HEWLETT PACKARD

COMPUTER USERS CATALOG

SUMMER 84

It's easy to order from HP

Special fast-order direct phone lines for computer supplies are now available in many countries—including the ones listed opposite—offering on-line price and availability information, as well as fast order entry:

Of course, orders may be placed in the regular way through local HP sales offices in those areas not yet served by these special phone lines.

Personal computers/software, peripherals, terminals

For your convenient reference, the following pages list many of HP's inexpensive hardware and software products. Please note that they should be ordered through your regular HP sales

representative or HP dealer, since they are not available through our direct phone order services.

What's New?

NEW More than 150 products are introduced in this edition of the *Computer Users Catalog*. Look for this symbol.

Quality products when you need them off-the-shelf

HP Computer Museum
www.hpmuseum.net

It's easy to order HP quality-tested supplies.

Yes, this HP Computer Users Catalog makes it easy for you to select and order quality-tested HP supplies and accessories of all types — including more than 150 new products on the following pages.

Optimize your HP equipment performance
You have come to expect excellent performance and dependable service from HP computer equipment. Our high-quality, off-the-shelf companion products — magnetic media, operating supplies, workstation furniture and more — are designed and tested to ensure they bring out the best performance in your HP computer equipment.

Supplies ordered from this catalog meet or surpass stringent compatibility requirements for use with HP equipment. You can expect longer, trouble-free equipment life when using HP-tested (often, HP manufactured) media and supplies.

Direct phone orders

United States 800-538-8787	**Canada**	**South Africa** 802-5111
California 408-738-4133	Toronto local 416-671-8383	53-7954
United Kingdom 0734-792868	Ontario 1-800-268-6982	28-4178
0734-792959	Quebec 1-800-387-3417	**Belgium/Luxembourg** ..... (02)762 32 00
France .... (6)928 32 64	British Columbia .. 112-800-387-3154	**Switzerland** .... (057)31 22 54
West Germany 07031-142829	other provinces .. 1-800-387-3154	or 31 22 59
07031-223133	**The Netherlands** 020-470639	**Australia** .... (03) 895-2645
Sweden 08-7502027		or 895-2615
08-7502028		(02) 888-7712
		or 887-1611

One-stop shopping for PC

Plotters & supplies
Pens, pages 96–98.
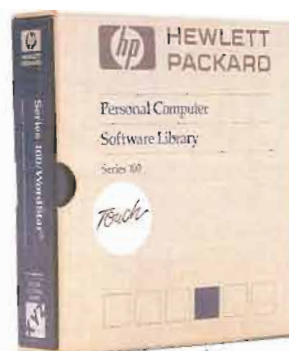**Papers,** pages 92–95.
Transparencies, pages 93–94.

7475A six-pen plotter, page 41.

Productivity software Series 80, 100, 200
Business
Engineering
Scientific
Begins page 17.

HEWLETT PACKARD

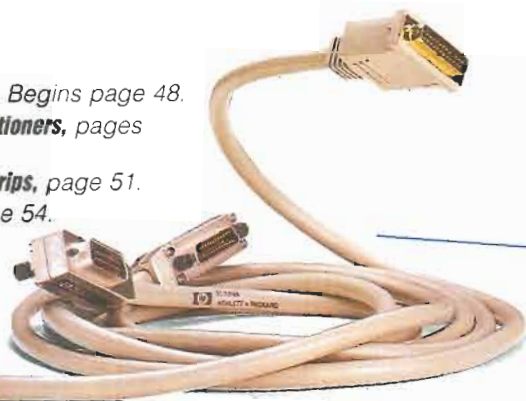Personal Computer
Software Library

Personal computers/ calculators

HP150 Touchscreen PC (see your authorized dealer).

Cables   Begins page 48.
Power line conditioners, pages 52–53.
Multiple outlet strips, page 51.
ABC switch, page 54.

HP 41C Calculator, page 6.

HP 12C Calculator, page 4.

Hayes Smartmodem 1200.
See page 39.

Furniture & accessories
Tables,
pages 60–61.
Ergonomic chairs,
pages 64–65.
PC accessories,
pages 66–69.

supplies and accessories

Edu-tainment software

Adventure, pages 22–24.
Strategy, page 24.
Education, pages 24–25.
Simulation, page 25.

Magnetic media

Discs, pages 103, 106, 108.
Tape cartridges, page 110.

92191A 3.5-inch Micro disc, page 106.

Printers and supplies

Ink-jet cartridges, page 88.
Ribbons, pages 80–81.
Thermal paper, pages 90–91.

HP2225 ThinkJet Printer. Small, fast, quiet—and inexpensive! Pages 46–47.

Media accessories

Flexible disc accessories, pages 104–107.
Cartridge accessories, page 111.

3.5-inch Micro disc desktop file, page 106.

*N*early one-third of this catalog features supplies, accessories and peripherals for HP PCs and calculators. For your convenience, the major product areas and page references are shown in the adjacent graphic. Be sure to browse through the referenced pages—you'll probably find some new ways to increase your personal productivity.

Remember, every product in this catalog is HP manufactured, tested or approved to operate with your HP equipment. You can expect optimum performance and reliability—that's our promise!

Inside Personal computers & software

Series 10 Professional Calculators

HP's SLIM-LINE Series 10 Calculators for professionals provide exceptional computing power, in a compact shirt-pocket sized package.

Programming power. All Series 10 Calculators have powerful, built-in keystroke functions and programming abilities.

HP's RPN logic system lets you slice through even the most complex problems with ease. With RPN, you handle every problem consistently, working with one or two numbers at a time and seeing intermediate results. You never get lost in the middle of your calculations, and you recover easily and unambiguously from error. The system economizes programming time and the amount of program memory occupied.

Continuous memory. Continuous memory technology saves your work even when the calculator is turned off. You concentrate on solving problems, not on reloading programs or re-entering numbers.

Convenient design. Slanted keys respond to light pressure, so they are less fatiguing to use over long periods of time. And because of the positive click you feel when a keystroke is executed, you don't have to check the display to know you've entered a number or function.

Automatic turn-off function. Your Series 10 Calculator conserves battery life by auto-

matically turning itself off after several minutes of non-use.

Liquid-crystal display. It's easy to read, even in bright sunlight.

Rugged construction. A shock-mounted display and rugged casing stand up to hard knocks. Extensive testing produces a calculator you can count on for day-in, day-out performance.

There are four models in Series 10: two for engineers and scientists, one for computer science and digital electronics, and one for financial applications.
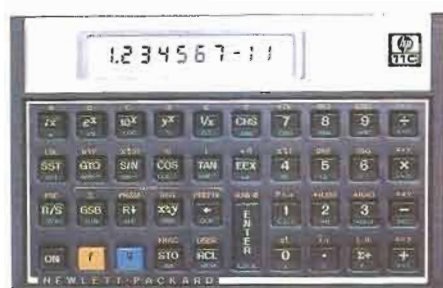
HP-11C Advanced Programmable Scientific.
203 program lines, insert/delete editing, five user-definable keys, trigonometrics, hyperbolics and inverses, statistics.

HP-15C Advanced Programmable Scientific with Matrices.
Matrix functions (up to 64 elements), complex number functions, solve and integrate, 448 program lines, insert/delete editing, five user-definable keys.

NEW **92177S Desktop calculator stand** helps you keep sight of your Series 10 Calculator. The sturdy smoked acrylic stand holds your professional calculator at just the right angle for easy display reading and efficient data entry. The stand size is 5.5 inches (140mm) wide × 4.5 inches (114mm) deep and has rubber feet for firm footing on any work surface.
(1–2)
(3–5)   SAVE WITH
(6+)   QUANTITY DISCOUNTS

HP-12C Advanced Programmable Financial.
Simple and compound interest, time and money functions, amortization, net present value and internal rate of return, bond yield and price, 99 program lines.

HP-16C Programmable for Digital Electronics and Computer Science.
Four number base modes (binary, octal, decimal, hexadecimal), four Boolean operators (AND, OR, XOR, NOT), word size specifiable up to 64 bits, bit manipulation, 203 program lines, insert/delete editing.

Series 10 handbooks

Series 10 accessories

82174A Soft case

Comparison guide: HP handheld calculators/computers

This chart summarizes features and functions found on Series 10 slim-line calculators and Series 40 handheld computers. All units use time-proven RPN logic, and have high-resolution liquid crystal displays (LCD) that are easy to read in your office or lab, or in bright sunlight outdoors. See the following pages for more details.

Features	Series 10 Financial	Computer science	Scientific	Scientific	Series 40
	12C	16C	11C	15C	41C/CV/CX
Operating features					
RPN logic system (with 4-register stack)	•	•	•	•	•
Error recovery (last x)	•	•	•	•	•
Maximum number of storage registers	20	101R	21	67	919*
Continuous memory	•	•	•	•	•
Maximum number of digits displayed	10	10F	10	10	10
Number of digits used in computation	10	10D	10	10	10
Rechargeable batteries/AC recharger					•
Long-Life disposable batteries	•	•	•	•	•
Software support					
Application pacs (with modules)					•
Solution books/handbooks	•		•	•	•
Users' Library programs					•
Accessory support					
Memory modules					•+
Extended memory modules					•
Extended functions					•★
Time module					•
Multipurpose rechargeable battery pack					•
General features					
One-year limited warranty	•	•	•	•	•
Display separates thousands	•	•F	•	•	•
Diagnostic self-check	•	•	•	•	•
Error codes/messages	•	•	•	•	•
Redefinable keys					•
Alpha mode/display/keyboard					•
Status annunciators	•	•	•	•	•
Automatic power off	•	•	•	•	•
Audible tones					•
Programming features					
Maximum number of program lines	99	203	203	448	6,433*
Shared program/storage memory	•	•	•	•	•
Alpha program labels					•
Single-character program labels		6	5	5	56
Numeric program labels		10	10	20	100
Program review (single- and backstep)	•	•	•	•	•
Insert/delete editing		•	•	•	•
GO TO	•	•	•	•	•
Levels of subroutines		4	4	7	6
Conditional tests	2	8	8	12	20**
Flags		6	2	10	56
Pause	•	•	•	•	•
Indexed looping (DSE, ISG)			•	•	•
Indirect control of:					
Data storage/recall		•	•	•	•
Storage register arithmetic		•	•	•	•
Branching		•	•	•	•
Looping			•	•	•
Display Format			•	•	•
Flags			•	•	•
Integer/fraction truncation	•		•	•	•
Alpha string manipulation					•
Text-File Editor					CX
Dedicated input/output devices					
Card reader					P
Printer/plotter					P
Optical wand					P
HP-IL peripherals					
Digital cassette drive					P
Thermal printer/plotter					P
Impact printer (80-column)					P
HP-IL/GPIO interface					P
HP-IL video interface					P

Features	Series 10 Financial	Computer science	Scientific	Scientific	Series 40
	12C	16C	11C	15C	41C/CV/CX
General arithmetic features					
+, -, X, /, √x, 1/x, CHS	•	•	•	•	•
Ln x, e^x	•		•	•	•
y^x, Log x, 10^x, x², π			•	•	•
Absolute value			•	•	•
Storage register arithmetic	•		•	•	•
Business features					
Maximum number of dedicated financial registers	5				
Solves for: Number of periods (n), compound interest(i), present value (PV), payment (PMT), future value (FV)	•		S	S	S
Simple interest	•		S		S
Amortization (accumulated interest/remaining balance)	•		S		S
Net present value (NPV) and internal rate of return (IRR)	•			S	S
Beginning/end of period selection	•		S	S	S
Calendar functions	•				S★
Bond: Yield-to-maturity	•				S
Price	•				S
Depreciation (SL, DB, SOYD)	•		S		S
Scientific features					
Solve (root finder)			S	S	S
Integrate (numerical integration)			S	S	S
Matrix operations				S	S
Complex functions			S	S	S
Bit manipulation		•			
Boolean operators (NOT, OR, AND, XOR)		•			
Complement modes (1's, 2's, unsigned)		•			
Number base arithmetic (binary, octal decimal, hexadecimal)		•			•S
Metric conversions					S
Trigonometric functions: Modes (degrees, radians, grads)			•	•	•
Sin, Sin⁻¹, Cos, Cos⁻¹, Tan, Tan⁻¹			•	•	•
Hyperbolics and inverses			•	•	S
Rectangular—polar coordinates			•	•	•
Decimal angle—angle in degrees (hrs)/min/sec			•	•	•
Degrees—radians			•	•	•
Fixed and scientific notation	•	•F	•	•	•
Engineering notation			•	•	•
Automatic under/over flow into scientific	•	•F	•	•	•
Statistical functions					
Percent	•		•	•	•
Percent change	•		•	•	•
Percent total	•				
Mean/standard deviation (1- or 2-variable)	•		•	•	•
n, Σx, Σx², Σy, Σy², Σxy	•		•	•	•
Weighted mean	•				S
Linear regression or estimate	•		•	•	S
Correlation coefficient	•		•	•	S
Normal distribution	S		S	S	S
Factorial function	•		•	•	•
Gamma function			•	•	S
Permutations and combinations	S		•	•	S
Random number generator	S		•	•	S

• Built-in feature or function.

+ To be used with the HP-41C only.

* The HP-41C has 63 registers or 441 program bytes built in (expandable to 922 registers or 6,433 bytes with memory modules and extended memory modules). The HP 41CV/CX has 319 registers or 2,233 bytes built in (expandable to 6,433 bytes).

★ Extended functions and timer modules are built into the HP-41CX.

** The HP-41C/CV have 14 conditional tests. The HP-41CX has 20.

CX This capability is part of HP-41CX features only.

S Available in software form.

F Using Floating-Point Decimal Mode.

D Ten digits are used in computation when in Floating-Point Decimal Mode. Word size is user-specifiable in other modes, up to 64 bits.

R 16-bit registers.

P Peripheral available.

Series 40 Advanced Programmable Calculators

The Series 40 Advanced Programmable Calculators come in three varieties tailored to meet individual needs. The HP-41C and the HP-41CV are identical except that the HP-41CV has five times the memory (2233 bytes of built-in memory compared to the HP-41C's 441). The new HP-41CX combines the extra memory of the HP-41CV with improved text file capabilities and also features built-in extended function and timer modules. With memory modules, all three models are expandable to 6,433 bytes.

They speak your language

With HP-41 Advanced Programmable Calculators you can communicate in friendly words or in numbers. Alphanumeric capability lets you name and label programs, functions and even results. And it can prompt you for data with words and phrases. Status annunciators indicate mode conditions. Messages pinpoint calculation errors and 10 different tones let you aurally keep track of your operations.
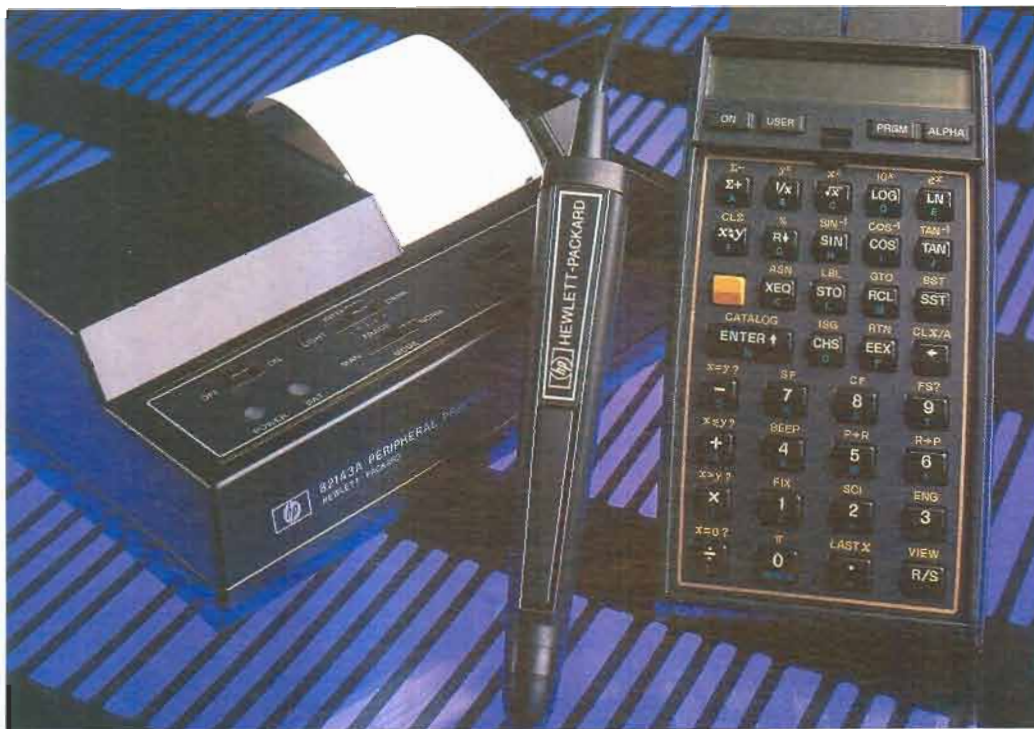
Series 40 Advanced Programmable Calculators come complete with:
- HP-41 Owner's Handbook and Programming Guide
- Guide For Experienced Users
- Rugged, pliable carrying case
- Four type N batteries
- Overlay packet
- HP-41 Quick reference card
- Users' Library subscription form
  For additional details see table on page 5.

Customize to suit your needs. Almost any key can be assigned an operation from the HP-41's large function library, an application module, or a program you've written. In normal mode, the standard HP-41 keyboard is functional. User mode lets you modify the keyboard, with new assignments you indicate on a keyboard overlay.

Enhanced programmability. You don't have to learn a complicated language to use the HP-41. Just enter the keystrokes as you would enter them on a calculator. Alphanumeric capability lets you label programs with easy-to-remember names. Each program is autonomous, and each can have up to 100 different local labels for branching within a program. The HP-41 also features up to six levels of subroutines, 10 conditional tests, 56 internal flags, powerful loop control, indirect addressing and both local and global branching.

Simple, logical, effective RPN. The HP-41's RPN logic system economizes programming time and the amount of program memory occupied. And it's easy to use. You only work with one or two numbers at a time and see intermediate results.

Continuous memory saves everything. Continuous memory preserves everything from stored data to user-defined keyboard assignments, even though your computer is turned off. You enter frequently needed calculations once, then perform them as often as necessary without having to re-enter your program.

Crystal-clear display. Glare won't be a problem for you with the HP-41's easy-to-read, liquid crystal display. And its low-power operation minimizes battery drain.

HP-41C Advanced Programmable Calculator
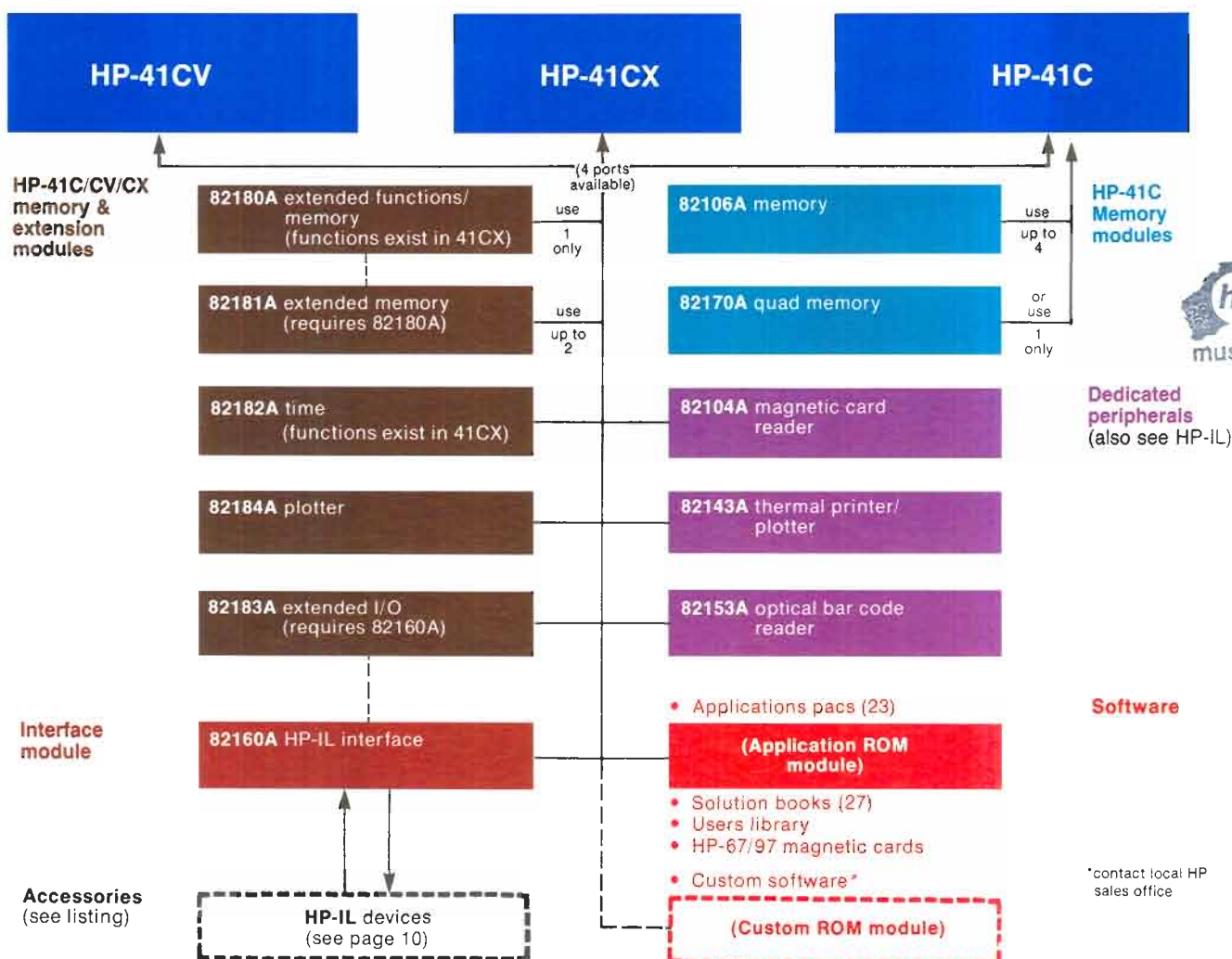
HP-41CV Advanced Programmable Calculator

With 5X memory.

HP-41CX Advanced Programmable Calculator

With timer, extended and text file functions

Series 40 products/configuration

The diagram below suggests the great versatility possible with various modules and peripherals which may be plugged into any of four ports on every Series 40 Computer. Size: 3.1 × .71 × .33 inches. (79×18×8.4mm)

HP-41CV   **HP-41CX**   **HP-41C**

HP-41C/CV/CX memory & extension modules

(4 ports available)

82180A extended functions/ memory (functions exist in 41CX) — use 1 only

82181A extended memory (requires 82180A) — use up to 2

82182A time (functions exist in 41CX)

82184A plotter

82183A extended I/O (requires 82160A)

82106A memory — use up to 4

82170A quad memory — or use 1 only

HP-41C Memory modules

82104A magnetic card reader

82143A thermal printer/ plotter

82153A optical bar code reader

Dedicated peripherals (also see HP-IL)

Interface module

82160A HP-IL interface

• Applications pacs (23)

(Application ROM module)

• Solution books (27)
• Users library
• HP-67/97 magnetic cards

• Custom software*

Software

*contact local HP sales office

Accessories (see listing)

HP-IL devices (see page 10)

(Custom ROM module)

Dedicated peripherals for Series 40 Computers

Also see HP-IL peripherals on page 10.

82104A Magnetic card reader.
The HP 82104A stores your programs and information on small magnetic cards, giving you an inexpensive and time-saving method for making frequent program modifications and for developing and changing software. 20 mag cards included.

82143A Thermal Printer/Plotter.
This portable, battery-operated thermal printer is a valuable aid in editing programs, checking long calculations, and presenting results in graphic form. The HP 82143A gives you upper- and lowercase alpha with double-wide characters, and it lets you define your own "special" characters. It also gives you plotting capability and intensity control,

so you get optimum contrast and readability.
   (Uses same supplies & accessories as HP-IL Printer/Plotter 82162A; see page 10.)

82153A Optical wand.
Using your advanced calculator is even quicker and easier with the wand. Plugged into the HP-41, the wand reads bar code, a convenient and inexpensive means of loading programs and information. Much of Series 40 software is available in bar code, including Users' Library programs and solution books. Because of their special capabilities, application pac functions are not available in bar code.

Series 40 memory, extension & interface modules

82106A Memory module (HP-41C only). Each module adds 64 registers; use up to four modules.

82160A HP-IL interface module (Series 40). Allows you to use the HP-IL devices listed on pages 10–11.

82170A Quad memory module (HP-41C only). Adds 256 registers; use one only. Do not use with 82106A modules.

82180A Extended functions/memory modules. Adds 889 bytes extended memory and memory management functions; also programmable assign, string functions. (Functions exist in 41CX.)

82181A Extended memory module. Adds 1666 bytes on 238 data registers; use up to two of these modules: requires 82180A.

82182A Time module. Expand your HP-41 with time information and time-controlled operations. Clock functions. (Functions exist in 41CX.)

82183A Extended I/O module. Adds flexibility for accessing mass memory device files, and more general I/O capabilities. Requires 82160A.

82184A Plotter module. Adds bar code generation and plotting capabilities.

Series 40 accessories

00097-13143 120 Blank program cards—for 82104A card reader

00097-13206 1000 Blank program cards without holders—for 82104A card reader

00097-13142 Three program card holders for 82104A card reader

82044A Security cable for 82143A, 82161A, 82162A

82045A Blue-printing thermal paper for 82143A and 82162A. Box of six rolls

82175A Black-printing thermal paper for 82143A and 82162A. Box of six rolls

82059D AC adapter/recharger for 82120A, 82143A, 82161A, 82162A, 82163A, 82164A, 82165A, 82168A, 82169A—110 Vac

82066B AC adapter/recharger for 82120A, 82143A, 82161A, 82162A, 82163A, 82164A, 82165A, 82168A, 82169A—Euro. 220 Vac

82111A Soft case holds HP-41 plus card reader 82104A

82120A Multipurpose rechargeable battery pack. Requires the 82059D (U.S.) or the 82066B (Euro.)

2.25 in (57 mm)

80 ft (24 m) roll

82151A Package of two module holders

82152A Five blank key overlays

82172A 50 Blank overlays

82200A HP-41 touchpad

92266A Battery charger for four nickel cadmium batteries. Nickel cadmium batteries provide additional power and can be recharged outside HP-41. Includes four batteries. For sale in United States and Canada only.

92266B Set of four nickel cadmium batteries

Series 40 software application pacs*

Each pac includes a pre-programmed application ROM module to transform your HP-41 into an answer machine for a particular discipline or application. Comprehensive manual included in all pacs, and many also include special keyboard overlays to redesignate keys for the application.

Auto-start duplication ROM	00041-15042	Mathematics	00041-15003	Navigation	00041-15011
Aviation (pre-flight only)	00041-15018	Mathematics (Spanish)	00041-15029	Real estate	00041-15016
Circuit analysis	00041-15006	Securities	00041-15026	Structural analysis	00041-15021
Clinical lab & nuclear medicine	00041-15024	Standard applications	00041-15001		
Financial decisions	00041-15004	Statistics	00041-15002		
Financial decisions (Spanish)	00041-15030	Statistics (Spanish)	00041-15028	HP-IL development module	00041-15043
Games	00041-15022	Stress analysis	00041-15027	Petroleum fluids	00041-15039
Home management	00041-15023	Surveying	00041-15005		
Machine design	00041-15020	Thermal & transport science	00041-15019		

*Additional languages available. Contact your local authorized HP dealer or HP sales office.

Series 40 localized software

If you are outside the United States, check with your nearest HP dealer or local HP sales office for the availability of application pacs or solutions books written in your language, or for the technical/trade practices in your country.

Series 40 custom software copies

If you have written unique software so that HP-41s can be used in your business or other personalized applications, HP can manufacture special key overlays showing your particular key definitions. And your software can be reproduced in volume on any of four media: digital mini cassettes, plug-in custom ROM modules, magnetic cards, and bar codes. Contact your local HP sales office for more details.

Series 40 solution books*

Programs to help solve general or specialized problems are provided in two forms in every book: step-by-step listings for keystroke entry, and the same information printed in bar code form for fast entry with the HP 82153A optical wand.

Antennas	00041-90093	Geometry	00041-90084	Solar engineering	00041-90138
Business statistics/marketing/sales	00041-90094	Heating, ventilation & air condition	00041-90140	Surveying	00041-90141
Calendars	00041-90145	High-level mathematics	00041-90083	Test statistics	00041-90082
Chemical engineering	00041-90100	Home construction estimating	00041-90096	Time module solutions I	00041-90395
Chemistry	00041-90102	Lending, savings & leasing	00041-90086		
Civil engineering	00041-90089	Mechanical engineering	00041-90090		
Control systems	00041-90092	Optometry (general)	00041-90143	Structural design (includes cassette)	00041-90441
Electrical engineering	00041-90088	Optometry II (contact lens)	00041-90144		
Fluid dynamics & hydraulics	00041-90139	Physics	00041-90142	*Additional languages available. Contact your local authorized	
Games I	00041-90099	Real estate	00041-90136	HP dealer or HP sales office.	
Games II	00041-90443	Small business	00041-90137		

HP-97A Programmable Desktop Calculator

Features: Built-in magnetic card reader for inexpensive, off-line mass storage of programs and data; whisper-quiet thermal printer for immediate hard copy output; 224 program lines or 26 data storage registers; 10 user-definable keys; eight conditional tests; four flags; three levels of subroutines; editing tools; trigonometrics; factorials; percent; standard deviation; summations; rectangular-to-polar coordinates.

HP-97 application pacs

Each application pac contains 15 to 26 preprinted, prerecorded magnetic cards, a program card holder and a manual of complete documentation.

Electrical engineering	00097-13131
Business decisions	00097-13144
Clinical lab & nuclear medicine	00097-13165
Civil engineering	00097-13195
Navigation	00097-13205
Surveying	00097-13175
Statistics	00097-13111
Math	00097-13121
Mechanical engineering	00097-13155
Games	00097-13185

NOTE: HP-97 programs will also work in the HP-41. Lengthy programs may require additional memory modules on the HP-41.
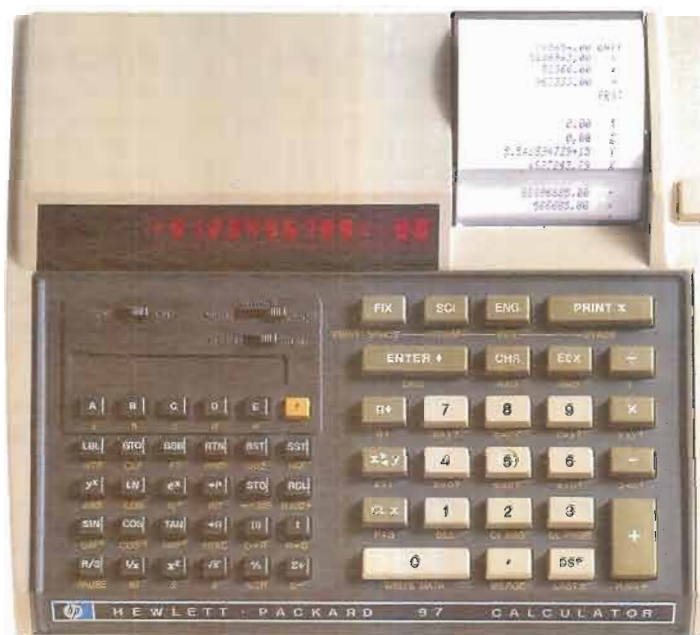
HP-97 accessories

00097-90001 Owner's handbook	
82033A Battery pack	
82037A Reserve power pack	
82059D AC adapter/recharger—110 Vac	
82066B AC adapter/recharger—220 Vac	
82067B AC adapter/recharger for U.K. use only	
82035A Soft vinyl case	

00097-13143 120 Card pac
00097-13206 1000 Card pac (no holders)
00097-13142 Program card holders (three)
00097-13154 Program pad
82045A Blue-print thermal paper Box of six rolls

HP-IL products

82913A 12-inch Video monitor *displays information in twenty-four 80-character lines. See below.*

92198A HP-IL 80-column Video Interface. *Use with an HP-75 and an HP video monitor or a standard television to take advantage of a full-screen display. See description at right.*

92207C Anti-glare filter *increases contrast and reduces glare. See page 69.*

Series 82167 HP-IL cables. *A bit-serial interface loop that combines low power, small size, and low cost. See page 51.*

82168A Acoustic Coupler *allows for communication with a distant computer over ordinary telephone lines. See below.*

HP-75 Handheld Computer. *A powerful, battery-operated computer that can be used anywhere, anytime. See page 13.*

HP-IL The Hewlett-Packard Interface Loop (HP-IL) is a bit-serial interface for low-cost, battery-operated systems. Devices on the loop are connected by two-wire cables leading from the output port of one device to the input port of the next until all devices form a closed loop.

HP-IL Video Interface

92198A HP-IL 80-Column Video Interface

Now you can team your HP-IL controller with one of HP's video monitors (or even a standard television) to take advantage of a full-screen display through the use of this 80-column HP-IL video interface. Monitors can display information in twenty-four 80-character lines. The video interface can also switch to a 40 by 20 format for use with standard television. Features include: large, readable display, powerful screen-editing features, two software selectable character sets (ASCII with inverse video or ROMAN 8) and three cursor types (none, block and insert).
U.S. ONLY

HP-IL peripherals

82161A Digital Cassette Drive

With 128K bytes of on-line mass storage packed into each mini-cassette, you have power for information collection and management applications which previously required a larger computer.

82162A Thermal Printer/Plotter

This portable, battery-powered printer provides hard copy of information, program listings, bar code, and graphics. A large 101-character buffer provides fast printing and plotting. You get numeric, upper- and lowercase alpha, double-wide characters and intensity control for optimum contrast and readability. With the handy FORMAT function, you can center or justify your copy to left and right margins.

7470A Graphics Plotter Opt. 003
For description, see page 40.

82168A Acoustic Coupler

Using this acoustic coupler with an HP-IL controller allows for communication with a distant computer over ordinary telephone lines. The Bell 113 acoustic coupler transmits data at 300 Baud. With this portable, battery-powered machine, distant computer information is as near as your telephone. Not available for sale in Europe.

HP-IL accessories

82160A HP-IL/Series 40 interface
82163B HP-IL video interface—Euro
82912A 9" Video monitor
82913A 12" Video monitor

82164A HP-IL/RS232C interface
82165A HP-IL/GPIO interface
82166C HP-IL interface kit
82167A HP-IL cable (0.5m)

82167B HP-IL cable (1m)
82167D HP-IL cable (5m)
82169A HP-IL/HP-IB interface
82938A HP-IL/Series 80 interface

HP-IL accessories (cont.)

82045A Blue-printing thermal paper for 82143A, 82162A Box of six rolls

2.25 in. (57mm)

80 ft. (24 m) roll

82175A Black-printing thermal paper for 82143A, 82162A. Box of six rolls

82033A Battery pack for 82161A, 82162A, 82168A

82037A Reserve power pack for 82161A, 82162A, 82168A
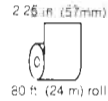
82044A Security cable for 82143A, 82161A, 82162A

82059D AC adapter/recharger for 82120A, 82143A, 82161A, 82162A, 82163A, 82164A, 82165A, 82168A. 82169A—110 Vac

82066B AC adapter/recharger for 82120A, 82143A, 82161A, 82162A, 82163A, 82164A, 82165A, 82168A. 82169A—Euro. 220 Vac

82067B AC adapter/recharger for 82120A, 82143A, 82161A, 82162A, 82163A, 82165A (for U.K. use only)

82176A Box of 10 mini cassettes each with own protective plastic box. Each cassette can hold up to 128K bytes of information.

82177A Blank labels for mini data cassette (20 sheets = 420 labels)

HP-IL products/configurations

This diagram summarizes HP-IL products, as well as an indication of how HP-IL products can be interconnected. The smallest configuration would typically be one computer and one other HP-IL device.

Series 40	Series 70	Series 80
HP-41C	HP-71B	HP-85
HP-41CV	HP-75D (HP-IL standard)	HP-86
HP-41CX		HP-87

hp museum

Computer interfaces (series 40 & 80)

82160A Series 40 HP-IL interface

82938A Series 80 HP-IL interface ***

To larger HP computers (HP 1000/3000)

HP-IL peripherals

82162A thermal printer/plotter

82161A digital cassette drive

HP-IL peripherals

NEW **2225B** ThinkJet printer See pages 46—47

3468A digital multimeter **

2671A thermal printer** Opt. 048

82166C HP-IL interface kit

Built into your device

Convertors & interfaces

2671G graphics printer** Opt. 048

82168A acoustic coupler

Telephone

7470A graphics plotter Opt. 003 (see p. 40)

92198A/82163B video interfaces

82912/3A video monitors or TV

HP-IL cables

82167A cable (0.5 m)
82167B cable (1 m)
82167D cable (5 m)

82165A HP-IL/GPIO interface

Parallel interfaced device

82164A HP-IL/RS232C interface

RS232C device

82169A HP-IL/HP-IB interface

HP-IB device

**Contact local HP sales office.
***Requires 82936A ROM drawer, and 0085/87-15003 I/O ROM.

Series 70 Handheld Computers
Complex calculations have never been so easy ...

NEW The HP-71 is the solution to your everyday computational requirements. This BASIC language handheld computer combines the power of a computer and the size of a calculator to give you the computational strength you demand. Yet, it's small enough to be the perfect travelling companion. The computational power you need, plus portability, are available now—in the same distinctive package.

HP-IL interface option for connecting to other devices.

22-Character LCD with scrolling to 96 characters, upper- and lowercase letters.

Card reader option.

Redefinable keyboard. Keys are redefinable using custom keyboard overlays.

Dimensions: 7.5 × 3.8 × 0.5 inches.

Weight: 12 ounces.

BASIC Language. Powerful programming language.

Battery power. Four 1.5V. AAA size batteries, or optional ac adapter.

Calc mode. Advanced calculator operating mode.

Five-level command stack. Recall any of your last five commands for editing and re-use.

Continuous memory. Turn your HP-71 off without losing information.

Four ports accept any combination of custom or prewritten software (up to 64K bytes each) or memory modules.

10-digit key pad.

The HP-71 solution. The HP-71 grows as your needs grow. Expand it with memory modules. accessories, peripherals, an HP-IL (Hewlett-Packard Interface Loop) interface, and applications software for even greater computational muscle.

Put 17.5K bytes of built-in user memory (RAM) at your disposal. And expand it to 21.5K bytes by plugging in one 4K byte memory module. But, don't stop there—keep adding memory modules. Up to four modules will boost accessible user memory to 33.5K bytes. And continuous memory makes sure your data will be there when you need it.

Language and operating system. The powerful 64K byte built-in BASIC operating system assures you of fast solutions to your complex. repetitive, computational problems. The expanded BASIC language gives you more than 240 functions, statements and operators to simplify your programming. Advanced statistics functions let you perform computations on up to 15 independent variables. A complete set of trig functions lets you solve complex equations. Or you can tap the resources of pre-written HP software to save yourself time.

BASIC makes it easy; the powerful HP-71 makes it possible.

HP-71 Handheld Computer

HP-71 extensions and accessories

Expand your capabilities without increasing the outside dimensions of your HP-71. These extensions and accessories are designed to fit compactly inside the HP-71 to give you extra computing power in the palm of your hand.

NEW **82420A 4K RAM memory module.** Plug in a maximum of four of these modules to increase memory and storage capacity by 16K bytes. Each memory module contains 4K bytes of user memory (RAM).
82420A

NEW **82401A HP-IL interface** plugs into a specially designed port at the upper left of your HP-71, establishing a link with the expansive HP-IL family. Create a system that can print, plot, store, retrieve, and display information. Or, control instruments and peripherals, in addition to communicating with larger computers.
82401A

HP-71 software

For ready-made solutions, take advantage of HP-written software. Each application pac comes with a plug-in module and complete documentation.

NEW **Finance.** Preprogrammed functions let you unravel your financial problems quickly and easily. Get fast, accurate answers to your loan, amortization, internal rate of return, and net present value problems. Calculate, display, print, and store depreciation schedules. Five different methods are available for your depreciation calculations. A special HELP file in the module lists functions for your reference.
82482A

NEW **AC Steady State Circuit Analysis.** A convenient, menu-driven program helps you construct and analyze circuit models using resistors, capacitors, inductors. transmission lines, voltage-controlled current sources, and open or shorted stubs as circuit elements. Print or display ac voltage, phase, and group delay at any node in the circuit at any frequency. using linear or logarithmic frequency increments. Circuit descriptions can be stored. printed, and edited. You can quickly simulate and analyze circuits such as passive filters, active filters, operational amplifiers, and transistor amplifiers in a portable environment. Circuit size

is limited only by available memory; an HP-71 with three-memory modules can solve a circuit with 72 branches and 24 nodes.
82481A

NEW **Surveying.** One large, integrated program lets you arrange, balance, and adjust a traverse of your points in files. Apply them in traversing, inversing. curve layout, intersection, radial staking, and area computation. An easy-to-use, menu-driven data entry system lets you choose your input mode regardless of the mode of output you desire.
82483A

Portable solutions for the professional on the move

NEW The HP-75D is HP's first portable bar code reader to read major industrial bar codes. Together with the 82725A and a compatible bar code wand, the HP-75D combines the power of a portable computer and an optical scanning wand to create a fast, accurate data collection system.

48K byte operating system with 167 keywords.

8K byte memory module port for additional user storage capacity.

Built-in beeper for programmable acoustic alarms.

Battery pack with rechargeable nickel-cadmium batteries.

32-Character LCD with scrolling to 96 characters.

HP-IL interface for connecting to a wide variety of battery-powered devices.

Digital bar code wand interface for reading major industrial bar codes.

*THU 12-08-1982 13:59:48 ***

8-Bit CMOS CPU

Touch-type QWERTY keyboard

Redefinable keyboard

Dimensions: 10 × 5 × 1.25 inches.

Weight: 26 ounces

16K byte user RAM. Expandable to 24K bytes.

Continuous memory

Three plug-in ports for prewritten software modules, (up to 32K bytes each).

Hand-pull card reader for off-line storage on magnetic cards, 1.3K bytes per card.

HP-75D Portable Computer

82725A Bar code reader module

92267A High resolution bar code wand

92267B Medium resolution bar code wand

HP-75 plug-in application ROMs

VisiCalc® The power and versatility of the original electronic spreadsheet in a truly portable package. Organize lists, file data and evaluate alternative courses of action. Can also be used with HP-IL peripherals to print results or view progress on a video display.

00075-15014

TextFormatter When you're on the road, enter notes, memos and reports using the HP-75's powerful, built-in text editor. Then, when connected to a printer at the home office, TextFormatter prints your work in a neatly formatted output.

00075-15019

Data Communications Now the HP-75 can serve as a portable terminal to access other computer systems and a variety of news services. Configuration files contain user defined log-on sequences and personalized system configuration. Requires external modem.

00075-15035

Math Powerful application pac to handle a multitude of problems including extensive real and complex matrix operations, polynomial root finder, solutions for $f(x) = 0$, definite integrals and finite Fourier transforms. New key words can be used as BASIC keywords in user applications.

00075-15015

Surveying Integrated program for use in the field to calculate traversing, inversing, coordinate geometry, curve layout or radial staking. Display/print details through HP-IL peripherals or download data points to Series 80 Personal Computer for further manipulation.

00075-15012

HP-75 solution books*

Electronics	00075-13008	Math II	00075-13004	Mass media duplication privacy 00075-13015
Finance	90075-13009	Math III	90075-13005	
Games I	00075-13006	Real Estate	00075-13010	
Games II	00075-13007	Statistics	00075-13011	Graphics 00075-13016
I/O utilities	00075-13013	Test statistics	90075-13012	
Math I	00075-13003			*Magnetic program cards are included.

Series 70 accessories

00075-90001 HP-75 owner's manual

00075-90004 HP-75 reference manual

82001B Rechargeable battery pack

82002A Recharger—110/220 Vac (for 82004A power pack only)

82004A Reserve power pack (requires an HP 82002A)

82059D AC adapter/recharger— 110 Vac

82067B AC adapter/recharger for U.K. use only

82700A 8K memory module

82701A HP-75 security cradle

82703A Field case

82707A 30 blank magnetic card pac

82708A 100 blank magnetic card pac

82710A Five blank key overlays

82713A ROM emulator for HP-75

82715A Five notebook card holders

82717A 50 blank key overlays

Note: product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

Series 80 Personal computers
Series 80 plug-in modules

These modules expand memory, add CP/M® System or provide mounting for firmware enhancement ROMs. Each module can plug into any one of the four ports in the back of the computer.

82903A 16K Memory module for HP-85A. Each HP-85A will only accept one 16K byte memory module.

82908A, 82909A Memory modules for HP-85B, HP-86/87. The HP-82908A adds 64K bytes. The HP 82909A adds 128K bytes. Up to four modules can be used for a maximum of 544K bytes.

82967A Speech synthesis module. This Series 80 plug-in module allows speech output of more than 1500 words/sounds/phrases from your Series 80 Computer. Software is included which allows the user to review, listen and create the needed phrases and store them for later use by an application program. A startup vocabulary of more than 1500 words is provided. Software and vocabulary is provided on both a 3.5-inch and 5.25-inch flexible disc.

HP-85 requires 32K bytes memory, a flexible disc drive and a standard 8-ohm speaker or headphone.

HP-86 requires 64K bytes memory. The monitor speaker can be used with an additional HP 92220M monitor cable.

HP-87 requires 64K bytes memory and a standard 8-ohm speaker or headphone.

82900A CP/M® System. The CP/M System extends the HP-86/87 by providing a wide variety of software solutions. It adds a Z-80 microprocessor and 64K bytes of dedicated RAM. See note below.

82900A Opt. 001 Term/80 Terminal Emulation System turns the HP-86/87 into an intelligent terminal that communicates with large HP mainframe computers in multiple operating modes, including block and format. Term/80 enables the HP-86/87 to emulate the popular HP 2622A Terminal. Communicates at speeds up to 9,600 baud.

Note: The HP 82900A CP/M System or HP 82900A Opt. 001 Term/80 product includes an Auxiliary Processor Module. Therefore, if you own one of the two products, you can acquire the other's capabilities by buying the proper software product:
CP/M software only:
HP 82848A Opt. 630—3.5-inch disc media
HP 82848A Opt. 650—5.25-inch disc media
Term 80 Software only:
HP 82849A Opt. 630—3.5-inch disc media
HP 82849A Opt. 650—5.25-inch disc media

82928A System monitor. Provides the necessary hardware to aid in developing and debugging assembly language programs for HP Series 80 Personal Computers. The HP 00085-15007 (or 00087-15007), 82928A and 82929A form a complete set of tools.

82929A Programmable ROM drawer. This drawer lets you use the firmware created with the assembler ROM in Series 80 Computers. You can plug in standard EPROMs that you program yourself in your own code.

82929A Option 001 Hybrid ROM Development System. With the Hybrid ROM Development System, you and your HP-85 Personal Computer can produce customized hybrid ROMs. Hybrid ROMs are EPROMs (erasable, programmable read-only memories) that store your Assembly language and BASIC language programming. The development system provides the BASIC programs, binary programs, and documentation necessary to incorporate such programming into hybrid ROMs.

82936A ROM drawer. Provides mounting for up to six of the firmware enhancement ROMs shown below. Plugs into any port on the back of a Series 80 Computer. Only one ROM drawer can be used at a time.

Series 80 firmware enhancements (ROMs)

These enhancements are contained in ROM plug-in modules. HP ROMs are used to enhance the capabilities of Series 80 software or integrate peripherals into a Series 80 system. These firmware modules plug into the Series 80 Computer via the 82936A ROM drawer.

00085-15001 Mass storage ROM. Provides the capability to interface the HP-85 with the HP 8290X-series Flexible Disc Drive or the HP 9134A/9135A Winchester Disc Drive. Consumes 150 bytes of available user memory. (Mass storage ROM capability is built into the HP-86/87.)

00085-15002 Plotter/Printer ROM. Provides the capability to interface the HP-85 with HP's high-resolution graphics plotters and full-width line printers. Consumes 373 bytes of available user memory.

00087-15002 Plotter ROM. Allows data to be transferred from the HP-86/87 to an HP plotter. Also provides single commands to dump CRT graphics and alpha screens to any HP dot matrix printer. (Print and graphics commands for transferring data to an HP printer are included in each HP-86/87). Consumes 1392 bytes of available user memory.

00085-15003, 00087-15003 I/O ROM. Provides straightforward input/output commands that enhance the HP Series 80 BASIC language capability. Consumes 416 bytes of available user memory.

00085-15004, 00087-15004 Matrix ROM. Gives you a powerful set of statements and functions for working with arrays on the Series 80 Personal Computers. Both matrices (two-dimensional arrays) and vectors (one-dimensional arrays). Consumes only 69 bytes (HP-85) or 73 bytes (HP-86/87) of available user memory.

00085-15005, 00087-15005 Advanced programming ROM. Extends your control over data, programs and Series 80 system operations with the functions, statements and commands provided in this ROM. Consumes only 132 bytes (HP-85) or 159 bytes (HP-86/87) of available user memory.

00085-15007, 00087-15007 Assembler ROM. Provides the capability to write customized assembly language programs that can be executed from Series 80 user memory or burned into EPROMs. Consumes only 124 bytes of available user memory. Use with HP 82928A and 82929A.

00087-15011 MIKSAM ROM. MIKSAM is a powerful software development tool for application programmers and serves as a core around which custom file management can be designed to fill your special needs. With MIKSAM you can even search for more than one category of data at once. Use MIKSAM with you HP-86/87 and a minimum of one disc drive. Consumes 4K bytes of available user memory.

00087-15012 Electronic disc ROM. Structure user RAM as if it were a disc with this powerful electronic disc ROM. A major portion of the HP-86A to HP-86B upgrade. this ROM increases program chaining speed and disc information access. With certain applications, Word/80 runs 16 times faster. Use the electronic disc ROM with the HP-86A/87 (Electronic disc ROM capability is built into the HP-85B and HP-86B.) This product also enables 10 megabyte Winchester disc utilization.

Series 80 interface modules

A variety of useful interface modules are available to connect peripherals and other devices to your Series 80 Personal Computer. The interface modules plug into any one of the four ports in the back of a Series 80 Computer.

82169A HP-IL/HP-IB interface. Interconnection of HP-IL and HP-IB is possible with the HP-IL/HP-IB interface. It operates in either of two modes; translator or mailbox. In translator mode, a controller exists on either the HP-IL or HP-IB side of the interface, and the devices to be controlled may exist on both sides. Control may be passed between HP-IL and HP-IB controllers as long as only one is active at a time. In a mailbox mode, controller systems exist on both sides of the interface, and information may be passed bidirectionally between the two systems through the two resident 110-byte buffers.

82937A HP-IB interface. The Hewlett-Packard Interface Bus (HP-IB) is an easy-to-use hardware and software interface system that permits bidirectional, asynchronous communication among a wide variety of instruments and peripherals. It implements the IEEE 488-1978 Standard Digital Interface for Programming Instrumentation and allows your HP computer to communicate with up to 14 HP-IB-compatible devices per interface, with a total of no more than 20 meters of cable.

82938A HP-IL interface. The Hewlett-Packard Interface Loop (HP-IL) is a bit/serial interface that combines low power, small size and low cost. With HP-IL, you can interface as many as 30 devices, with up to 10 meters of cable between each device.

82939A Serial interface (RS232C). The Serial Interface is the RS232C-compatible interface for the Series 80 Personal Computer. It provides bit-serial asynchronous data communication and is a common means of communicating between a computer and peripherals such as terminals and printers. The standard 82939A is terminated with an RS232C female connector for use with the HP 2601A Printer (with its supplied cable). Option 001 is terminated with an RS232C male connector for use with modems and some non-HP printers. Option 002 is shipped with a 13.1-foot (4m) unterminated interface cable for current loop operation.

82940A GPIO interface (parallel). This is a general-purpose byte (8-bit) or word (16-bit) oriented interface commonly used with printers, paper tape readers and punches, card readers and special instrumentation. It has two output-only 8-bit ports and two bidirectional 8-bit ports. They can be used as separate 8-bit ports or as 16-bit ports.

82941A BCD interface (Binary Coded Decimal). This interface supports interfacing with BCD instrumentation, such as voltmeters, multimeters, medical systems and weighing systems. It provides the mainframe with 11 digits of 4-bit BCD input or output data plus 4 sign bits for one or two channels.

82949A Printer interface. Provides interface for the HP Series 80 Computer to drive printers requiring a standard parallel Centronics-type interface. This output-only interface consists of a plug-in module and a captive cable, terminated with a standard Amphenol-type, 36-pin connector.

82950A Modem. Provides data communications in the United States. It is a serial, asynchronous, full duplex modem which operates at speeds of 110 or 300 baud. It connects directly to the telephone line and is compatible with Bell 103/113 modems. Features automatic answering, automatic dialing and log-on, five sets of special function keys. Order 82950A for modem with data cartridge. Specify either option 650 for modem with 5.25-inch flexible disc or option 630 for modem with 3.5-inch disc.

82966A Data Link interface. Now you can configure Series 80 Personal Computers with most other HP computer products on a common network. By implementing the Data Link protocol, the new Data Link interface enables Series 80 Personal Computers to connect to an HP 3047A adapter and an I/O ROM functions to communicate over HP's multi-drop data communications network. The network consists of a group of terminals and/or computers connected to a common data line—where a single HP1000/3000 host computer is the master of all communications activity.

92204A COM-80 Communications Interface Turn your HP Series 80 Computer into an applications oriented intelligent terminal via the COM-80 communications interface. The card interface allows asynchronous and bisynchronous data communications on multiple ports. The added capability to handle three hardware devices per card is standard. Using the interface with your Series 80 Computer, you now have the added advantage of a HASP workstation, allowing you to use major applications software packages via a timesharing service and still retain local control of your data. Along with the other standard features, you now have the capability to collect, edit, store and forward data from an ASCII device to a host computer without re-cabling using the multi-port feature.

Applications
- 2780/3780 RJE Terminal
- Asynchronous Terminal Emulator with file transfer capabilities.
- All applications are function key driven.

Bisynchronous mode
- Can handle standard baud rates up to 9600.
- Point-to-point leased or switched line capability.
- Conversational mode.
- Automatic ASCII to EBCDIC conversion.
- Auto retry on read and write.
- CRC generation and verification.
- Provides BASIC statements allowing the development of BSC programs.
- Transparent mode.

Asynchronous mode
- Can handle standard baud rates up to 9600.
- XON/XOFF, DTR/CTS, no protocol capabilities for both transmit and receive.
- From 5 to 8 data bits, 1, 1½ or 2 stop bits; odd, even or no parity.
- Necessary statements are available using the HP I/O ROM.

The 92204A provides two communication ports and one printer port all on the same plug-in module. The two data-comm ports may be configured on either an asynchronous character-oriented ASCII terminal (using 92239B software) or HASP/RJE workstation communicating in 2780/3780 mode (using 92239B software). The 92204A requires either 92239A or 92239B software. Specify option 610, 630 or 650 for software media. 92204A includes one 92221C datacomm cable. Order 92221T for a printer cable or 92221C for additional datacomm cable.

Series 80 accessories

82956A Keyboard overlays for HP-86 and HP-87. One printed and five blank overlays per package.

82935A Three-ring system literature binder ideal for storage of manuals. Instruction books and sales literature.

HP Series 80 plug-in, ROM and interface modules

	Computer	HP-85	HP-86/87
Plug-in modules	Memory modules	HP-85A 82903A (16K bytes)	
		HP-85B 82908A (64K bytes)	82908A (64K bytes)
		82909A (128K bytes)	82909A (128K bytes)
	CP/M System module	n/a	82900A
	Term/80	n/a	82900A Opt. 001
	System monitor	82928A	82928A
	Programmable ROM drawer	82929A	82929A
	Hybrid ROM Development System	82929A Opt. 001	n/a
	ROM drawer	82936A	82936A
	Speech synthesis module	82967A	82967A
ROM	Mass storage ROM	00085-15001	HP-86/87; included.
	Plotter/printer ROM	00085-15002	HP-86/87: Printer ROM included.
	Plotter ROM	See 00085-15002	00087-15002
	I/O ROM	00085-15003	00087-15003
	Matrix ROM	00085-15004	00087-15004
	Advanced programming ROM	00085-15005	00087-15005
	Assembler ROM	00085-15007	00087-15007
	MIKSAM ROM	n/a	00087-15011
	Electronic disc ROM	n/a	HP-86A/87: 00087-150012 HP-86B: Capability built-in
Interface modules	HP-IL/HP-IB interface	82169A	82169A
	HP-IB interface	82937A	HP-86A: 82937A HP-86B/87: included.
	HP-IL interface	82938A	82938A
	Serial (RS232C) interface	82939A Opt. 001 Opt. 002	82939A Opt. 001 Opt. 002
	GPIO interface	82940A	82940A
	BCD interface	82941A	82941A
	Printer interface	82949A	HP-86A: included. HP-86B/87: 82949A
	Series 80 Modem†	82950A†	82950A
	Data Link interface	82966A	82966A
	COM80 communications interface**	92204A	92204A
	2780/3780 RJE software —Media: tape cartridge —Media: 3.5-in. disc —Media: 5.25-in disc	92239A Opt. 610 Opt. 630 Opt. 650	92239A Opt. 610 Opt. 630 Opt. 650
	Async. terminal emulator software —Media: tape cartridge —Media: 3.5-in. disc —Media: 5.25-in. disc	92239B Opt. 610 Opt. 630 Opt. 650	92239B Opt. 610 Opt. 630 Opt. 650
	Datacomm cable	92221C	92221C
	Printer cable	92221T	92221T

**Requires either 92239A or 92239B software.

†Order 82950A for modem with data cartridge. Specify either Option 650 for modem with 5.25-inch disc or Option 630 for modem with 3.5-inch disc.

Personal computer software (descriptions begin on page 22)

HP-85 Personal Computers

Category	Software package name†	Product number★	Data cartridge	3.5-in. disc.	5.25-in. disc.	Required for operation††	For description see page
Data communications	Data Communications	82821A	Opt. 610	Opt. 630	Opt. 650	A,D,E,G,N	Page 26
	Professional Communications	82850A	n/a	Opt. 630	Opt. 650	B,D,G, or N,M,P	Page 26
Edu-tainment	Games	82818A	Opt. 610	Opt. 630	Opt. 650		Page 26
	Games II	82819A	Opt. 610	Opt. 630	Opt. 650		Page 26
Engineering	AC Circuit Analysis	82810A	Opt. 610	Opt. 630	Opt. 650		Page 27
	Electronics Engineering Multi Pac (AC Circuit Analysis, Waveform Analysis, Math)	82812A	Opt. 610	Opt. 630	Opt. 650		Page 27
	Surveying	82813A	Opt. 610	Opt. 630	Opt. 650		Page 27
	Waveform Analysis	82809A	Opt. 610	Opt. 630	Opt. 650		Page 27
Finance/accounting	Financial Decisions	82803A	Opt. 610	Opt. 630	Opt. 650		Page 28
	Portfolio Management	82814A	n/a*	Opt. 630*	Opt. 650*	E	Page 28
	TAJ™ (The Accounts Journal™) HP+	82854A	n/a**	n/a**	Opt. 650**	B,E,K,M	Page 28
General business	File Manager	88103A	n/a	Opt. 630	Opt. 650	B,E,J,M,P,X	Page 29
	Information Management	82817A	n/a	Opt. 630	Opt. 650	B,E,J,M	Page 29
	VisiCalc® PLUS	82800A	Opt. 610	Opt. 630	Opt. 650	A,B,E,F,J	Page 31
General/utility	BASIC Training	82802A	Opt. 610	Opt. 630	Opt. 650		Page 31
	Standard Pac	82820A	Opt. 610	n/a	n/a		Page 32
Statistics/mathematics	Basic Statistics & Data Manipulation	82805A	Opt. 610	Opt. 630	Opt. 650		Page 32
	General Statistics	82804A	Opt. 610	Opt. 630	Opt. 650		Page 32
	Linear Programming	82808A	Opt. 610	Opt. 630	Opt. 650		Page 32
	Math	82811A	Opt. 610	Opt. 630	Opt. 650		Page 32
	Regression Analysis	82806A	Opt. 610	Opt. 630	Opt. 650	L	Page 32
	Statistical Analysis Multi Pac (Basic Statistics, General Statistics, Regression Analysis)	82807A	Opt. 610	Opt. 630	Opt. 650		Page 32
Word processing/graphics	Graphics Presentations	82801A	Opt. 610	Opt. 630	Opt. 650	A,B,E,F,J	Page 33
	Text Editing	82816A	Opt. 610	Opt. 630	Opt. 650		Page 33

* Must also include Option 610, 630 or 650.

• Data cartridge included in 3.5-inch and 5.25-inch disc versions of Portfolio management package.

•• Single package contains both 3.5-inch and 5.25-inch discs.

† HP Series 80 software marked with the **HP PLUS** logo **(HP+)** is developed by independent companies. This software has been checked through customer reference and by a Hewlett-Packard evaluation team for quality, ease of use and installation.

†† Additional system elements, if required to operate the software package, are:

A ROM drawer (HP 82936A)
B Plotter/printer ROM (HP 00085-15002)
C Mass storage ROM (HP 00085-15001)
D I/O ROM (HP 00085-15003)
E 16K byte memory module (HP 82903A)
F HP-IB interface (HP 82937A)
G Serial interface (HP 82939A)
H Disc memory (HP 82900-series, 9121D/S, 9134A, 9135A, or 9895A)
J Plotter (HP 7225B w/HP 17601A module, HP 9872C or HP 7470A)
K Printer (HP 82905A/B or HP 2671A/G)

L Basic statistics and data manipulation software (HP 82905A)
M Items A, C, F and H
N Modem (HP 82950A, Opt. 630 or 650)
P Advanced programming ROM (00085-15005)
Q CP/M System (HP 82900A)
R Auxiliary Processor Module
X Dual disc drive
n/a not available

Note: product names followed by * or ™ are trademarks of their respective companies. For a complete listing, see page 126.

Edu-tainment — it's more than just learning, and a lot more fun.

Be sure to see our expanded range of edu-tainment software, starting on page 22. Choose from education, simulation, strategy, and adventure games.

HP-86 and HP-87 Personal Computers††

	Software package name†	Product number*	3.5-in. disc.	5.25-in. disc.	Required for operation††	For description see page
Data communications	Data Communications	82821A	Opt. 630	Opt. 650	A,D,G,N	Page 26
	Professional Communications	82851A	Opt. 630	Opt. 650	A,D,G,N	Page 26
	Term/80 (software only)	82849A	Opt. 630	Opt. 650	G,R	Page 26
Edu-tainment	Action Games	92248DA	Opt. 630	Opt. 650	64K bytes	Page 26
	Galaxy Patrol	92248FA	Opt. 630	Opt. 650	64K bytes	Page 26
Engineering	AC Circuit Analysis	82840A	Opt. 630	Opt. 650		Page 27
	Electronics Engineering Multi Pac (AC Circuit Analysis, WaveForm Analysis, Math)	82842A	Opt. 630	Opt. 650		Page 27
	Surveying	82843A	Opt. 630	Opt. 650		Page 27
	Waveform Analysis	82839A	Opt. 630	Opt. 650		Page 27
Finance/accounting	Estate Tax Plan (p-System) HP +	82878A	Opt. 630	Opt. 650	96K bytes	Page 28
	Financial Decisions	82833A	Opt. 630	Opt. 650		Page 28
	Home Budget Manager	92248EA	Opt. 630	Opt. 650	96K bytes	Page 28
	Peachtree Accounting Series 8					
	• Accounts Payable HP +	82885A	Opt. 630	Opt. 650	64K bytes	Page 28
	• Accounts Receivable HP +	82884A	Opt. 630	Opt. 650	64K bytes	Page 28
	• General Ledger HP +	82883A	Opt. 630	Opt. 650	64K bytes	Page 28
	• Inventory Control HP +	82886A	Opt. 630	Opt. 650	64K bytes	Page 28
	• Peach Pak	82889A	Opt. 630	Opt. 650	64K bytes	Page 28
	• Peach Pay™ Payroll System HP +	82887A	Opt. 630	Opt. 650	64K bytes	Page 28
	Personal Tax Plan (CP/M) HP +	45586A	Opt. 630	Opt. 650	Q	Page 28
	Personal Tax Plan (p-System) HP +	82877A	Opt. 630	Opt. 650	96K bytes	Page 28
	Portfolio Management	82844A	Opt. 630	Opt. 650	96K bytes	Page 28
	Professional Tax Plan (CP/M) HP +	45585A	Opt. 630	Opt. 650	Q	Page 28
	Professional Tax Plan (p-System) HP +	82876A	Opt. 630	Opt. 650	96K bytes	Page 28
General business	DATEBOOK™ II (CP/M) HP +	45581A	Opt. 630	Opt. 650	Q	Page 29
	dBase II™ (CP/M) HP +	45583A	Opt. 630	Opt. 650	Q	Page 29
	FILE/80	82824A	Opt. 630	Opt. 650	128K bytes, X	Page 29
	File Manager	88104A	Opt. 630	Opt. 650	B,E,J,M,P,X	Page 29
	MicroPlan™ (CP/M) HP +	45502A	standard	Opt. 650	Q	Page 30
	MicroPlan Consolidation™ (CP/M) HP +	45503A	standard	Opt. 650	Q	Page 30
	MILESTONE∗ (CP/M) HP +	45580A	Opt. 630	Opt. 650	Q	Page 30
	MultiPlan™ (CP/M) HP +	82855A	Opt. 630	Opt. 650	Q	Page 30
	Perfect Pack™ (CP/M) HP + **	98592JA	standard	Opt. 650	Q	Page 30
	PERSONAL DATEBOOK™ (CP/M) HP +	45582A	Opt. 630	Opt. 650	Q	Page 31
	Personal Productivity Pac	82846A	Opt. 630	Opt. 650	128K bytes A,B,J	Page 31
	VisiCalc∗ PLUS	82830A	Opt. 630	Opt. 650	64K bytes A,B,J	Page 31
General/utility	BASIC Training	82832A	Opt. 630	Opt. 650		Page 31
	CP/M∗ System (software only)	82848A	Opt. 630	Opt. 650	R	Page 31
	FORTRAN-77 (p-System add-on)	82828A	Opt. 630	Opt. 650	96K bytes	Page 31
	UCSD p-System∗/FORTRAN-77	82825A	Opt. 630	Opt. 650	96K bytes	Page 32
	UCSD p-System∗/PASCAL	82826A	Opt. 630	Opt. 650	96K bytes	Page 32
	UCSD p-System∗ Runtime Module	82829A	Opt. 630	Opt. 650	96K bytes	Page 32
	UCSD PASCAL∗ (p-System add-on)	82827A	Opt. 630	Opt. 650	96K bytes	Page 32

HP-86 and HP-87 Personal Computers†† (cont.)

	Software package name†	Product number*	3.5-in. disc.	5.25-in. disc.	Required for operation††	For description see page
Statistics/mathematics	Basic Statistics & Data Manipulation	82835A	Opt. 630	Opt. 650		Page 32
	General Statistics	82834A	Opt. 630	Opt. 650		Page 32
	Linear Programming	82838A	Opt. 630	Opt. 650		Page 32
	Math	82841A	Opt. 630	Opt. 650		Page 32
	Regression Analysis	82836A	Opt. 630	Opt. 650	L	Page 32
	Statistical Analysis Multi-Pack (General Statistics, Basic Statistics, Regression Analysis)	82837A	Opt. 630	Opt. 650		Page 32
Word processing/graphics	Graphics Presentations	82831A	Opt. 630	Opt. 650	128K bytes A,B,J	Page 33
	MailMerge™ (CP/M) HP +	45587A	Opt. 630	Opt. 650	Q	Page 33
	Perfect Writer Perfect Speller™ (CP/M)**	98593JA	standard	Opt. 650	Q	Page 33
	Spellstar™ (CP/M) HP +	45588A	Opt. 630	Opt. 650	Q	Page 33
	WordStar™ (CP/M) HP +	45584A	Opt. 630	Opt. 650	Q	Page 34
	WORD/80	82823A	Opt. 630	Opt. 650	128K bytes	Page 34

* **Must also include Option 630 or 650.**

** Available November 1984

† HP Series 80 software marked with the **HP PLUS** logo (**HP +**) is developed by independent companies. This software has been checked through customer reference and by a Hewlett-Packard evaluation team for quality, ease of use and installation.

†† HP-86 and HP-87 Computers all require an external printer and disc memory (items H & K at right). Additional system elements, if required to operate the software package, are:

A	ROM drawer (HP 82936A)
B	Plotter/printer ROM (HP 00087-15002)
D	I/O ROM (HP 00087-15003)
E	16K byte memory module (HP 82903A)
F	HP-IB interface (HP 82937A)
G	Serial interface (HP 82939A)
H	Disc memory (HP 82900-series, 9121D/S, 9134A, 9135A, or 9895A)
J	Plotter (HP 7225B w/HP 17601A module, HP 9872C, or HP 7470A)
K	Printer (HP 82905A/B or HP 2671A/G)

L	Basic statistics and data manipulation software (HP 82805A)
M	Items A, C, F and H
N	Modem (HP 82950A: Opt. 630 or 650)
P	Advanced programming ROM (00087-15005)
Q	CP/M System (HP 82900A)
R	Auxiliary Processor Module
X	Dual disc drive
n/a	not available

Note: product names followed by * or ** are trademarks of their respective companies. For a complete listing, see page 126

HP-120 and HP-125 Personal Office Computers

	Software package name†	Product number*	3.5-in. disc.	5.25-in. disc.	8-in. disc.††	For description see page
Data communications	DSN/Link	45534B	Opt. 630	Opt. 650	Opt. 680	Page 26
Finance/accounting	BPI General Accounting HP +	45552A	Opt. 630	Opt. 650	Opt. 680	Page 27
	BPI Payroll HP +	45553A	Opt. 630	Opt. 650	Opt. 680	Page 27
	PeachPay™ Payroll HP +	45594A	Opt. 630	Opt. 650	n/a	Page 28
	Peachtree Accounting Series 8					
	• Accounts Payable HP +	45593A	Opt. 630	Opt. 650	n/a	Page 28
	• Accounts Receivable HP +	45590A	Opt. 630	Opt. 650	n/a	Page 28
	• General Ledger HP +	45589A	Opt. 630	Opt. 650	n/a	Page 28
	• Inventory Control HP +	45592A	Opt. 630	Opt. 650	n/a	Page 28
	• Sales Invoicing HP +	45591A	Opt. 630	Opt. 650	n/a	Page 28
	Personal Tax Plan HP +	45586A	Opt. 630	Opt. 650	n/a	Page 28
	Professional Tax Plan HP +	45585A	Opt. 630	Opt. 650	n/a	Page 28

HP-120 and HP-125 Personal Office Computers (cont.)

	Software package name†	Product number★	3.5-in. disc.	5.25-in. disc.	8-in. disc.††	For description see page
General business	Condor® 20-1***	45550A	Opt. 630	Opt. 650	Opt. 680	Page 29
	Condor³ 20-2***	45550E	Opt. 630	Opt. 650	Opt. 680	Page 29
	Condor³ 20-3***	45550H	Opt. 630	Opt. 650	Opt. 680	Page 29
	Condor³ Upgrade 20-1 to 20-2	45550K	Opt. 630	Opt. 650	Opt. 680	Page 29
	Condor² Upgrade 20-1 to 20-3	45550P	Opt. 630	Opt. 650	Opt. 680	Page 29
	Condor² Upgrade 20-2 to 20-3	45550N	Opt. 630	Opt. 650	Opt. 680	Page 29
	DATEBOOK™ II HP +	45581A	Opt. 630	Opt. 650	Opt. 680	Page 29
	dBase II™ HP +	45583A	Opt. 630	Opt. 650	n/a	Page 29
	MicroPlan™	45670A	Opt. 630	Opt. 650	Opt. 680	Page 30
	MicroPlan Consolidation	45671A	Opt. 630	Opt. 650	Opt. 680	Page 30
	MILESTONE® HP +	45580A	Opt. 630	Opt. 650	Opt. 680	Page 30
	PERSONAL DATEBOOK™ HP +	45582A	Opt. 630	Opt. 650	Opt. 680	Page 31
	VisiCalc®	45531B	Opt. 630	Opt. 650	Opt. 680	Page 31
General utility	BASIC	45535A	Opt. 630	Opt. 650	Opt. 680	Page 31
	Programming Package	45536A	Opt. 630	Opt. 650	Opt. 680	Page 32
Word processing/graphics	Graphics	45532B	Opt. 630	Opt. 650	Opt. 680	Page 33
	MailMerge™	45562A	Opt. 630	Opt. 650	Opt. 680	Page 33
	Picture Perfect™	45603A	Opt. 630	Opt. 650	n/a	Page 33
	SpellStar™	45561A	Opt. 630	Opt. 650	Opt. 680	Page 33
	Word	45533B	Opt. 630	Opt. 650	Opt. 680	Page 33
	WordStar²	45560A	Opt. 630	Opt. 650	Opt. 680	Page 34

† HP Series 100 software marked with the HP PLUS (HP+) is developed and supported by independent software companies. This software has been checked through customer references and by a Hewlett-Packard evaluation team for quality, ease of use and installation.

Note: product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126. n/a not available

★ **Must also include Option 630, 650, or 680**

*** Require dual disc drives

HP-150 Personal Office Computers

		Software package name	Product number	3.5-in. disc.	5.25-in. disc.★	For description see page
Data communications	*Touch*	DSN/Link	45425A	standard	Opt. 650	Page 26
	☞	MONITOR/IBM PC	45439A	standard	Opt. 650	Page 26
Edu-tainment † ☞	*Touch*	Adventure	92243AA	standard	n/a	Page 22
☞	*Touch*	Baron™	92243KA	standard	n/a	Page 25
☞	*Touch*	Cyborg	92243NA	standard	n/a	Page 24
☞		Deadline™	92243VA	standard	n/a	Page 24
☞	*Touch*	Milky Way Merchant	92243BA	standard	n/a	Page 24
☞	*Touch*	Millionaire™	92243JA	standard	n/a	Page 25
☞		Planetfall™	92243PA	standard	n/a	Page 22
	Touch	Ricochet™	92243GB	standard	n/a	Page 24
☞		Starcross™	92243DA	standard	n/a	Page 22
☞		Suspended™	92243FA	standard	n/a	Page 22
	Touch	Temple of Apshai™	92243GA	standard	n/a	Page 23
☞	*Touch*	Touch Games I	92248AA	standard	Opt. 650	Page 26
☞	*Touch*	Tycoon™	92243HA	standard	n/a	Page 25
		Type Attack™	92243EA	standard	n/a	Page 24
☞	*Touch*	Winning Deal	92248CA	standard	Opt. 650	Page 26
☞		Witness™	92243QA	standard	n/a	Page 23
☞		Zork³ I	92243CA	standard	n/a	Page 23
☞		Zork³ II	92243RA	standard	n/a	Page 23
Finance/accounting		BPI/Accounts Receivable	45455A	standard	Opt. 650	Page 27
		BPI/General Accounting	45455A	standard	Opt. 650	Page 27
		BPI/Personal Accounting	45459A	standard	Opt. 650	Page 27

† All edu-tainment software, except Winning Deal and Touch Games I, can be purchased directly through the Computer Users Catalog.

HP-150 Personal Office Computers (cont.)

	Software package name	Product number	3.5-in. disc.	5.25-in. disc.*	For description see page
General business	dBase II™	**45468A**	standard	Opt. 650	Page 29
Touch	Condor™ 20-1	**45415A**	standard	Opt. 650	Page 29
Touch	Condor 20-3	**45416A**	standard	Opt. 650	Page 29
Touch	Condor 20-1 to 20-3 Upgrade Kit	**45417A**	standard	Opt. 650	Page 29
Touch	Context MBA™	**45481A**	standard	Opt. 650	Page 29
💾 *Touch*	Financial Calculator	**45423A**	standard	Opt. 650	Page 29
Touch	MicroPlan™	**45465A**	standard	Opt. 650	Page 30
Touch	MicroPlan™ Consolidation	**45466A**	standard	Opt. 650	Page 30
Touch	MultiPlan™	**45473A**	standard	Opt. 650	Page 30
Touch	Personal Card File	**45422A**	standard	Opt. 650	Page 30
Touch	VisiCalc®	**45405A**	standard	Opt. 650	Page 31
💾	1-2-3™ by Lotus	**45482A**	standard	Opt. 650	Page 30
General/utility	BASIC	**45445A**	standard	Opt. 650	Page 31
💾	Cross Reference Utility	**92248BA**	standard	Opt. 650	Page 31
💾 *Touch*	Microsoft® Compiled BASIC	**45446A**	standard	Opt. 650	Page 31
💾 *Touch*	Microsoft® COBOL	**45448A**	standard	Opt. 650	Page 31
💾 *Touch*	Microsoft® PASCAL	**44574A**	standard	Opt. 650	Page 31
💾 *Touch*	Microsoft® FORTRAN	**45449A**	standard	Opt. 650	Page 31
Word processing/ graphics *Touch*	Diagraph™	**45463A**	standard	Opt. 650	Page 33
Touch	Graphics	**45410A**	standard	Opt. 650	Page 33
	MailMerge™	**45401A**	standard	Opt. 650	Page 33
Touch	MemoMaker	**45420A**	standard	Opt. 650	Page 33
Touch	Picture Perfect™	**45462A**	standard	Opt. 650	Page 33
	SpellStar™	**45402A**	standard	Opt. 650	Page 33
Touch	WordStar®	**45400A**	standard	Opt. 650	Page 34
	WordStar®, MailMerge™, SpellStar™	**45404A**	standard	Opt. 650	Pages 33–34

Note: Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

HP Series 200: Models, 216, 226, and 236 Personal Technical Computers*

	Software package name	Product number***	HP216 3.5-in. disc.	HP216 5.25-in. disc.	HP226/236 5.25-in. disc.	Required for operation**	For description see page
Edu-tainment	💾 Adventure †	**92244GA**	Opt. 630	n/a	n/a	B2.0	Page 22
Engineering	AC Circuit Analysis	**98825A**	Opt. 630	Opt. 650	Opt. 655	100K, B2.0	Page 27
	Digital Filter Design	**98828A**	Opt. 630	Opt. 650	Opt. 655	256K, B2.0	Page 27
	Linear Systems Analysis	**98826A**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 27
	Waveform Analysis	**98827A**	Opt. 630	Opt. 650	Opt. 655	320K, B2.0 HP-IB printer	Page 27
General business	Context MBA™	**97038JA**	Opt. 630	Opt. 650	Opt. 655	512K**	Page 29
	Forecasting	**98818A**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 29
	Project Management	**98817A**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 31
	VisiCalc®	**98810A**	Opt. 630	Opt. 650	Opt. 655	320K	Page 31
Graphics	Graphics Presentations	**98815A**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0 plotter	Page 33
Statistics/mathematics	Numerical Analysis Library	**98821A**	Opt. 630	Opt. 650	Opt. 655	100K, B2.0	Page 32
	Statistics Library, Complete	**98820A**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 32
	Statistics Library, Part I	**98820B**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 32
	Statistics Library, Part II	**98820C**	Opt. 630	Opt. 650	Opt. 655	180K, B2.0	Page 32

* Originally Models 9816, 9826 & 9836. Were referred to as Models 16, 26 and 36. Also referred to in this catalog as HP216, HP226, and HP236.

Note: product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

** Memory requirements are stated in terms of additional read/write memory needed except for those items with a double asterisk (**). All packages require BASIC version 2.0 (B2.0) except Context MBA™ and VisiCalc®.

*** One of the following options must be ordered to specify the HP Series 200 computer model and disc size:
Opt. 630 Model 216 3.5-in. flexible disc
Opt. 650 Model 216 5.25-in. flexible disc
Opt. 655 Model 226 or Model 236 5.25-in. flexible disc
n/a = Not available

† Adventure can be purchased directly through the Computer Users Catalog.

edu-tainment

Adventure games

Planetfall™
💾 • HP150

As a proud member of the Stellar Patrol you are helping to carry the Third Union's peaceful message of a benevolent central bureaucracy to the thousands of worlds lost after the Great Collapse. It takes grit and courage as well as wisdom to be such a messenger. You will start at the bottom as an Ensign 7th Class, but there's plenty of opportunity for advancement for those who live up to the motto "Boldly going where angels fear to tread."

Like all of Infocom™'s prose adventures, PLANETFALL lets your imagination make you part of the story, in control of what you do and where you go. You will quickly become immersed in its rich environments and meet personalities as real as you've ever encountered.

And so you must embark on your mission. Do you have what it takes to lead a Patrol expedition?

Adventure—The Original by Crowther and Woods
💾 • HP150 *Touch*　　　💾 • HP216

"Somewhere nearby is Colossal Cave, where others have found fortunes in treasure and gold, though it is rumored that some who enter are never seen again. Magic is said to work in the cave. I will be your eyes and hands. Direct me with commands of one or two words."

So begins one of the most popular computer games of our time. Relying solely on your one- or two-word commands, ADVENTURE compels you to visualize your quest. ADVENTURE has more than 100 rooms to explore, 15 treasures to collect, and many objects to locate and use during your journey through the cave.

The original ADVENTURE was written at the artificial intelligence laboratories of MIT and Stanford. The Hewlett-Packard implementation of this classic game is not only challenging for adults, but will also capture the imagination of children while providing an entertaining way to sharpen their reading skills.

Embark on the adventure of a lifetime. But be prepared to encounter many

dangers as you venture into the fascinating world of Colossal Cave!

Starcross™
💾 • HP150

STARCROSS launches you headlong into the year 2186 and the depths of space. And not without good reason, for you are destined at that point in time to rendezvous with a gargantuan starship from the outer fringes of the galaxy. Upon docking with the strange craft, you must succeed in gaining entry to its mysterious interior. Once within, you will explore as startling, complex and engaging a world as any you have encountered and come face to face with other worldly beings, both helpful and harmful.

But the great starship serves a far larger purpose than mere cultural exchange. It conveys a challenge that was issued eons ago, from light-years away—and only you can meet it.

This exciting science fiction adventure game from Infocom™ will provide you with hours of enjoyment as you find and harness the quantum black holes.

Suspended™
💾 • HP150

They said you would sleep for half a millenium—not an unreasonable length of time, considering you'd be in limited cryogenic suspension. Your body would rest frozen at the planet's nerve center,

A Cryogenic Nightmare

Wake up to a world Rip Van Winkle never dreamed of.

The classic treasure hunt—fraught with danger, full of surprises.

Planetfall— the stellar patrol wants you.
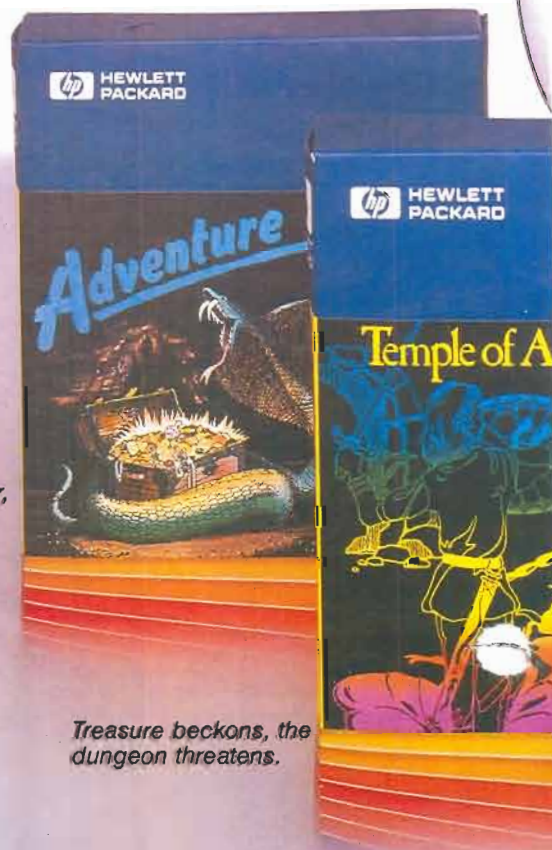
Treasure beckons, the dungeon threatens.

an underground complex 20 miles beneath the surface. Your brain, they told you, would be wired to a network of computers.

In SUSPENDED, you will strategically manipulate six robots. One specializes in sight, a second in hearing, and a third in accessing information from computer memory banks. Through them, you solve the intertwined mysteries awaiting you in one of the greatest adventure games of all times.

SUSPENDED is another episode of the INTERLOGIC™ prose series from Infocom™.

Temple of Apshai™
● HP150 *Touch*

This game of adventure is for those of you who long for the days of armor-clad warriors and sword-wielding soldiers. The Temple of Apshai offers the opportunity to live out your fantasies. It takes you back to the days of yore to explore unknown depths crawling with monsters and laced with treasures. If you are an experienced dungeon adventurer, you can even bring along characters from other games.

Temple of Apshai has been converted especially for the HP150 to take advantage of the HP *Touch* features. When you encounter a giant mantis, swamp rat or zombie, you can simply touch the screen to activate a sword parry, shoot a magic arrow or slip through the secret door.

The suspense, danger and action that await you inside the dungeon of the Temple of Apshai will beckon you again and again.

Zork® I
● HP150

Your greatest challenge lies ahead . . . and downwards. The Great Underground Empire confronts you with perils and predicaments ranging from the mystical to the macabre, as you strive to discover the 20 treasures of ZORK and escape with them and your life.

You are on the threshhold of a whole new experience. For ahead of you is the extraordinary story of ZORK. And once you step through the door, you leave the world of arcade games and trite fantasies behind and enter the dimensions of your imagination.

You don't just play ZORK—you become part of it. Every plot, every puzzle, every personality has been honed and per-

fected to make your experience uniquely realistic and involving.

ZORK is part of the INTERLOGIC™ series from Infocom™.

Zork® II
● HP150

The second chapter in the story of the Great Undergound Empire takes you further into the bowels of the earth to discover the secrets of sorcery. Confront the Wizard of Frobozz and his evil spells. He will attempt to impede your quest with his capricious powers.

ZORK II is a complete game in and of itself, and you don't have to master ZORK I in order to venture into it. But why not experience both?

The Witness™
● HP150

February 1938. A cold and dreary Friday evening in a quiet neighborhood on the outskirts of Los Angeles. Why should you, the Chief Police Detective, give up your precious spare time to work on this case—battling a 12-hour deadline? Could it be the self-centered soldier of fortune who asked you so urgently? Was his wife's death really a suicide? What makes his daughter so intriguing? And what about the Asian butler, or the lover who looks like a film star?

Ahead of you is a Gordian knot of motives and alibis to untangle. The only testimony you can trust is that of your own eyes because . . . you are The WITNESS. By Infocom™.

Journey to the limits of space, with your imagination as your guide.
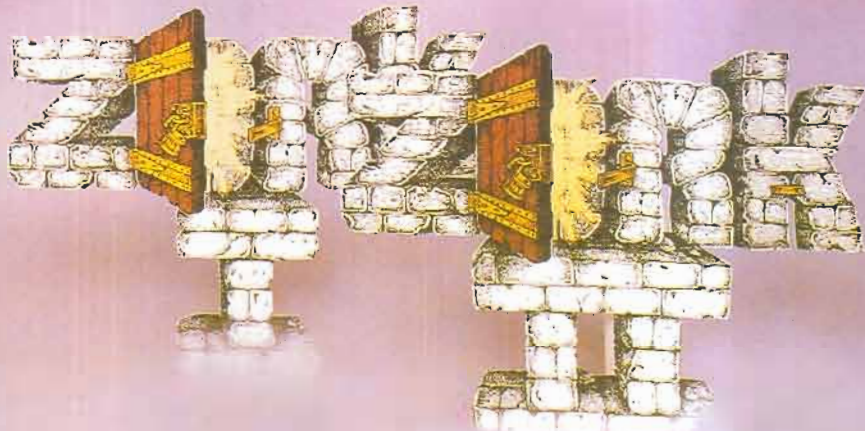
Descend into the bowels of the earth with the best-selling adventure game ever written (and its sequel).

edu-tainment (cont.)

Adventure games (cont.)

Deadline™
• HP150

A locked door. A dead man. And 12 hours to solve the murder.

When you take on DEADLINE, you're not just pitting yourself against a 12-hour time limit to solve one of the cleverest and most baffling cases in the detective genre; you're encountering a totally original concept in interactive adventure that literally puts the case in your hands. Working from an actual dossier on the crime and piecing together the myriad clues along the trail, you face a challenge so sophisticated that your suspects possess independent, flesh-and-blood personalities. And some of those personalities are so treacherous that, should you make the wrong move, one of them may do you in.

Deadline is the first of the INTER-LOGIC™ Mystery Series from Infocom.

Cyborg
• HP150 Touch

Do you enjoy science fiction? If so, this one is for you! Cyborg was the first text adventure game to feature a true plot. Its puzzles logically add up to the equivalent of a short science fiction story.

Just imagine being unlike the rest of your peers—half man, half machine. Shunned by society, you escape your mental anguish by accepting a mission that will take you through 122 locations and force you to locate and determine the use of 28 movable objects. Unlike traditional adventure games, your goal in Cyborg is not to collect treasures or

achieve the highest possible score. Instead, your sole objective is to complete your assigned mission.

Cyborg will challenge your wit and reward your logic skills. Once you get the hang of it, you'll be hooked. It's like reading a good book—you just can't put it down!

What do you think—are YOU Cyborg material?

Strategy games

Milky Way Merchant
• HP150 Touch

Become a galactic merchant! Sharpen your trading skills as you try to beat your opponents to the best deals. Milky Way Merchant provides you with the opportunities and the barriers in a strategy game that spans the galaxy.

The year is 2200 and interstellar development has begun. Across the Milky Way galaxy, trading centers are opening in several planetary systems, including our own solar system.

The Interstellar Federation has granted you—and your competition—a license to transport, buy, and sell supplies to settlements across the federation. If you plan and bargain well, the sky's the limit for profits. If not, your failure could lead to the collapse of stellar economies.

The opportunities—and obstacles—are never the same. Game conditions continually evolve as star systems change their demands and new centers join the federation.

Milky Way Merchant offers an unlimited array of planetary environments that will

keep you racing to outmaneuver your opponents for hours.

For one to four merchants.

Ricochet
• HP150 Touch

Ricochet is a powerful, strategic game in which you test your wit against the HP150 or against another opponent. The screen is reminiscent of a billiards table, with additional barriers which increase the difficulty of judging the ultimate path of each projectile. The action really begins when you shoot your launcher against your opponent's barriers (and hopefully bumpers and launchers).

Each projectile causes the barriers to turn 90 degrees causing an entirely new board layout for each shot. You can choose to alter the layout of your barriers in exchange for a launch at any point in the game. These changes are made on the HP150 merely by touching the screen.

And that's only the beginning. Several variations and levels of difficulty are available to offer continuing challenge and excitement.

Educational games

Type Attack™
• HP150

Is it a game? Is it a typing tutor? Yes! As alien combinations of letters and words attack the planet of Lexicon, you can defend your planet by quickly typing the correct letters or words, and zapping them out of the sky.

This fast action game provides hours of fun, increases productivity and is a wonderful way to reduce computer anxiety. Various skill levels and groupings have

Cyborg—
Don't just read
science fiction. . .
experience it!
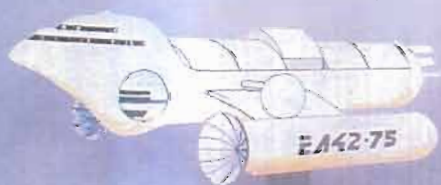
Milky Way Merchant—
Explore outer space as an inter-galactic shipping
magnate.
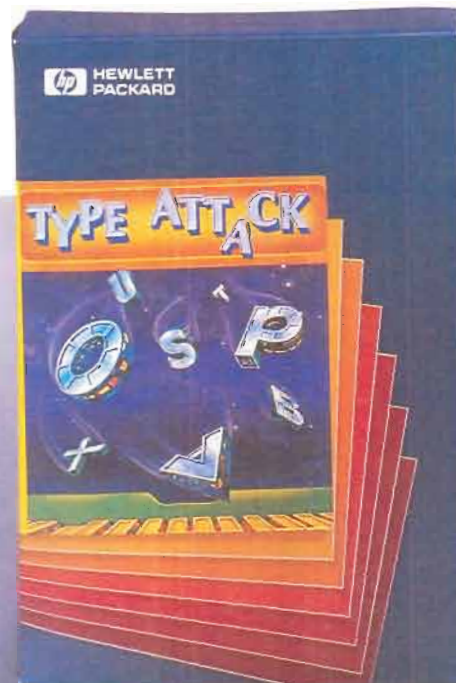
Sharpen your keyboard
skills with a game you
can't put down.

been designed by a professional typing teacher to improve touch typing skills. The pace of the game can be varied from 1–99 wpm and additional "lessons" can be created by the user.

Each game is timed and mistakes subtract energy points. The top five scores are saved so you can continually sharpen your skills or compete with a friend.

Simulation games

BARON: The Real Estate Simulation
• HP150 *Touch*

Imagine yourself a real estate baron with vast holdings around the country. Buy a high rise in New York, sell a cattle ranch in Texas, invest a quarter million in second mortgages or exercise an option on that manufacturing plant in Texas. Raw economic power flows through your fingertips.

You will be challenged by everything from fluctuating interest rates influenced by national events to neighborhood vandalism. You start with $35,000 and will have 60 simulated months to parlay it into a fortune by buying, selling and developing different kinds of properties in five U.S. states.

BARON is a complete economic simulation of the real estate market. The mortgage and property appreciation rates are not random numbers, but are based on a complex historical model of the real estate market. Exciting actual headlines from major financial publications can be signals indicating upward or downward price trends. A wide array of graphic and tabular data allows you to research property price trends around the country.

Best of all, BARON'S built-in program generator gives you the ability to generate an endless stream of economic scenarios.

MILLIONAIRE: The Stock Market Simulation™
• HP150 *Touch*

Enter the high-powered financial world of the New York Stock Exchange where strategic decisions can make or lose a fortune. You'll begin with $10,000 and will have as investment possibilities 15 familiar stocks in five different industry groups. You will buy and sell in response to an array of influences on both the market and your portfolio. MILLIONAIRE is played a week at a time over 77 simulated weeks with stock prices changing each week in response to market forces. As your net worth increases, you progress through different investment levels which allow increasing sophisticated trading options such as: buying-on-margin, call options and put options.

MILLIONAIRE is an economic computer simulation of the stock market. The market trends during the game are based on actual stock market trends rather than on random numbers. Each week actual headlines from major financial publications will yield clues about upward or downward price trends. An array of graphic and tabular data will provide information about the profitability of the corporations, the number of shares traded on the exchange, stock price trends, industry trends and daily stock price changes.

Designed to be simultaneously entertaining and educational, MILLIONAIRE increases your awareness of various investment opportunities, risks and rewards in today's stock market. Best of all, MILLIONAIRE'S built-in program generator creates a new economic scenario each time you play.

TYCOON: The Commodities Market Simulation™
• HP150 *Touch*

If you thrive on the abrupt twists and turns of a highly volatile marketplace, you belong in the intensely competitive commodities arena of TYCOON. Experience the most exciting fast-paced speculation in the world without risking a dime.

Imagine having financial control over vast quantities of the world's most important raw materials. In TYCOON you'll be trading gold, silver, oil, foreign currencies, T-Bills, and other exciting commodities. Imagine buying 500,000 barrels of oil just before an embargo, or holding 100,000 ounces of gold when the price drops $100.00 an ounce?

TYCOON is a complete economic simulation of the commodities market. The price changes are not random numbers, but actual commodity price trends. Exciting news headlines and a wide array of graphic price-trend data allow both novice and expert traders to search for that perfect opportunity to make a fortune. You will have free reign to soar high or plummet quickly depending on your strategy.

Best of all, TYCOON'S built-in program generator gives you the ability to generate an endless stream of economic scenarios. Your trading skills will improve, but TYCOON will continue to challenge you with new environments and opportunities each time you enter its marketplace.

hp museum

You just contracted your half a million barrels of oil. Newsflash! Oil embargo imminent!!!

With geometric precision you can outmaneuver either an opponent or the computer.

Where raw economic power surges through your fingertips.

The DOW has dropped 150 points. Can you salvage your fortune?

edu-tainment—cont.

Action Games
■ •HP86/87

Action Games turns your HP86 or HP87 into an electronic amusement center. You play six challenging arcade-style video games.

• Criss-Cross: A galactic shooting gallery that pits you against enemy space ships in a fight to the death.

• Dodge Ball: Just like the school yard game! Dodge speeding and ricocheting balls at one of three skill levels.

• Race: Test your nerve at the wheel of a Formula I car as you careen through an obstacle-strewn course.

• Mouser: You are a mouse trapped inside a three-dimensional maze with giant predators that relentlessly track you.

• Spools: Hop your way from one side of the screen to the other by jumping from spool to spool. There's one problem: The spools are moving!

• Heebie-Geebies: The Heebie-Geebies will destroy you unless you trap them. How? By leaving a trail.

Galaxy Patrol
■ •HP86/87

Galaxy Patrol turns your HP86 or HP87 into the cockpit of a sleek interceptor craft on the fringes of the galaxy. As the captain of this powerful starship, you're patrolling the galactic border, repelling any alien incursions you discover.

Suddenly, your tactical map shows aliens infiltrating several key sectors in your area! As you come out of warp drive, you see the menacing forms of the aliens drawing near. They swoop across your screen, daring you to stop them. You dive after them, plasma cannons blazing. An explosion appears as you zero in on the target. But in a split second you see another alien approaching—much larger, closer and deadlier. You throw the interceptor into a tight turn, narrowly missing the alien bomb, and start breathing again.

But now the gauges on your control panel show that fuel and shield power levels are dropping. You must get to the base and refuel . . . Are you up to the challenge?

Games I
•HP85

Games I provides an entertaining way to become familiar with the keyboard and operation of the the HP85 Personal Computer.

Games II
•HP85

Graphic, arcade-type games to provide both entertainment and familiarization with the keyboard and general operation of the HP85 Personal Computer.

Touch Games I
■ •HP150 *Touch*

Touch Games I livens up your leisure time with novel and strategic diversions, plus some old favorites presented with new twists.

Touch Games I includes:

• 3D Tic-Tac-Toe
• Blackjack
• Wumpus XIV: The deadly Wumpus dragon lives in a cave system of 20 rooms. You must terminate him or die.
• Biorhythms: Chart the ups and downs of your physical, emotional, and cognitive cycles.

Winning Deal
■ •HP150 *Touch*

With the HP150 as your challenger, card playing has never been more fun. Winning Deal combines your favorite card games with the magic of *Touch* , so moving a card is as easy as pointing your finger. And Winning Deal's "learn-as-you-play" feature won't let you make illegal moves. Try out your skill and luck on these single-player games:

• Blackjack
• Concentration
• Accordion Solitaire
• Streets and Alleys Solitaire
• Klondike Solitaire

data communications

Data communications
•HP85   •HP86/87

Turn your Series 80 Computer into an intelligent remote terminal that will communicate with other asynchronous computers and terminals. Transmission rates range from 50 to 9600 baud. You can transfer data files to a remote device (uploading) or from a remote device to your HP Series 80 Computer (downloading). Print reports, store and retrieve data and use other Series 80 peripherals while you are on line.

DSN/Link
•HP120/125   •HP150 *Touch*

—HP120/125: An easy-to-use communications program that transfers data files between HP Series 100 and HP 3000 Computers. This software turns the HP120/125 into a distributed processor. Remote files can be accessed, transferred to the HP Series 100 and processed locally. Results can be stored locally, sent to a printer, and transferred back to the HP 3000. Bidirectional file transfers are supported via hardwired or remote connections.

—HP150: This version provides file transfer capability between the HP150 and other computer systems or information services such as The Source, Dow Jones News/Retrieval, and Compuserve.

MONITOR / IBM PC
■ •HP150

This file transfer monitor for the IBM PC is designed to work with DSN/Link (see description above) on the HP120/125 and the HP150. In conjunction, DSN/Link and MONITOR/IBM PC enable fast, easy, error free transfer of ASCII or Binary files between the two systems. Both programs and data files may be transferred, but compatibility of data formats or program instructions is not guaranteed. Files may be transmitted either using full duplex modems and telephone lines (with the appropriate modem cables) or using an HP 13242H cable to connect the HP system and the IBM PC. MONITOR/IBM PC includes an IBM formatted 5.25-inch floppy disc and a manual. It requires 128K of RAM memory on the IBM PC and the 2.0 or later version of the MS-DOS operating system.

Professional Communications
•HP85   •HP86/87

Advanced software for communication via telephone lines. either with the 300 baud Series 80 modem or an external 300 or 1200 baud modem. With Professional Communications the user can do all of the following within a single software environment: create, edit and merge text files; transfer files/keystrokes to another computer; receive and store text from another computer; set up the Series 80 Computer as a "bulletin board" system; audit all communications activity; and secure or encrypt files and communications.

Term/80
•HP86/87

When combined with Auxiliary Processor Module, Term/80 converts the HP86/87 into an intelligent terminal that communicates with large HP mainframe computer in multiple operating modes, including block and format. Term/80 enables the HP86/87 to emulate the popular HP 2622A Terminal. If you don't own the Auxiliary Processor Module, order the HP 82900A Opt. 001. (See page 14, 16)

engineering

AC Circuit Analysis
● HP85 ● HP86/87 ● HP216/226/236

Model your circuit and examine its AC performance quickly and accurately. Determine steady-state AC behavior of electrical networks including resistors, capacitors, inductors, voltage-controlled and independent current sources.

Note: The HP85/86/87 versions of AC Circuit Analysis are a subset of the Series 200 package

Digital Filter Design
● HP216/226/236

Provides the tools necessary for designing digital filters. Includes routines for designing both infinite impulse response (IIR) and finite impulse response (FIR) digital filters. Also included are routines for transforming analog filter functions, H(s), to digital transfer functions, H(z). Once the program has computed the

filter coefficients, both magnitude and phase plots are available to measure the actual performance of these filters.

Electronics Engineering Multi Pac
● HP85   ● HP86/87

Contains AC Circuit Analysis. Waveform Analysis and Math packages at a bundled discount price.

Linear Systems Analysis
● HP216/226/236

Provides "classical" tools needed for analyzing single-input/output linear systems. The following analysis plots are available: root locus, Nyquist, step response, impulse response and bode. Linear systems can be in the form of a control system block diagram or a simple transfer function in Laplace (S) notation.

Surveying
● HP85   ● HP86/87

Programs to aid surveyors in many of their most often encountered computations. Fast, easy calculations and maintenance of coordinate points for easy recall.

Waveform Analysis
● HP85 ● HP86/87 ● HP216/226/236

Performs fast Fourier transforms on either frequency or time domain data. Computes correlation function and power spectrum, plus Fourier series coefficients. Double data block entry for cross-correlation, power spectrum and convolution. Plot or print output.

Note: The HP85/86/87 versions of Waveform Analysis are a subset of the Series 200 package.

finance/accounting

BPI Accounts Receivable
● HP150

BPI Accounts Receivable can grow with your company. It expands in capacity with the execution of a single command. If you have a large number of customer accounts, you'll appreciate the flexibility of this system. With this system, you can:
● Set up your accounts receivable ledger based on either the balance forward or the open item method of maintaining accounts.
● Use four kinds of customer accounts, including nonrevolving and revolving accounts, ones with fixed, required payments, and customer accounts with periodic, repetitive charges.
● Set up two levels of finance charges, specify the rate and the minimum balance for each, and still waive finance charges for specific customers.
● Determine the number of days in a billing period and the month that marks the end of your fiscal year.

The system prints customer statements, past due notices, mailing labels, current period journal activity, and both customer and general ledgers. You can print detailed analyses of customer accounts showing the following: balance forward, last transaction date, aged balances, charges year-to-date, finance charges year-to-date, times billed for the year-to-date and for the life of the account, and the number of times the account has been past due.

You can set up stand-alone accounts receivable system, or you can design it to merge with General Accounting.

BPI General Accounting
● HP120/125   ● HP150

BPI/General Accounting System is designed to simplify bookkeeping by offering a series of computerized accounting procedures. You can automatically record a single transaction as a double entry to designated control accounts, merge the system with other books with a single entry for each account, or use it independently as a stand-alone system.

Print up to 10 profit-and-loss substatements for various branches or departments, plus a consolidated profit-and-loss statement. Trial balance, profit-and-loss statements, and balance sheet may be printed at any time during the month. Up to 2,000 accounts (1,200 on the HP120/125) are available to be divided among general ledger, accounts receivable, accounts payable, payroll, and cash disbursements.

BPI Payroll
● HP120/125

This full-function system provides for automatic payroll processing, check printing and transfer of data to the optional BPI General Ledger.

Using standard double-entry accounting, the Payroll system will calculate all taxes and deductions, track vacation days and pay, sick days and pay, tips, advances and reimbursements. It also allows for an employer-sponsored IRA (Individual Retirement Account). Employees may be salaried, hourly or commissioned. They can live in different states— or even be on different pay cycles.

You can subscribe, at a nominal charge, to an update service from BPI which provides employment tax table changes affecting the states and localities you operate in.

The system can handle up to 200 employees (100 on the HP120/125).

BPI Personal Accounting System
● HP150

BPI/Personal Accounting System lets you take advantage of the speed and accuracy of computerized accounting in managing your own finances. Quickly and easily, you can: unravel snags in your checking account while reconciling your monthly statement; get a handle on your credit cards by recording your charges in up to 10 accounts; plan a budget for income and expense accounts; and print checks automatically on your computer printer.

You set up your own set of accounts within these five categories: assets, liabilities, net worth, income and expenses. Personal Accounting will calculate the balance of each account and print reports describing your current financial status.

Printed reports from the system can include: a list of checks written and deposits made for each of 10 checking accounts; a list of outstanding checks and deposits in transit; a general journal; an amortization schedule, in which the system calculates the interest and principal portions of each loan or mortgage payment; and two different statements of net worth that summarize your assets. You can also receive profit and loss statements, lists of your accounts, and lists of your payees and payors.

finance/accounting (cont.)

Estate Tax Plan
● HP86/87

An estate tax planning package designed for professional tax planners, trust officers, insurance brokers and financial planners.

Estate tax plan was developed under the Supervision of Dr. William A. Raabe, CPA.

Financial Decisions
● HP85   ● HP86/87

An easy-to-use aid in evaluating financial decisions. Programs include: compound interest, loan amortization, discounted cash flow, depreciation, interest conversions, bonds, notes, breakeven analysis, and odd-days interest.

Home Budget Manager
▩ ● HP86/87

Written for the HP86/87, Home Budget Manager helps you monitor and control your household budget. Enter income, expense, and budget information in detailed categories, then compare and analyze the data with reports and graphics. With Home Budget Manager you can record income and expenses in your own format; create a budget which corresponds to your customized expenses, then compare your outlays against your budget; enter checks into multiple expense categories; record autoteller, bank charge and cash expense entries; flag and track tax exempt income and expenses; create reports and graphs.

Peachtree Accounting Series 8

Allows you to spend more time on analysis and less on bookkeeping. The Peachtree accounting modules can be used independently or together as an integrated system that combines entries in all modules for trial balancing and end-of-period reporting.

Peachtree Accounts Payable
● HP86/87   ● HP120/125

Maintains a complete master file on each vendor. This AP can show you which invoices to pay—by due date, discount date or according to your cash flow requirements. Include detailed aging reports, automatic posting for recurring invoices, and the ability to apply credits to a specific invoice or as an open credit against a vendor record.

Peachtree Accounts Receivable
● HP86/87   ● HP120/125

Helps prepare bills and obtain timely collections from your customers. Use it to print invoices, statements and aging reports, as well as maintain information on sales taxes, customer accounts and details for posting to the General Ledger. At the end of a billing period, AR will execute either a balance forward or a more detailed open-item customer account, or a combination of the two.

Peachtree General Ledger
● HP86/87   ● HP120/125

Helps track a company with up to 100 departments. Provides a complete set of management reports and automatically posts transactions entered in other Peachtree modules. General Ledger provides flexible chart-of-account setup and built-in depreciation/amortization calculations.

Peachtree Inventory Control
● HP86/87

Helps monitor all facets of your inventory operations. Features include three price levels for each item, standard cost or average cost options, and an inventory master file with sales, costs and reorder information. Handles approximately 1250 inventory items on each 270K byte disc.

Peachtree Peachpak
● HP86/87

Combines Peachtree General Ledger, Accounts Payable, and Accounts Receivable at a reduced price.

Peachtree Sales Invoicing
● HP120/125

An add-on "bridge" between the Series 8 Accounts Receivable and Series 8 Inventory that allows simultaneous access to and updating of the two packages' data files. This eliminates the laborious two-step method of entering data in Accounts Receivable and again in Inventory.

Sales invoicing reports include a back-order report by invoice, an inventory activity report which includes quantities shipped and backordered by invoice, and a summary report showing total units, sales, cost of sales and profit for all part numbers.

PeachPay™ Payroll System
● HP86/87   ● HP120/125

A complete payroll system you can use by itself or with Peachtree General Ledger. Maintains a complete employee payroll history and will support weekly, biweekly, semimonthly and monthly pay periods. Provides 12 deduction categories and eight earnings categories. Tracks sick and vacation days used and accrued. Tax record maintenance is provided by an annual subscription.

Personal Tax Plan
● HP86/87   ● HP120/125

An easy-to-use tax planning package for individual home users. This package was designed by CPAs and fully tested by a major public accounting firm. Manual provides step-by-step instructions.

Portfolio Management
● HP85   ● HP86/87

A software package that helps individual investors and professional investment advisors monitor their portfolios. Softkey and prompt-driven commands make it easy to enter investments for net worth valuation and tax planning. A connection with the Dow Jones News/Retrieval® Service lets you automatically update the current market value of your portfolio of stocks, bonds, warrants, T-bills and mutual funds. You can also handle cash, real estate, liabilities, and other investments in your portfolio. Handles up to 100 investment items, with an unlimited number of portfolios (35 portfolios stored on each data cartridge or disc).

Professional Tax Plan
● HP86/87   ● HP120/125

An easy-to-use tax planning package for professional tax and financial planners, including CPAs, attorneys, and financial planners. The program is designed by CPAs and has been fully tested by a major public accounting firm.

TAJ™ (The Accounts Journal)
● HP85

An HP-85 accounting package that fully integrates the journals needed in small business accounting, general ledger, accounts receivable, accounts payable and payroll. TAJ can handle up to 400 general ledger accounts, 300 customers, 300 vendors and 50 employees. All journals are updated with one posting. Available on 5.25-inch discs only.

general business

Condor™ database packages

A powerful and user-friendly data management system that allows you to manage your business instead of your data. Set up a useful database quickly and easily. Transfer data to other Series 100 applications. With WordStar® and Mail-Merge™, create vendor and client lists, form letters, and mailing labels. Generate custom applications using help menus and English-like commands.

Three versions of the Condor-20 series are available. Condor 20-1 is a low-cost entry-level system for simple databases. Condor 20-2 has full relational features for processing multiple files. Condor 20-3 is the most powerful with relational, advanced reporting, and indexing capabilities. Upgrade kits are available to take you from the lower versions to the more powerful ones.

Condor 20-1
• HP120/125   • HP150 *Touch*

HELP menus let you use databases for daily applications with minimal training. Create a database quickly and easily by typing a form on the screen. Enter, update, and list the data using the same form. You can sort your data, compute simple statistics, and produce simple row and column reports.

Can be upgraded to Condor 20-2 (HP120/125 only) or Condor 20-3.

Condor 20-2
• HP120/125

Has all the features of Condor 20-1 plus relational database functions, allowing you to retrieve, sort, and print information from two databases. You can also join, project, post, and combine multiple files.

Can be upgraded to Condor 20-3.

Condor 20-3
• HP120/125   • HP150 *Touch*

Provides all the capabilities of Condor 20-2 plus advanced reporting and indexing features. Condor 20-3 has a report generator that allows you to create customized reports in a wide variety of formats. Condor 20-3's indexing features give you more rapid access to the database, eliminate the need to presort before printing, and create indexes for existing, non-indexed databases.

Context MBA™
• HP150 *Touch* • HP216/236

For managers and other professionals who need to analyze data for decision-making, and then summarize the results for reports or presentations.

Context MBA helps you: generate reports analyzing current sales data; predict and describe budget requirements based on current year expenses; create a model to compare planned inventory with actual inventory on hand and then report the findings; and write executive memos and reports.

Context MBA software includes spreadsheet, graphics, word processing, database management, and telecommunications. These five MBA functions all work with the same information—once information is entered, all parts of the program have access to it. So a change in a spreadsheet immediately causes a change in a displayed graph.

The windowing feature allows more than one function to appear on the screen at a time so data can be analyzed in several different ways. For instance, when changing a spreadsheet value, you can immediately see the change in a graph that is displayed concurrently.

DATEBOOK™ II
• HP86/87   • HP120/125

This program gives an individual or clerical staff a more efficient way to manage time than with an appointment book. It is useful where time management is critical to efficiency: in doctors' offices, legal firms, and other professional offices. Appointments can be scheduled, cancelled, modified, moved or held until they can be rescheduled. Openings can be searched by time of day, day of week, or day of year. Print the appointments for the day, display all scheduled appointments for any person, or schedule a conference at a convenient time for all attendees.

dBASE II™
• HP86/87 • HP120/125 • HP150

dBase II™ is a data management tool for constructing and manipulating numeric and character information files.

A special feature of dBase II is its own English-style program-building language. You may sort, edit, or display a database directly from the keyboard, or write menus and programs to support your specific applications. Use the full-screen editing facility to prompt operator input or to format data output into orderly, attractive reports.

Applications that dBase II has been used for include: general ledger, journal of accounts, accounts receivable, accounts payable, sales tax records, payroll, check management and writing, time billing, inventory control, job costing, tax computation, and document cross-referencing.

FILE/80
• HP86/87

Solution-oriented file management system designed to provide user with an efficient method of managing files and producing output (records, labels, letters) from information in the files.

File Manager
• HP85   • HP86/87

Create and enter data into a file structure and then perform searching, sorting, reporting and plotting functions. Report results in one of three versatile formats, or create attention-getting line, curve, bar and pie charts. Softkeys allow you to select and initiate a command by pressing a single key which is labeled on the screen. A HELP key will guide you through each procedure. It can handle up to 1000 records of 1000 bytes each, file size dependent on the capacity of your mass storage. Data can be translated to a string data file for use with other software such as VisiCalc PLUS.

Financial Calculator
 • HP150 *Touch*

Financial Calculator is a program that simulates the HP12C Business Calculator. You use the calculator displayed on the screen just as you would use the HP12C by touching its keys and functions. The familiar display comes with an impressive level of functionality. In addition to the HP12C's full computing and programming power (see page 4), you can copy all your programs and registers onto files and recall them at will. This enables you to build your own program library. You can also transfer results to VisiCalc® or Lotus 1-2-3™ spreadsheets, and print calculations on a printer.

Forecasting
• HP216/226/236

Allows time-series data to be analyzed, smoothed, forecast and plotted using a variety of statistical techniques.

Information Management (IMPac)
• HP85

Provides a powerful, flexible system for list management. Each record can be 20 to 1024 bytes long. Fields can be defined as alphanumeric, numeric-only and dollars. Has create, update, search and extend programs; plus a querying system, report writer and extensive graphics.

Note: Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

general business (cont.)

MicroPlan™
● HP86/87 ● HP120/125 ● HP150 Touch

MicroPlan is a financial planning package designed for the serious business user. Formulas are built in, and no replication is required. On-screen commands are referenced by numbers. so typing skills are not needed.

As you develop a spreadsheet with MicroPlan, the commands used are automatically documented so that continuity is assured. To find out how a worksheet was developed, you press the command for "show rows," and the sequence of commands will be shown, with their prompted values.

"Programming" in MicroPlan does not mean COBOL or BASIC. It can be thought of as a command stack or keystroke memory. In the program mode, MicroPlan remembers all commands you are executing, and puts them in a file for later execution. With the program mode, a manager can set up a complex table that needs to be updated periodically; an assistant can then do the updating by following the prompt messages which the manager has supplied.

MicroPlan's report generator includes features such as variable column width, $ and % signs for rows and columns, automatic pagination, and <> for negative numbers. Financial commands include depreciation, loan amortization, discounted cash flow, internal rate of return, and tax scheduling. Statistical commands include variance, delta, sigma, and mean.

An add-on consolidation module (see below) is used for calculations across tables, sensitivity analysis, and drawing mainframe or outside data directly into MicroPlan.

MicroPlan Consolidation Module™
● HP86/87 ● HP120/125 ● HP150 Touch

MicroPlan Consolidation Module is an add-on to MicroPlan for consolidation of different reports, and for drawing data into MicroPlan from outside sources. Such outside sources include mainframes (e.g., the HP 3000), outside timesharing services (e.g., The Source), and other spreadsheet, general ledger, database, or accounts receivable packages.

Reports from different departments, individuals, services, regions, or time periods can be consolidated for variance analysis or other management summaries. MicroPlan's built-in variance command will tally the differences between an actual and projected budget, and supply the percentage of variance for the items selected, or for the whole report.

MILESTONE®
● HP86/87 ● HP120/125

A project management and time scheduling product that uses PERT/CPM

techniques to increase productivity and management of small projects. It helps project leaders and small business owners clarify the tasks at hand and communicate schedules and priorities.

Stresses interactivity and comprehensive reporting. The list of associated activities provides a thread used to link all jobs together into an overall project schedule. Adding or changing activities will be recomputed into the schedule and the results are immediately displayed on the screen.

MultiPlan™
● HP86/87 ● HP150 Touch

An electronic worksheet that is designed to help you get fast answers to many planning, modeling, and forecasting questions. It starts by presenting you with a blank grid of rows and columns. You build your worksheet on this grid, just as you would on ledger paper. You enter numbers and connect them with the formulas you ordinarily use. After that, you do the brain work and the computer does the calculations.

MultiPlan's features include the ability to build formulas by highlighting cells, command prompting, full English words for commands, on-line reference guide, and up to eight display windows. Its cell referencing methods include naming, relative reference, and absolute reference.

There are a variety of built-in functions, such as arithmetic, trigonometric, conditional (if-then, and, or), table (lookup, index). net present value, and standard deviation. Multiplan also offers variable column width, a user-assignable decimal point. text calculation, and alphabetical and numerical sorting. Popular report options include variable margins, automatic pagination, and print formulas.

1-2-3™ by Lotus Development Corporation
● HP150

1-2-3 is a fully integrated package that offers data base management. spreadsheet, and graphics. Not only is it the fastest spreadsheet program currently available for the HP150, it is also one of the easiest to use. With its menu-driven structure. on-screen descriptions. on-line HELP facility (more than 250 screens of information tied to your current activity), and disk tutorial (six lessons). 1-2-3 is unmatched in its convenience for both the novice and the expert. With the largest worksheet on the market (2048 rows by 256 columns), it provides ample space for related data on a single sheet. A macro capability allows you to customize a worksheet by giving letter names to frequently used sequences of commands. Graphing facilities are also extensive. You can create instant line. bar. pie. stack-bar, and scatter charts with a few keystrokes using data from your dis-

played worksheet. The mathematical capability usually found in electronic spreadsheets has been expanded to include functions for future value, payment date, and statistical applications. 1-2-3 also provides you with a data transfer utility to allow exchange of ASCII text files with other programs.

Perfect Pack™ from Perfect Software
● HP86/87

Perfect Pack™ from Perfect Software consists of four products: Perfect Calc™ (spreadsheet). Perfect Filer™ (data management system), Perfect Writer™ (word processor), and Perfect Speller™ (spelling checker). All four are integrated, so one set of logical commands directs the entire product line. And data files are compatible within all products. You can incorporate a spreadsheet into a printed document, or send a personalized letter to a selected group of people in a data address file.

With Perfect Calc, up to seven separate spreadsheets may be viewed simultaneously on-line; a split screen can display any two of the spreadsheets. Multiple spreadsheet editing, subsetting, and merging are available. There is an expandable function library, and 17 application template programs.

Perfect Filer features menu guides for customized data file creation, and has a forms capability for data file input and display. Up to five simultaneous sorts are possible on up to 65K records, with up to 20 selective subsets for a single file. Relational operators, date/time, and financial formats are built in. Formatting procedures are available to generate lists, labels, invoices. Two mailing list data formats are provided.

The Perfect Writer/Speller™, which may be purchased separately, is a word processing package with an associated in-text spelling checker. See page 33 for more information and features.

Personal Card File
● HP150 Touch

A simple database application for keeping track of small amounts of information such as phone numbers and addresses. PCF looks and operates like a standard desktop Rolodex. You define cards (records) for the information you want to maintain. Cards can also be defined so mailing labels can be printed from PCF, and files can be used to create custom form letters with WordStar® and Mail-Merge™.

Once a database is created, browsing through entries and selecting individual cards is as easy as just touching the Rolodex that appears on the screen.

Personal Card File can transfer files to and from Condor™ databases, giving you a growth path to more sophisticated databases.

PERSONAL DATEBOOK™
- HP86/87   • HP120/125

Offers many of the advantages of DATE-BOOK II, but is designed for the individual who keeps a personal calendar. PERSONAL DATEBOOK can maintain appointments for up to nine people; the group feature is not included. The overall capacity is the same as DATEBOOK II with a similar configuration, but PERSONAL DATEBOOK shows more of one person's schedule on the screen at one time.

Personal Productivity Pac
- HP86/87

Personal Productivity Pac contains Visi-Calc®. WORD/80 and FILE/80 at a reduced price.

Project Management
- HP216/226/236

Analyzes project networks using CPM, PERT and MPM techniques. The output is in GANTT chart form.

VisiCalc®
- HP85   • HP86/87   • HP120/125
- HP150 *Touch*   • HP216/226/236

VisiCorp's popular electronic worksheet is a powerful tool for analysis and solution of complex business and scientific problems. Any cell in the worksheet (64 columns by 254 rows) may contain a label, a number, or a calculated result. A full range of commands are available to calculate totals, averages. net present values. trigonometric and math functions, and more. "What if . . ." questions can be answered by changing assumptions and data in the worksheet. Any information affected by a change is updated automatically.

HP85/86/87 VisiCalc PLUS: The "PLUS" is an ability to produce line, bar, and pie charts from row and column information without entering new data.

HP150 VisiCalc with *Touch* : This enhanced version provides an on-line HELP facility with immediate access to command descriptions. Individual cell widths provide flexibility in formatting. Expanded printing options, such as margin settings, page breaks, titles, page numbering, and formula printing, enable you to produce quality reports without supporting software. Protected cells permit you to create worksheets for use by others.

general/utility

BASIC
- HP120/125   • HP150

—Series 100/BASIC for the HP120/125: Even the most casual programmer can now quickly write a program to solve a problem. The Series 100 BASIC interpreter provides one of the most extensive implementations of BASIC available on a microcomputer. Included are features and performance found in languages operating on large minicomputers. Series 100 BASIC meets the requirements for the ANSI subset standard for BASIC.

—Series 100/BASIC for the HP150: This version is entirely compatible with Microsoft's BASIC-80. It is also compatible with the Series 100 BASIC available for the HP120/125. Programs written for the HP120/125 can be ported to the HP150 and used without requiring changes to the source code.

BASIC Training
- HP85   • HP86/87

Self-teaching BASIC language course for novice users. Proceed at your own pace. Prerecorded media provides guide to operation and programming. Prepares users for more advanced operations.

COBOL by Microsoft®
- HP150 *Touch*

COBOL by Microsoft provides part of a complete development environment on the HP150 for users whose applications are written in COBOL and who would prefer to further develop their applications in the same language and methodology. This system features a 2-pass compiler and four levels of overlays. and complies with the ANSI X3.23-1974 standard at the low intermediate level for all the level-1 and some level-2 ANSI-74 standard features.

Compiled BASIC by Microsoft®
- HP150 *Touch*

Compiled BASIC by Microsoft is an optimizing compiler designed to complement HP's Series 100/BASIC. This creates an extremely powerful BASIC programming environment for your HP150. You can develop and debug your BASIC programs using the Series 100/BASIC interpreter. then streamline program execution by using Compiled BASIC. This package allows you to create programs that, in most cases, execute faster than the same interpreted programs. require less memory, and provide source-code security.

CP/M® System
- HP86/87

When combined with Auxiliary Processor Module. the CP/M System extends the HP86/87 by providing a wide variety of software solutions. If you don't already own the Auxiliary Processor Module. order the HP 82900A. (See pages 14, 16.)

Cross Reference Utility
- HP150

Cross Reference Utility is designed as a productivity aid to programmers using Series 100/BASIC. Using your standard BASIC program file you can generate a complete cross-reference listing. which includes variable names. BASIC function names. and mathematical operators. all referenced by line number. and resolved and unresolved line references. This utility is easy to operate and its performance has been optimized for fast execution. Output can be directed to a printer or to a disc file.

FORTRAN by Microsoft®
- HP150 *Touch*

FORTRAN by Microsoft provides part of a complete program development environment on the HP150. It allows users who desire a high-level language to implement compute-bound applications while maintaining code transportability and ease of programming. This package is a subset implementation of the ANSI X3.1978 standard and features a 3-pass compiler.

FORTRAN-77
- HP86/87

This is offered as an add-on FORTRAN-77 compiler module for the user who already employs the UCSD p-System/PASCAL software development system. (NOTE: FORTRAN-77 is not a standalone product.)

PASCAL by Microsoft®
- HP150 *Touch*

Microsoft PASCAL is an optimizing 2-pass compiler with an optional third pass to produce object listings. It accepts and compiles programs written according to the ISO standard as well as the full Microsoft syntax extensions. It generates native machine code instead of intermediate P-code in order to provide the advantage of faster execution while maintaining the ISO standard of high level code transportability.

Note: Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing. see page 126.

general/utility (cont.)

Programming Package
• HP120/125

The Programming Package is designed for the programmer writing at the micro-code level for the CP/M® Operating System. Utility programs supplied include an assembler, loader and debugger for 8080 and Z-80 microcode. Also included is a full reference manual describing the functions of the HP Series 100 system and how to programmatically access the feature set.

Standard Pac
• HP85

Replacement data cartridge with the standard programs and utilities. One Standard Pac is provided with each HP85 Personal Computer.

UCSD PASCAL®
• HP86/87

This is offered as an add-on PASCAL compiler module for the user who already employs the UCSD p-System/FORTRAN-77 software development system. (NOTE: UCSD PASCAL is not a standalone product.)

UCSD p-System®/FORTRAN-77
• HP86/87

This product is a complete software development system supporting FOR-TRAN-77. It offers the user an integrated operating system including the FORTRAN compiler, and assembler, editor, linker and file handler. This system will allow the user to develop highly portable applications software as well as take advantage of the growing library of third-party software developed for the p-System.

UCSD p-System®/PASCAL
• HP86/87

This product is a complete software development system supporting UCSD Pascal®. The UCSD p-System offers the user an integrated operating system including the PASCAL compiler, assembler, editor, linker and file handler. This system will allow the user to develop highly portable applications software, as well as take advantage of the growing library of third-party software developed for the p-System.

UCSD p-System® Runtime Module
• HP86/87

This enables you to execute software developed under the UCSD p-System. This does not, however, support the program development facilities of the p-System such as editing, filing, debugging, linking, compiling, etc.

statistics/mathematics

Basic Statistics & Data Manipulation
• HP85   • HP86/87

Provides common database for statistics software pacs shown below (excludes General Statistics). Routines for data entry, editing, output, sorting and transformation are included. Computes many basic statistics.

General Statistics
• HP85   • HP86/87

A flexible set of easy-to-use statistical routines for data evaluation. Single and paired sample analysis, test statistics, continuous and discrete distributions, and multiple linear regression are included.

Linear Programming
• HP85   • HP86/87

Solves a wide variety of optimization problems using a modified simplex method that incorporates variable bounds. Applications include chemical blending, production scheduling, profit optimization and lots more.

Math
• HP85   • HP86/87

Provides quick access to commonly employed mathematical routines used in calculus, numerical analysis, linear systems, geometry and more. Full descriptions, plus relevant equations, examples and other helpful data are included.

Numerical Analysis Library
• HP216/226/236

Contains seven main sections: root-finders, numerical integration, ODE solvers, Eigen analysis, interpolation, general functions and Fourier analysis.

Regression Analysis
• HP85   • HP86/87

Find the relationship between a dependent variable and one or more independent variables. Polynomial and multiple linear regression routines (including four variable-selection procedures) are provided. A table of residuals is printed. Requires Basic Statistics & Data Manipulation pac for data entry.

Statistical Analysis Multi Pac
• HP85   • HP86/87

Contains General Statistics, Basic Statistics & Data Manipulation and Regression Analysis packages at a bundled discount price.

Statistics Library, Complete
• HP216/226/236

An economical way to get all the capabilities described for the two individual software packages, Statistics Library Parts I and II: basic statistics and data manipulation, general statistics, statistical graphics, regression analysis, Monte Carlo simulation, analysis of variance, principal components, factor analysis.

Statistics Library Part I
• HP216/226/236

Designed as a basic library of general statistics, Part I consists of basic statistics and data manipulation, general statistics, statistical graphics and regression analysis. A total of five discs.

Statistics Library Part II
• HP216/226/236

Designed as an advanced statistical analysis library, Part II consists of Monte Carlo simulation, analysis of variance and principal components and factor analysis. It is necessary to have Part I for Part II to run. Part II contains five discs.

word processing/graphics

Diagraph™
- HP150 *Touch*

Diagraph is an interactive graphics software product designed to simplify the production of flow diagrams, organization charts, schematics, network design, forms, text slides, and presentation aids. Your diagram can be printed, plotted, saved as a file, and later retrieved.

Titles, labels, and blocks of text can be placed anywhere on a chart. Key words or phrases can be highlighted using a bold or italic font. Use block letters (outline or solid) for titles and captions.

Symbols are organized by type and application: geometrics, arrows, highlights, pointers, junctions, primitives, pictorials, data processing, etc. They can be enlarged or reduced in size, rotated to any angle, and/or re-created as a mirror image. Most symbols have a three-dimensional representation. Four perspective views of an object are available.

—HP150 Diagraph with *Touch* : With the help of the HP150 touchscreen you can modify diagrams by touching symbols on the screen, then select the function (move, connect, text, delete, etc.). To add a symbol, touch the screen where you want the symbol placed, then use the size, rotate, mirror, and perspective functions to adjust the composition.

Graphics
- HP120/125   • HP150 *Touch*

A simple, yet very powerful graphics package, which produces pie charts, bar charts, line graphs, scattergrams, and text slides. With Graphics, nontechnical users can prepare presentation material easily and quickly.

Common data menus are used for all graphs, eliminating the need for duplicate entry. Data files are stored separately from plot specifications, making it easy to replot periodic reports with updated information.

Graphics can be produced on both standard paper and overhead transparencies, and on the HP150, viewed directly on the screen. Text slides can be composed using a variety of character fonts and sizes, enabling you to produce bold, yet inexpensive presentation slides.

Graphics Presentations
- HP85 • HP86/87 • HP216/226/236

Prepare professional-quality charts and overhead slides for management, meetings, customer presentations, sales meetings, management reports, and much more. Text and illustrations can be easily prepared without programming. Simply respond to a series of easy-to-answer questions to generate text and pie, bar or line charts.

MailMerge™
- HP86/87 • HP/120/125 • HP150

A multipurpose merging program, which can be used with WordStar® to produce a list of names and addresses; form letters; and letters that have special words and phrases unique to each addressee. It can also be used to print mailing labels and envelopes.

MemoMaker
- HP150 *Touch*

A word processor for the novice. Extreme ease of use is its principal advantage over other products. Even "two-finger typists" can immediately generate documents with the help of MemoMaker. There are no commands to memorize and on-screen help is always available.

With MemoMaker, "what you see is what you get." Changes can be made and viewed immediately on the display. Features include block moves and deletes, underline and bold enhancements, and automatic word wrap between margins.

Since document formats are compatible with Series 100/WordStar®, rough drafts can be created using MemoMaker and transferred to WordStar for more advanced processing. Documents created with WordStar can also be edited with MemoMaker.

Perfect Writer™/Perfect Speller™
- HP86/87

A word processing package with an associated in-text spelling checker.

Perfect Writer features extensive character, word, sentence, and paragraph editing. Up to seven separate documents can be edited simultaneously, and a split screen can display any two of the on-line documents. Documents are automatically saved after each paragraph. There are 91 built-in page and document design formats. Perfect Writer also offers mail/merge with Perfect Filer (see page 30) proportional spacing, automatic footnotes, in-text referencing, and index and table of contents generation.

Perfect Speller offers a 50,000-word dictionary to check the spelling in any of your documents. You may also add words unique to a specific subject.

Picture Perfect™
- HP120/125   • HP150 *Touch*

An interactive graphics software package. With Picture Perfect you can transform your data into pie, vertical bar, horizontal bar, line or combination line and bar charts. Formatting flexibility allows you to control the appearance of your chart. Data values may be windowed or on top

of bars. Bars may be simple, stacked, comparative, or overlapping with up to 24 bars. Legends may be windowed or placed at any location. Blocks of annotations may be placed as desired. Two independent Y axes allow comparison of different data sets in the same chart. Pie charts may have up to 16 segments with variable explosion of any or all pie segments. The combination of bar and line charts (previously known as Plan/Variance™) is ideal for the presentation of financial and accounting data such as budget vs actual values. In addition, 58 shading patterns allow you to control the final appearance of your charts.

With its easy-to-follow menu driven approach, Picture Perfect gives non-technical users enhanced graphics flexibility for producing more sophisticated presentations.

—HP150 with *Touch* : Added features include a help facility which eliminates the need to refer to external documents for information about the use of the system. Touch any field on the menu to refresh your understanding of the available options.

SpellStar™
- HP86/87 • HP120/125 • HP150

SpellStar is a spelling checker program that works with WordStar® to correct misspellings by comparing text with a 20,000-word dictionary. You can add words to the main dictionary or create your own supplemental dictionary.

Text Editing
- HP85

Write memos, outlines and reports on the display screen. Edit copy, save it on tape or disc, or print it. Variable input/output of text files. Tab, add, delete, replace, renumber and move lines. Matched string search and replace.

Word
- HP120/125

A full-feature word processor program designed for use by office personnel. The computer display screen shows the portion of text being edited. A variety of commands execute corrections, insertions and move blocks of text on the screen. Finished text can be reviewed before printing. Series 100/Word uses screen-labeled function keys to provide a wide variety of powerful commands. The labeled keys guide the operator step by step through the entire document preparation process. Series 100/Word also maintains and sorts mailing lists. Mailing lists can be merged with form documents to create "customized" letters.

word processing/graphics (cont.)

WORD/80
● HP86/87

Complete software product for the generation of memos, letters and reports. Consists of an editor to create, type, print and store documents—and a formatter to format and print files created with the editor.

WordStar®
● HP86/87 ● HP120/125 ● HP150 *Touch*

WordStar is the most popular microcomputer word processing system today. Text is displayed directly on the screen as it is entered, and most formatting takes place immediately. Block and column move commands allow the movement of text within the document. With SpellStar™ documents can be checked for misspellings, and with MailMerge™ they can be used to create custom form letters and boiler plate letters.

—HP120/125: This version features screen-labeled function keys in addition to standard WordStar control sequences.

—HP150 with *Touch* : This is the easiest-to-use version of WordStar because you enter all the commands through the touchscreen or softkeys.

Note Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

HP 2647 Intelligent Graphics Terminal software

Graphics

Multiplot and Slide software (rev.F.).
Replacement BASIC/Multiplot software on data cartridge for use with the HP 2647A. NOTE: Rev. F supports the 9872C Plotter.
For 2647A: **02647-13301**

AUTOPLOT/47. Replacement AUTOPLOT/47 software on flexible disc for use with the HP 2647F.
For 2647F: **02647-13401**

Graphics Presentation Pac/47. Contains a variety of useful programs which can be used to prepare graphical presentations of data. The user is guided by an easy-to-use command menu. Programs allow the user to produce a variety of business graphics such as enhanced pie, bar, and linear charts. Additional programs allow the user to create flowcharts, diagrams and organization charts, and electronic circuit drawings.
For 2647A: **13257B**
For 2647F: **13257G**

HP 2647A Intelligent Terminal

Business

Project Management Pac/47. Offers a variety of easy-to-use programs to assist project managers to improve planning, control and overall decision making of their projects. Easy-to-communicate visual representations of project status and organization are provided with optional graphic display and color plotter output. Time value of money programs are included, along with CPM and GANTT chart programs.
For 2647A: **13257F**
For 2647F: **13257H**

Order the 93987F kit from your local HP Sales Office to convert your HP 2647A to a 2647F.

WORD/47. Friendly word processing software that aids in preparing correspondence, memos and manual drafts. Features include word wraparound, search and replace, copy paragraph, delete words, sentences, and paragraphs; justify, and indent. Page-formatting software allows the user to output text in a page format to a printer, disc file or display. A forms design module simplifies and speeds up form and table design. Requires external printer; HP 2601A or 2631B/G or 2671G or 2673A.
For 2647F: **13257W**

Statistics/mathematics

Statistical Analysis Pac/47. Offers a variety of programs that provide solutions to the most frequently used statistical operations: basic statistics, curve fitting, regressions, analysis of variance, confidence limits and more. Many programs provide optional graphical output capability.
For 2647A: **13257D**
For 2647F: **13257L**

Mathematical Analysis Pac/47. Offers a variety of programs that provide solutions to the most frequently used mathematical operations. Programs are included for: differentiation, integration, finding roots of polynomials, interpolation, matrix and vector operations, and more.
For 2647A: **13257C**
For 2647F: **13257M**

General/utility

LINK/47. A menu-driven application program for bidirectional file transfer between the HP 2647F and the HP 3000 Computer System. Menu-driven softkeys provide easy transfer of both ASCII and binary files between the HP 3000 system disc and 2647F disc. Provides protection against overwriting already existing data.
For 2647F: **13257N**

2647A/F File Conversion Kit. An easy-to-use, menu-driven utility program that transfers ASCII and binary files from the mass storage device of any HP 264X-Series Terminal to the flexible disc of the HP 2647F. The kit consists of a disc, instructions and a HP 13232U cable. Two data comm cables (HP 13232A/M/N) required but not included.
For 2647F: **13257P**

9845B/C Desktop Computer software and accessorie...

9845 B/C Desktop Computer software

	Software package name	Part number	Additional software included	Required for operation
Graphics	Graphics Presentations (9845B/T)	09845-10540	—	D,J
	Graphics Presentations (9845C)	09845-15230	—	D
Statistics/ mathematics	Basic Statistics and Numerical Analysis	09845-15100	—	C
	General Statistics	09845-15130	09845-15100	E
	Regression Analysis	09845-15110	09845-15100	E
	Nonlinear Regression	09845-15140	09845-15100	E
	Analysis of Variance	09845-15170	09845-15100	E
	Monte Carlo Simulation	09845-15160	—	C
	Principal Components and Factor Analysis	09845-15080	—	F
	Statistical Graphics	09845-15200	—	D,E
	Numerical Analysis Library	09845-10350	—	C
Engineering	AC Circuit Analysis	09845-12620	—	F
	Waveform Analysis	09845-12600	—	F
	Linear Systems Analysis	09845-15190	—	F
	Digital Simulation	09845-12610	—	F
Business	Forecasting	09845-10610	—	E
	Project Management	09845-11100	—	G
	List Management	09845-10630	—	H

C 9845 B/C
D Plotter
E 9845 B/C Opt. 311, 560 or 700
F 9845 B/C Opt. 150 or 250

G 9845 B/C Opt. 311, 313, 560 or 700 and 9885 M/S
H 9845 B/C Opt. 560 or 600 (for 9871 or 2631)
J 9845B w/ 98411B, Opt. 311 and Graphics ROM or 9845T with plotter.

HP 9800 Desktop Computer accessories

	Computer	Order number	Description		
Ribbon	9805A	9282-0511	Individual, red and black		
Magnetic program cards	9810A/9820A	5060-9152	Indiv. w/envel. 6 in. (152.4 mm)		
	9810A/9820A	9162-0012	Indiv. no envel. 6 in. (152.4 mm)		
	9810A/9820A	9162-0045	Indiv. w/envel. 10.5 in. (266 mm)	(1–9) (10–99) (100+)	SAVE WITH QUANTITY DISCOUNTS
Holder sheet	9810A/9820A	9230-0052	Indiv. holder sheet, holds 3 cards		
Program pads	9810A	09810-90016	Indiv. program pad		
	9815A	09815-90011	Indiv. program pad		
	9820A/9821A	09820-90016	Indiv. program pad		
	9830A/B	09830-90016	Indiv. program pad		
Keyboard overlays	9815A/S	7120-4691	Indiv. blank key overlay		
	9825A/S, 9831A	7120-4802	Indov. blank key overlay		
	9830A/B	7120-3510	Pkg. 6 blank key overlays		
	9835A/B	7120-6452	Indiv. blank key overlay		
	9845A/B/S/T	7120-6164	Indiv. blank key overlay		
Media	9815A/S, 9825A/S 9835A/B 9845A/B/C/S/T 9915A (Opt. 001)	98200A	Box of 5 mini data cartridges, each with own protective plastic box 140 ft., 250 KB each	(1 box of 5 cartridges) (2–4) (5–19) (20+)	SAVE WITH QUANTITY DISCOUNTS
	9821A/9830A/B	9162-0050	Individual digital cassette	See p. 110 for details	
	9836A	92190A	Box of 10 5.25-in. flex discs	See p. 103 for details	

Software related products

Software publications

Series 80 Software Catalog. The Series 80 Software Catalog is a handy reference guide to a growing list of programming solutions available for HP Series 80 Personal Computers. It includes summaries of HP-developed and third-party application packages as well as inexpensive contributed programs. Whether you want inexpensive programs to solve specific computing problems or a total software solution, the Series 80 Software Catalog is your guide to the right software to meet your needs.

5953-7804

Third Party Technical Software Solutions Catalog. A single reference source of software for HP Series 200 (Models 216, 226, 236). HP Desktops (9845). HP 9000, HP 1000 and selected HP Series 80 (85/86/87) Computers. The catalog consists of HP-developed and HP PLUS software for all technical and desktop computers.

5957-4315

Subscription Service. Includes four quarterly issues.

5957-8403

9800 Exchange Library Software Catalog. A complete reference source of inexpensive, useful applications software and utilities for HP9845/35 users. The catalog lists and describes several hundred programs for engineering, math. statistics, business management, utilities, and life and physical sciences.

5957-4317

Business Systems Software Solutions Directory. A comprehensive collection of software running on the HP 3000 and HP 250, including software from U.S. and Canadian software suppliers (HP PLUS), as

HP / MPN

HP Software ... part of the Hewlett-Packard's Manufacturing Productivity Network.

well as HP sold and supported software. With over 250 pages of software listed, this is an invaluable tool for HP commercial minicomputer users and prospects.

30000-90251

Subscription Service. Includes four quarterly issues.

5957-8404

Series 100 Communicator. *Communicator* magazine is the heart of the Series 100 support program. It brings you application information, operation tips, programming techniques, information on software updates, manual corrections and data on known software problems and their solutions. *Communicator* is both a reference to everything current on the system and your window into the continually expanding world of the Series 100.

Individual copies: Present and past issues of the *Communicator* are available individually by part number. For these

part numbers, consult a current issue of the *Communicator* or your local HP dealer.

Subscriptions: A one-year subscription to the Communicator (six issues)

U.S. Communicator
45530A

Canada/Mexico Communicator
45530B

International Communicator (air printed matter)
45530C

Series 100 software updates. Low-cost updates are available for HP Series 100 software. Each update consists of a new disc and the appropriate manual updates. For current ordering information, refer to the latest issue of the Series 100 *Communicator.*

APRIL/MAY 1984   PREMIER ISSUE   FIVE DOLLARS

Professional Computing

THE AUTHORITATIVE SOURCE FOR HEWLETT-PACKARD PC USERS

The Interactive Office
Upgrading your HP 86B. What's next?
The HP 150—Is It Really Magic?

PROFESSIONAL COMPUTING: The Authoritative Source for Hewlett-Packard PC Users is the first magazine specifically designed for people who buy and use HP personal computer systems. Articles are written by foremost experts on new ways to expand and upgrade HP systems as well as innovative applications in the office, laboratory, space, medicine, science and recreation.

Departments include a *User's Exchange* to share problems, solutions and applications; *Software Reviews* of new packages for various HP models; *Hardware Reviews* of equipment and its impact on software capabilities; a *Buyer's Guide* evaluating HP compatibility with non-HP equipment; a *New Product Update* containing a listing of new software and hardware; and a *New Literature Section.* Subscriptions are $30 for the first year (six issues). Outside U.S., add $10 for postage and handling. To enter your subscription write or call: *Professional Computing,* John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158, (212) 850-6447.

HP Computer users groups

The independent organizations below are listed as a service to our readers. Space limitations make it necessary to list only those that are international in scope.

You are not alone. . . Interex—The International Association of Hewlett-Packard Computer Users is dedicated to helping you get the most from your system. Interex will keep you in touch with other HP computer users through publications, a library of current programs, and up-to-date information about the HP computing world (see photo above).

HP 1000 users

Interex offers products and services designed with both the HP 1000 and the HP 9000 user in mind. For a nominal price, you can begin receiving some of the most helpful scientific and technical programs and publications available today.

From its basic *"TC Interface* Subscription" to its complete "Full Membership," this group is sure to provide new ideas and technical assistance to even the most discriminating engineer or scientist.

A "Full Membership" with Interex qualifies you to receive: a non-cumulative Contributed Software Library "start-up" tape containing some of the best graphics and general purpose driver programs around; a cross-reference index with a complete listing of the contributed library programs; a one-year subscription to the technical magazine, *TC Interface,* which features topics ranging from programming tips, to hardware and software reviews, to in-depth technical articles; the monthly *Interrupt* newsletter that keeps you informed about international, regional, local and special interest group activities: discounts to international conferences, and much, much more.

All of this can be yours for only $400!

For those interested in only *TC Interface* and a semi-annual listing of the most recent library tape release, an "Individual Membership" is available for only $50.00. The magazine may also be purchased separately for only $19.75 per year for residents in the U.S., Canada and Mexico only.

For more information and sample publications, call or write for a *FREE* "Prospective Member Packet"—Interex—The International Association of Hewlett-Packard Computer Users, 2570 El Camino Real West, fourth floor, Mountain View, California, 94040 U.S.A., (415) 941-9960; ask for Sally.

Prices are subject to change without notice and may vary for subscribers outside of the United States and Canada.

HP 3000 users

Interex is a must for the HP 3000 business professional. For a nominal price, you can begin receiving some of the most

innovative and up-to-date computer programs and publications available anywhere today.

Interex offers various types of memberships, from the basic "*Interact* Magazine Subscription," to the full "Installation Membership."

An "Installation Membership" with Interex entitles you to—a new release of the "best-of" library tape, one of the most useful and effective library of programs on the market for the HP 3000; *Interact* magazine, a monthly publication that includes new product reviews, user forums, and industry news; *The Journal,* a technical magazine which addresses topics from programming to language applications; *Interrupt,* the monthly newsletter keeping you informed about international, regional, local and special interest group activities; discounts to international conferences, and much, much more.

This entire package is available for only $425!

Other memberships available include: a "General Membership" which consists of two publications, *Interact* and *The Journal,* for only $50.00 annually; and a 12-issue subscription to *Interact* costs $24.95 for residents of the U.S., Canada and Mexico.

For more information and sample publications, call or write for a FREE "Prospective Member Packet"—Interex—The International Association of Hewlett-Packard Computer Users, 2570 El Camino Real West, fourth floor, Mountain View, California, 94040 U.S.A., (415) 941-9960; ask for Sally.

Prices are subject to change without notice and may vary for subscribers outside of the United States and Canada.

HP Series 100 users

Stay in touch with an Interex Series 100 membership. Membership includes a library of current PC programs and contemporary publications, such as *Professional Computing* (opposite page). For more information, write to the address above.

Telecomputing for HP personal computers & terminals

92205 Hayes Smartmodem 1200.* Now your HP personal computer or terminal (with RS232C port/interface) can communicate with other computers or time sharing systems in the United States and Canada by using telephone lines and the HP 92205.

Compatible with Bell System 103/113 and 212A modems, the 92205 communicates asynchronously in full or half-duplex at rates of 0–300 or 1200 baud. Features include automatic answering, automatic pulse or Touch-Tone® dialing (separately or in combination), and hardware/software switchable operating parameters such as dialing speed and number of rings before answering an incoming call. It can also automatically redial the last telephone number entered. Front panel lights indicate modem status.

The 92205 is a direct-connect device which eliminates the loss and distortion often experienced with acoustic couplers.

*Made for Hewlett-Packard by Hayes Microcomputer Products, Inc.

Note: product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

For sale in United States and Canada only.

92205A (for U.S. customers).
(1 unit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

NEW **92205C** (for Canadian customers). Canadian customers must order the 92205C to comply with Canadian communications regulations.
(1 unit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

High-resolution, compact printer fits easily into your HP 150

In just minutes you can install this add-on internal thermal printer and have your first hard-copy in hand. And, unlike peripheral printers, this unit fits right into the 150 itself—freeing up valuable desktop space and protecting it from spills and other accidental damage.

The 2674A is astonishingly quiet. Even in the most subdued office environments, intrusive printer noise should never be a bother.

And, best of all, this printer produces high-quality text and graphics at a very affordable price.

Features:
- Easy installation—it takes only minutes
- Fast (120 cps)
- Very quiet
- High resolution—90 × 90 dots per square inch
- Fully dot-addressable graphics
- Compressed printing—allows 132 columns. Ideal for spreadsheets.

2674A Printer

NEW **92173A Paper tray** attaches directly behind the 2674A Printer and holds a full pack of thermal fanfold paper. This handy device lets you enjoy the convenience of flat 8.5 × 11-inch sheets of thermal paper.

92173A

Supplies and software for the HP 150 are featured on many pages of this catalog. Be sure to see the following pages for:

High-quality graphics at

Two-pen plotter for your personal computer

Turn your personal computer into your personal graphics workstation with the HP 7470 two-pen graphics plotter. Compact and portable, the 7470 produces quality A/A4-size graphics you would expect to see only on a much more expensive plotter.

Take a look at the HP 7470's quality features.

Versatile writing system. The HP 7470's two-pen writing system plots on either paper for reports or transparency material for overhead projection. Overhead transparencies can be made in minutes—saving you both time and money.

Two built-in pen stalls make two-color plotting easy. For plots with more than two colors, just halt the plotter, snap new pens into the stalls, and resume plotting. Automatic pen capping prevents ink dryout, and the special pen damping device gives you consistent line width, chart after chart.

Your charts will have variety with the 7470. Choose from a myriad of pen colors in two line

widths, seven dashed-line types, text written in any direction you wish (with or without slant), and in your choice of type styles.

Almost everything you need to operate the plotter is right up front on the control panel.

You can select pens or halt the plotter to substitute pens or to view the plot. The front panel also gives you easy access to the digitizing capability and the scaling points.

Intelligent plotter. The HP 7470 is a smart plotter. It has five internal character sets (including three European sets) to end the need for software-generated characters.

And the 7470 contains more than 40 built-in HP-GL instructions so you can use simple commands to perform a variety of operations—like drawing arcs and circles, selecting pen velocity, and defining characters.
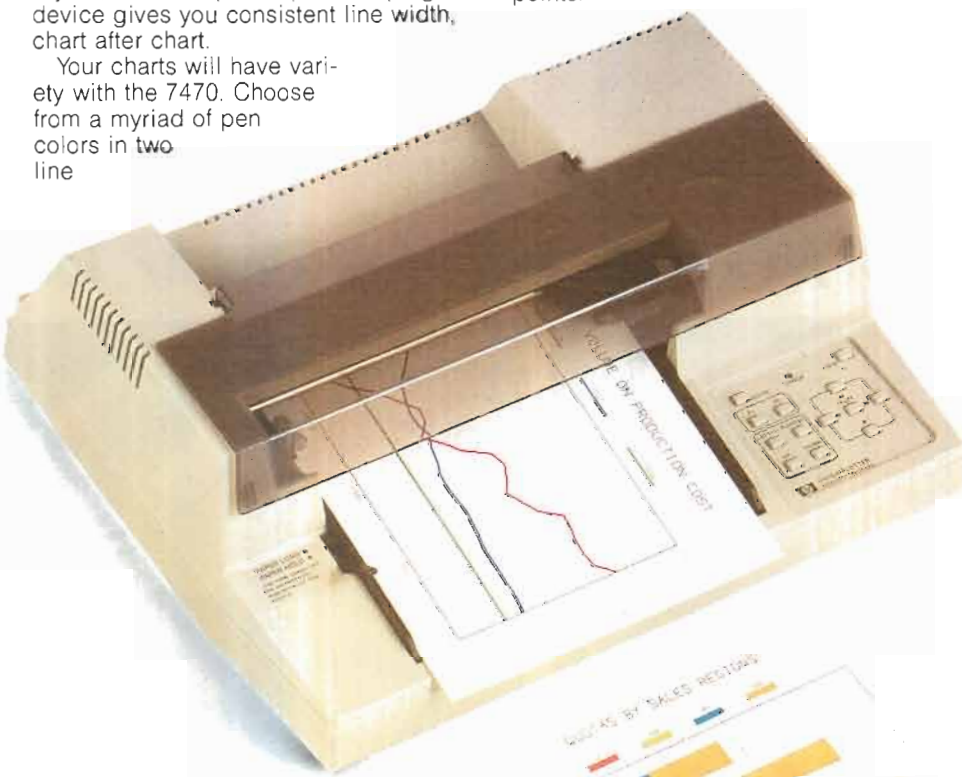
Software

Today, many software packages are available to produce high-quality graphics with *your* computer. These packages produce a variety of color graphics easily and quickly—no programming necessary.

Ordering information

Both the 7470 and the 7475 are compatible with almost any computer in the marketplace. Be sure to order the correct option, along with any necessary cables.

7470A **Opt. 001**
(RS232C)
(for cables see page 55–57)
Opt. 002
(HP-IB)
(for cables see page 50)
Opt. 003
(HP-IL)
(cable included)

Plotter accessories

pens & media .... pages 92–100
dust covers/carrying cases ..... pages 74–75

c price you can afford

Six-pen plotter for your professional computer

The 7475 combines the advanced technology of the smaller 7470 with two new capabilities.

★ **You can use either of two paper sizes for colorful, quality graphics.**
Size A/A4 8.5 x 11 inches (210 x 297 mm). Adds color and interest to your reports and visual presentations.
Size B/A3 11 x 17 inches (297 x 420 mm). Especially well-suited for time lines, PERT charts, schematics, engineering drawings and other applications when you need to show added visual details.

★ **With 7475 you also get an easy-to-load, six-pen carousel.** From the compact carousel, pens are selected, returned to place, and capped after use. Your pens are always ready to plot when you need that fast overhead transparency for a last-minute presentation.

Hewlett-Packard provides six pen stalls so you can store and use pens of different widths—thick pens for bold headings and thin pens for details.

Easy operation. The 7475's simple, easy-to-use front control panel *almost* makes your charts for you! With it you can:
- test pen colors before you plot
- check the paper size for which the plotter is set
- command that the chart automatically come to the front of the plotter so you can see what you've plotted—then continue plotting exactly where the plot ended previously

- rotate your charts 90 degrees to fit different formats
- test with a built-in demonstration plot
- digitize or scale points
Additionally, the 7475 contains more than 50 simple yet powerful HP-GL instructions (see 7470 description) and 19 character sets, including:
- ISO European

- Katakana
- ASCII
- Roman 8 extensions

Check the following catalog pages for descriptions and ordering information for HP's personal/desktop computer **graphics software.**
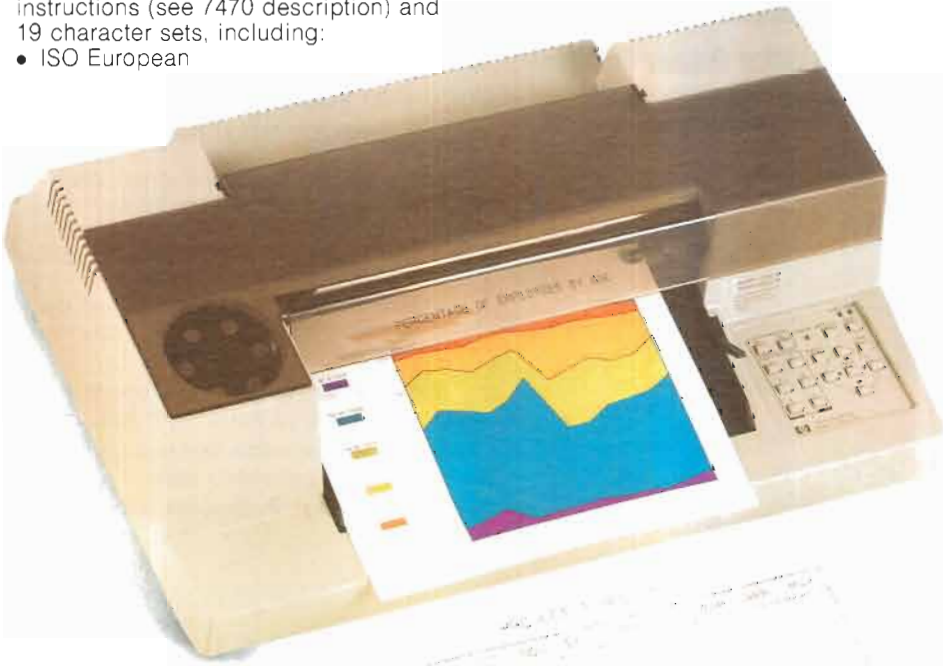
7475A Opt. 001
(RS232C)
(for cables see page 55–57)
Opt. 002
(HP-IB)
(for cables see page 50)

9217IS Desktop printer stand stores your paper conveniently inside for easy access and improved paper flow. See page 77 for more details.
(1–2) SAVE WITH
(3+) QUANTITY DISCOUNTS

Hewlett-Packard's lowest-cost display terminal

HP 2621B Interactive Terminal. The HP 2621B Terminal combines ease of use with reliability in our least expensive model. This character mode terminal contains a feature set that improves your productivity and satisfaction in a wide variety of applications.

High-resolution display reduces operator fatigue and gives a more pleasing appearance to displayed information.

Two full pages of memory (48 lines) double the accessible work space.

Easy-to-use terminal increases productivity by simplifying operation and reducing learning time.

Reliability and serviceability built in with low component count and modular construction.

Full editing capability allows easy modification of previously typed lines.

Hard copy (Option 050) is given by a convenient integral thermal printer.
- Fast, quiet printing with the 120-character-per-second Thermal Printer
- Uses 92160A/B thermal paper. See page 91.

2621B Terminal

Option 050 Printer

The HP 2621B uses a HP 262X-port 2-type cable with a 25-pin connector.

The executive-sized HP 2382A Terminal

HP 2382A Office Display Terminal. The HP 2382A Terminal is a space saving, low-cost, block mode display terminal that doesn't intrude into your work environment. Its human-engineered design and aesthetic styling make it both easy to operate and attractive in any office setting.

Easily readable display has crisp, clear characters in a 24-line by 80-column format with four display enhancements to distinguish between, or highlight, different kinds of data.
- 9-inch diagonal, high-resolution display
- Two full pages (48 lines) of continuous scrolling memory

Human engineered to reduce operator fatigue and give a friendlier feel.

Easy-to-use, powerful features for the novice or experienced user.

The HP 2382A uses a HP 262X-port 2-type cable with a 25-pin connector

Block/forms mode increases productivity by improving data accuracy and data throughput.
- Software compatible with HP 2622A (and HP 2640B) can be used with VPLUS/3000 data entry and forms management software
- Review, edit and transmit blocks of text or data
- Display familiar office forms on screen with 64-character line drawing set (Option 202) and four display enhancements
- Enter data only into unprotected fields where it belongs

2382A Terminal

Opt. 202 Line Drawing Set

Now your terminal can speak!

Our new Speech Output Module (SOM) is a simple, easy way to increase productivity in the office, factory or lab. You can move around your work area or concentrate on other projects with the assurance that important computer-generated messages will be audibly announced as they come up on-screen. All you have to do is listen!

SOM hardware		
	Includes	Compatible with
27201A Speech Output Module	• Hardware Reference Manual • 262X-series cable • Speaker phone plug • Headphones	2622 2623 2624/2626 with printer option
Option 001	• Adds five 16K-bit RAMs (installed)	ALL TERMINALS
Option 002†	• Adds 115 VAC power supply (for 262X-Terminals)	2622 A-D, 2623A, 2624B, 2626A-W, 2627A, 2700 series
Option 003†	• Adds 115 VAC power supply (for 264X-Terminals)	264X-terminals Other RS232C peripherals Stand alone

†Options 002 and 003 cannot be ordered in the same unit.

HP's low-cost terminal for industrial applications

HP 3081A Industrial Workstation Terminal. The 3081A is a personal data collection terminal designed for industrial applications. Rugged and sealed, it is ideal for use in harsh factory environments. It is dustproof and splashproof and can be washed off with soap and water.

The one-line alphanumeric display and choice of numeric (standard) or alphanumeric (option #004) keyboard with tactile feedback provide a friendly human-machine interface further enhanced by bar code reading capability. The bar code reader can be configured with a range of handheld wands—also known as "lightpens"—and slot readers for badges and edge-coded documents.

The 3081A can be connected to an RS232C point-to-point port on many computers through an adapter (up to four terminals per adapter). It can also be a component in a distributed network of terminals connected to a 2333A Multipoint Cluster Controller (with up to 32 terminals per controller). The 3081A current loop connection is characterized by high noise immunity which allows the terminal to be placed at a distance of up to 150 meters (490 feet) from the RS232C Adapter or the Cluster Controller.

3081A Terminal (numeric keyboard)
3081A w/ #004 (alphanumeric keyboard)
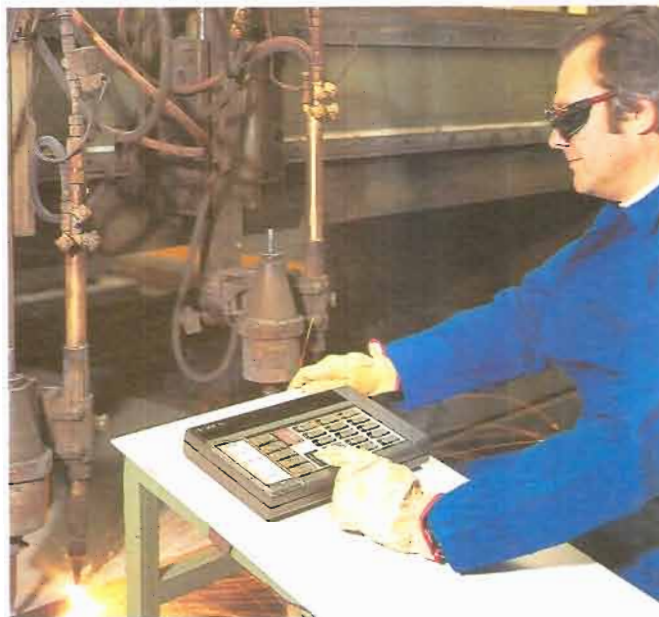
3081A with numeric keyboard, bar code slot reader, and mounting bracket.

3081A with alphanumeric keyboard and industrial bar code wand

HP 3081A accessories

Description	Product number
3081A Mounting bracket	03081-60110
Medium resolution general purpose wand (12 mils)	5061-3855
High resolution general purpose wand (6 mils)	5061-3856
Low resolution industrial wand (15 mils)	0950-1663
High resolution industrial wand (7.5 mils)	0950-1662
Low resolution slot reader (15 mils)	0950-1681
High resolution slot reader (6 mils, infrared)	0950-1665
Replacement numeric keyboard overlay	03081-40007
Replacement alphanumeric keyboard overlay	03081-40006
Replacement softkey label cover	03081-40005
Replacement softkey labels (package of 5)	03081-80015
Cable connector kit for 92922A or 40253A	5061-3858
General purpose (plastic) wand holder	03075-40006
General purpose (plastic) wand replacement tip	5040-9906
Industrial (metal and sealed) wand holder	03075-40010
Industrial (metal and sealed) replacement tip	1535-4474

Bar code readers—the fast, simple, accurate alternative to keystroking.
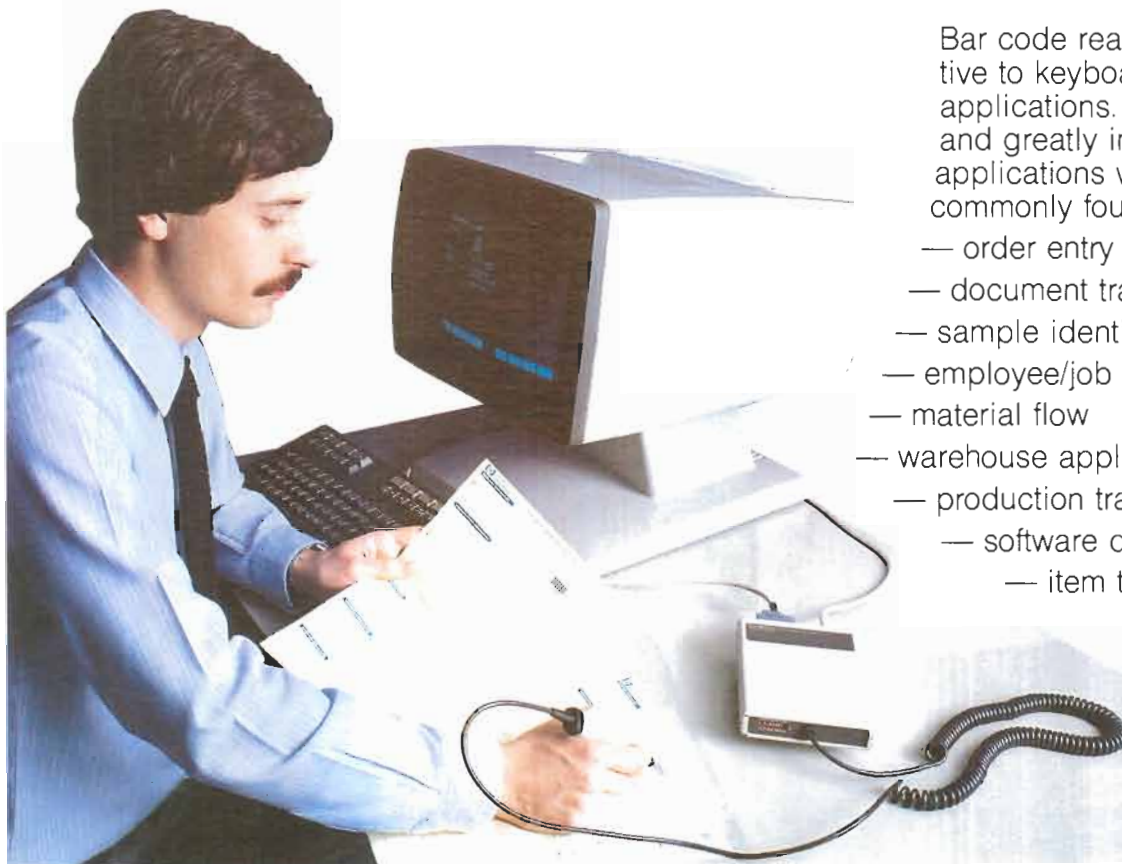
Bar code readers are an effective alternative to keyboards for many data entry applications. They speed up data entry and greatly improve accuracy in clerical applications where video terminals are commonly found, for example:

— order entry

— document tracking

— sample identification

— employee/job identification

— material flow

— warehouse applications

— production tracking and control

— software distributions

— item tracking

The benefits are:
- Speed—three times faster than typing
- Accuracy—error rate reduced by a factor of 1000

Choosing a bar code reader

The 92911A may be used in conjunction with either HP 262X Terminals (less 2621A/P/B and 2622D) or HP125 Personal Computers. If RS232C point-to-point communications are being used, then either the 92911A or 39801A may be used.
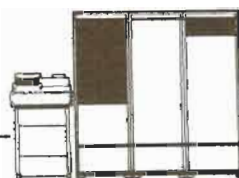
Computer

The flexibility in configuring the 39801A offers an alternative solution to the 92911A in some configurations. The 39801A can operate either as a terminal on an RS232C line or in conjunction with a terminal. For a more detailed comparison of the 92911A and the 39801A, see the guide at right.

92911A configuration

39801A configuration

Bar code reader comparison

	92911A	39801A
Use with HP terminals	X	X
RS232C datacomm	X	X
Use without HP terminals		X
Automatic code recognition		X
UPC/EAN/JAN codes required		X
Use with personal/desktop computers		X
Eavesdrop, multiplexed configuration		X
Use when a more rapid display of data on the CRT screen is preferred		X
Use when a single reader is desired for a variety of terminals, desktop computers, and personal computers.		X

92911A Bar code reader consists of a bar code wand attached to a decoder pod by a coiled cable. The decoder pod is connected in series with the terminal's keyboard cable, and is powered through it. The 92911A is ready to use whenever the terminal is powered-on.

When a correct read has been completed, the terminal beeper sounds, and the data is displayed on the CRT in the same way as keyboard-originated data. When all the characters have been displayed, the terminal beeper sounds a second time.

The standard configuration comprises a medium-resolution wand (12 mils) recommended for general use and for use with bar codes generated on good quality dot matrix printers (e.g. HP 2933A, 2934A). Option 053 features a high-resolution wand (6 mils) for use with high-density bar codes (pre-printed labels, specialized serial impact printers, etc.).

Features
- Compatible terminals: HP 2622A, 2623A, 2624B, 2626A/W, 2627A, HP125 Computers
- Compact, easily installed
- No modifications to host terminal/system
- Choice of wands
- Two most popular industrial codes:
  — Interleaved 2 out of 5 (USD 1)
  — Code 3 of 9 (USD 3)

92911A
92911A w/ Opt. 053 high resolution wand

39801A Bar code reader. The 39801 can be used with virtually any computer, from the HP-75 to the HP3000, and can be optionally connected in series with any of HP's CRT terminals. The 39801A is essentially a transmit-only device. A "good read" beep signals the operator after successfully reading a bar code symbol.

Features:
- Flexible dual RS232C data communications
  — Facilitates a wide variety of configurations
- Three industrial bar codes standard:
  — Interleaved 2 of 5 code (USD 1)

  — Code 3 of 9 (USD 3)
- Optional bar codes available
  — Opt. 001: Add UPC/EAN/JAN (deletes Industrial 2 of 5)
  — Opt. 002: Add Codabar (deletes Industrial 2 of 5)
- High performance digital wands
  — 45° scan angle
  — Sealed sapphire tip
  — Rugged case

39801A
39801A w/ Opt. 001
39801A w/ Opt. 002

Preprinted bar code labels

Many bar code applications can be successfully addressed with preprinted sequential bar code labels (provided the identifier is linked to the real item/document number in a database). Besides saving the cost of printers, this technique allows the use of plasticized, dirt/liquid-resistant labels.

Features
- Off-the-shelf, high-quality photo-composed bar code labels
- Plastic film protection
- Self-adhesive
- Print contrast ratio greater than 90 percent
- Meet HP bar code readers specifications

- Sequential numbering from 00000 to 99,999 in 10 sets of 10,000 labels in each code
- Low-density 3 out of 9 code
- High-density interleaved 2 out of 5 code

Interleaved 2 out of 5 labels

Part Numbers		Description
Interleaved 2 out of 5 code 25.4 mm × 15.9 mm	3 of 9 code 63.5mm × 15.9 mm	set of 10,000 labels
92911-90111	92911-90101	numbered from 00000 to 09999
92911-90112	92911-90102	numbered from 10000 to 19999
92911-90113	92911-90103	numbered from 20000 to 29999
92911-90114	92911-90104	numbered from 30000 to 39999
92911-90115	92911-90105	numbered from 40000 to 49999
92911-90116	92911-90106	numbered from 50000 to 59999
92911-90117	92911-90107	numbered from 60000 to 69999
92911-90118	92911-90108	numbered from 70000 to 79999
92911-90119	92911-90109	numbered from 80000 to 89999
92911-90120	92911-90110	numbered from 90000 to 99999

Miscellaneous bar code accessories

Description		Product number
Bar code wand accessories	General purpose (plastic) wand holder	03075-40006
	General purpose (plastic) wand replacement tip	5040-9906
	Industrial (metal and sealed) wand holder	03075-40010
	Industrial (metal and sealed) replacement tip	1535-4474

The HP 2225 ThinkJet printer ushers in the future . . . quietly
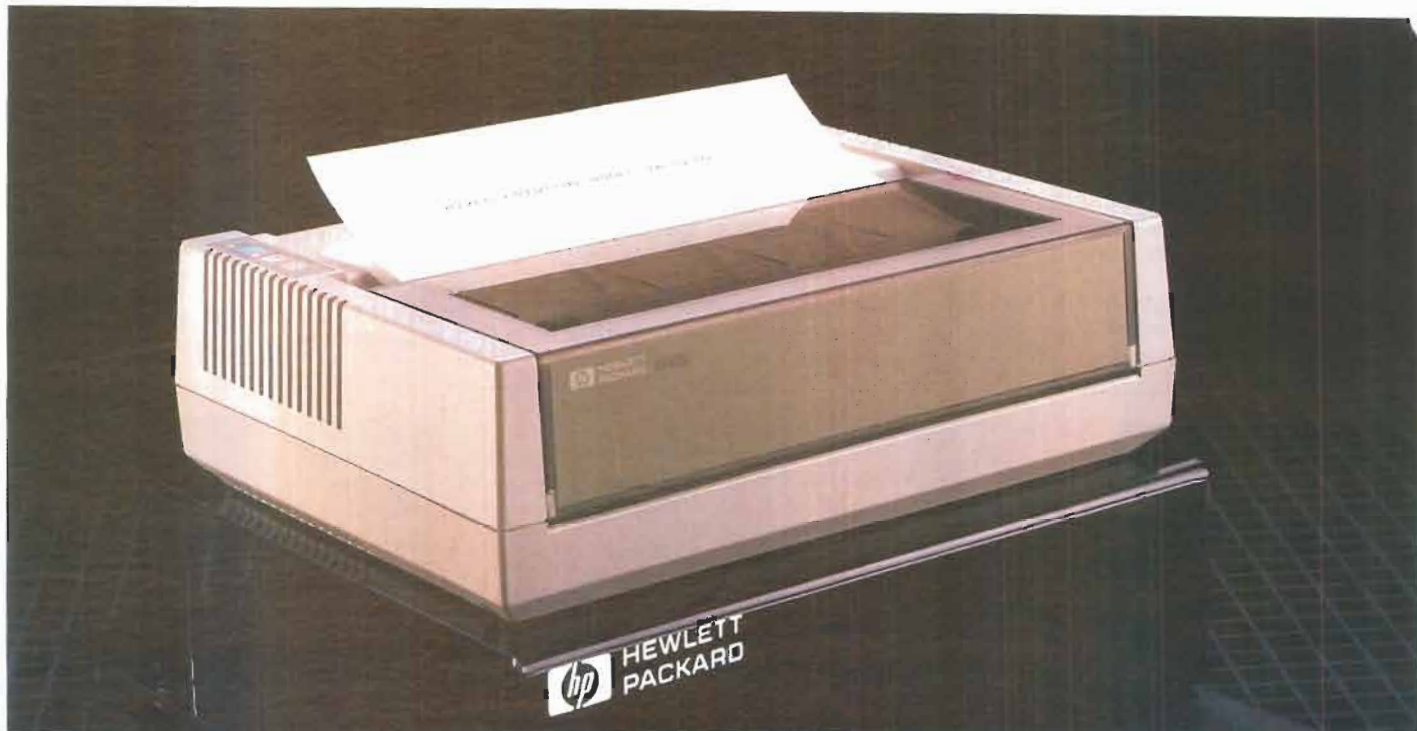
The HP 2225 ThinkJet Printer's compact size makes it ideal for the home or office. Exterior dimensions: height 3.5 inches (89 mm); width 11.5 inches (292 mm); depth 8.1 inches (206 mm).

The 82906A Impact Printer—perfect for multi-part forms!

The 82906A Impact Printer is conveniently sized for desktop use. Exterior dimensions: height 3.9 inches (100 mm); width 16.5 inches (420 mm); depth 13.7 inches (347 mm).

NEW The powerful HP 2225 ThinkJet Printer lets your words speak louder than your printer. HP has refined ink-jet printing and now offers it to you in a light weight printer priced under $500. Ink-jet printers direct ink through a print head onto the paper. Since the print head never touches the paper, there is no impact noise and no wear on the head mechanism. With the HP 2225A, the whole print mechanism is contained in a small, disposable cartridge that simply snaps into place.

Quiet. The HP 2225 is ideal for the office or home because it is so quiet. With a noise level under 50 dB you can carry on a normal conversation while the printer is working beside you.

Fast. Print speed of 150 characters per second means you can print an average letter in a matter of seconds. And print speed is not affected by switching to bold-face type.

Graphics. When words can't express everything you want to say, the HP 2225 makes graphics a breeze. The ink-jet head literally paints your picture onto the page. A wide variety of character sizes is also available.

HP 2225A (HP-IB interface)
HP 2225B (HP-IL interface, DC battery power)
HP 2225C (Centronics interface)

ThinkJet accessories

HP 2225: Computer compatibility guide

Computer	HP-41	HP-71B	HP-75	HP-85	HP-86A	HP-86B/87	Series 100/200
Printer model	2225B	2225B	2225B	2225A	2225C	2225A	2225A
Graphics printing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ROM/driver required	Included	Included	Included	82936A ROM drawer 00085-15002 Plot/Print ROM	Included	Included	Included
Computer interface required	82160 HP-IL	82401A HP-IL	HP-IL included	82937A HP-IB	Parallel included	HP-IB included	HP-IB included
Cable required	82167 A/B/D	82167 A/B/D	82167 A/B/D	31389 A/B/C	82957A	31389 A/B/C	31389 A/B/C

NEW **The economical 82906A Dot Matrix Impact Printer** is ideal for low-volume, single-user printing. It provides permanent printed copies of your work, either for distribution to others or for your own reference.

The 82906A can print characters of varying width and boldness and can print on multi-part forms. It uses both friction paper feed for letters and memos or pin feed for continuous paper, forms, and mailing labels. An optional tractor feed (HP 92171N) is required for pin-feed paper under 9.5 inches in overall width. The 82906A is available with HP-IB interface only.

82906A features:
— Pin and friction paper feed
— 160 characters per second maximum print speed
— Extensive formatting capabilities:
  • Programmable character pitch, line spacing, and boldness
  • Superscripts and subscripts
  • Proportional spacing
  • Automatic underline
  • Margin settings
  • Backspace
  • Page length selection
  • Automatic perforation skip

— Graphics printing
— 96 ASCII characters plus Roman Extension characters
— User definable character set

82906A w/ Opt. 002
(Option 002 specifies 120 volt power)
92154A Replacement print head
92171N Tractor unit

Impact printer accessories

HP 82906A: Computer compatibility guide

Computer	HP-85	HP-86	HP-87	HP-150	HP-200
Graphics printing	Yes	Yes	Yes	Yes	Yes
ROM/driver required	82936A ROM drawer 00085-15002 Plot/Print ROM	Included	Included	Included	Included
Computer interface required	82937A HP-IB	Included	Included	Included	Included
Cable required	31389 A/B/C	31389 A/B/C	31389 A/B/C	31389 A/B/C	31389 A/B/C

Do-it-yourself cabling

Share data and peripherals on cut-to-length coax cable

HP Series 500, Models 20, 30, and 40, now offer high-performance local area networking via a 10 Mbps coax link. Substantial software and hardware work together to provide:

- **Remote file access**—sharing directories, data and special files, and peripherals.
- **Network file transfer**
- **Remote process management**—starting or stopping processes on systems throughout the network.
- **Interprocess communication**—communicating between simultaneously running processes.

Via HP's SRM (Shared Resource Management) interface, Series 500 Computers can be connected to HP's desktop computers and share peripherals and data. For SRM cables, see page 50.

Local area network cables

Cable no.	Jacket material	Minimum order	Maximum length		
92179E	PVC	10 m	500 m	10–49m 50–99m 100+ m	SAVE WITH QUANTITY DISCOUNTS
92179F	FEP	10 m	500 m	10–49m 50–99m 100+ m	SAVE WITH QUANTITY DISCOUNTS

Contact your HP sales representative for LAN 9000 or SRM information.

Two types of cut-to-length cables are available:
PVC—Use where cable will be installed in conduit.

FEP—Approved for installation in ceilings and walls without conduit (Teflon® jacketed).

Connector diagrams
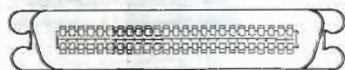
1 50-pin male (for 262X Terminals).

2 30-pin female (for 264X Terminals).

3M (male) and **3F** (female) standard 25-pin RS232C connectors.

4M (male) and **4F** (female) 14-pin multipoint cable connectors.
5 is a 48-pin connector, not shown.

6M (male) and **6F** (female) 3-pin connectors for HP3000 Series 64/68 ATP RS232C interface.

7M (male) and **7F** (female) 5-pin connectors for HP3000 Series 64/68 ATP RS422 interface.

Be sure to see the connector kits and cable guide on opposite page.

Note: Product names followed by * or ™ are trademarks of their respective companies. For a complete listing, see page 126

92229A Crimp tool for ATP connectors. This precision-machined hand crimp tool is needed to crimp the RF shield included in the 92224A/B and 92225A/B connector kits to the cable shield. A safety release is located inside the handle.

Connector kits and cable guide

In addition to HP's finished cables, we offer unterminated cables and connector kits to allow you to custom fit your installations. This handy guide matches the cables and connectors described below.

Illustration (see bottom p. 48)	Description	Connector kit	Raw cable
1	For 262X Terminal (port 1) (except 2621B)	5061-2412	92179A/B
2	For 264X Terminal	5061-1340	92179A/B
3M	Universal RS232C	92178A/C	92179A/B
3F	Universal RS232C	92178B/C	92179A/B
4M, 4F	Multipoint connectors for 264X	5061-2401	92179A/B
5	No kit available		
6M	3000-series 64/68 ATP for RS232C	92224A[1]	92179C/D
6F	3000-series 64/68 ATP for RS232C	92224B[1]	92179C/D
7M	3000-series 64/68 ATP for RS422	92225A[1]	92179C/D
7F	3000-series 64/68 ATP for RS422	92225B[1]	92179C/D

1) Requires 92229A crimp tool for assembly

Connector kits

Each kit contains all parts necessary for a complete assembly.

Illustration (see page 48)	Description	No. of male connectors	No. of female connectors	No. of pins	Part no.		
3M	RS232C	2	—	25	92178A	1–4	SAVE WITH
3F	RS232C	—	2	25	92178B	5–9	QUANTITY DISCOUNTS
3M/3F	RS232C	1	1	25	92178C	10 +	
2	For 264X Terminals	—	1	30	5061-1340		
4M/4F	Multipoint connectors for 264X Terminal	1	1	14	5061-2401		
1	For 262X port 1 (except 2621B)	1	—	50	5061-2412		
6M	3000-series 64/68 ATP RS232C	4	—	3	92224A[1]	1 Kit	
6F	3000-series 64/68 ATP RS232C	—	4	3	92224B[1]	2–3 4 +	SAVE WITH QUANTITY DISCOUNTS
7M	3000-series 64/68 ATP RS422	4	—	5	92225A[1]	1 Kit	
7F	3000-series 64/68 ATP RS422	—	4	5	92225B[1]	2–3 4 +	SAVE WITH QUANTITY DISCOUNTS

1) Requires 92229A crimp tool for assembly

Unterminated cables

Please specify lengths in meters.

Shielded	Unshielded	No. of wires	Gauge	Part no.	Minimum order	Max. continuous.* length		
	X	12	22	92179A	10 m	400 m	10–19 m 20–99 m 100 +	SAVE WITH QUANTITY DISCOUNTS
	X	25	26	92179B	10 m	400 m	10–19 m 20–99 m 100 +	SAVE WITH QUANTITY DISCOUNTS
X		3	24	92179C	30 m	300 m	30–99 100 +	SAVE WITH QUANTITY DISCOUNTS
X		5	24	92179D	30 m	300 m	30–99 100 +	SAVE WITH QUANTITY DISCOUNTS

Longer continuous lengths are available on special order. Delivery time may be increase.

HP-IB/IEEE-488 cables

DESIGNED FOR HP-IB SYSTEMS

92220R. This new cable comes in handy anywhere HP-IB connected devices are stacked. Its unique right-angle design reduces stress on the wires and the short length helps reduce chances of communication errors.

The 31389-series HP-IB cables have been improved to meet the new FCC rules, effective Oct. 1, 1983.

The 31389-series and 10833-series cables are now identical; however, both product numbers will coexist for your convenience.

Order number (identical cables are co-listed)	92220R (special right angle)	10833D	31389A or 10833A or 45529A	31389B or 10833B or 45529B	31389C or 10833C
Length	1.0 ft. (0.3 m)	1.6 ft. (0.5 m)	3.3 ft. (1.0 m)	6.6 ft. (2.0 m)	13.2 ft. (4.0 m)

NEW HP-IB extenders

With all its advantages, the HP Interface Bus (IEEE-488) faces one undeniable limitation: 2 meters between devices or a maximum of 20 meters (66 feet).

The 37203 extender units, used in pairs, can extend that limit up to 1000 meters (3300 feet). Between the extenders the data is serially transmitted over inexpensive coaxial cable (see below). Error-correcting circuitry is built in for maximum data integrity.

Transfer rates of up to 50,000 bytes per second ensure no loss of performance.

Note: Not for use with HP 3000. Available in U.S. only.

Order number	Description
37203A	HP-IB extender unit. Stand-alone unit with HP-IB and female BNC coaxial connectors. 110/220Vac. May be paired with 37203L.
37203L	HP-IB extender board. Convenient plug-in board for HP A/L 1000 family computers, with female BNC coaxial connector. May be paired with 37203A.
37203A with Opt. 010	HP-IB extender for laser printer. Stand-alone unit for use with HP2688A Desktop Laser Page Printer, with maximum extension of 500 meters. Has HP-IB and female BNC connectors; 110/220Vac. Pair only with another 37203A Opt. 010 unit.
92179G	Coaxial cable. Shielded. Minimum order 100 meters.
92226A	BNC connector, male

Note: Extenders are not recommended for remoting disc storage devices.

System Configuration — Point-to-point
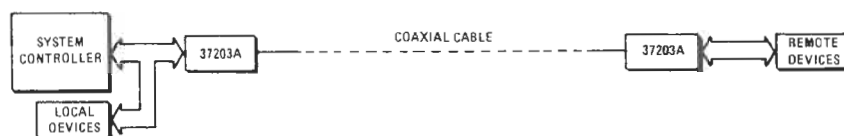
Shared resource management cables

Length	Connectors	Part no.
33 ft. (10 m)		97061A
82.5 ft. (25 m)		97061B
198 ft. (60 m)		97061C
198 ft. (60 m)		97061D

SRM interface cards required:

Computer	Interface card
HP Series 200 Models 26 and 36	98629A
HP 9835 and 9845	98029A
HP Series 500 Models 20, 30, and 40	27123A

HP-IL cables

The Hewlett-Packard Interface Loop (HP-IL) is a bit-serial interface that combines low power, small size and low cost. With the small, two-wire cable, you can interface as many as 30 devices with up to 10 meters of cable between each device. For more information on HP-IL, see the book "HP-IL System: An Introductory Guide to Hewlett-Packard Interface Loop 92233A," page 114.

HP-IL cable no.	82167A	82167B	82167D
Length	1.65 ft. (.5 m)	3.3 ft. (1 m)	16.7 ft. (5 m)

System cables

System	Description	Length	P/N
HP-86	36-pin cable for use with 82905B printer options 242, 342, 442	4ft./1.2m	82957A
	Monitor cable: coax connector both ends	25.4in/0.6m	92220M
Series 200 Model 16	RS232C cable with male connector	16ft./4.9m	5061-4215
	RS232C cable with female DTE connector	16ft./4.9m	5061-4216
7470A/7475A	RS232C cable to IBM® Personal Computer: Male-female, for use with Option 001.	4ft./1.2m	17255B
	RS232C cable for use with Option 001. Pin-for-pin configuration, male-male. 25 wire. Can be used with Apple™ computers.	9ft./2.3m	17355A
	RS232C Eavesdrop cable	3.3ft./1m	17455A
7550A	RS232C cable to IBM PC, female-female.	3.3 ft/1.0m	17655A
	RS232C cable for HP150, male-female.	3.3 ft/1.0m	17755A

Power cords

Part no.	8120-1348 Black 8120-1378 Gray	8120-1351 ★	8120-1369 ★	8120-1689 ★	8120-2104 ★
Plug					
Voltage rating	125V	250V	250V	250V	250V

*Order from HP sales office.

Organize power cords for convenience and safety

Durable, seamless steel power strip features a 6-foot cord, a push-to-reset safety circuit breaker, six outlets, and a convenient master switch with pilot light. Mounts easily flush to any surface using keyhole slots on the bottom (mounting hardware is provided).

The strip is UL® listed for safety.

92199A: Maximum rating: 15 A, 125VAC, 60 Hz, 1875 W (continuous duty), length: 12 inches, width: 2.5 inches, height: 1 inch. Color: beige. For sale in U.S. only.
(1–4)
(5–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

Protect your people and your equipment

Use these handy cable covers to eliminate costly accidents. These covers are made of long-lasting, flexible vinyl and come complete with double-faced adhesive tape for quick installation.

The 15-foot (4.8m) lengths can be trimmed to size with a sharp knife or butted for longer lengths. Beige or brown colors will match your office decor. The pre-slit channel accepts a cable up to .44 in. (7/16), (11mm) in diameter.

92199C Beige, 15-foot (4.8m) roll
92199D Brown, 15-foot (4.8m) roll
(1–4)
(5–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

Note: HP does not recommend placing a power cord and a data communications cable in the same channel

May be permanently attached using epoxy cement
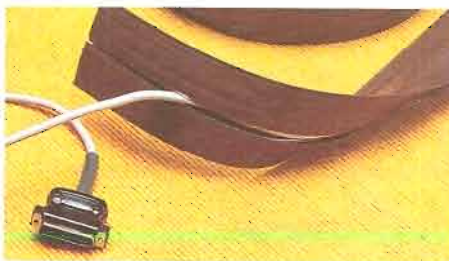
Note: Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

Power line conditioners*—why your system may need one

Why do I need a power line conditioner?

The technology of delivering electrical energy to you was developed prior to the advent of the 1980 computer systems (some as long as 40 years ago).

Your electrical utility was established to provide power for existing devices, such as lights and motors. And frankly, they do an excellent job. Most electric companies provide AC power that far exceeds established quality standards. But what is good enough for a light bulb or a motor is not adequate for today's high-speed computer electronics.

What is so special about modern electronic circuitry?

Electricity travels at an almost unbelievable speed. Yet, designers continuously seek additional ways to increase the working speed of computers. One alternative is to shorten the path the electricity has to travel. Another is to make the circuitry sensitive to very small changes in the electricity flow. Consequently, sudden changes in the power line will influence the logic within your computer.

If this is true, why isn't protection designed in?

Simply because electrical environments differ widely from one place to another. In some places, your computer will operate reliably year after year—in another place, power line conditioning is necessary. These places can be separated by half a world or half a block! Some areas have weather disturbances, such as lightning, which cause anomalies. Others have man-made disturbances, such as electrical motors and utility switching relays.

It is virtually impossible to design against all these influences—especially if computer manufacturers wish to bring their customers the best computing power at the best possible price. Building total power line protection into all computers is like forcing every person in the world to buy skis—even if they live in the Sahara Desert! Hewlett-Packard, therefore, makes power conditioning available on an "as needed" basis: If you don't need it, you don't pay for it; if you do need it, it is available.

How do I know if I need conditioning?

The best way is to ask your HP service engineer. They can analyze your power situation and recommend the best way to proceed.

Can I watch my system and determine if I need conditioning?

Probably not! You can get an indication that something is wrong by observing your system, but erratic behavior can be caused by many factors. Static electricity, for example, is very destructive to computers.

Power conditioning manufacturers would like to scare you into believing that "dirty power" is going to make your system "crash," but that is typically untrue!

More often the system will exhibit behavior that is more frustrating than catastrophic: a momentarily stuck cursor, garbled printouts, ignored commands. The system may correct itself but after a few of these incidents, you will probably question your wisdom in selecting that particular system. This is understandable but not correct.

There are so many types of conditioners. Which should I choose?

It is confusing. However, before we investigate the different choices, let's look at one of the many concepts which must be understood before we can discuss power conditioning intelligently: Normal mode versus common mode. The power line consists of three wires:
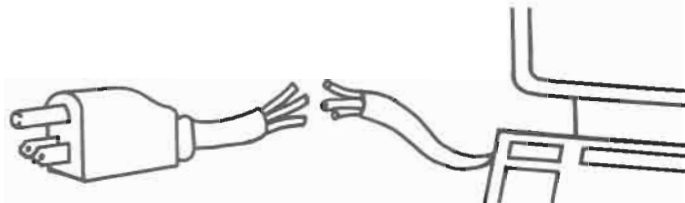
The terminology varies, but in essence two wires carry the AC power and the third wire is connected to ground. Not only is the ground reference essential to your computer's logic circuitry but the National Electric Code requires this ground reference in order to protect people. Yet, many power conditioner manufacturers virtually disregard this wire!

The term voltage describes the difference in electrical charge (measured in volts) between two points. The difference between the two AC power carrying wires is called normal mode voltage; the difference between any one of these two wires and ground is called common mode voltage.

Since we have established that all three are important, the first question to ask when considering power line conditioners is: Does the power conditioner protect both in normal mode and common mode?

Makes sense, but there are still many different types available!

Yes, there are: Isolation Transformers, Ferro-Resonant Transformers and relatively inexpensive units called Surge Suppressors.

These are all intended to deal with over-voltages, and many do a good job. However, they don't consider the resultant electrical current surge, and in many cases create problems instead of protecting the computer.

*Power line conditioners are for sale in the United States and Canada only.

Let's look at how a typical surge suppressor works:
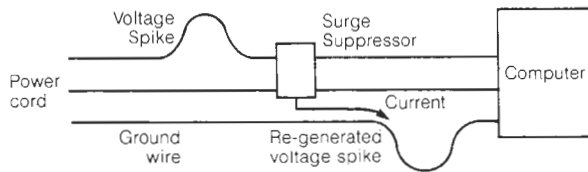
A voltage spike enters the power line in normal mode; the surge suppressor "clamps" the voltage to a pre-set level. Since energy cannot be created nor eliminated, it must go somewhere. What happens is that, according to Ohms law, Voltage = Resistance × Current ($E = R × I$), voltage divided by resistance becomes current. As this current travels throughout the suppressor, it encounters resistances (in electrical wires, etc.) and is again transformed into a voltage, this time as referenced to ground. In effect, the surge suppressor has generated a common mode voltage spike. Therefore, the conditioner must not only demonstrate protection in normal mode in/normal mode out and common mode in/common mode out but also, common mode in/normal mode out and especially normal mode in/common mode out.

Are there other considerations?

A major consideration is that the conditioner carry a safety approval by a recognized laboratory, such as UL in the U.S. and CSA in Canada. This assures you that the device will not harm operating personnel.

Another major consideration is reliability. Some components, especially some voltage-clamping devices, exhibit recognized aging characteristics, so that a finite life can be predicted. This aging depends heavily upon how often a voltage spike occurs and how large it is. It is therefore impossible to calculate when the component will begin to fade and provide decreased protection.

What is IEEE Standard 587?

This is a guide published by the International Society of Electrical and Electronic Engineers in 1980. It describes the nature of transient over-voltages as they can occur in normal power circuits. The guide discusses rates of occurrences, the waveshape and other details, so that engineers can perform realistic testing of their devices.

One important fact to keep in mind is this: Compliance with IEEE-587 means that the power conditioner will not be destroyed by the recommended test, not that it will continue to protect the computer! And protection is what you are paying for.

How do I know which size to choose?

It's easy. Each conditioner size is expressed in KVA (1000 Volt Amperes). Look at the rear label on your equipment to determine which size conditioner you need. It may be necessary to convert Amperes to 1000 Volt Amperes. Let's take an example:

	On label	Conversion	KVA
Computer	3A	3A × 120V* = 360VA	0.36
Disc	2A	2A × 120V* = 240VA	0.24
Printer	2A	2A × 120V* = 240VA	0.24
		Total KVA	0.84

*These are 120V, 50/60 Hz, single phase units for sale in U.S. and Canada only

A conditioner must be able to handle the entire load, so select the closest unit upwards. In this case it would be the 92199N at 1.0 KVA.

What do I do if the conditioner fails to work?

Unlike many other conditioners, the 92199 Series conditioners have no semiconductors in the power path, no fans to fail, no filters to clog, and no adjustments to be misaligned. Therefore, they are extremely reliable.

If they refuse to work, the most likely problem is the built-in fuse—either a common fuse or a specially designed protective link for the larger units. Check your instruction manual for the correct part. The protective link is available from Hewlett-Packard as part number **92199X**.

In the unlikely event that replacement of the fuse does not correct the problem, the conditioner is covered under a five year warranty. Just return the unit to the address in your instruction manual.

HP power line conditioners offer:

• Power line protection
HP power line conditioners will meet the IEEE-587 testing guidelines (6000 volts with 200 Amperes) and continue working.

Also, HP power line conditioners operate independent of the quality of ground reference to eliminate high frequency disturbance (noise) in the power ground wire.

• Safety
All HP power line conditioners are approved by UL in the U.S. and CSA in Canada.

• Efficiency
Starting a disk drive or charging the capacitance of an information processing system requires more current in the first few seconds than needed for normal operation. As an example, starting a disk drive may require 50 Amperes. Yet, the normal operation may need only 8 Amperes.

To meet this current differential with most power conditioners you must specify—and pay for—a substantially larger device just to start your equipment than you need to keep it running.

This oversizing is *not* necessary with HP power conditioners because they have an inrush capacity *10 times* their power rating.

• Reliability
HP power line conditioners are designed for long-term, trouble-free performance. There are no semiconductors in the direct power path to age or fail. There are no adjustments to be set improperly.

These units run cool because of their efficiency: Less than 10 percent of the energy is lost as heat. Consequently, there are no fans, which can fail and cause the unit to overheat. And there is no filter, which requires periodic cleaning.

Power line conditioners

Model no.	KVA	Dimensions	Shipping weight	Outlets
92199K	0.2	4.44 in. H × 4.64 in. W × 6.41 in. D	9 lbs.	2 (5–15R)
92199L	0.5	5 in. H × 6 in. W × 7 in. D	14 lbs.	4 (5–15R)
92199N	1.0	5.7 in. H × 8.5 in. W × 15.75 in. D	37 lbs.	4 (5–15R)
92199Q	2.0	8.12 in. H × 9 in. W × 17.87 in. D	71 lbs.	5 (4 ea. 5–15R; 1 ea. L5–20R)
92199R	2.8	10.5 in. H × 10.25 in. W × 18 in. D	93 lbs.	5 (4 ea. 5–20R; 1 ea. L5–30R)
92199T	4.8	10.5 in. H × 10.25 in. W × 18 in. D	115 lbs.	5 (4 ea. 5–20R; 1 ea. L5–30R)

Key to connectors   5–15R   5–20R   L5–20R   L5–30R

Alternate between peripherals with the flick of a switch

RS232C ABC switch. An easy way to switch between your peripherals, CPU ports and data-comm devices without plugging and unplugging cables. The 92178S switches between three EIA devices (all 24 lines) and your CPU, terminal or printer. Typical applications are shown in the diagrams below.

NOTE: This switch is a customer-installable device and does not qualify as an item which can be included under HP systems contracts. NOT AVAILABLE IN EUROPE.

92178S

PLOTTER	PRINTER	MODEM
TERMINAL	PRINTER	TERMINAL
CPU	CPU	CPU

ABC SWITCH → TERMINAL

ABC SWITCH → CPU

ABC SWITCH → PRINTER
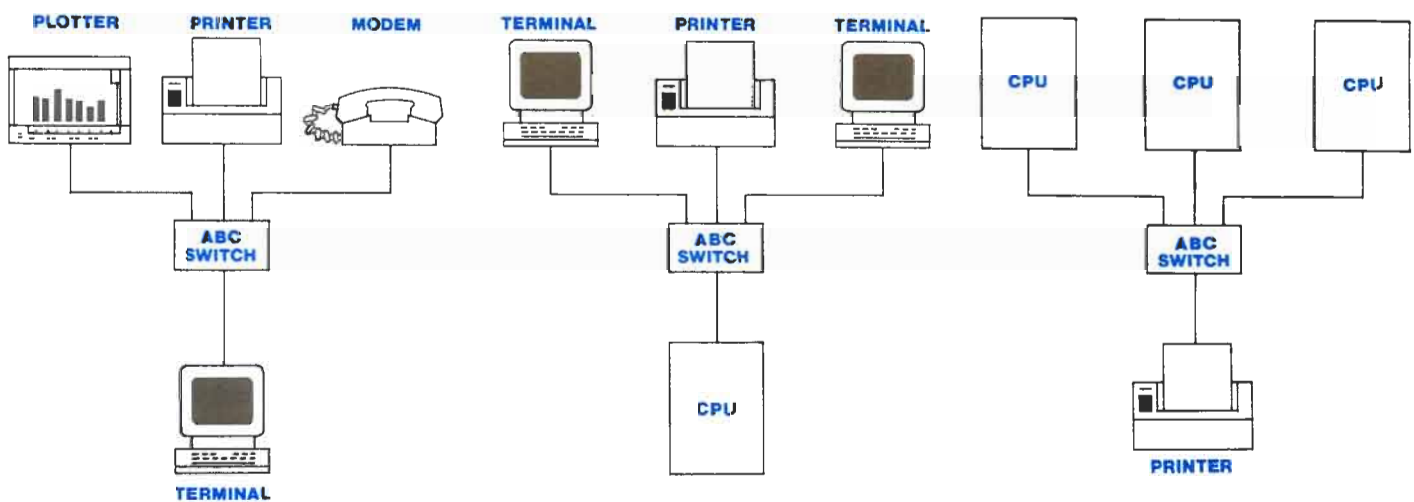
Rugged, simple, reliable—and convenient
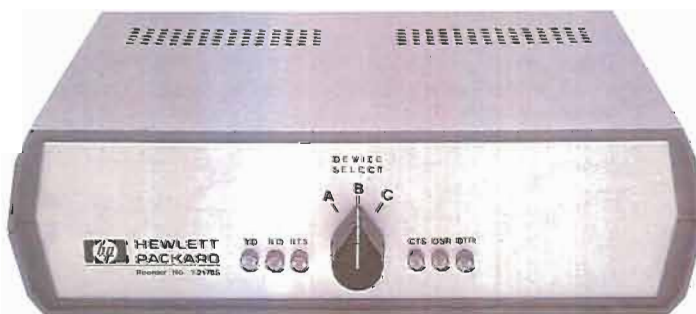
- Sealed, ceramic gold-plated switch for smooth operation.

- Monitor LED lamps for quick trouble-shooting.

- Meets FCC Class B specifications.

- PC board construction for longer life and greater reliability.

- Rear connectors are standard female RS232C.
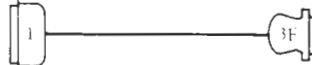
RS232C Extension cables

		Length	Description	Order this cable no. with new system	Order this no. for replacement cable
Extension cables	3M — 3M	9 ft. (2.3 m)	Pins 1-25 wired end-to-end	—	17355A
	3F — 3M	16.7 ft. (5 m)	Pins 1-25 wired end-to-end	(30062C)	31391A
		33.4 ft. (10 m)		—	31391B
		50 ft. (15 m)		(30062C, Opt 001)	31391C
		100 ft. (30 m)	Pins 1-25 wired end-to-end; shielded.	(30062C, Opt 002)	30062-60026
	3M — 3M	12.5 ft. (3.8 m)	Pins 1-8, 11, 12, 19, 20, 22, 23, 25 wired end-to-end.	—	92219G
	3F — 3M	25 ft. (7.6 m)	Hardwire extension; pins 2, 3, 7 wired end-to-end.	(30062D)	30062-60018
		50 ft. (15 m)		—	92215A
	3F* — 6M	16.7 ft. (5 m)	Adapter cable between HP 3000/64 ATP and existing RS232C terminal cable.	(30152A)	30152-60001
	6F — 6M	50 ft. (15 m)	Extension cable for HP 3000/64 ATP RS232C interface.	(30153A)	30153-60001

Connectors **3M, 3F, 6M, 6F** see page 48.
*Block RS232C connector.

RS232C cables

		Length	Description	Order this cable no. with new system	Order this no. for replacement cable
Modem cables	3M — 3M	25 ft. (7.6 m)	Connects HP 3000 to modem types 103 and 202S. Shielded.	(30062B)	30062-60022
		50 ft. (15 m)		(30062B Opt 001)	30062-60023
Modem eliminator cables	3F — 3F	5 ft. (1.5 m)	Bypasses modem and connects 13232P to HP 1000, HP 3000 or another terminal. Unshielded.	(13232U)	5061-2403
		16.7 ft. (5 m)	Use with 13222M or 13232M on HP 300.	—	31390A
262X (port 1) HP 125 (port 1) (Not for 2621 or 2382A)	1 — 3M	16.7 ft. (5 m)	U.S. modems 103A, 202C/D/S/T, 212A, Vadic 3400 signal-compatible acoustic couplers. Also HP 1000 & 3000 System multiplexers.	(13222N)	13222-60001
		50 ft. (15 m)		—	92217A
		16.7 ft. (5 m)	European 103- or 202C-type modems. Shielded.	(13222M)	13222-60002
		50 ft. (15 m)		—	92217B
	1 — 3F	6.6 ft. (2m)	Standard RS232C communications.	(13222C)	13222-60003
		50 ft. (15 m)		—	92217C
	1 — 3M	16.7 ft. (5 m)	3-wire cable with EMP protection for terminal from lightning-induced transients.	(13222Y)	13222-60005
		50 ft. (15 m)		—	92217D
	1 — 6M	16.7 ft. (5 m)	RS232C interface cable for HP 3000/64 ATP.	(13222X)	92217E

Connectors **1, 3M, 3F, 6M** see page 48.

RS232C cables (cont.)
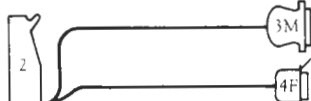
		Length	Description	Order this cable no. with new system	Order this no. for. replacement cable
262X (port 2) 2621 2382A HP 125 (port 2) HP 120 HP 150	3M — 3M	16.7 ft. (5 m)	HP 1000, 3000 Systems; U.S. modems 103A, 202C/D/S/T, 212A, Vadic 3400 modems; acoustic couplers (signal compatible only). Shielded.	(13242N)	13242-60001
		50 ft. (15 m)		—	92218A
		16.7 ft. (5 m)	European 202C-type modems. Shielded.	(13242M)	13242-60002
		50 ft. (15 m)		—	92218B
		16.7 ft. (5 m)	3-wire cable with EMP protection for terminal from lightning-induced transients.	(13242Y)	13242-60005
		50 ft. (15 m)		—	92218C
	3M — 6M	16.7 ft. (5 m)	RS 232C interface cable for HP 3000/64 ATP.	(13242X)	92218D
	3M — 3M	16.7 ft. (5 m)	RS232C-compatible serial printer such as 2601/2631/2635. Shielded.	(13242G)	13242-60010
	3M — 3F	16.7 ft. (5 m)	RS232C-compatible serial printers. Shielded.	(13242H)	13242-60011
	3F — 3M	16.7 ft. (5 m)	RFI-filtering modem bypass cable for 2621B and 2629L terminals.	(40242Z)	40242-60002
		16.7 ft. (5 m)	RFI-filtering extender cable for 2621B and 2629L terminals.	(40242C)	40242-60003
	3M — 3M	16.7 ft. (5 m)	RFI-filtering modem cable for 2621B and 2629L terminals.	(40242M)	40242-60004
264X	2 — 3M	15 ft. (4.5 m)	U.S. modems 103A, 202C/D/S/T; signal-compatible acoustic couplers. Also HP 1000, 2000 & 3000 System multiplexers.	(13232A)	02640-60043
		50 ft. (15 m)		—	92219A
		15 ft. (4.5 m)	U.S. modems 103A, 202C/D/S/T, 212A, Vadic 3400; signal-compatible acoustic couplers. Also HP 1000 & 3000 System multiplexers.	(13232N)	02640-60131
		50 ft. (15 m)		—	92219B
		15 ft. (4.5 m)	European 202C-type modems.	(13232M)	5061-2409
		50 ft. (15 m)		—	92219C
	2 — 5	50 ft. (15 m)	HP 1000/21MX computers with HP 12531D or 12880A Interfaces.	(13232B)	02640-60058
	2 — 3F	5 ft. (1.5 m)	Standard Async D.C. to non-HP computer.	(13232C)	02640-60059
		50 ft. (15 m)		—	92219D

Connectors **2, 3M, 4M, 4F, 5M** see page 48.

Maximum cabling distances

To ensure proper performance, be sure to consult the manuals for equipment you are connecting via cable. Check closely the specification for maximum cable length.

RS232C cables (cont.)

		Length	Description	Order this cable no. with new system	Order this no. for replacement cable
264X (cont.)		15 ft. (4.5 m)	3-wire cable with EMP protection for terminal from lightning-induced transients.	(13232Y)	02640-60218
		50 ft. (15 m)		—	92219E
		16.7 ft. (5 m)	RS232C interface cable for HP 3000/64 ATP.	(13232X)	92219F
Multi-point 1st terminal		15 ft. (4.5 m) 15 ft. (4.5 m)	U.S. Modems 103A, 202C/D/S/T; signal-compatible acoustic couplers. Also HP 1000, 2000 & 3000 multiplexers. - To 2nd HP 264X terminal.	(13232P)	02640-60132
Multi-point 2nd + terminals		15 ft. (4.5 m) 15 ft. (4.5 m)	Preceding 264X terminal. - Next 264X terminal (or open).	(13232Q)	02640-60133
		15 ft. (4.5 m) 15 ft. (4.5 m)	Power protect cable. If power fails on terminal to which connected, the terminals which follow can still operate. Preceding 264X terminal. - Next 264X terminal.	(13232T)	02640-60151
		100 ft. (30 m)	Multi-point extension cable.	(13232R)	02640-60134
		250 ft. (76 m)		—	92220A
		500 ft. (152 m)		—	92220B
		1000 ft. (305 m)		—	92220C

Connectors **2, 3M, 3F, 5, 6M** see page 48.

RS422 cables

		Length	Description	Order this cable no. with new system	Order this no. for replacement cable
Extension cable		100 ft. (30 m)	Extender cable for connecting HP 3000/64/68 ATP and RS422 interface cable.	(30154A)	30154-60001
262X Terminals		16 ft. (5 m)	5-wire cable for terminal to HP 3000/64/68 ATP, RS422	(13222P)	92216A
264X Terminals		16 ft. (5 m)	5-wire cable for terminal to HP 3000/64/68 ATP, RS422	(13232I)	92216B

Connectors **1, 2, 7M, 7F** see page 48; **2 *** modified connector to include power protect relays on **02640-60151** only.
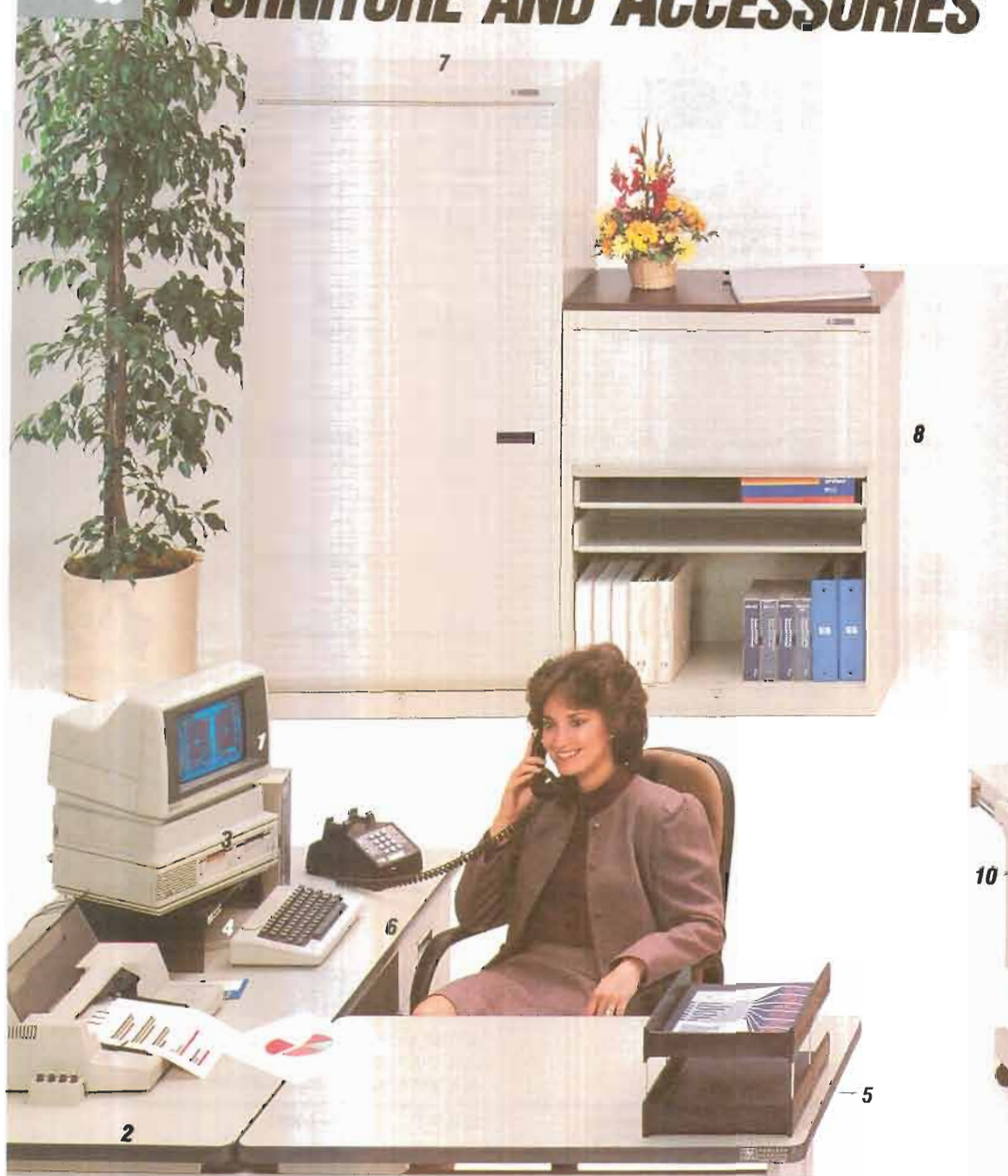
HP's Standard Furniture—outstanding features that suit your budget

HP's standard *is* quality. Our products must meet stringent demands in the areas of design, construction, and convenience. The workstation furniture above passes on all three points—and at a reasonable price!

Efficient design allows you to grow

The modular design of our workstation furniture helps you keep pace with today's rapidly evolving computerized office or laboratory. It lets you build the workstation you initially need, on a modest scale and at a modest price—while making it easy for you to modify and enlarge it as people and equipment are added, or as your floorplan changes. And all of the pieces are visually compatible, as well as being color-coordinated to HP computer products.

Durability you can count on

Our furniture is solidly built to handle terminals, printers, plotters, personal computers, disc drives—as well as conventional office equipment, such as typewriters. The steel construction assures you of stability and reliability for many years to come. But the best part is that assembly is simple and fast. All you need is a Phillips head screw driver. Mounting holes are pre-drilled/tapped, and all screws, hardware, and instructions are provided.

Convenience—an added plus

Built-in cable management neatly and efficiently handles unsightly cables and power cords. And the mar-resistant work surfaces are cantilevered for a more open, uncluttered area underneath the workstation.

Still want more?

If efficiency, durability, and convenience aren't enough—turn to page 62 for a look at our *Design Plus* System Furniture. This original HP design is remarkably attractive, as well as functional.

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1 Series 200 Model 16 Personal Computer
2 HP7470 Two-pen graphics plotter. Page 40.
3 Tilt/swivel unit. The perfect way to personalize your HP 120, 150, 200 model 16 and 2382. Gives you 20 degrees of tilt and 360 degrees of rotation. Pages 66–67.

4 Keyboard park. An essential complement to your HP 120, 150 and 200 model 16 and 2382. Pages 66–67.
5 92210E Work surface extension (return). Page 60.
6 92210B 60-inch Standard workstation table. Page 60.

7 92172B Universal storage cabinet—efficient and well-integrated into overall workstation design. Page 70.
8 92172A Workstation/storage cabinet. Page 70.
9 92175B Brown soft-surface mat—a static fighter. Page 73.

10 92174A/D HP data binders. Page 83.

11 92210M Top access mobile media file. A great way to get mobility, convenience and good looks. Page 60.

12 82901M Dual 5.25 flexible disc drive.

13 92210R Storage module unit—for disc drives and/or low-cost general storage. Page 60.

14 92210C Workstation table with right-hand adjustable keyboard section. Page 60.

15 92171B Easel copy holder. Page 68.

16 92171E Footrest. Page 68.

17 92176D Anti-static carpet mat—a handsome, durable way to protect your electronic equipment from static. Page 73.

18 92194A Desktop file for 5.25-inch flexible discs. Page 105.

19 92207A Anti-glare filter—notice the increase in contrast between the two filtered displays on the right and the unfiltered screen on the left. Page 69.

20 92209A HP Ergonomic chair—comfort, mobility and adjustability. Page 65.

21 92210N HP Mobile drawer unit. Page 60.

22 92178S ABC Switch—if you have multiple system interfaces, this switch can really simplify your life. Page 54.

23 HP 125 Personal Computer

24 92210H Standup printer/terminal stand. Page 61.

25 264X Terminal

26 92171A Clamp-on copy holder. Page 68.

27 92207B Anti-glare filter. Page 69.

28 92209N HP Ergonomic chair with arm support—the executive model. Page 65.

29 92207C Anti-glare filter. Page 69. Also see **19**

30 92176B Anti-static carpet mats. Another static fighter. Page 73.

31 82905B Dot-Matrix Printer.

32 92171S Desktop printer stand. The perfect solution for fanfold printing with 82905/06 printers. Page 77.

33 HP-86 Desktop computer

34 92210B 60-inch Standard workstation table. Page 60.

35 92210G Desktop storage shelf—a well-integrated organizer featuring message board and bookshelf. Page 60.

36 92210Q Suspended drawer unit. Page 60.

37 92210V Tabletop connector—perfect for corners and for providing extra desktop working area. Page 60.

38 92210A 48-inch Compact workstation table. Page 60.

39 HP-12C Calculator. Page 4.

40 92177S Desktop calculator stand. Page 4.

HP Standard Furniture (see photo pages 58–59)

	Product no.	Description	Height	Width	Depth		
	92210A (see photo page 59)	Compact workstation table, with leg levelers and modesty panel. 7-in. (178-mm) shelf standard.	27.0 in. 686 mm	48.0 in. 1220 mm	30.0 in. 762 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210B (see photo page 59)	Standard workstation table, with leg levelers and modesty panel. 7-in. (178-mm) shelf standard.	27.0 in. 686 mm	60.0 in. 1524 mm	30.0 in. 762 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210C (see photo page 58)	Workstation table with right-hand adjustable keyboard section. Leg levelers, modesty panel and 7-in. (178-mm) shelf standard. Keyboard section starts 3 in. (76 mm) from the right side, adjusts down a total of 2.1 in. (53 mm) from table top and can be tilted 10 degrees from the horizontal. Manual adjustments.	29.0 in. 736 mm	60.0 in. 1524 mm	30.0 in. 762 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
		Adjustable keyboard dimensions	1.2 in. 30 mm	24.0 in. 610 mm	10.0 in. 254 mm		
	92210D	Workstation table with left-hand adjustable keyboard section. Leg levelers, modesty panel and 7-in. (178-mm) shelf standard. Keyboard section starts 3 in. (76 mm) from the left side, adjusts down a total of 2.1 in. (53 mm) from the table top and can be tilted 10 degrees from the horizontal. Manual adjustments.	29.0 in. 736 mm	60.0 in. 1524 mm	30.0 in. 762 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
		Adjustable keyboard dimensions	1.2 in. 30 mm	24.0 in. 610 mm	10.0 in. 254 mm		
	92213A	Desktop computer workstation with raised, sliding worksurface for graphics tablets, etc. 7-in. (178-mm) shelf and casters standard. **92210E/Q/R will not attach to this workstation.**	26.0 in. 660 mm	48.0 in. 1220 mm	24.0 in. 610 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
		raised, sliding worksurface	28.4 in. 720 mm	24.0 in. 610 mm	30.0 in. 762 mm		
	92210E (see photo page 58)	Work surface extension (return), with leg levelers and modesty panel. Fits right or left side of **92210B** table, left side of **92210C**, right side of **92210D**. Requires use of 'Z' bracket (included) when mounting on **92210C/D**. **Not for 92210A.**	27.0 in. 686 mm	40.0 in. 1016 mm	24.0 in. 610 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210F	Desktop storage shelf for **92210A** workstation table. Includes two book supports and back-wall message board. 11 in. (279 mm) storage shelf adjusts from 15 in. (381 mm) to 21 in. (533 mm) above work surface of table. Convenient paper/storage shelf included.	23.0 in. 584 mm	47.0 in. 1194 mm	12.0 in. 305 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210G (see photo page 59)	Desktop storage shelf for **92210B/C/D** workstation table. Includes three book supports and back-wall message board. 11 in. (279 mm) storage shelf adjusts from 15 in. (533 mm) to 21 in. above work surface of table. Convenient paper/storage shelf included.	23.0 in. 584 mm	59.0 in. 1499 mm	12.0 in. 305 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210M (see photo page 58)	Top access mobile media file. Stores legal, letter, data processing printout as required. Full suspension. Locking top panels slide to each side to provide easy access and handy work surfaces. Dual wheel casters.	25.3 in. 643 mm	20.5 in. 521 mm	23.3 in. 592 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210N (see photo page 59)	Mobile drawer unit, on casters. Two drawers, with identical key lock all units. Deep bottom drawer like **92210Q** below. Unit rolls easily to any workstation: top same height as **92210A/B**.	27.0 in. 686 mm	15.4 in. 391 mm	20.0 in. 508 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210Q (see photo page 59)	Suspended drawer unit. Two drawers, with identical key lock units. Deep bottom drawer can store three types of hanging files: letter-size, legal-size, and computer printout binders. Fits right or left side of **92210A/B/C/D** tables.	21.0 in. 533 mm	14.8 in. 375 mm	19.4 in. 493 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210R (see photo page 58)	Storage module unit, with three-position adjustable shelf. Rear of module is open for ventilation and access to **92210A/B/C/D** cable management system, when module used to hold electronic equipment. Fits right or left side of **92210A/B/C/D** tables.	19.0 in. 483 mm	21.0 in. 534 mm	19.4 in. 493 mm	(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
		inside module dimensions:	17.0 in. 432 mm	19.4 in. 493 mm	19.4 in. 493 mm		
	92210V (see photo page 59)	Workstation tabletop connector. 90-degree triangle. Joins two **92210A/B/C/D** tables together.	Each side	30.0 in. 763 mm		(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS
	92210L	Set of four heavy-duty, double-wheel casters. Use in place of leg levelers on **92210A/B/C/D** tables or **92210H/P** stands where mobility is desired. Caster height 1.75 in. (45 mm).				(1–2 units) (3 +)	SAVE WITH QUANTITY DISCOUNTS

EASY ASSEMBLY! A Phillips screwdriver is the only tool needed to assemble the 92210A/B/C/D/E and 92213A units, and to install the 92210/Q/R/S/V units. All mounting holes are pre-drilled/tapped, and all hardware and brackets are included.

Tables and printer stands

The 92210H/P/T printer stands and table below have the same design lines and color as the various components in our modular workstation system, as well as the built-in cable management feature.

The HP 92170G, right, is of a different style, and matches the design lines of the HP 7908/11/12 disc drives.

92170G Tables—standalone at right, and at left configured with a 7912 Disc Drive, HP 1000 System.

Left to right—92210P printer stand, 92210H standup printer/terminal stand, 92210T mobile workstation table. Also shown is the 92173P paper transporter, HP 2601A printer and 2624A terminal.

Standard tables and stands

	Product number	Description	Dimensions			
			Height	Width	Depth	
	92170G (See above photo)	Custom designed workstation table. Matches color, form and dimensions of HP 7908/11/12 disc drives. Steel construction with new wood-laminate top. Hex-head wrench included for easy assembly.	28.3 in. (720 mm)	36.6 in. (930 mm)	28 in. (712 mm)	SAVE WITH QUANTITY DISCOUNTS
	92210H (See above photo)	Standup printer/terminal stand. Design matches HP 92210-series workstation system. Same slotted top and rear printout catcher as 92210P (see above). Height is 38 in. (965 mm), ideal for walk up operation of equipment. Cable management slots, 7-in. (178-mm) shelf standard.	**work surface** 38 in. (965 mm) 29.5 in. (749 mm)	30 in. (762 mm) **printout catcher** 17 in. (432 mm)	24 in. (610 mm) 13.5 in. (343 mm)	SAVE WITH QUANTITY DISCOUNTS
	92210P (See above photo)	Printer stand. Design matches HP 92210-series workstation system. Convenient paper feed slot (4 × 19 in., 102 × 483 mm) in top allows bottom paper feed. Also features rear printout catcher with 1.5-in. (38-mm) slot to allow paper transport to rear feed printers. Cable management slots, 7-in. shelf standard.	**work surface** 27 in. (686 mm) 18.5 in. (470 mm)	30 in. (762 mm) **printout catcher** 17 in. (432 mm)	24 in. (610 mm) 13.5 in. (343 mm)	SAVE WITH QUANTITY DISCOUNTS
	92210T (See above photo)	Mobile workstation table for terminals. Design matches HP 92210-series workstation system. Features a dropped, pull-out keyboard surface. Cable management slots, locking casters and 7-in. (178-mm) shelf standard.	**work surface** 28.3 in. (720 mm) **keyboard surface** 26.4 in. (670 mm)	30 in. (762 mm) 23.5 in. (597 mm)	28 in. (712 mm) 12 in. (305 mm)	SAVE WITH QUANTITY DISCOUNTS

Front feed for
293X Series
printers

All units shown
feature integrated
top design and
height compatibility

Matte black cable
rack safely routes
cables and cords to
desired drop
location

Mobile mini-
rack system
shown with
disc drive and
six of 20 filler
panels in
place

Sculpted
aluminum feet
and top
supports

2932A
Dot Matrix Printer

92214A

9121D
Disc
Drive

92214B

92209M

92214P

92214J

92211R

92214C
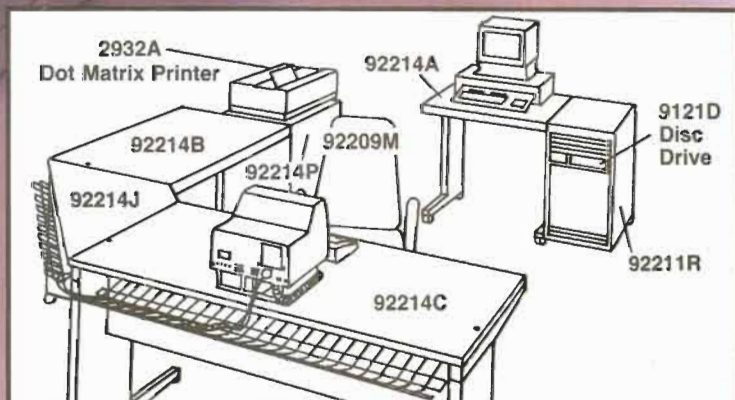
All the features of our Standard line plus exceptional style

Designed by Hewlett-Packard, *Design Plus* System Furniture offers a striking blend of strength and superior design. Each piece is fashioned to blend attractively (in color and style) with our current and future computer products. In addition, this finely crafted furniture also offers custom features such as cantilevered top design for more leg room and a built-in cable management system.

Quality construction—Sculptured aluminum feet and top supports, steel side panels and a durable laminated top are a few of the features that make our *Design Plus* tables an excellent, lasting value. Our mini-racking cabinet is also constructed of steel and comes fully assembled.

Easy assembly—The *Design Plus* system tables are shipped to you in a "knocked down" form. All you need is a Phillips head screw driver and in minutes, you have your *Design Plus* Furniture assembled and ready to use. The mini-rack requires no tools to assemble. It snaps together! Order HP *Design Plus* today.

HP *Design Plus* System Furniture (See photo at left)

Part number	Description	Height	Dimensions Width	Depth	
92211R	*Design Plus* Mobile mini-rack system cabinet for HP modular peripherals and systems 12.8 in. (325 mm) wide such as the HP 9121 disc drive. Comes fully assembled with casters. Back is key lockable and opens for easy access to mounted equipment. Accessories available are the 92211S mounting rail and module lock kit, and the 92211T filler panel kit.	28.4 in. 720 mm	14.8 in. 375 mm	28.0 in. 711 mm	Available after July 15, 1984.
92214A	*Design Plus* Mobile terminal support and transport system table. Designed to safely move terminals and small systems. Comes with cable management and locking casters.	28.4 in. 720 mm	29.5 in. 750 mm	28.0 in. 711 mm	(1−2 tables) (3+) SAVE WITH QUANTITY DISCOUNTS
92214B	Medium *Design Plus* system table. Comes with cable management, locking casters, and is same height as 92211RD/E mobile rack system cabinet.	28.4 in. 720 mm	44.3 in. 1125 mm	28.0 in. 711 mm	(1−2 tables) (3+) SAVE WITH QUANTITY DISCOUNTS
92214C	Large *Design Plus* system table. Comes with cable management, adjustable leveling glides, and is same height as 92211RD/E mobile rack system cabinet.	28.4 in. 720 mm	59.0 in. 1500 mm	28.0 in. 711 mm	(1−2 tables) (3+) SAVE WITH QUANTITY DISCOUNTS
92214P	*Design Plus* universal support stand. For use with HP 2932/33/34, HP 2563A printers and small HP plotters. Comes with printout catcher shelf, casters and leveling glides. Has slot in top for bottom feeding and slot in door top for front feeding. Also has sound control pad on door, two interior walls, and comes color compatible with HP printers and plotters.	28.4 in. 720 mm	23.6 in. 600 mm	17.7 in. 450 mm	(1−2 units) (3+) SAVE WITH QUANTITY DISCOUNTS
92214J	90-degree *Design Plus* corner turn. Used for joining two system tables together for a larger work area.	Each side	28.0 in. 711 mm		(1−2 units) (3+) SAVE WITH QUANTITY DISCOUNTS

HP Ergonomic Chairs

"If you're like me, you probably spend more time than you'd like seated at your desk, conference table or workstation.

And if you do spend much of your workday in a chair, your productivity and end-of-day fatigue relate directly to the comfort of your chair.

That's why I want you to know that this office chair I've used over the past two years is the best chair I've ever had. I concur with HP's industrial design group and our product managers that the HP Ergonomic Chair is the best value in terms of quality construction and adjustable comfort.

Staying comfortable in a chair is not, for me, a simple matter. I'm tall (6 feet 5 inches) and like many of you, my lower back gives me trouble. The lumbar support in this chair certainly relieves lower spinal pressures, while the high chair back provides support to my upper spine and shoulder area during long phone calls or meetings.

And it's so easy to change the seat height and back angle that I probably do it 10 times a day. Like stretching or taking a stroll, it just seems to relieve tension and loosen up my muscles.

I'm so convinced that these chairs increase personal productivity that I have made them our standard for the entire Supplies Division—including our conference rooms.

They're that good!"

...Will Carleton, General Manager
HP Supplies Division
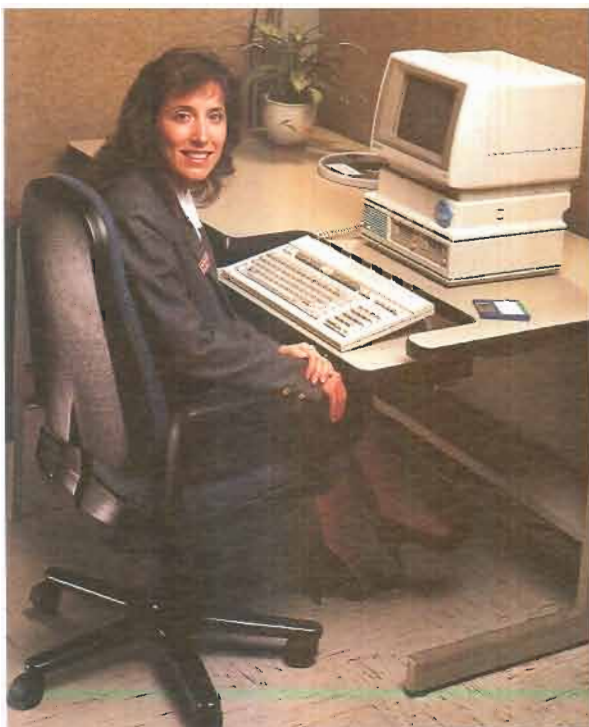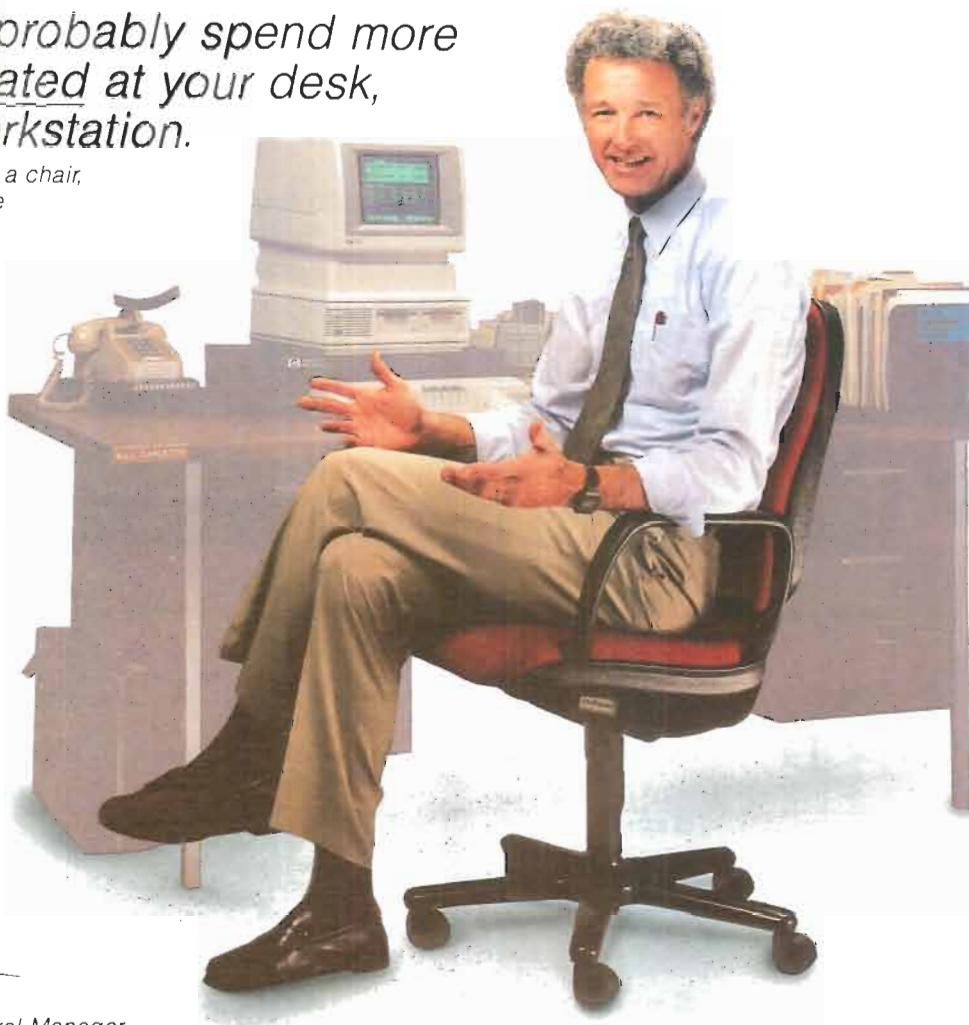
"When I joined the HP Supplies Division about a year ago, I don't think I'd ever heard the term "ergonomic chair."

Now, almost two thousand "sitting" hours later, I can tell you it has come to mean something very important—comfort!

Interestingly, I need an ergonomic chair more than most. At a compact height of 5 feet 1 inch, I'm much shorter than our division manager (see Will's comments above). For the first time in my career, I can sit back in a chair and still have my feet resting comfortably on the floor.

In my work, I turn frequently from my desk to my design table or terminal. The push button right on the edge of the seat makes it a snap to instantly adjust chair height to the best position for each of these three work zones.

I also like the push-button-controlled chair back. Sometimes I lock it at a fixed angle for firm support, and other times I set it to move freely for light support as I lean forward or back on it.

In fact, it's the chair's ease and range of adjustability that sets it apart from all the others I've used in the past. I can and do change seating positions all day long—and find myself feeling better at the end of a long day's work as a result.

Thanks, Will!"

...Kathy Roslund, Catalog Editor

Rust
Beige
Dove Blue

For comfort at your workbench, try the Ergonomic Workbench Chair!

The Ergonomic Workbench Chair is perfect for those who sit at graphics workstations, CAD/CAM stations or other areas that have elevated work surfaces. This chair has five individual, easily reached adjustments. As with our other ergonomic chairs, it is this ease and range of adjustments that keeps you comfortable throughout the day.

Each workbench chair has as standard equipment an adjustable chrome foot ring, five-leg base and dove blue fabric. Optional casters are available for those who require mobility in their chair.

Choose from three colors!
The Ergonomic chair and Ergonomic chair with arm support are available in three colors. The workbench chair comes in dove blue only. For additional chair photos, see pages 58–59.

92209S Workbench chair

18° Back tilt

Back height
3.25 in.
(82.5 mm)

Seat height
4.6 in.
(116.8 mm)

20° Back tilt

Seat height
4.6 in.
(116.8 mm)

Back tilt 19°

Back height
3.5 in.
(89 mm)

Seat height up to
10 in. (254 mm)

Foot-ring adjustment
8.5 in.
(216 mm)

Seat tilt 8.5°

Chair shown with optional casters.

HP Ergonomic chair

Part number	Color	Seat	Chair back	Weight	
92209A	Rust	Height 17.2–21.8 in. (410–560 mm)	Height 36.7–41.3 in. (940–1060 mm)	35.2 lbs. (16 kg.)	(1–2) (3+) SAVE WITH QUANTITY DISCOUNTS
92209B	Dove blue	Depth 17.2 in. (440 mm)	Depth 19.9 in. (510 mm)		
92209C	Beige	Width 18.3 in. (470 mm)	Width 18.3 in. (470 mm)		

In addition to adjustable seat height, the **92209A, B,** and **C** chairs also feature a nine-position, vertically adjustable seat back.

HP Ergonomic chair with arm support

Part number	Color	Seat	Chair back	Weight	
92209M	Rust	Height 16.8–21.5 in. (430–550 mm)	Height 38.2–42.9 in. (980–1100 mm)	30.8 lbs. (14 kg.)	(1–2) (3+) SAVE WITH QUANTITY DISCOUNTS
92209N	Dove blue	Depth 17.2 in. (440 mm)	Depth 23 in. (590 mm)		
92209P	Beige	Width 17.6 in. (450 mm)	Width 17.9 in. (460 mm)		

HP Ergonomic workbench chair

Part number	Color	Seat	Chair back	Weight	
92209S	Dove blue	Height 22.2–32.2 in. (564–818 mm) Depth 17.6 in. (447 mm) Width 18.9 in. (480 mm)	Height 34.9–43.75 in. (886–1111 mm) Depth 19.5 in. (495 mm) Width 18.9 in. (480 mm)	30 lbs. (13.6 kg)	(1–2) (3–9) (10+) SAVE WITH QUANTITY DISCOUNTS
92209L	Dark brown	Caster Set		5 lbs.	(1–2) (3–9) (10+) SAVE WITH QUANTITY DISCOUNTS

hp museum

Tilt and swivel accessories for personal computers/terminals.

At the touch of your fingertips, tilt and rotate the display for optimum, glare-free viewing. Or swing the display around to share with a co-worker.

For your HP 120/200 Model 16 Personal Computer*:

For your 2382A Office Display Terminal:

For your HP 150 Personal Computer:

1 92240A Display tilt unit
2 9121D Disc drive
3 92240B Swivel unit

4 92171K Keyboard park (see below)
5 92171Y Swivel adapter
6 92240A Display tilt unit

7 9121D Disc drive
8 92240B Swivel unit
9 92171J Jumbo keyboard park (see below)

*These computers are darker in color than the tilt/swivel products.

Keyboard accessories

When not in use, simply slide your keyboard into one of these parks to free up valuable desktop space and protect it from spills and other accidental damage.

Non-slip rubber feet

Dual backwall slots for convenient cable management

92171K Keyboard park

For keyboards up to 13.2-inches (335mm) wide.

92171J Jumbo keyboard park

For extended keyboards up to 19 inches (483mm) wide. on the HP 120, 200 Model 16, and the 150.

Constructed of formed and bonded acrylic plastic for durability
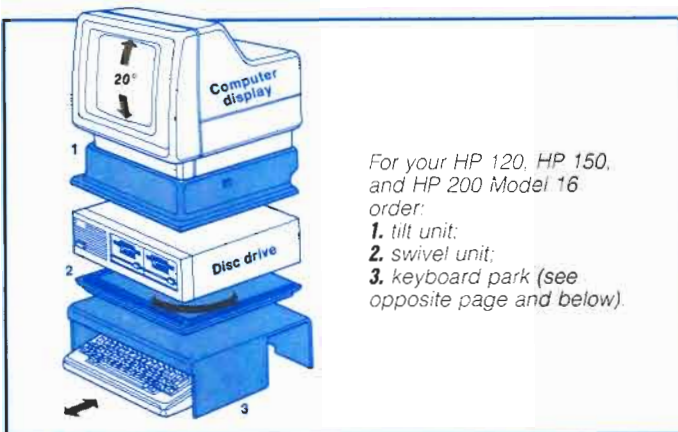
For your HP 120, HP 150, and HP 200 Model 16 order:
1. tilt unit;
2. swivel unit;
3. keyboard park (see opposite page and below).
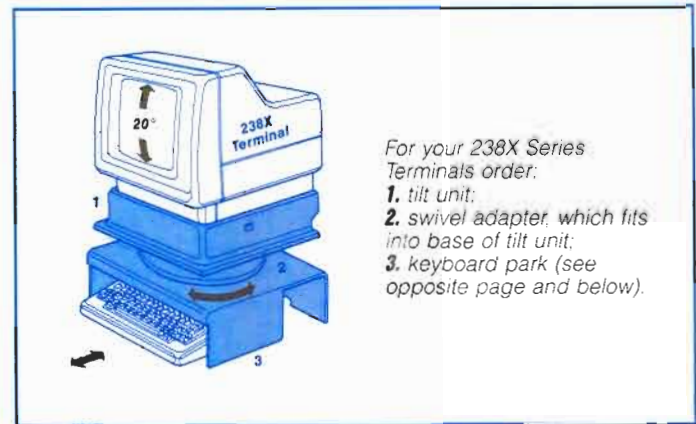
For your 238X Series Terminals order:
1. tilt unit;
2. swivel adapter, which fits into base of tilt unit;
3. keyboard park (see opposite page and below).

Tilt/swivel accessories

Part Number	For use with computer/ terminal	Description	Dimensions height	width	depth		
92240A	HP 150 HP 120* Model 16* HP 2382*	Display tilt unit. 20-degree viewing angle adjustment (up or down 10 degrees from horizontal). Tilt adjusts easily with pushbutton. **Color is light gray.**	2.8 in. 70mm	12.8 in. 324mm	12.0 in. 305mm	(1–2 units) (3–9) (10+)	SAVE WITH QUANTITY DISCOUNTS
92240B	HP 150 HP 120* Model 16* HP 2382*	Swivel unit. Placed under HP 9121 Disc Drive so entire equipment stack (disc drive, tilt unit, display) can be rotated right or left. **Color is light gray.**	0.9 in. 25mm	12.8 in. 324mm	11.2 in. 284mm	(1–2 units) (3–9) (10+)	SAVE WITH QUANTITY DISCOUNTS
92171Y	HP 2382 (Requires 92240A)	Swivel adapter. This adapter snaps directly into the base of the 92240C. Imparts 360-degree rotation capability to the tilt unit. Ideal for shared terminal applications. Not needed when purchasing a 92240B-D.	height 0.4 in. 10mm	diameter 9.5 in. 241mm		(1–2 adapters) (3–9) (10–)	SAVE WITH QUANTITY DISCOUNTS

*These computers/terminals are darker in color than the tilt/swivel products.

Keyboard parks

92171K Keyboard park. Desktop real estate is too valuable to be occupied by an idle keyboard, so move that keyboard out of your way when it's not in use (and protect it from accidental spills and impact). Tuck it neatly into HP's handsome, smoked-acrylic park, which is engineered to support both terminal and tilt swivel unit.

Park's backwall slot carries keyboard cord conveniently to rear for neat appearance. For keyboards up to 13.2 inches (335mm) wide. Exterior dimensions: height 4.4 inches (112mm); width 14.1

inches (358mm); depth 11.2 inches (285mm). Color: gray smoked. Construction: formed and bonded acrylic plastic.
(1–2 units)
(3–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

92171J Jumbo keyboard park. Our regular keyboard park has grown to meet the demands of extended keyboards for the HP 120, 200 Model 16 and the HP 150. If you want all the advantages of the 92171K but have a keyboard wider than

13.2 inches (335mm). this is your park! It's ideal for the tilt/swivel and your computer with its 3.5-inch disc drive. Order one today and increase your desktop space. Color: gray smoked. Construction: formed and bonded acrylic plastic. Exterior dimensions: height 4.4 inches (112mm); width 19 inches (483mm); depth 11.2 inches (285mm).
(1–2 units)
(3–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

Palm rests

92171Q Adjustable palm rest. Lower operator fatigue and increase productivity with this adjustable palm rest. This unit has fingertip adjusting wheels to raise or lower the rest for proper forearm angle and wrist support. It installs easily under the detached keyboard of the HP 264X Terminal family. In addition to this unit, see the 92171R for HP 262X and other keyboards. Rest height is 1.4 inches (35mm) adjustable to 1.75 inches (45mm) and is made of high-strength plastic. Color is buff. (Replaces 92171P palm rest.)
(1–2 units)
(3–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

92171Q

92171R Extended keyboard palm rest. Just the right size for the extended keyboards (16.7 inches long/425mm) used on HP 120/125 Personal Computers. Also can be

used with the extended keyboards on HP 262X Terminals. Foam molded for extra comfort. Cocoa brown color.
(1–2 units)
(3–9)   SAVE WITH
(10+)   QUANTITY DISCOUNTS

92171R

Workstation accessories

Left—92171A, Right—92171B

92171A Clamp-on copy holder is easily adjusted; you can position it where you need it to most conveniently reference your copy.

It clamps to vertical or horizontal surfaces up to 1.25 inches (32mm) thick, and has a maximum reach of 30 inches (762mm). The line guide is moveable. and friction locks securely hold the position you have selected.

(1–2 holders)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92171U Tilting turntable

92171U Tilting turntable provides a tilting range of up 5 degrees and down 5 degrees from horizontal with nine different positions. Different operators can easily position the CRT to an ideal viewing angle to minimize glare and reduce neck, back and eye strain. Turns 360 degrees (limited by cabling). Slight turning resistance keeps CRT in the desired position and turns only when you want it to turn. Exterior dimensions: height 3.75 inches (95mm); width 19.5 inches (495mm); depth 24 inches (610mm).

(1–2 turntables)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92171B Easel copy holder. Placing this copy holder between detached keyboard and CRT means better productivity and less eye strain for your data entry operators. The holder will tilt at the push of a button from zero to 90 degrees. The line guide mechanism is fingertip adjustable and can be used either on the left or right side of the holder, or may be completely removed.

This sturdy plastic copy holder is designed for page sizes up to 14.87 (14⅞) × 11 inches. Putty colored. Order several and save.

(1–2 holders)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92171T CRT turntable

92171T CRT turntable for properly positioning and sharing terminals. Turns 360 degrees on a strong, positive-position ball-bearing mechanism (limited by cabling). Color matches HP's computer workstation furniture (92210) and HP's storage cabinets (92172). Exterior dimensions: height 1.25 inches (32mm); width 20 inches (508mm); depth 24 inches (610mm).

(1–2 turntables)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92171H CRT tray

92171H CRT tray. The solution to workstation clutter is here. This smoked acrylic CRT tray allows work documents to be neatly stacked on top of your HP 262X- and 264X-Series Terminals.

Rubber feet keep the CRT tray securely in place on top of your terminals. The curved front lip of the tray also hooks over the edge of work surfaces to organize the inflow and outflow of paperwork around terminals.

The tray has an open front and a hand-thumb notch for easy access to contents, and holds up to 132-column printout. Exterior dimensions: height 2.5 inches (6.4cm); width 16 inches (41cm); depth 12 inches (30.5cm).

(1–2)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92171E Footrest

92171E Footrest. Reduce lower back fatigue and circulation-restricting lower thigh presure—raise your feet off the ground and onto our angled footrest. This is especially helpful for those who sit all day and do data entry or other desk work. Constructed of steel, these footrest also have ribbed rubber facings and non-slip rubber feet. Order several and help others take a load off their feet.

(1–2)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

Anti-glare filters reduce annoying reflections

HP's anti-glare filters put nothing between you and your data except a distortion-free, optically coated safety glass which actually increases contrast. There is no blurring of the image, nothing to obstruct your view.

Each filter is easily mounted in seconds with Velcro® strips. No tooling is required.

It is time to face the glaring truth—inefficiency in computer systems is bad business.

These filters will fit other terminals and computers, as well. The Velcro® mounting requires a .75-inch (2 cm) wide, flat surface on at least two sides. The accompanying illustrations will allow you to select the correct size.

92207A Anti-glare filter. For use with 262X-series terminals and the HP-125 Personal Computer.

92207B Anti-glare filter. For use with 264X-series terminals

92207C Anti-glare filter. For use with the HP-86 Personal Computer.

Terminals

	Filter number
262X-series	**92207A**
264X-series	**92207B**

Computers

HP-125	**92207A**
HP-86 (12-inch monitor)	**92207C**
(1–2)	SAVE WITH
(3–6)	QUANTITY DISCOUNTS
(7+)	

Keep your anti-glare filters clean and smudge-free! Order the 92193V video cleaning kit featured on page 101.
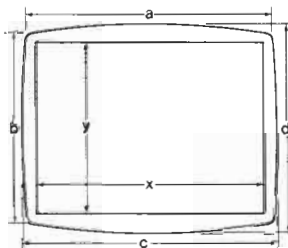
Filter A

a.	12.71 in.	32.28cm
b.	10.45 in.	26.49cm
c.	12.93 in.	32.84cm
d.	10.82 in.	27.48cm
x.	11.66 in.	29.61cm
y.	8.70 in.	22.09cm
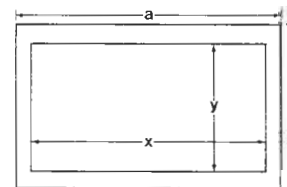
Filter B

a.	12.68 in.	32.22cm
b.	7.77 in.	19.75cm
x.	11.21 in.	28.48cm
y.	6.10 in.	15.50cm
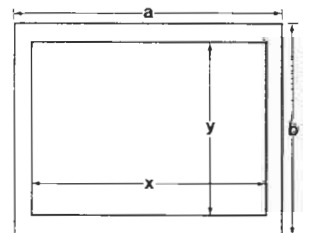
Filter C

a.	12.00 in.	30.48cm
b.	9.50 in.	24.13 in.
x.	10.53 in.	26.74cm
y.	7.83 in.	19.88cm

Halon fire extinguishers

(Sold by HP in U.S. only)
Halon 1211 is a "clean" and especially effective fire-extinguishing agent for use on or near computer equipment and media. It is easy to use, blankets a fire quickly, and penetrates obscured areas.
- Leaves no residue
- No cold shock to equipment
- No electrical shock to user
- Will not affect most delicate fabrics

92208B 5-pound extinguishing capacity. (U/L Rated 10B:C)

(1–2)	SAVE WITH
(3+)	QUANTITY DISCOUNTS

92208C 9-pound extinguishing capacity. (U/L Rated 1A:10B:C)

(1–2)	SAVE WITH
(3+)	QUANTITY DISCOUNTS

92208D 13-pound extinguishing capacity. (U/L Rated 2A:40B:C)

(1–2)	SAVE WITH
(3+)	QUANTITY DISCOUNTS

Media and documentation cabinets

Organization is easy with media storage cabinets. Save time and effort! HP media and documentation cabinets make organization and retrieval of valuable media and programs a simple, efficient task.

Ready for immediate shipment. There's no waiting with HP! We keep these cabinets in stock—pre-assembled—and ready for shipment just as soon as we receive your order.

Custom HP design. These cabinets are designed specifically to meet the media, documentation, and supplies storage requirements of all HP system users. Cabinets and doors are designed to match or complement a wide range of HP products. Take a look at the furniture section of this catalog to see how well these cabinets complement our workstation furniture line.

Durable walnut-patterned top.

Documentation/storage shelf has 3 movable dividers. Tall enough (13.75 in., 35 cm) for metric A4 binders.

Mag tape hanger bar securely holds up to 35 reels in seals.

Hanger bar for printouts, with 20 printout hangers included with cabinet. (Mag tape can also be hung from this bar.).

Top roll-out shelf. Movable (and removable) dividers form up to 14 compartments. Vertical clearance 5 in. (12.7 cm).

Bottom roll-out shelf. Vertical clearance 5 in. (12.7 cm).

Storage 15.25 in. (38.7 cm) high.

Storage 13.25 in. (33.7 cm) high.

Keyed lock for door.

Workstation/ storage cabinet

92172A Shelves are all pre-installed. Sent separately are the rugged walnut-grained plastic top which affixes easily to top of cabinet, and the roll-out shelf dividers, which you simply drop in place on either top or bottom roll-out shelf. (Media and supplies pictured are not included in cabinet price.)
Exterior dimensions: height 47 inches (119.5cm); width 36.1 inches (92cm); depth 18.6 inches (47cm).

Cabinet and door are both pearl gray.
NOTE: Shipped by truck. Shipping weight—263 lbs. (120 kg).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS

The 92172A and 92172B cabinets have convenient roll-out shelves with fully adjustable width/depth dividers, ideal for small supplies like mini data cartridges, plotter pens, printwheels, etc. If desired, dividers may be totally removed for storing disc packs/cartridges or other large items.

Universal/ storage cabinet

92172B Shelves and hanger bars are all pre-installed. Sent separately and included in the cabinet price are 20 print-out hanger cartridges [light blue color; each cartridge holds printouts up to 1 inch (2.5cm) thick], and roll-out shelf divider unit which drops securely onto either top or bottom roll-out shelf. (Media and supplies pictured are not included in cabinet price.)
Exterior dimensions: height 71 inches (180cm); width 36.1 inches (92cm); depth 18.6 inches (47cm).

Cabinet and door are both pearl gray.
NOTE: Shipped by truck. Shipping weight—291 lbs. (133 kg).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS

Quality construction. These cabinets are extremely well-constructed of welded steel for enduring strength and reliability, and feature a tambour roll-up door of high-impact plastic for lightness and ease of use.

Space efficient. The roll-up door makes efficient use of available space, which means more useful storage space inside the

cabinet for your requirements. When the door is open, access to any part of the cabinet is easy.

Lock for security. With the door closed and locked, your valuable media, program listings and supplies are safe from unauthorized access.

NOTE: Necessary attachments and instructions are included with all cabinets.

Documentation shelf is tall enough (13.75 in., 35 cm) for metric A4 binders.

Each mag tape hanger bar securely holds up to 35 reels in seals.

Each printout hanger bar holds up to 28 printout cartridges (Mag tape can also be hung from these bars).

Keyed lock for door.

Printout/documentation storage cabinet

92172C. This cabinet has a documentation shelf at top for binders and storage. The printout hanger bars provide a unique method for storing computer printouts and make frequent retrieval of data convenient. Documentation shelf and printout hanger bars are all pre-installed. (Binders and printout hanger cartridges pictured are not included in cabinet price—order these items separately.)

Exterior dimensions: height 71 inches (180cm); width 36.1 inches (92cm); depth 18.6 inches (47cm).

Cabinet and door are both pearl gray.
NOTE: Shipped by truck. Shipping weight—231 lbs. (105kg).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS

Printout binder adapters. See 92172L/M/N, page 83.

Printout hanger cartridges

Box of 10 cartridges for use with the 92172B and 92172C cabinets. (NOTE: 20 light blue cartridges are included and shipped with each 92172B cabinet.)

Each cartridge can hold printout thickness up to 1 inch (2.5cm) and has adjustable pins to hold any printout where the width between pin feed holes on each edge is between 11.25–14.9 inches (28.5 and 37.9cm). Cartridges are hinged for easy loading and unloading. Self-adhesive labels are included.

92172P Box of 10 light blue cartridges

92172R Box of 10 red cartridges

92172Y Box of 10 yellow cartridges
(1–2 boxes)   SAVE WITH
(3+)   QUANTITY DISCOUNTS
NOTE: Discounts apply to quantity purchase of single part numbers only.

Magnetic tape storage cabinet

92172D. The tape hanger bars are designed to accommodate .5-inch industry-compatible magnetic tape in tape seal only. Up to 175 of either 600-foot, 1200-foot, or 2400-foot reels of tape may be stored in any combination. Spring-loaded rear panel makes retrieval easy and fast. Mag tape hanger bars are all pre-installed. (Media pictured is not included in cabinet price.)

Exterior dimensions: height 71 inches (180cm); width 36.1 inches (92cm); depth 18.6 inches (47cm).

Cabinet and door are both pearl gray.
NOTE: Shipped by truck. Shipping weight—224 lbs. (102kg).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS

Library tape storage rack. See 92172E, page 113.

Facts about static protection

If your work area contains electronic circuitry, such as computers and measurement devices, protection against damaging static electricity is a must. HP's static-control products come in a variety of shapes and sizes. To help you make the right choice, we have collected some important facts about static.

Cause and effect

Static electricity is generated when two different materials come into contact and then are separated. Common actions such as walking (shoes leaving floor), sitting (clothes rubbing against upholstery), and standing (clothes rubbing against the body), cause static energy buildup.

When you consider that modern electronic circuitry can operate using levels of 5 volts or less, you can easily see how static discharge though the circuitry can be extremely damaging. (For typical static buildup levels see box on right.)

Nature tends to balance itself. Just as hot and cold water blend to become lukewarm, static charges must become equalized. Therefore, built-up energy continuously seeks a path to ground (neutral charge).

This is one of many reasons HP designs its computers with a ground connection from the chassis to the wall socket. The charge will then have an easy path to balance itself. We suggest you check the building wiring, especially in older buildings, to ascertain that the ground path really exists.

However, even if the discharge path bypasses all the sensitive circuitry, electromagnetic waves (similar to radio or TV waves) will still be generated by the discharge. Because these waves travel through the air, they are able to reach the circuitry with a very high charge.

HP's answer to static

The solution is simple: prevent the damaging charge from reaching the equipment. Hewlett-Packard offers a complete line of products which will do just that. The static control mats drain the charge via a ground cord within fractions of a second after you step on the mat; the anti-static carpet mats distribute the charge over a large area, reducing built-up static in any one area (use only where conditions for static buildup are unfavorable); the tabletop mat affords the same protection as the static control mats, but is more convenient and aesthetically pleasing (operator *must* touch the mat before touching the equipment); the Staticide spray and wipes are for use on areas not protected by anti-static carpets and mats.

Static facts

Static damage is described in two ways:
- Catastrophic—when the component is dead; the board/unit will not work.
- Degrading—when a discharge weakens a component, possibly causing premature failures within days, weeks or months after the incident, or characteristic changes such as intermittent failures (usually with temperature shifts, vibrations, or load variations).

	Most common static reading	Highest static reading
Walking across carpet	12,000 volts	39,000 volts
Walking across vinyl tile floor	4,000 volts	13,000 volts
Working at desk	500 volts	3,000 volts

*Institute of Electrical and Electronics Engineers Inc. (IEEE) from 12th Annual Proceedings of IEEE Reliability Physics.

The static charge level is:	When you:
3,500 volts	feel
15,000 volts	see

Anti-static accessories

Use Staticide spray and wipes on areas not protected by anti-static carpets and mats.

Staticide™ Spray and Wipes complete the protection your equipment deserves.

Non-toxic, non-flammable, biodegradable Staticide™ from ACL is the only EPA-registered anti-static solution and is now available in convenient spray bottles and handy wipes.

Use the spray on large areas, such as walls and floors, and the wipes on CRTs and keyboards. Since static attracts dust, you will be delighted with the wipes' cleaning ability, as well.

92176S Spray 1-quart (0.95 l) bottle w/spray trigger
(1–11)   SAVE WITH
(12+)   QUANTITY DISCOUNTS
92176W Wipes 24 individually packaged wipes per box
(1–11)   SAVE WITH
(12+)   QUANTITY DISCOUNTS

Protection that goes where you go!

92175S Shoe grounding strap. Today's non-leather shoe material "insulates" the operator from anti-static carpets. In highly sensitive areas, such as computer rooms, this convenient shoe strap is recommended. Easily attached and disposable, it protects your equipment by providing a conductive path to the mat. Boxes of 100 straps include instructions.
(1–2 boxes)
(3–5)   SAVE WIT.
(6+)   QUANTITY DISCOUNTS

Note: Product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.
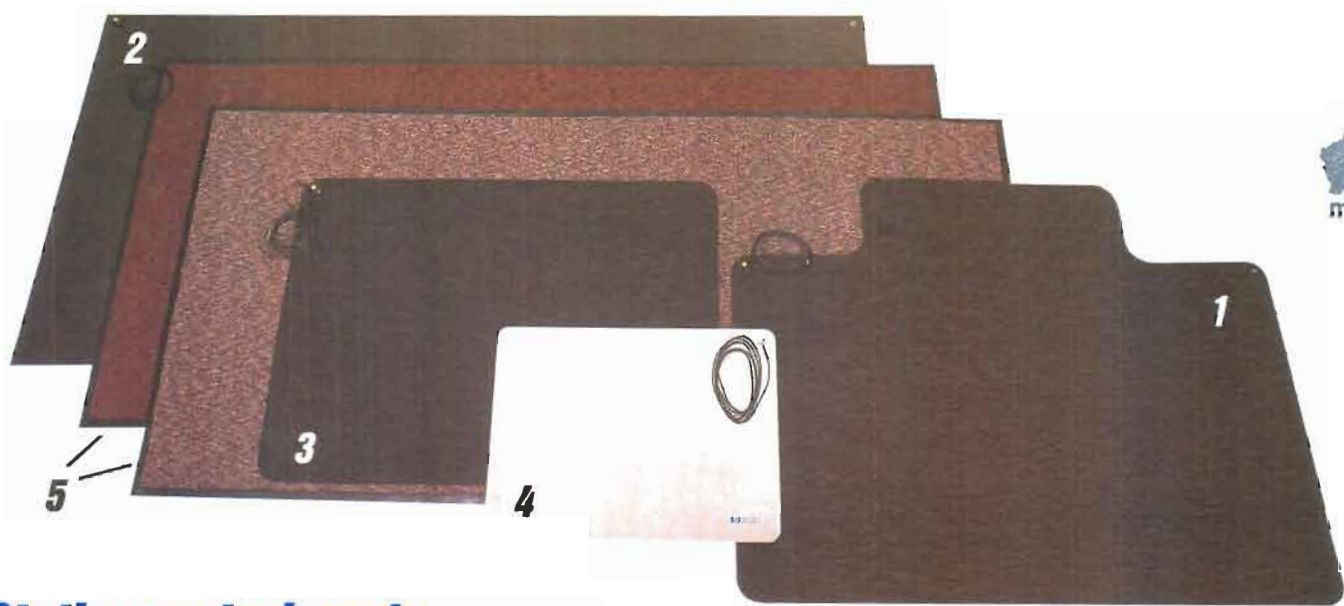
Static control mats

1 **92175A Black hard-surface mat**
• For sit-down applications—castered chairs will roll easily on mat
• Shaped to fit most desks/workstations
• Anti-shock
• 10-foot (3.05m) ground wire
NOTE: Shipped by truck.
(1–2 mats)
(3+)   SAVE WITH QUANTITY DISCOUNTS

2.5 ft. (0.8m)
4 ft. (1.2m)
5 ft. (1.5m)
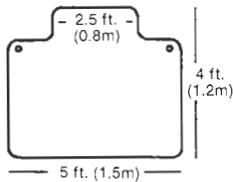
2 **92175B Chocolate brown soft-surface mat**
• For stand-up application
• Cut-to-fit space requirements
• Anti-shock
• Foam backing has both anti-skid and anti-fatigue characteristics
NOTE: Shipped by truck.
(1–2 mats)
(3+)   SAVE WITH QUANTITY DISCOUNTS

4 ft. (1.2m)
8 ft. (2.4m)
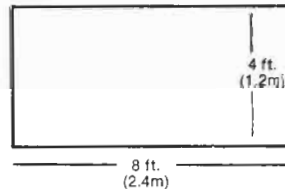
3 **92175C Small black hard-surface mat**
• For sit-down applications—castered chairs will roll easily on mat
• Ideal for terminal and processing data entry
• Anti-shock
• 10-foot (3.05m) ground wire
NOTE: Shipped by truck.
(1–2 mats)
(3+)   SAVE WITH QUANTITY DISCOUNTS

3 ft. (0.9m)
4 ft. (1.2m)
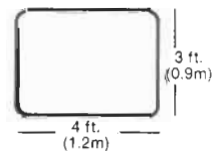
Tabletop static mat

4 **Now an alternative to floor mats is here!**
92175T Tabletop mat. When anti-static carpets and floor mats are impractical or aesthetically unappealing, tabletop mats are the answer to static protection. Simply touch the mat before using your equipment and any charge you have generated will drain via the 10-foot ground wire.

For peripheral equipment positioned off the mat, the procedure is the same. Just touch the mat before handling the equipment and static charge is dissipated.

Our desktop mats are cushioned, skid-resistant and easily cleaned with deter-gent and warm water. For a custom fit, they can be cut to size with heavy scissors.
Size: 23 × 30 inches (58 × 76 cm)
(1–2)
(3+)   SAVE WITH QUANTITY DISCOUNTS

Anti-static carpets

5 Carbon-impregnated filaments woven into the carpet automatically drain off static. This protection remains even after washing. Our exclusive non-skid backing prevents the mat from shifting or curling. And to complement all types of workstation furniture, our nubby-weave mats are offered in two warm hues.

Size: 4 × 6 foot (1.2 × 1.8m)
92176A Natural color
92176C Russet color
(1–2 mats)
(3+)   SAVE WITH QUANTITY DISCOUNTS

Size: 4 × 8 foot (1.2 × 2.4m) shown in photo above
92176B Natural color
92176D Russet color
(1–2 mats)
(3+)   SAVE WITH QUANTITY DISCOUNTS

Dust covers

HP custom covers for your valuable computer equipment

Protects equipment—saves you money. These protective cloth covers keep dust, dirt and food away from the vital internal components of your computer equipment.

Looks professional. Each cover is constructed of durable, dark tan cloth—for a professional look in any workplace. When your computer equipment is in use, these covers fold neatly and easily into a compact bundle for storage in a drawer.

Perfect fit. Each cover is custom-designed to provide a perfect fit to your equipment. Special rear cutouts allow for routing of power and interconnect cables. These protective covers are a wise investment in the future of your equipment. Use the chart below to order a cover for each of the computer products listed to the right.

For plotters, printers, and disc drives

HP Product model no.	Dust cover part no.
2631	92251C
7220A/B, 7221A/B, 9872 A/B	9222-0564
7220C, 7221C, 9872C	9222-0742
7220S, 7221S, 9872S	9222-0681
7220T, 7221 T, 9872T	9222-0741
7225B	9222-0635
7240A/7245B	9222-0607
7470A	92250N
7475A	07475-60010
7550A	07550-60210
82901M	92251A
82902M	92251B
82905A/B	92250T
9121 S/D	92251D

For terminals and computers

HP Product model no.	Dust cover part no.
HP 83/85	82948A
HP 87	82955A
HP 120"	92250D
HP 125"	92250B
HP 150"	92250F
2382A	92250A
262X"	92250B
264X"	92250C
9816" (Series 200 Model 16)	92250P
9825A/B/S/T	92251H
9826A	92251J
9835A	92251K
9835B	92251H
9845B Opt. 1XX	92251M
9845B Opt. 2XX	92251N

"Separate covers for keyboard and CRT.

Carrying cases

STYLE A

STYLE B

STYLE D

STYLE C

Protection for those on the go!

Protect your valuable equipment with HP's custom-designed carrying cases.

Made from scuff- and water-resistant soft vinyl, each features resilient foam padding to cushion the contents from life on the road.

Quality construction ensures years of use. Treat yourself to the convenience of having computational power and information wherever it is needed—not just at the office.

NOTE: These are quality cases, well padded to protect your equipment, but are not intended for shipment or as checked airline luggage.

For terminals and computers

HP Product model no.	Carrying case part no.	Carrying case style
HP 120[1]	13269P	D
HP 150 and 9121S/D	13269C	D
HP/85/86/87 (86 monitor must be carried separately)	13269A	B
HP 83/85 (Contoured foam insert)	82933A	A
2382A	13269P	D
9816[2]	13269P	D
9825A/B/S/T	13269M	C
9835 (Computer only)	13269M	C
9835 (CRT)	13269R	C
9845B/C Opt. 1XX, 2XX (Computer only)	13269Q	C
9845B Opt. 1XX (CRT)	13269R	C
9845B/C Opt. 2XX (CRT)	13269S	C

[1]A separate carrying case for the disc drive must be used if the HP 120 features the extended keyboard.
[2]Use 13269C for 9816 with extended keyboard.

For plotters, printers and disc drives

HP Product model no.	Carrying case part no.	Carrying case style
7220, 7221, 9872B/C	1540-0480	C
7225B	1540-0560	C
7240A, 7245B	1540-0558	C
7470A	07470-60001	D
7475A	07475-60001	D
82901M	1540-0685	C
9111A/T	1540-0685	C
9121S/D	13269T	D

Impact printers

Two standouts for your printer!

Loaded with features to make working with your printer more efficient. Ruggedly built and easy-to-assemble, these stands are color-matched to complement HP printers.

In the furniture section .... see page 61.

Impact printer accessories

92167V/W Printwheel storage albums

92261S Desktop mini stand

92171S Desktop printer stand

92167V Printwheel storage album. This special album helps you organize and store your HP 2602A daisy printwheels. Its circular design has a capacity of six printwheels. Snap the wheels in place, close the cover and store this handsome album near your printer. Cover color is bone suede with dark brown accent. Size is 12 × 13.3 inches (305 × 338mm). Take advantage of our quantity discounts. Order several and save.

(1–2 albums)	
(3–9)	SAVE WITH
(10 +)	QUANTITY DISCOUNTS

92167W Printwheel storage album. Organize your HP 2601A daisy printwheels with our printwheel storage album. It has a capacity of six printwheels and is ruggedly constructed to prevent damage while providing a dust-free storage environment. Bone color with black accent. Size is 9.5 × 11.62 inches (241 × 295mm). Order several and save.

(1–2 albums)	
(3–4)	SAVE WITH
(5+)	QUANTITY DISCOUNTS

92261S Desktop mini-print stand. This smoked acrylic printer stand is especially designed for use with the 2225 ThinkJet Printer. Its small footprint helps economize on space while allowing fanfold printer paper to be easily supplied from under your printer. Exterior dimensions: width 11.75 inches (298mm); depth 12 inches (305mm); height 3.25 inches (83mm).

(1–2 stands)	
(3–9)	SAVE WITH
(10 +)	QUANTITY DISCOUNTS

92171F Printer/plotter stand

92171S Desktop printer stand. This unique smoked acrylic printer stand is now designed for use with the HP 82905A/B and 82906A Printers.

Fanfold paper conveniently fits inside the printer stand—providing organization and improved paper flow while printing. Printer stand holds paper 4 inches (102mm) to 10 inches (254mm) wide. Also provides a convenient workstation for your 7470 Plotter.

Exterior dimensions: height 3.37 inches (85mm); width 16.5 inches (419mm); depth 14 inches (355mm). The right size for personal/office workstations.

(1–2)	SAVE WITH
(3 +)	QUANTITY DISCOUNTS

92171F Printer/plotter stand for 264X-Series terminals. Save valuable workstation surface area with this platform, which provides a level surface for your terminal printer or plotter. There are many other uses for this versatile terminal accessory. (Slots are provided for the front feet of the 2671-Series printers.)

(1–2)	SAVE WITH
(3 +)	QUANTITY DISCOUNTS

Impact printer accessories (cont.)

26010A-26020A Multi-part forms tractors

26010A Multi-part forms tractor. Add the convenience of continuous forms to your HP 2601A Printer. The tractor installs easily over existing platen and is advanced as the platen turns. The tractor wheels are adjustable to accept up to 16-inch form widths. With the forms tractor installed, the HP 2601A will fit completely inside the 92177C sound enclosure.

26020A Bidirectional forms tractor. Add this lightweight, durable forms tractor to your 2602A Printer. Easy to install and simple to use. The tractor can be used with the standard sound panel in place on the printer and adjusts to accept up to 15-inch form widths. With the forms tractor installed, the 2602A will fit inside the 92177D sound enclosure.

HP 2601A Printer with 92177A sound pad

92177A Sound absorbing pad. Help quiet your 2601A/2602A or other printers. The main body is made of high-quality felt, treated with a stiffening agent which allows continuous lateral motion without fiber breakdown. The non-skid rubber bottom holds the pad firmly on your stand or desk, thus preventing "printer creep." The top corners are impregnated with a layer of latex to hold your printer firmly on the pad. Size is 18 inches (457mm) × 22 inches (559mm). Order several and save.
(1 pad)
(2–4)   SAVE WITH
(5 +)   QUANTITY DISCOUNTS

26004A Sound cover kit. Designed to quiet your 2608A/S Printer. Included in the cover is a built-in static eliminator which reduces paper static buildup and aids in proper paper stacking.

26090A Sound cover. Help quiet your HP 2630 family printers with this easily installed sound abatement cover. It will reduce printing noise up to 10 dB. Includes mounting clips, paper intake shield and instructions.
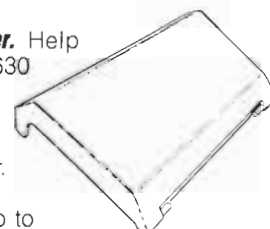
Impact printer supplies

HP 2602A Starter kits

To help you get off to a good start with your HP 2602A Daisywheel Printer, try our starter kits. Included are enough ribbons to keep things going for six to eight weeks as well as different printwheels (type styles) to try on your printer.

Each kit comes with 13 high-capacity multistrike film ribbons (92151H box of 12 ribbon cartridges plus one extra cartridge) and four 98-character plastic printwheels. A custom storage binder which holds four printwheels and one

ribbon cartridge is included. This helps protect your printwheels and keeps the supplies you need close for easy access.

92265A U.S. 2602A starter kit. Contains the ribbon cartridges and storage binder as described. The USAS-CII 98-character printwheels in this kit are: 92262B Prestige Pica 10, 92262E Prestige Elite 12, 92262F Letter Gothic 12, 92262G Bold P.S.* See 2602 printwheel chart for type styles available, page 84.
(1–2 kits)   SAVE WITH
(3 +)   QUANTITY DISCOUNTS

Reduce printer noise up to 80% with our new sound enclosures

Reduce unwanted printer noise in your work area or office now! Our sound enclosures are specifically designed to quiet the HP 2601A and HP 2602A Daisywheel Printers. The construction of the enclosures allows use of continuous forms and access to platen knobs. The tops are easy-to-open acrylic plastic which hold in any open position.

All enclosures have a dual-voltage fan module (120 Vac, 60 Hz/220 Vac, 50 Hz). When the printer is installed in the enclosure, its power cord is removed and used to plug in the fan module and connect it to the main. A jumper power cord from the fan module then plugs into the printer. With this arrangement, the fan module on-off switch will control the power to the printer. This safety feature protects your printer from overheating.

All enclosures come complete with a bottom section which is padded to further assist in isolating printer noise and vibration. Order one today and keep things on the quiet side.

1 **92177D Sound enclosure.** For use with HP 2602A Daisywheel Printer with or without forms tractor. Exterior dimensions: height 16.1 inches (409mm); width 27.7 inches (704mm); depth 23.25 inches (591mm).
(1 enclosure)
(2–5)
(6+)
SAVE WITH QUANTITY DISCOUNTS

2 **92177G Sound enclosure** for HP 2601 or HP 2602 with a sheet feeder. Includes a pullout drawer as the base to allow easy access to sheet feeder trays. Exterior dimensions: height 24.25 inches (616mm); width 31.75 inches (806mm); depth 32 inches (813mm).
(1 enclosure)
(2–5)
(6+)
SAVE WITH QUANTITY DISCOUNTS

3 **92177C Sound enclosure** (replaces 92177E/F). For HP 2601A Daisywheel Printer with or without forms tractor. Not for use with 26010D sheet feeder option. Exterior dimensions: height 14.9 inches (378mm); width 25.6 inches (650mm); depth 25.1 inches (638mm).
(1 enclosure)
(2–5)
(6+)
SAVE WITH QUANTITY DISCOUNTS

92265B United Kingdom 2602A starter kit. Contains the ribbon cartridges and storage binder as described. The 98-character U.K. printwheels in this kit are: 92263B Prestige Pica 10, 92263C Prestige Elite 12, 92263D Courier 12, 92263E Bold P.S.* See printwheel chart for type styles available, page 85.
(1–2 kits)
(3+)
SAVE WITH QUANTITY DISCOUNTS

92265C German 2602A starter kit. Contains the ribbon cartridges and storage binder as described. The 98-character German wheels in this kit are: 92263F Pica 10, two each 92263G Letter Gothic 12, 92263H Square P.S.* See printwheel chart for type styles available, page 85.
(1–2 kits)
(3+)
SAVE WITH QUANTITY DISCOUNTS
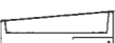
92265D French 2602A starter kit. Contains the ribbon cartridges and storage binder as described. The 98-character French wheels in this kit are: 92263J Courier 10, two each 92263K Prestige Elite 12, 92263L Bold P.S.* See 2602 printwheel chart for type styles available, page 85.
(1–2 kits)
(3+)
SAVE WITH QUANTITY DISCOUNTS

*Proportional-spaced printwheels are designed for use with HPWORD software only.

Impact printer supplies (cont.)

Impact printer ribbons

Impact printer model number	Part number/ description		Dimensions & measurements	Unit of measure		Cross-reference to other supplies & accessories
2563A **Dot Matrix** **Printer**	92158A	Ribbon cartridges, mobius loop construction, continuous feed. Blue/black print.	.75 in. (3/4) ribbon, 100 yards 30 million characters	**Box of 3**	(1-2 boxes) (3-7) SAVE WITH (8+) QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 Printer stand . . . . pg. 63
	92158M	Ribbon cartridges, for optical mark recognition applications. Blue/black print.	.75 in. (3/4) ribbon, 100 yards 3 million characters	**Box of 3**	(1-2 boxes) (3-7) SAVE WITH (8+) QUANTITY DISCOUNTS	
2601A **Daisywheel** **Printer**	92151C	Multistrike, high-capacity, reel-to-reel ribbon cartridges. Black print.	.31 in. (5/16) ribbon, 235,000 characters	**Box of 12**	(1 box) (2-3) SAVE WITH (4+) QUANTITY DISCOUNTS	See: Multi-part forms tractor . . . . pg. 78 Paper . . . . pg. 81 Paper transporter . . . . . pg. 83 Printer stand . . . . pg. 61
	92151D	Fabric, continuous cycle feed ribbon cartridges. Black print.	.31 in. (5/16) ribbon, 1 million characters	**Box of 12**	(1 box) (2-3) SAVE WITH (4+) QUANTITY DISCOUNTS	Printwheel cleaning kit . . . . pg. 100 Printwheels, plastic & metal . . . . pg. 84 Printwheel storage album . . . . pg. 77 Sound absorbing mat . . . pg. 78 Sound enclosures . . . . . pg. 79
2602A **Daisywheel** **Printer**	92151H	Multistrike, high capacity reel-to-reel ribbon cartridge. Black print.	.31 in. (5/16) ribbon, 450,000 characters	**Box of 12**	(1 box) (2-5) SAVE WITH (6+) QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 Printwheels . . . . pg. 84 Printwheel storage album . . . . pg. 77 Sound enclosure . . . . . . pg. 79 Starter kits . . . . pg. 78
2607A Dot **Matrix Line Printer** (Also **9881A** Printer and **12987A** Subsystem)	9282-0531	Nylon ribbon, reel-to-reel. Black print.	.75 in. (3/4) ribbon, 36 yards, .005 in. thick.	**Each**	Minimum order 6 ribbons (6-23 ribbons) SAVE WITH (24+) QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 Paper transporter . . . . . pg. 83 VFU tape . . . . pg. 8?
2608A/S Dot **Matrix Printer**	92158A	Ribbon cartridges, mobius loop construction, continuous feed. Blue/black print.	.75 in. (3/4) ribbon, 100 yards 30 million characters	**Box of 3**	(1-2 boxes) (3-7) SAVE WITH (8+) QUANTITY DISCOUNTS	See: Layout forms . . . . pg. 82 Paper . . . . pg. 81 Sound cover kit . . . . pg. 78
	92158M	Ribbon cartridges, for optical mark recognition applications. Blue/black print.	.75 in. (3/4) ribbon, 100 yards 3 million characters	**Box of 3**	(1-2 boxes) (3-7) SAVE WITH (8+) QUANTITY DISCOUNTS	
2611A Line Printer	1535-3914	Wide nylon ribbon for normal print applications. Blue/black print.	14 in. ribbon, 15 yards, .005 in. thick	**Each**	(1-2 ribbons) (3-11) SAVE WITH (12+) QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 VFU tape, prepunched . . . . pg. 82
	92230A	Wide nylon ribbon. For high-contrast print applications. Black print.	14 in. ribbon, 18 yards, .004 in. thick	**Each**	(1-2 ribbons) (3-11) SAVE WITH (12+) QUANTITY DISCOUNTS	
2613A Line Printer (Also **12975A** Subsystem) **2617A Line Printer** (Also **13053A** Subsystem)	9282-0545	Wide nylon ribbon. Blue/black print.	15 in. ribbon, 20 yards, .004 in. thick	**Each**	(1-3 ribbons) (4+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 VFU tape, prepunched . . . . pg. 82
2618A Line Printer (Also **12983A** Subsystem)	9282-0543	Wide nylon ribbon. Blue/black print.	14.5 in. (14-1/2) ribbon, 20 yards, .004 in. thick	**Each**	(1-3 ribbons) (4+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 VFU tape, prepunched . . . . pg. 82
2619A Line Printer	1535-3914	Wide nylon ribbon for normal print applications. Blue/black print.	14 in. ribbon, 15 yards, .005 in. thick	**Each**	(1-2 ribbons) (3-11) SAVE WITH (12+) QUANTITY DISCOUNTS	See: Paper . . . . pg. 81 VFU tape, prepunched . . . . pg. 82 Vacuum bags . . . . pg. 82
	92230A	Wide nylon ribbon. For high-contrast print applications. Black print.	14 in. ribbon, 18 yards, .004 in. thick	**Each**	(1-2 ribbons) (3-11) SAVE WITH (12+) QUANTITY DISCOUNTS	

Impact printer ribbons (cont.)

Impact printer model number	Part number/ description	Dimensions & measurements	Unit of measure		Cross-reference to other supplies & accessories
2631A/B Dot Matrix Printer **2635A/B Printing Terminal** **2639A Printing Terminal**	92155A	Ribbon cartridges, mobius loop construction, continuous feed. Black print.	.75 in. (3/4) ribbon, 55 yards 15 million characters	**Box of 3**	(1-2 boxes) (3-7) (8+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . .see below Paper transporter . . . . . pg. 83 Print head . . . . pg. 82 Print stand . . . . pg. 61 Sound cover . . . . pg. 78
2631G Graphics Printer	92155B	Ribbon cartridges, used with 2631G, opt. 200 only. Black print.	.75 in. (3/4) ribbon, 55 yards, 5000 bar code labels (10 char. each)	**Box of 3**	(1-2 boxes) (3-7) (8+) SAVE WITH QUANTITY DISCOUNTS	
2767A Line Printer	9300-0427	Wide nylon ribbon. Blue/black print.	9 in. ribbon, 28 yards, .005 in. thick	**Each**	(1-3 ribbons) (4-35) (36+) SAVE WITH QUANTITY DISCOUNTS	
2932/33/34A Dot Matrix Printers	92155L	Ribbon cartridges, continuous feed. Black print.	.75 in. (3/4) ribbon, 50 yards, 10 million characters	**Box of 3**	(1-2 boxes) (3-7) (8+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . .see below Paper catcher . . . . pg. 82 Plug-in type cartridges 2934 only . . . . pg. 85 Print head . . . . pg. 82 Printer stands . . . . pg. 63
82905A/B Dot Matrix Printer **82906A Dot Matrix Printer**	92156A	Ribbon cartridges continuous feed. Black print.	.5 in. (1/2) ribbon, 20 yards, 3 million characters.	**Box of 2**	(1-2 boxes) (3-7) (8+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . .see below Print head . . . . pg. 82 Print stand . . . . pg. 77
9871A Character Printer	9282-0561	Nylon ribbon cartridge. Black print.	.31 in. (5/16) ribbon, 16 yards, 500,000 characters	**Each**	Minimum order 6 ribbons (6-11) (12-35) (36+) SAVE WITH QUANTITY DISCOUNTS	See: Paper . . . . .see below Printwheels . . . . pg. 85

Impact printer paper

For use with	Part number/ description	Dimensions & measurements		Unit of measure	
	92157A	Fanfold, blank printer paper.	9.5 in. (241 mm) 8.5 in. (216 mm) 11 in. (279 mm)	18 lb. bond, white, 2400 sheets/box	**Box**	(1-2 boxes) (3-5) (6-11) (12+) SAVE WITH QUANTITY DISCOUNTS
2563A 2601A 2602A 2607A 2608A/S 2611A 2613A 2617A 2618A 2619A 2631/35/39 2932A 2933A 2934A 82905A/B 82906A 9871A	92157B	Fanfold, 3-hole punched, blank printer paper.	9.5 in. (241 mm) 8.5 in. (216 mm) 11 in. (279 mm)	18 lb. bond, white, 3200 sheets/box	**Box**	(1-2 boxes) (3-5) (6-11) (12+) SAVE WITH QUANTITY DISCOUNTS
	92157C	Fanfold, micro-perforated printer paper for high-quality word processing applications.	9.5 in (241 mm) 8.5 in. (216 mm) 11 in. (279 mm)	20 lb. no. 1 bond, white, 2400 sheets/ box	**Box**	(1-2 boxes) (3-5) (6-11) (12+) SAVE WITH QUANTITY DISCOUNTS
	9280-0705	72-column blank printer paper.	8.5 in. (216 mm) 7.5 in. (191 mm) 11 in. (279 mm)	15 lb. bond, white, 3200 sheets/box	**Box**	(1-67 boxes) (68+) SAVE WITH QUANTITY DISCOUNTS
	9280-0218	80-column green-bar printer paper.	9.9 in. (251 mm) 11 in. (279 mm)	15 lb. bond green-bar 0.5 in. (1/2) 3200 sheets/ box	**Box**	(1-51 boxes) (52+) SAVE WITH QUANTITY DISCOUNTS
All above except 82905A/B 82906A	9320-1515	132-column blue-bar printer paper.	14.9 in. (378 mm) 11 in. (279 mm)	18 lb. bond blue-bar 0.5 in. (1/2) 2400 sheets/ box	**Box**	(1-2 boxes) (3-5) (6-11) (12+) SAVE WITH QUANTITY DISCOUNTS

Impact printer supplies (cont.)

Impact printer supplies

Printer	Order supply no.	Description		
2601A	26010A	Multi-part forms tractor. Adjustable to accept up to 15.2-in. form width.		
		Extra paper trays for HP 26010D sheet feeder.	(1–2 trays) (3 ÷)	SAVE WITH QUANTITY DISCOUNTS
	92177J	(8.5 × 11 inch)		
	92177K	(landscape: 11 × 8.5 inch)		
	92177L	(legal: 8.5 × 14 inch)		
	92177M	(210 × 297mm/A4)		
	92177N	(landscape: 297 × 210mm/A4)		
2602A	26020A	Multi-part forms tractor. Adjustable to accept up to 15.2-in. form width.		
2607A	02607-80024	Individual pre-punched VFU tape. 66 lines per page		
2608A/S	02608-60091	Package of layout forms. Total 250 sheets on 5 pads.		
2611A **2613A** **2617A** **2618A** **2619A**	02613-80001	Individual pre-punched VFU. (66 lines/page)		
	02618-80003	(88 lines/page)		
	4114-0371	Blank VFU Tape, self adhesive. 25 blank tapes per package.	(1 pkg) (2 –)	SAVE WITH QUANTITY DISCOUNTS
	9300-0750	Package of 3 vacuum bags (minimum order 5 packages).		
2631/A/B/G **2635/39**	92154G	Print head. Replacement print head for 2631G Opt. 200. Also fits other 263X Series printers.	(1–2 heads) (3 ÷)	SAVE WITH QUANTITY DISCOUNTS
2932/33/34A Dot Matrix Printers	92154B	Print head. Average life 200 million characters		
	92171G	Printout paper catcher. Wire construction, easy mounting.	(1–2 catchers) (3–9) (10 +)	SAVE WITH QUANTITY DISCOUNTS
82905A/B	92154P	Print head. Reliable and user installable. Average life is 50 to 100 million characters.		
82906A	92154N	Print head. User installable. Average life is 50 to 100 million characters.		
	92171N	Tractor unit. Allows use of fanfold paper and labels from 4 in. (102mm) through 9.5 in. (241mm) in width.		
Miscellaneous supplies	92231A	12-Channel VFU tape punch. Will punch either six or eight lines-per-inch control tapes. Splicing easy with precision registration pins and hold-down arms on punch. Bidirectional control knob moves tape easily through punch.		
	92231B	Paper perforator tape, Box of 28 Rolls. (Supersedes 9280-0063.) Oiled gray paper tape, 1 in. (25.4 mm). Each roll 1000 ft. (305 m) long.	(1 box) (2–4) (5–9) (10 ÷)	SAVE WITH QUANTITY DISCOUNTS

92173P Paper transporter. Tired of lifting and carrying heavy boxes of printer paper to and from your computer area? Use HP's paper transporters. They provide an easy way to move boxes of blank forms and finished printouts from one place to another. The transporters are made of durable steel with non-mar, double-wheel casters and come with their own pull handles. Exterior dimensions: width 13 inches (330mm); depth 16 inches (406mm). Color is gray. Order several and save.

(1)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

A ruler ... and a lot more

- Handy 15-inch length
- See-through windows for easy reading.
- Spacing scales with 150 and 180 print positions.
- Spacing guides (reverse side) scaled to 6 and to 8 lines/inch.

5957-8407

92173P Paper transporter
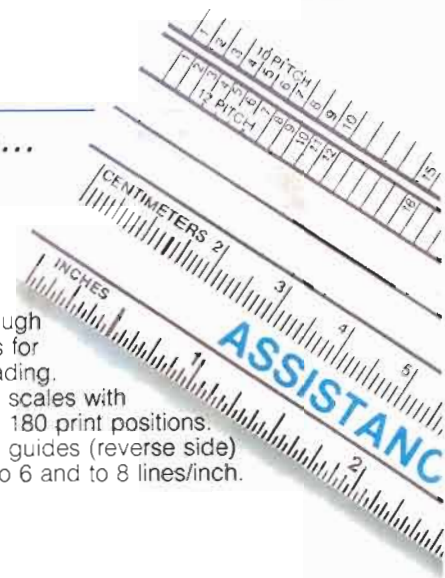
Data binders protect and organize your printouts!
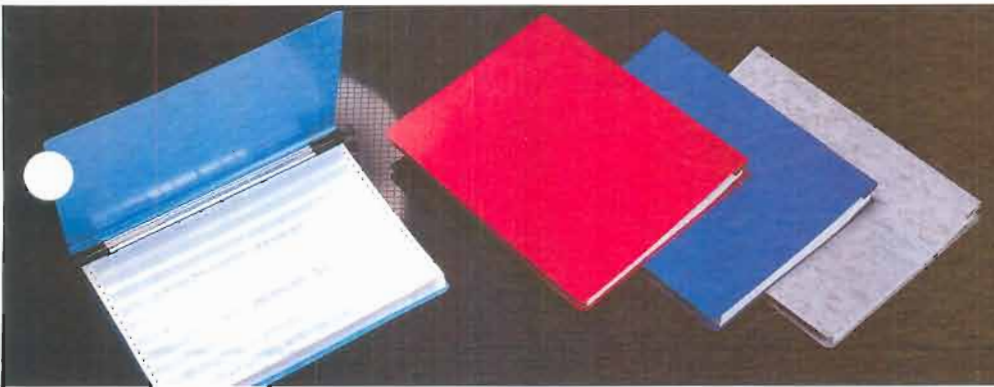
92174 A,B,C,D HP data binders

92174A/B/C/D Data binders. Keep your frequently used printouts intact, neatly organized and protected from rips, tears and rough handling.

These binders feature:
- Loading from the top or bottom for easy updating.
- Special slide-out suspension hooks for easy adaption to drop filing.
- Specially coated 20-point pressboard covers which provide more resistance to moisture, stain and wear than regular pressboard.
- Unbreakable plastic-coated steel posts that hold up to 6 inches of unburst printouts.

92174E/F/G/H Data binders specifically for your HP2680 printer output. All the above features plus a new compact size to accommodate your 12- by 8.5-inch laser printouts.

Sold in boxes of 10. One color to a box. Four colors available. See chart.

92210M Mobile file for printout storage, see page 60.

HP Data binders

Part #	Color	Description	1–4 Boxes	5–9 Boxes*	10+ Boxes*
92174A	red	14.8 × 11-in.		SAVE WITH	
92174B	gray	binder.		QUANTITY DISCOUNTS	
92174C	light blue	Holds up to 6 in. of			
92174D	dark blue	unburst forms.			
92174E	red	12 × 8.5-in.		SAVE WITH	
92174F	gray	binder.		QUANTITY DISCOUNTS	
92174G	light blue	Holds up to 6 in. of			
92174H	dark blue	unburst forms.			

HP Printout binder adapters

Part #	Color	Description		
92172L	light blue	Printout binder adapters give 14.8 × 11 in. data binders lateral-hang filing capabilities. Each holds up to 4 in. of printout. For use with 92172B and 92172C cabinets. See pages 70–71.		
92172M	red		(1–2 boxes)	SAVE WITH
92172N	yellow		(3+)	QUANTITY DISCOUNTS

*Quantity discounts apply to purchase of single color only.

Impact printer supplies (cont.)
Printwheels

2601A Daisywheel Printer

Plastic Print-wheels —96 Character

Pica 10 Part no. 92252A	ABC abc 0123456789 ¢!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~¬
Courier 10 Part no. 92252B	ABC abc 0123456789 £!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~¬
Manifold 10 Part no. 92252C	ABC ABC 0123456789 ¢!"#$%&' ()¨+,-./:;<=>?@[\]b_◊{|}¤¬
APL-10 Part no. 92252D	*ABC* 0123456789 •¨)<≤=>]∨∧≠÷ ⊃↓⊂∩↑∼⌋d¿×○⊥|□↑○⌐∇△⁻∃⌉∪□ ,+./([;×:\⁻←↦→≥-◊{┤}$¬
OCR-A 10 Part no. 92252E	ABC abc 0123456789 Ñ|"£$%&' {}*+,-./:;ſ=⌐?¥£Ø¶| .ÄÖÜ.¥
OCR-B 10 Part no. 92252F	ABC abc 0123456789 £!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~¤
Courier Legal 10A Part no. 92252G	ABC abc 0123456789¢!"#$%&' ()*+,-./:;½=½?@[°]°_°§¶†"_
Elite 12 Part no. 92252H	ABC abc ¢!"#$%&'()*+,-./:;<=>? @[\]^_`{|}~¬ 0123456789
Prestige Elite Legal 12A Part no. 92252J	ABC abc 0123456789 ¢!"#$%&°()*+ ,-./:;§=†?@[°]°_'¼_¶™½
Courier 72 Part no. 92252K	ABC abc 0123456789¢!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~¬
General Scientific Part no. 92252L	∇∞Ψφ+<∧¶↑>§Ω∂∽↓ℓΓθΣ÷Ξ∝Δ≡Τ≈ αβψφε↓λη↓⌡κωμνορργθστξ×δχυζ 0123456789 ⌈π•{}±⌈÷)ſ⌈ʃ^‗˜↓ ^¨Π∠†ʃ|✓=+,_°°⊗⊗™˜ₐ

German Pica 10A Part no. 92252P — ABC abc 0123456789 §!"£$%&' ()*+,-./:;<=>?ßÄÖÜ^_`äöü~\|

German Courier 10 Part no. 92252U — ABC abc 0123456789 §!"£$%&' ()*+,-./:;<=>?ßÄÖÜ^_`äöü~\|

German Elite 12 Part no. 92252V — ABC abc 0123456789 §!"£$%&'()*+ ,-./:;<=>?ßÄÖÜ^_`äöü~\|

French Pica 10 Part no. 92252Q — ABC abc 0123456789 ₣!"£$%&' ()*+,-./:;<=>?à°ç§^_`éùè¨\|

French Prestige Cubic 10 Part no. 92252W — ABC abc 0123456789 ₣!"£$%&' ()*+,-./:;<=>?à°ç§^_`éùè¨\|

U.K. Courier 10 Part no. 92252X — ABC abc 0123456789 ½!"£$%&' ()*+,-./:;<=>?@[\]^_`{|}~#

Kana Gothic Elite 12 Part no. 92252T — ABC クヨウテニモカナユタソジツコトホワキチオリンムイヤエ # +)(@/98765 ヌバ゛241セ−ヒメフ3,0.ル*X マ¥ネスサミアⅡノ°レヲラケ_ハ

(1 box)
(2–4)*
(5+)*

SAVE WITH QUANTITY DISCOUNTS

Note: Sold in boxes of six each.

Metalized Print-wheels —96 Character

Titan 10 Part no. 92153U	ABC abc 0123456789¢!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~´
Financial 10 Part no. 92153V	ABC 0123456789 ≠cd6f 18↑*₿↓m5 Ø©/4129ₚ32Ⅵ@]!;#$≈&≠◊∆%*+, -./.,‡=□?⊗[^\∆_`{#}~-
Cubic PS 96 Part no. 92153W	ABC abc 0123456789 ¢!"#$%&' ()*+,-./:;<=>?@[\]^_`{|}~´

(1–2 wheels)
(3–5)*
(6+)*

SAVE WITH QUANTITY DISCOUNTS

Metalized Print-wheels —88 Character

Titan 10 Part no. 92153A	ABC abc 0123456789 ¢!"#$% &'()*+,-./:;¼=½?@_,.
Pica 10 Part no. 92153B	ABC abc 0123456789 ¢!"#$%& '()*+,-./:;¼=½?@_,.
Elite 12 Part no. 92153C	ABC abc 0123456789 ¢!"#$%& '()*+,-./:;¼=½?@_,.
Letter Gothic 12 Part no. 92153D	ABC abc 0123456789 ¢!@='$%& (*)_,+¼=½,?:";-./.
Bold PS Part no. 92153E	ABC abc 0123456789 ¢!"#$%& '()*+,-./:;¼=½?@_,.

(1–2 wheels)
(3–5)*
(6+)*

SAVE WITH QUANTITY DISCOUNTS

Note: Sold as single wheels.

2602A Daisywheel Printer

USASCII printwheels

Plastic Print-wheels —98 characters

Courier 10 Part no. 92262A	ABC abc 012345 ,.:;-+$# ¢¬£¤ %{}[]()>=<~'^`?!@*/|\&"_
Prestige Pica 10 Part no. 92262B	ABC abc 012345 ,.:;-+$# ¢¬£¤ %{}[]()>=<~'^`?!@*/|\&"_
Courier 12 Part no. 92262D	ABC abc 0123456789 ,.:;-+$#%{}[] ()>=<~'^`?!@*/|\&"_ ¢¬£¤
Prestige Elite 12 Part no. 92262E	ABC abc 0123456789 ,.:;-+$#%{}[] ()>=<~'^`?!@*/|\&"_ ¢¬£¤

Letter Gothic 12 Part no. 92262F — ABC abc 0123456789 ,.:;-+$#%{}[] ()>=<~'^`?!@*/|\&"_ ¢¬£¤

Bold Face PS Part no. 92262G — ABC abc 0123456789 ,.:;-+$#%{}[]' >=<~'^`?!@*/|\&"_ ¢¬£¤

(1 wheel)
(2–5)*
(6+)*

SAVE WITH QUANTITY DISCOUNTS

*Quantity discounts apply to purchase of single part numbers only.

Note: Sold as single wheels.

2602A Daisywheel Printer (cont.)

International printwheels

Country	Style	Sample
United Kingdom	Courier 10 Part no. 92263A	ABC abc 012345 ,.:;-+$ ¢¬#¤ £%{}[]()>=<~'^`?!@*/\\&"_
	Prestige Pica 10 Part no. 92263B	ABC abc 012345 ,.:;-+$ ¢¬#¤ £%{}[]()>=<~'^`?!@*/\\&"
	Prestige Elite 12 Part no. 92263C	ABC abc 0123456789 ,.:;-+$£%{}[] ()>=<~'^`?!@*/\\&"_ ¢¬#¤
	Courier 12 Part no. 92263D	ABC abc 0123456789 ,.:;-+$£%{}[] ()>=<~'^`?!@*/\\&"_ ¢¬#¤
	Bold Face PS Part no. 92263E	ABC abc 0123456789 ,.:;-+$£%{}[]{} >=<~'^`?!@*/\\&"_ ¢¬#¤
German	Pica 10 Part no. 92263F	ABC abc 012345 ,.:;-+$£ ´µ@# %äüÄÜ()>=<ß'^`?!§*/öÖ&"_
	Letter Gothic 12 Part no. 92263G	ABC abc 0123456789 ,.:;-+$£%äüÄÜ ()>=<ß'^`?!§*/öÖ&"_ ´µ@#
	Square PS Part no. 92263H	ABC abc 0123456789 ..:;-+$£%äüÄ Ü()>=<ß'^`?!§*/öÖ&"_ ´µ@#
French	Courier 10 Part no. 92263J	ABC abc 012345 ,.:;-+$ œ|®÷ £%éè°§()>=<~'^`?!à*/ùç&"
	Prestige Elite 12 Part no. 92263K	ABC abc 0123456789 ,.:;-+$£%éè°§ ()>=<~'^`?!à*/ùç&"_ œ|®÷
	Bold Face PS Part no. 92263L	ABC abc 0123456789 ,.:;-+$£%éè°§ ()>=<~'^`?!à*/ùç&"_ œ|®÷
Swedish/ Finnish	Courier 10 Part no. 92263M	ABC abc 012345 ,.:;-+$ ´¤[] #%äåÄÅ()>=<ü'Üé?!É*/öÖ&"_
	Bold Face PS Part no. 92263N	ABC abc 0123456789 ,.:;-+$#%äåÅ Å()>=<ü'Üé?!É*/öÖ&"_ ´¤[]
Norsk/ Danish	Courier 10 Part no. 92263P	ABC abc 012345 ,.:;-+$ ½|£' #%æåÆÅ()>=<~'^`?!@*/øØ&"_
	Bold Face PS Part no. 92263Q	ABC abc 0123456789 ,.:;-+$#%æå ÆÅ()>=<~'^`?!@*/øØ&"_ ½|£'
Spanish	Courier 10 Part no. 92263R	ABC abc 012345 ,.:;-+$ ´½ªº #%{}¡¿()>=<~'°`?!@*/ñÑ&"_
	Bold Face PS Part no. 92263S	ABC abc 0123456789 ,.:;-+$#%()¡¿ ()>=<~'°`?!@*/ñÑ&"_ ´½ªº
Italian	Courier 10 Part no. 92263T	ABC abc 012345 ,.:;-+$ "|®½ £%àè°é()>=<ì'^ù?!§*/òç&"_
	Bold Face PS Part no. 92263U	ABC abc 0123456789 ,.:;-+$£%àè° é()>=<ì'^ù?!§*/òç&"_ ¨'|®½

For HP international 150 keyboards only

Country	Style	Sample
French/ Canadian	Courier 10 Part no. 92264A	ABCabc0123456789,-.:;!"#$ %&'()*+<=>?«»`^
Danish	Courier 10 Part no. 92264B	ABCabc0123456789,-.:;!"§$ %&'()*+<=>?~|#'
Norwegian	Courier 10 Part no. 92264C	ABCabc0123456789,-.:;!"#$ %&'()*+<=>?~|§'
Swiss	Courier 10 Part no. 92264E	ABCabc0123456789,-.:;!"£$ %&'()*+é=è?'µ@ß³[]²¨#
European Spanish	Courier 10 Part no. 92264F	ABCabc0123456789,-.:;!"#$ %&'()*+<=>?§~1^
Latin Spanish	Courier 10 Part no. 92264G	ABCabc0123456789,-.:;!"#$ %&'()*+<=>?§~1°
Dutch	Courier 10 Part no. 92264H	ABCabc0123456789,-.:;!"#$ %&'()*+<=>?·ij³·²

(1 wheel)
(2-5)*
(6+)*

SAVE WITH
QUANTITY DISCOUNTS

*Quantity discounts apply to purchase of single part numbers only.

Note: Sold as single wheels.

hp museum

2934A Plug-in character style cartridges

	Sample
92188A Courier	ABCabc123,-.!"#$%&'()*+<=>?|}~■λΣε ££I``¨~ûŒ£¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóú àèòùäeoüÀ٢ØÆàíøæÀïŌÜÝþþ-½½ªº«■»±■
92188B Courier 12	ABCabc123,-.!"#$%&'()*+<=>?|}~■λÅÈ£εII`` `¯ûŒ¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóûàèòùäeoûÀ١Ø£À īøæÀïŌŪ£ıßΟ£Åã£ŒƒŕŌŌŌŠÜÝþþ-½½ªº«■»±■
92188E Helv	ABCabc123,-.!"#$%&'()*+<=>?|}~■λÅÈ£ÈII`` `¯ûŒ¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóûàèòùàeoûÀ٢Ø ÆâíøæÀïŌÜÈ١ßΟ£Å㣠١óòŌŌŠÜÝþþ-½½ªº«■»±■
92188G OCR A	ABC[\]^Yꓘabc123,-.!"##%&'()*+<=>? :;|}J■
92188H Light Italic 10	ABCabc123,-.!"#$%&'()*+<=>?|}~■λÅÈ ££II``` `¯ûŒ¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóú àèòùäeoûÀ١ØÆàíøæÀïŌÜÝþþ-½½ªº«■»±■
92188J Italic 12	Sample not available at time of printing.
92188M Prestige Pica 10	ABCabc123,-.!"#$%&'()*+<=>?|}~■λÅÈ ££II``` `¯ûŒ£¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóú àèòùäeoûÀ٢ØÆàíøæÀïŌÜÝþþ-½½ªº«■»±■
92188N Prestige Elite 12	ABCabc123,-.!"#$%&'()*+<=>?ÀÅÈ£ÈII``` `¯ûŒ£¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóûàeoûÀ١Ø£à íøæÀïŌÜ£١ßΟ£Åã£ŒƒŕŌŌŌŠÜÝþþ-½½ªº«■»±■
92188R Letter Gothic 12	ABCabc123,-.!"#$%&'()*+<=>?|}~■λÅÈ ££II``` `¯ûŒ£¯ÇçÑñ¡¿Œ£¥§ƒ¢âêôûáéóú àèòùäeoûÀ١ØÆàíøæÀïŌÜÝþþ-½½ªº«■»±■
92188T OCR B	ABC[\]^_ abc123,-.!"#$%&'()*+:;<=>?(|} ■

9871A Impact Printer

Package of three print discs. Each package contains three identical, 96-character print discs. Available in following character sets:

1530-0697	(Standard)	1530-1851	(Katakana)	(1-5 pkg)	SAVE WITH
1530-1810	(European)	1530-1895	(Cyrillic)	(6-11)	QUANTITY DISCOUNTS
1530-1811	(ASCII)	1530-2022	(APL)	(12-)	

Laser page printers

2688A Desktop Laser Page Printer

2680A Laser Page Printer

Laser page printer supplies

Printer	Order supply no.	Description	Estimated no. printed pages (8.5 × 11 in.)		
2680A Laser Printer	92180A	Toner. 12-one kilogram bags per box. For HP 2680 only.	300,000 to 400,000 pages per box	(1–2 boxes) (3–10) (11–19) (20–39) (40+)	SAVE WITH QUANTITY DISCOUNTS
	92180D	Drum kit. Includes new cleaner blade.	300,000 per drum		
	92180T	Tool kit. Includes corona stringing tool, mag orientation tool & cleaner blade pressure tool. Comes in plastic tool case.	N/A		
	92181A	Disposal containers. Box of 6 for spent toner collection.	360,000 per box	(1–2 boxes) (3–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92182A	Carrier. Box of 24 bottles.	1,200,000 per box		
	92182D	Developer. Box of 6 bottles. 1 bottle per drum replacement.	1,800,000 per box	(1–2 boxes) (3+)	SAVE WITH QUANTITY DISCOUNTS
	92183A	Splicing tape. Box of 6 rolls.	3,240,000 per box		
	92184A	18 lb. (69-gm/sq meter) continuous fanfold paper. 12 × 8.5 in. (305 × 216mm), 3600 sheets per box, 45 boxes per pallet. Sold only in pallet quantities.	162,000 per pallet	(1–2 pallets) (3+)	SAVE WITH QUANTITY DISCOUNTS
2687A Desktop Laser Printer	92185A	Toner. Box of 6 bottles plus one empty collection bottle. For HP 2687A and HP 2688A only.	18,000 per box	(1 box) (2–5) (6+)	SAVE WITH QUANTITY DISCOUNTS

Laser page printer supplies (cont.)

Printer	Order supply no.	Description	Estimated no. printed pages (8.5 × 11 in.)		
2688A Desktop Laser Printer	92185B	Cleaning pads. Box of 3.	60,000 per box	(1 box) (2–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92185D	Ozone filters. Box of 3.	60,000 per box	(1 box) (2–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92185E	OPC belts. Box of 3.	60,000 per box	(1 box) (2–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92185S	Printing and maintenance kit. Convenient way to maintain your 2687/88A Laser Printer. Recommended maintenance procedure calls for the cleaning pad, ozone filter and OPC belt to be changed after using a box of toner. Kit contains 1 cleaning pad, 1 ozone filter, 1 OPC belt and a new box (6 bottles) of toner.	18,000 per kit		

2687A and 2688A Laser printer character fonts

2687A Character font cartridges

Courier 10 Bold Part no. 92186A	ABC abc 1234567890!"#$%&'() *+,-./:;<=>?@[\]^_'{|}~	Prestige Elite 12 Part no. 92186K	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~
Courier 10 Italic Part no. 92186B	ABC abc 1234567890!"#$%&'() *+,-./:;<=>?@[\]^_'{|}~	Prestige Elite 12 Bold Part no. 92186L	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~
Courier 10 Extended Part no. 92186C	ABC abc 1234567890!"#$%&'() *+,-./:;<=>?@[\]^_'{|}~	Prestige Elite 12 Italic Part no. 92186M	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~
Letter Gothic 12 Bold Part no. 92186D	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~	Pica Part no. 92186N	ABC abc 1234567890!"#$%&'() *+,-./:;<=>?@[\]^_'{|}~
Letter Gothic 12 Italic Part no. 92186E	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~	Pica Bold Part no. 92186P	ABC abc 1234567890!"#$%&'() *+,-./:;<=>?@[\]^_'{|}~
Letter Gothic 12 Extended Part no. 92186F	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~	Pica Italic Part no. 92186Q	ABC abc 1234567890!"#$%&'() #+,-./:;<=>?@[\]^_'{|}~
Proportional Space Part no. 92186G	ABC abc 1234567890!"#$%&'()* +,-./:;<=>?@[\]^_'{|}~	Liner Printer Part no. 92186R	ABC abc 1234567890!"#$%&'()*+,-./:;<=>? @[\]^_'{|}~
Proportional Space Bold Part no. 92186H	ABC abc 1234567890!"#$%&'()* +,-./:;<=>?@[\]^_'{|}~	Script Part no. 92186S	ABC abc 1234567890!"#$%&'()*+,-./:;<=>?@[\]^_'{|}~
Proportional Space Italic Part no. 92186J	ABC abc 1234567890!"#$%&'()* +,-./:;<=>?@[\]^_'{|}~	(1 cartridge font) (2–5) (6+)	SAVE WITH QUANTITY DISCOUNTS

Quantity discounts apply to purchase of single part numbers only.

2688A Software fonts

Times New 2™ (600-ft. mag tape) Part no. 92187A	ABC abc 123 !".#$%&'()*+,-	Geneva 2™ (600-ft. mag tape) Part no. 92187B	ABC abc 123 !".#$%&'()*+,-
Times New 2™ (.25-in. tape cartridge) Part no. 92187C	ABC abc 123 !".#$%&'()*+,-	Geneva 2™ (.25-in. tape cartridge) Part no. 92187D	ABC abc 123 !".#$%&'()*+,-

Above samples represent three fonts of the Times New 2™ family.

Above samples represent three fonts of the Geneva 2™ family.

2688A Software fonts for use with HPTek on HP Series 200 Computers

Times New 2™ Part no. 92288A (5.25-in. media) Part no. 92288L (3.5-in. media)	See Times New 2™ samples above.	Extended Computer Modern Part no. 92288C (5.25-in. media) Part no. 92288N (3.5-in. media)	Samples not available at time of printing.
Geneva 2™ Part no. 92288B (5.25-in. media) Part no. 92288M (3.5-in. media)	See Geneva 2™ samples above.		

Note: Product names followed by ˣ or ™ are trademarks of their respective companies. For a complete listing, see page 126.

Ink-jet printer

92261S Desktop mini-print stand, page 77.

HP2225B ThinkJet Personal Printer, pages 46–47.

92261N Fanfold ink-jet printer paper, see below.

92261A Print head ink cartridges, see below.

92261M Cut-sheet ink-jet printer paper, see below.

Our ink-jet paper—the smart choice for your ThinkJet

To optimize your new ink-jet printer's capabilities and print quality, use HP ink-jet printer paper. It has been carefully manufactured and selected to meet rigid HP quality standards. See the difference our paper makes in the photo comparison below. For the quality image you deserve, depend on HP paper.
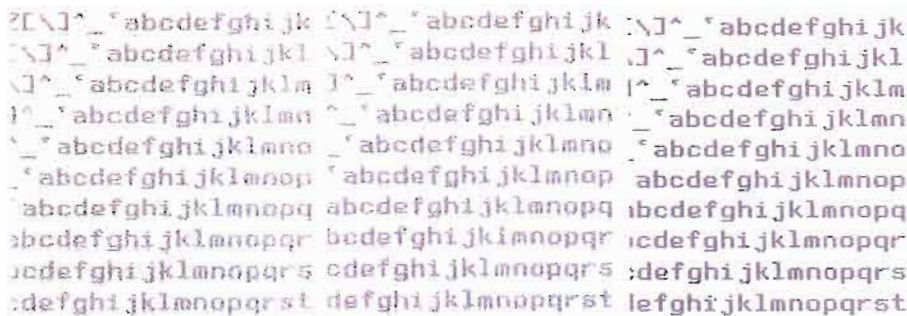
92157A Impact printer paper   Photocopy paper   92261M Ink-jet paper

The print samples at left were photographed under identical conditions. Notice the difference in contrast and legibility between the ink-jet paper on the right and the other two papers. The impact printer paper (far left) has long fibers that absorb the ink, allowing it to bleed or feather. And the coating on the photocopy paper (center) slows the drying process, which increases the chances of smearing.

Ink-jet printer supplies

Printer	Order Supply No.	Description	Unit of Measure		
2225A ThinkJet Printer	92261A	Printhead ink cartridge. Color is black. 600,000 characters (approx. 500 pages)	each		
	92261M	Cut-sheet ink-jet printing paper. Four individually wrapped 500-sheet packs (2000 sheets total). Size is 8.5 × 11 in.	box	(1–2 boxes) (3–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92261N	Fanfold ink-jet printing box paper. Microperforated for clean, neat separation. 2,500 sheets.	box	(1–2 boxes) (3–5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	92261S	Smoked acrylic mini-printer stand. See page 77 for details.	each	(1–2 stands) (3–9) (10+)	SAVE WITH QUANTITY DISCOUNTS

Thermal printers

Thermal paper for HP computers

Hewlett-Packard thermal papers are manufactured to yield high-quality, fade-resistant copies. The paper surfaces are exceptionally smooth to prevent excessive abrasion between the print head and paper which leads to premature head wear. Moreover, HP engineers test these papers on an on-going basis to ensure these quality standards are met.

Computer/ calculator model number	Part number & description		Dimensions & measurements	Unit of measure			Cross-Reference to other supplies & accessories
HP-85	82931A	Blue print	4.25 in. (108 mm)	Box of 2 rolls	(1-4 boxes) (5+)	SAVE WITH QUANTITY DISCOUNTS	
	82954A	Black print	400 ft. (122 m) roll	Box of 2 rolls	(1-4 boxes) (5+)	SAVE WITH QUANTITY DISCOUNTS	
97A calculator	82045A	Blue print. Continuous roll.	2.25 in. (57 mm) 80 ft. (24 m) roll	Box of 6 rolls	Box		
125A/B 150A	92160A	Blue print. Continuous roll. U.S. dimensioned.	8.5 in. (216 mm)	Box of 24 rolls	(1-2 boxes) (3-23) (24+)	SAVE WITH QUANTITY DISCOUNTS	See: Cables . . . . pg. 55–56
	92160B	Black print. Continuous roll. U.S. dimensioned.	100 ft. (30.5 m) roll	Box of 24 rolls	(1-2 boxes) (3-23) (24+)	SAVE WITH QUANTITY DISCOUNTS	
150A	92160C	Black print. Page-perforated roll. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm) 100 ft. (30.5 m) roll	Box of 24 rolls	(1-2 boxes) (3-23) (24+)	SAVE WITH QUANTITY DISCOUNTS	See: Paper tray . . . . pg. 39
	92160M	Blue print. Fanfold pack. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm)	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
	92160N	Black print. Fanfold pack. U.S. dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
9000 Model 20	9270-0640	Black print. Fanfold pack. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm)	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
	9270-0641	Blue print. Fanfold pack. U.S. dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
	9270-0642	Black print. Fanfold pack. Metric dimensioned.	8.27 in. (211 mm) 11.69 in. (297 mm)	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
	9270-0643	Blue print. Fanfold pack. Metric dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
9810A 9820A Calculators 9821A	9281-0401	Blue print. Continuous roll.	2.25 in. (57 mm) 250 ft. (76 m) roll	Box of 6 rolls	(1 box) (2-4) (5-19) (20-99)	SAVE WITH QUANTITY DISCOUNTS	See: Program pads . . . . pg. 35 Magnetic program cards . . . . pg. 35 Magnetic card holders . . pg. 35 Digital tape cassette . . . pg. 110
9815A/S 9825A/B/S/T 9835A/B	9270-0479	Blue print. Continuous roll.	2.25 in. (57 mm)	Box of 6 rolls	(1 box) (2-4) (5-19) (20-99)	SAVE WITH QUANTITY DISCOUNTS	For 9815A/S see: 98200A Mini data cartridge . . . . pg. 110 Blank key overlay . . . . . pg. 35 Individual program pad . . pg. 35 For 9825A/S see: 98200A Mini data cartridge . . . . pg. 110 Blank key overlay . . . . . pg. 35 For 9835A/B see: 98200A Mini data cartridge . . . . pg. 110 Blank key overlay . . . . . pg. 35
	9270-0664	Black print. Continuous roll.	250 ft. (76 m) roll	Box of 6 rolls	(1 box) (2-4) (5-19) (20-99)	SAVE WITH QUANTITY DISCOUNTS	
9845A/B/C/S/T	92161A	Superseded by 92161B.	8.5 in. (216 mm)				For 9845A/B/C/S/T see: 98200A Mini data cartridge . . . . pg. 110 Blank key overlay . . . . . pg. 35
	92161B	High-contrast. Blue print. Continuous roll. U.S. dimensioned.		Box of 6 rolls	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
	92161C	High-contrast. Black print. Continuous roll. U.S. dimensioned.	200 ft. (61 m) roll	Box of 6 rolls	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS	
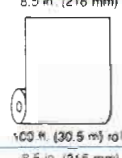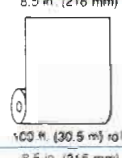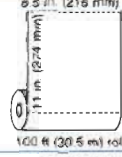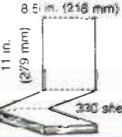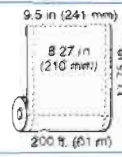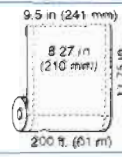
Thermal printers (cont.)

Thermal paper for HP computers (cont.)

Computer/ calculator model number	Part number & description		Dimensions & measurements	Unit of measure	
9845A/B/C/S/T	92161D	Superseded by 92161E	8.5 in. (216 mm) 11 in. (279 mm) 200 ft. (61 m) roll		
	92161E	High-contrast. Black print. Page perforated roll. U.S. dimensioned.		Box of 6 rolls	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS
	92161M	Superseded by 92161N.	8.27 in. (210 mm)		
	92161N	High-contrast. Blue print. Continuous roll. Metric dimensioned.		Box of 6 rolls	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS
	92161P	High-contrast. Black point. Continuous roll. Metric dimensioned.	197 ft. (60 m) roll	Box of 6 rolls	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS
	92161Q	Superseded by 92161R.	8 27 in. (210 mm) 11.69 in. (297 mm)		
	92161R	High-contrast. Black print. Page-perforated roll. Metric dimensioned.	197 ft. (60 m) roll	Box of 6 rolls	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS
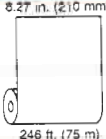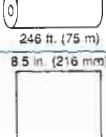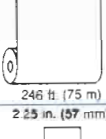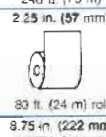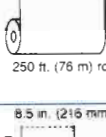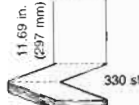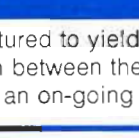
Thermal paper for HP printers

Thermal printer model number	Part number/ description		Dimensions & measurements	Unit of measure		Cross-reference to other supplies & accessories
2671A 2671G 2673A 2674A	92160A	Blue print. Continuous roll. U.S. dimensioned.	8.5 in. (216 mm)	Box of 24 rolls	(1-2 boxes) (3-23) (24+) SAVE WITH QUANTITY DISCOUNTS	See: Printer/plotter stand . . . . pg. 77
	92160B	Black print. Continuous roll. U.S. dimensioned.	100 ft. (30.5 m) roll	Box of 24 rolls	(1-2 boxes) (3-23) (24+) SAVE WITH QUANTITY DISCOUNTS	
	92160C	Black print. Page-perforated roll. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (274 mm) 100 ft. (30.5 m) roll	Box of 24 rolls	(1-2 boxes) (3-23) (24+) SAVE WITH QUANTITY DISCOUNTS	
	92160M	Blue print. Fanfold pack. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm)	Box of 4 packs	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS	
	92160N	Black print. Fanfold pack. U.S. dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+) SAVE WITH QUANTITY DISCOUNTS	
7240A 7245B	9270-0607	Black print. Page-perforated roll. Metric dimensioned.	9.5 in (241 mm) 8 27 in. (210 mm) 11.75 in (298.5 mm)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	See: Thermal print head . . . . pg. 100
	9270-0700	Blue print. Page-perforated roll. Metric dimensioned.	200 ft. (61 m)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	
	9270-0609	Black print. Continuous roll. U.S. dimensioned.	9.5 in. (241 mm) 8.5 in (216 mm)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	
	9270-0959	Blue print. Continuous roll. U.S. dimensioned.	200 ft. (61 m)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	
	9270-0605	Black print. Page-perforated roll. U.S. dimensioned.	9.5 in. (241 mm) 8.5 in. (216 mm) 11 in (279 mm)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	
	9270-0699	Blue print. Page-perforated roll. U.S. dimensioned.	200 ft. (61 m)	Box of 2 rolls	(1-5 boxes) (6-35) (36+) SAVE WITH QUANTITY DISCOUNTS	

Thermal paper for HP printers (cont.)

Thermal printer model number	Part number & description	Dimensions & measurements	Unit of measure		
7310A	9270-0680 Black print. Continuous roll. Metric dimensioned.	8.27 in. (210 mm)	Box of 6 rolls	(1-4 boxes) (5-29) (30+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0681 Blue print. Continuous roll. Metric dimensioned.	246 ft. (75 m)	Box of 6 rolls	(1-4 boxes) (5-29) (30+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0682 Black print. Continuous roll. U.S. dimensioned.	8.5 in. (216 mm)	Box of 6 rolls	(1-4 boxes) (5-29) (30+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0683 Blue print. Continuous roll. U.S. dimensioned.	246 ft. (75 m)	Box of 6 rolls	(1-4 boxes) (5-29) (30+)	SAVE WITH QUANTITY DISCOUNTS
82143A	82045A Blue print Continuous roll	2.25 in. (57 mm)	Box of 6 rolls		
82162A	82175A Black print Continuous roll	80 ft. (24 m) roll	Box of 6 rolls		
9866A/B HP 12996 Subsystem	9270-0488 Black print. Continuous roll.	8.75 in. (222 mm)	Box of 6 rolls	(1 box) (2-4) (5-19) (20+)	SAVE WITH QUANTITY DISCOUNTS
	9281-0414 Blue print. Continuous roll.	250 ft. (76 m) roll	Box of 2 rolls	(1 box) (2-4) (5-19) (20+)	SAVE WITH QUANTITY DISCOUNTS
9876A	9270-0640 Black print. Fanfold pack. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm)	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0641 Blue print. Fanfold pack. U.S. dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0642 Black print. Fanfold pack. Metric dimensioned.	8.27 in. (211 mm) 11.69 in. (297 mm)	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS
	9270-0643 Blue print. Fanfold pack. Metric dimensioned.	330 sheets per pack	Box of 4 packs	(1 box) (2-5) (6+)	SAVE WITH QUANTITY DISCOUNTS

Thermal paper for HP terminals

Hewlett-Packard thermal papers are manufactured to yield high-quality, fade resistant copies. The paper surfaces are exceptionally smooth to prevent excessive abrasion between the print head and paper which leads to premature head wear. Moreover, HP engineers test these papers on an on-going basis to ensure these quality standards are met.

Terminal Model number	Part number & description	Dimensions & measurements	Unit of measure			Cross-reference to other supplies & accessories
262X Interactive terminals 2675A Printing terminal	92160A Blue print. Continuous roll. U.S. dimensioned.	8.5 in. (216 mm) 11 in. (279 mm)	Box of 24 rolls	(1-2 boxes) (3-23) (24+)	SAVE WITH QUANTITY DISCOUNTS	For 262X and 2675A see: 1420-0259 Battery below For 2675A see: 98200A Mini data cartridge . . . . pg. 110
	92160B Black print. Continuous roll. U.S. dimensioned.	100 ft. (30.5 m) roll	Box of 24 rolls	(1-2 boxes) (3-23) (24+)	SAVE WITH QUANTITY DISCOUNTS	
3075A Data 3076A capture 3077A terminals	82045A Blue print. Continuous roll.	2.25 in. (57 mm) 80 ft. (24 m) roll	Box of 6 rolls	Box		

Miscellaneous terminal accessories

	Description	Product number		
262X Terminals	Battery	1420-0259	(1-2) (3+)	SAVE WITH QUANTITY DISCOUNTS
264X Terminals	Individual blank key overlay (Minimum order 5). Label template fits around user-defined "soft" keys on terminal	7120-5525		
3092/93 Industrial Terminals	Customizing keyboard template	03090-90010		

Graphics

Paper makes a difference—choose it carefully!

We have taken great care to ensure that HP plotting papers are not only compatible with, but specifically matched to our pens and plotters.

To achieve the best possible graphics, the components of your plotting system should be carefully matched. Although paper may at first seem unimportant, it will affect the ultimate sharpness, brightness and longevity of your color graphics. It can also mean the difference between a healthy, reliable plotter and one whose operation is hindered by paper-related problems.

- Our paper's smooth surfaces extend pen life by reducing abrasion on the pen tip. This same smoothness allows the pen to trace a sharper, crisper ink line.
- The chemical reaction between our papers and inks is tested to ensure that fading and color changes are minimized. Additionally, we test the wrinkling, tearing and peeling characteristics that determine the paper's durability.

- The paper you choose also will affect your plotter's performance. Our paper is selected only after extensive tests demonstrate its ability to minimize distortions (scrawling, broken or uneven lines) caused by paper slippage.

So rely on HP quality to ensure that your plotting system components are working together to bring you exceptional color graphics. Check the adjacent charts to quickly and easily choose the paper and pens that work best together.

See the difference HP paper makes. The comparison photos at right were made using the American Optical System at 18.75 magnification. The plots were made on a 7470A Plotter at 20 cm/s with a .3mm blue pen.

Copier paper

HP paper

Take the guesswork out of quality graphics

Exceptional plots are the combined result of an excellent plotter and its supplies offering. Use the handy guides below to choose a winning combination every time! See the following pages for more information on our pens and paper.

Media and pen compatibility

| | Fiber-tip pens | | Drafting pens | Rollerball pens |
	Paper	Transparency	Refillable	
Blank paper	•			•
Transparency film		•		
Tracing bond				•
Vellum			•	
Polyester film			•	
Bar code	•			
Presentation		•		

See our low-cost plotters, pages 40–41.

Media sizes

	Dimensions	A	B	D	E
ANSI	inches	8.5 × 11	11 × 17	22 × 34	34 × 44
	millimeters	216 × 279	279 × 432	559 × 864	864 × 1118
		A4	A3	A1	A0
ISO	inches	8.27 × 11.69	11.69 × 16.54	23.39 × 33.11	33.11 × 46.81
	millimeters	210 × 297	297 × 420	594 × 841	841 × 1189

Media and plotter compatibility

| Plotter model number | Blank plotter paper size | | | | | | | | | | Vellum size | | | | | | | | | Polyester film size | | | | | | | | | Tracing bond size | | | | Overhead transparency film size | |
	A	A4	B	A3	D	A1	E	A0	11" or 297 mm Roll	24" & 36" rolls	A	A4	B	A3	D	A1	E	A0	24" & 36" rolls	A	A4	B	A3	D	A1	E	A0	24" & 36" rolls	D	A1	E	A0	A	A4
7090A	•	•	•	•																													•	•
7220A/C, 7221A/B/C	•	•	•	•							•	•	•	•						•	•	•	•										•	
7220S/T, 7221S/T	•	•	•	•						•	•	•	•	•						•	•	•	•										•	
7225A/B	•	•																															•	
7470A	•																																•	
7475A	•	•	•	•																•	•	•	•										•	•
7550A	•	•	•	•							•	•	•	•						•	•	•	•										•	•
7580A/B	•	•	•	•	•	•					•	•	•	•	•	•				•	•	•	•	•	•				•	•				
7585A/B	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•		•	•	•	•	•	•	•			•	•	•			
7586B	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
9872A/B/C	•	•	•	•							•	•	•	•						•	•	•	•										•	
9872S/T	•	•	•	•						•	•	•	•	•						•	•	•	•										•	

Paper

NEW Glossy presentation paper

Impress your clients and your boss at your next meeting with reports and handouts containing high quality crisp graphics. HP's new heavy-weight, gloss-finish presentation paper provides the capability for producing professional looking reports.

This glossy paper was chosen for the vivid graphics it provides when used with HP's overhead transparency pens.

Media size	Part no.	Quantity/ pkg
A	9280-0640	50 sheets
A4	9280-0642	50 sheets
B	9280-0641	50 sheets
A3	9280-0643	50 sheets

Blank plotter paper

HP's blank plotter paper has been especially designed and tested to provide optimum performance when used with HP plotters with fiber-tip and rollerball pens.

HP's strict specifications require this paper to be an opaque medium with the correct mixture of wood pulp and rag fibers. This provides the correct smoothness for clear line definition and minimizes skipping, bleeding and feathering.

Media size	Part no.	Quantity/ pkg		
A	9280-0589	50 sheets	1–4 pkgs	SAVE WITH QUANTITY DISCOUNTS
			5+	
	9280-0517	300 sheets		
A4	9280-0588	50 sheets	1–4 pkgs	SAVE WITH QUANTITY DISCOUNTS
			5+	
	9280-0519	300 sheets		
11 × 16.5 in. (280 × 420mm)	9280-0180	100 sheets	1–16 pkgs	SAVE WITH QUANTITY DISCOUNTS
			17+	
B	9280-0614	50 sheets		
	9280-0518	300 sheets		
A3	9280-0615	50 sheets		
	9280-0610	300 sheets		
D	9280-0527	200 sheets		
A1	9280-0528	200 sheets		
E	9280-0587	150 sheets		
A0	9280-0590	150 sheets		

Blank roll paper

For use on HP's 7220, 7221, and 9872 S and T models only.

HP's blank roll paper has been especially designed and tested to provide optimum performance when used with HP's paper-writing pens.

Size	Part No.	Quantity/ pkg		
English 11.69 in. × 200 ft.	9280-0618	1 roll	1–5 rolls 6+ rolls	SAVE WITH QUANTITY DISCOUNTS
Metric 297mm × 61m	9280-0619	1 roll	1–5 rolls 6+ rolls	SAVE WITH QUANTITY DISCOUNTS

NEW For use with HP's new 7586B Roll Feed Drafting Plotter. This paper has been designed and tested for the 7586B. The end of each roll has been specially attached to the paper core to ensure easy release of the last page during plotting and to prevent paper unwinding from the core.

Size	Part No.	Quantity/ pkg
24 in. × 150 ft.	9280-0638	1 roll
36 in. × 150 ft.	9280-0637	1 roll

Overhead transparency film

With HP's fast-dry transparency film, waiting around for transparencies to dry is a thing of the past! Ink dries quickly, which minimizes bleeding and smearing.

Plotter	Size	No. of sheets	Part no.		
7470A	A	50	9270-1126	(1–9 pkgs) (10+)	SAVE WITH QUANTITY DISCOUNTS
7475A/ 7550A/ 7090A	A	50	9270-1131	(1–9 pkgs) (10+)	SAVE WITH QUANTITY DISCOUNTS
	A4	50	9270-1132	(1–9 pkgs) (10+)	SAVE WITH QUANTITY DISCOUNTS
7220/21/25 and 9872	A	100	9270-1128	(1–9 pkgs) (10+)	SAVE WITH QUANTITY DISCOUNTS

Drafting media

Tracing bond

This lightweight tracing bond performs at its best when used with rollerball pens.

Tracing bond is an uncoated, untreated and economical alternative to vellum. Use it when you need:
- Fast plotting capability of rollerballs (60 cm/sec)
- Consistent line width
- Diazo reproducible plots
- Low abrasion media
- Check plots and preliminary drawings, not for high-quality final plots.

Media size	Part no.	Quantity/pkg.
D	9280-0600	150 sheets
A1	9280-0599	150 sheets
E	9280-0598	150 sheets
A0	9280-0597	150 sheets

Vellum

This vellum provides optimum performance with refillable and disposable drafting-style pens.

HP vellum has a surface coating for increased smoothness and ink receptivity. It is also treated to add strength and transparency. Use this vellum when you need:
- Relatively permanent documents
- Less expensive media than polyester film
- Diazo reproducible media

Media size	Part no.	Quantity/pkg.
A	9280-0601	150 sheets
A4	9280-0603	150 sheets
B	9280-0602	150 sheets
A3	9280-0604	150 sheets
D	9280-0529	150 sheets
A1	9280-0530	150 sheets
E	9280-0593	150 sheets
A0	9280-0594	150 sheets
24 in. × 150 ft.	9280-0635	1 roll
36 in. × 150 ft.	9280-0636	1 roll

Polyester film

HP's double-matte, 3-mil film was specifically chosen to provide optimum performance when used with HP's refillable drafting pens.

This finely coated, translucent media minimizes pen and machine wear and maximizes line quality. Use this film when you need:

- Dimensionally stable media
- Close tolerance, high accuracy plots
- Camera-ready art
- Master copies which will be handled repeatedly
- Media that will not tear, crack, peel or fade under normal use
- Clear and sharp quality reproductions
- Plots with distinct continuous lines and virtually no beading, bleeding or feathering

Media size	Part no.	Quantity/pkg.
A	9280-0605	50 sheets
A4	9280-0608	50 sheets
B	9280-0607	50 sheets
A3	9280-0606	50 sheets
D	9280-0526	50 sheets
A1	9280-0525	50 sheets
E	9280-0591	50 sheets
A0	9280-0592	50 sheets
24 in. × 150 ft.	9280-0634	1 roll
36 in. × 150 ft.	9280-0633	1 roll

Special application media

Bar code paper

Especially designed for use on 7470A to provide optimum readability of HP-41-generated bar codes. Please see pages 44–45 for bar code information and page 51 for HP-IL cables.

Media size	Part no.	Quantity/pkg.	Price/pkg.
A	9280-0616	50 sheets	$16.00 ea.
A4	9280-0617	50 sheets	$16.00 ea.

Note: Use black *paper-writing* pens only (0.3mm width).

NEW 24-Hour recording paper

For use with the 7090A Measurement Plotter when using the 24-hour recording application.

Media size	Part no.	Quantity/pkg.
A	9280-0650	50 sheets
A4	9280-0652	50 sheets
B	9280-0651	50 sheets
A3	9280-0653	50 sheets

Plotter pens
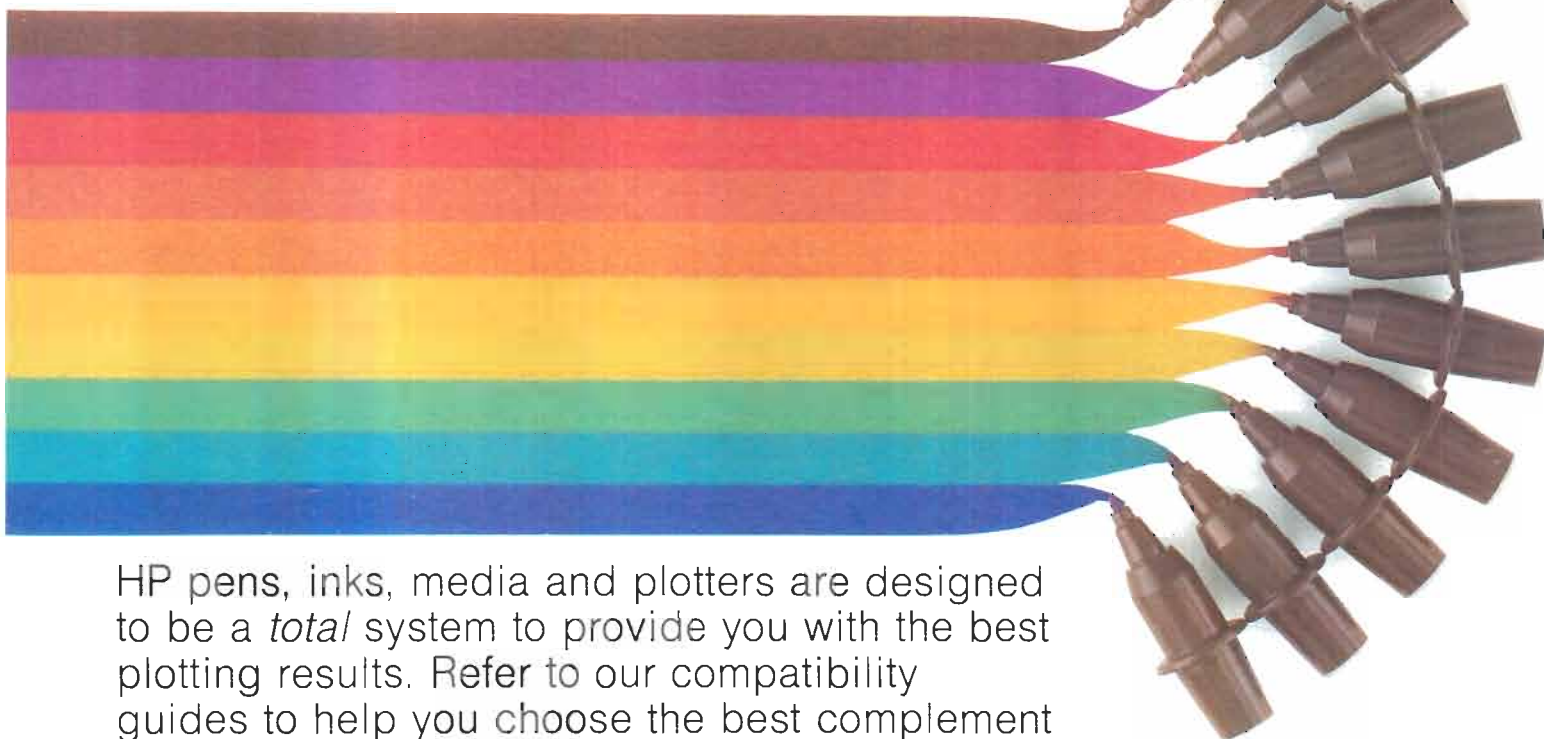
HP pens, inks, media and plotters are designed to be a *total* system to provide you with the best plotting results. Refer to our compatibility guides to help you choose the best complement of supplies for your particular plotter and application.

Pen life and plot quality are dependent on matching the pens with the media. Therefore, we manufacture our own pens and select our media carefully.
Using HP pens and media assures you of:

- low abrasion paper matched to our pen tips and ink combinations for increased pen life
- no watermarks on paper to interfere with pen writing

- smooth surface for consistent lines
- paper fiber content and type strictly specified to prevent fibers from pulling ink outside of trace.

Pen compatibility guide

Plotter model no.	Fiber-tip pens		Refillable Drafting pens		Rollerball pens
	Paper writing	Overhead transparency	Short body	Long body	Long body
7090A	•	•			
7220	•	•	•		
7221	•	•	•		
7225	•	•			
7470	•	•			
7475	•	•	•		
7550	•	•		•	•
7580	•			•	•
7585	•			•	•
7586	•			•	•
9872	•	•	•		
Other (7200, 7202, 7203, 7210, 9125, 9862)	•		•		

Don't let mismatched plotter supplies stop you short of achieving crisp, clear graphics. Use the compatibility guide (left) to help you choose the best pens for your particular plotter and application.

Fiber-tip pens

Watch for HP's new international pen symbols on HP pen packages and carousels. These symbols are designed to aid you in selecting the right carousel for your pens.

Paper	Transparency	Rollerball	Drafting

Be sure to see our selection of carousels on page 100.

Paper writing pens (newer plotters)

For use with **7090**, **7220**, **7221**, **7225**, **7470**, **7475**, **7550**, **7580**, **7585**, **7586** and **9872** graphics plotters.

Single-color pen packages (5 pens/pkg.)

Narrow line width (.3 mm)	Wide line width (.7 mm)
5060-6784 (Red)	**5060-6893** (Red)
5060-6785 (Blue)	**5060-6891** (Blue)
5060-6786 (Green)	**5060-6892** (Green)
5060-6787 (Black)	**5060-6890** (Black)

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Multi-color pen packages

Narrow line width (.3 mm)	Wide line width (.7 mm)
5060-6810 4 pens/pkg 1 each of:	**5060-6858** 4 pens/pkg 1 each of:
Red	Red
Blue	Blue
Green	Green
Black	Black

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Narrow line width (.3 mm)	Wide line width (.7 mm)
5060-6894 6 pens/pkg 1 each of:	**5060-6895** 6 pens/pkg 1 each of:
Burnt Orange	Burnt Orange
Brown	Brown
Violet	Violet
Turquoise	Turquoise
Gold	Gold
Lime Green	Lime Green

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Overhead transparency pens

For use with **7220**, **7221**, **7225**, **7470**, **7475**, **7550**, and **9872** graphics plotters.

Single-color pen packages (5 pens/pkg.)

Narrow line width (.3 mm)	Wide line width (.6 mm)
5061-5012 (Red)	**5061-5022** (Red)
5061-5016 (Blue)	**5061-5026** (Blue)
5061-5015 (Green)	**5061-5025** (Green)
5061-5010 (Black)	**5061-5020** (Black)

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Multi-color pen packages (4 pens/pkg.)

Narrow line width (.3 mm)	Wide line width (.6 mm)
5060-6818 1 each of:	**5060-6819** 1 each of:
Red	Red
Blue	Blue
Green	Green
Black	Black
5060-6834 1 each of:	**5060-6835** 1 each of:
Orange	Orange
Brown	Brown
Violet	Violet
Black	Black

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Transparency ink solvent:

5060-6828 container of 1 fluid ounce (29.6ml). For rejuvenating dry pens and cleaning ink off transparencies.

Paper writing pens

For use with **7200–7203**, **7210**, **9125**, and **9862** plotters.

Same-color pen packages (5 pens/pkg.)

5081-1190 (Red)	**5081-1192** (Green)
5081-1191 (Blue)	**5081-1193** (Black)

*Quantity (1–4 pkgs)
Discount (5+)
SAVE WITH QUANTITY DISCOUNTS

Note: Quantity discounts apply to purchase of single part numbers only.

HP's plotter pens are packaged in a specially coated foil bag, then heat sealed along the edges. This creates a moisture barrier to prevent pens from drying out, which ensures fresh pens and a long shelf life.

Rollerball pens

Use these pens with your 7550, 758 7585 and 7586 Plotters when you need the following features:
- fast plotting speed (60 cm/s)
- uniform line width
- ease of use

We recommend you use these pens for preliminary drawings or check plot applications. Use on HP's blank plotter paper for single-copy needs or with tracing bond for diazo reproducible check plots or preliminary drawings.

Single-color pen packages

(4 pens/pkg)
Narrow line width (.3 mm)

5061-5034 (Red)

5061-5036 (Blue)

5061-5035 (Green)

5061-5033 (Black)

*Quantity (1-4 pkgs)
Discount (5 +)

SAVE WITH
QUANTITY DISCOUNTS

*Quantity discounts apply to purchase of single part numbers only.

Drafting pens and supplies

Refillable drafting pens— short body

For use with **7220, 7221,** and **9872** Graphics Plotters.

5061-5060 Drafting pen, short body. Used with plotter points listed below. Two pen bodies and pen boots per package.

Plotter points (tungsten), used with drafting pen, short body.
9300-0955 Point size, .18 mm**
9300-0956 Point size, .25 mm**
9300-0957 Point size, .35 mm
9300-0958 Point size, .50 mm
9300-0959 Point size, .70 mm
9300-0960 Point size, 1.00 mm

Refillable drafting pens— long body

For use with **7550, 7580, 7585,** and **7586** Graphics Plotters.

07580-60025 Drafting pen, long body. Used with plotter points listed below. One pen body per package.

Plotter points (tungsten), used with drafting pen, long body.
9260-0742 Point size, .18 mm**
9260-0741 Point size, .25 mm**
9260-0588 Point size, .35 mm
9260-0744 Point size, .50 mm
9260-0579 Point size, .70 mm
9260-0743 Point size, 1.00 mm

Part no.	Description
9282-0905	Cleaning syringe (used to clean drafting pens)
9282-0908	Drafting pen cleaning solution 5.2-oz. bottle
9260-0596	Drafting ink. .75-oz. bottle, black

For special fine-line plotting only. These narrow pen tips require more cleaning and care than wider pen tips. Therefore, we do not recommend these fine-line tips for general use on the **7550, 7580, 7585, and **7586** Plotters.

Plotter supplies kits

These kits contain the material you need to prepare quality graphics on your choice of paper or overhead transparency film.

They are packaged in a convenient storage box with complete instructions on how to create clear, crisp graphs and how to care for the pens and media for optimum results.

Overhead transparency kits

Description	HP Part No.
HP 7470 • 50 sheets of paper-backed A-size transparency film • 16 pens in two tip widths & 7 colors	5061-7561
HP 7475, 7550, and 7090 • 50 sheets of paper-backed A or A4 size transparency film • 16 pens in 2 tip widths and 7 colors English A size media Metric A4 size media	 5061-7580 5061-7581
HP 7220, 7221 and 7225 with velocity select and 9872 • 100 sheets of A-size transparency film • 16 pens in two tip widths & 7 colors	5061-7560

Paper and pen kit

For use on all HP plotters.
• 300 sheets of blank plotter paper
• 20 fiber-tip paper pens in 10 colors (two line widths)
• Pen holder to store four pens

English A size media	5061-5070
Metric A4 size media	5061-5071

A convenient way to get an assortment of pens and plotter media for everyday use.

Plotter accessories storage

Plotter pen organizer

5061-5100 stores 20 fiber-tip or short-body, liquid ink pens and up to five drafting points.

Manufactured of smoked plastic. Exterior dimensions: height 2.25 inches (5.7cm); width 4.5 inches (11.5cm): depth 4.62 inches (11.8cm).

Plotter pen holder

07225-40054 This sturdy holder holds up to four fiber-tip, rollerball or short-body drafting pens.

Writing accessories chest

07580-60163 Do you keep your drafting plotter carousels in your bottom drawer and the cleaning brush in the file cabinet? Here's the answer to instant access to your drafting plotter supplies. This rugged, handsome chest is made from hardwood to provide years of convenient storage. The cut-outs in the foam insert hold the accessories snugly in place and a handle allows you to comfortably carry it.

Exterior dimensions: height 17 inches (43.18cm): width 7 inches (17.78cm): depth 10.75 inches (27.30cm).

Media handling accessories

For use with HP's new 7550A Graphics Plotter—the automatic sheet feed plotter for unattended operation of cut paper sheets.

Description	HP Part no.
A-size media loading tray	07550-60152
A4-size media loading tray	07550-60158
B-size media handling kit B-size media loading tray B/A3 media catcher tray B-size plotter paper, 50 sheets	07550-60160
A3-size media handling kit A3-size media loading tray A3/B media catcher tray A3-size plotter paper, 50 sheets	07550-60161

Miscellaneous graphics accessories

Item	Description	Part No.
Carousels	Pen carousel. **For use with 7550A Plotter.**	07550-60050 (transparency pens) 07550-60051 (fiber-tip pens) 07550-60052 (rollerball pens) 07550-60053 (liquid ink pens)
	Fiber-tip pen carousel (paper and transparency). **For use with 7090A/ 7475A Plotters.**	5061-5080
	Fiber-tip pen carousel	07580-60035
	Drafting pen carousel	07580-60081
	Rollerball pen carousel **For use with 7580/7585/7586 Plotters.**	07580-60082
Replacement boots	Boots for short-body drafting pens (2/ pkg). **For use with 7220/7221/9872 Plotters.**	9300-0967
	Boots for fiber-tip and rollerball pen carousels (8/pkg)	07580-60182
	Boots for drafting pen carousel (8/pkg) **For use with 7580/7585/7586 Plotters.**	07580-60181
Digitizing sights	Straight sight. **For use with all plotters.**	09872-60066
	Angled view sight. **For use with 7580/ 7585/7586 Plotters.**	07585-60191
Cleaning supplies	Gritwheel brush. **For use with 7550/ 7580/7585/7586 Plotters.**	8710-1386
	Cleaning syringe	9282-0905
	Cleaning solution **For use with drafting pens.**	9282-0908
Overlays	Overlay. **For use with 17623A Graphics Tablet**	4114-1033
	Overlays (3/pkg). **For use with 9111A/T Graphics Tablets**	7121-0988
	Individual blank key overlay (min. order of 5)	7120-7105
	Package of 5 hold-down sheets Hold-down magnet **For use with 9874 Digitizer.**	09874-87000 09874-67924
Paper spools	Take-up core for roll media 24-inch (609.6 mm) 36-inch (914.4 mm) **For use with 7586 Plotter.**	 9300-1068 9300-1069
Stylii	Stylus refills (2 inkless, 3 ink cartridges) **for use with the 17623A and 9111A/T.**	09111-68701
	Ink cartridge for stylus for use with the 9874.	Use Papermate standard ball point refill (Papermate part no. 46301, black ink, fine line) or equivalent.
Print heads	Thermal print head **for 7240 and 7245.**	07245-60001

Cleaning kits

Cleaning kits and con

Printwheel clean kit

HP introduces a revolutionary cleaner for your HP 2601A printwheels. Keep your print characters sharp and smudge-free without going through a messy cleaning job. Using the HP printwheel clean kit is a quick and easy process. Simply attach the wheel to the interchangeable wheel holder, then apply the cleaning solution to the element pad, close the lid and give the outside knob a few turns. That's all there is to the safe and regular maintenance of your daisy wheels.

1 *92193C Printwheel clean kit.* Includes the cleaner box, a single element pad, an interchangeable wheel holder and a 4-ounce bottle of cleaning solution. Each pad can be used for approximately 20 cleanings and is then easily replaced. See accessories for refills.

(1 kit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

2 *92193D Printwheel clean kit refill.* Included is a 4-ounce bottle of cleaning solution and a cleaner element pad. The element pad is good for approximately 20 cleanings.

(1–4 refills)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Magnetic tape head cleaning supplies

Although HP does not recommend the cleaning of rigid or flexible disc media, we do recommend the periodic cleaning of tape heads, capstans and guides on tape units and those products using high-density data cartridges and mini data cartridges. Such cleaning prolongs tape/ head life and helps reduce read/write errors due to dust and oxide buildup.

3 *92193H Magnetic head clean kit for flexible and rigid disc drives.* Prolong tape head life and minimize read/write errors by periodically inspecting your mag heads visually and by using this kit regularly. Regular use reduces dust and oxide buildup. Contains two 4-ounce bottles of cleaning solution, 50 lint-free wipes, 10 plastic swabs with urethane foam tips and one easy-pour dispensing cap.

(1 kit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

ponents for preventive maintenance

4 92193M Master clean kit for flexible and rigid disc drives. This kit contains all the components necessary for cleaning disc drive heads, capstans and guides, terminal screens, printers and all equipment surfaces. Included are one 4-ounce bottle of mag head cleaning solution, one 4-ounce bottle of anti-static solution, one 4-ounce bottle of screen-cleaning solution, 10 plastic swabs with soft urethane foam tips, 16 screen-clean wipes, 50 lint-free wipes, two pump spray tops and instructions.
(1 kit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

5 92193V Video clean kit. Clean your CRT terminal screens and other glass surfaces with the two 4-ounce bottles of screen-cleaning solution, fifty 3 × 5-inch lint-free wipes and one easy-pour dispensing cap.
(1 kit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

6 92193K Head cleaning kit for 5.25-inch flex disc drive. See page 105.
92193L Head cleaning kit for 8-inch flex disc drive. See page 105.

Individual cleaning accessories

Supplement and refill your HP cleaning kits with accessory cleaning components. You can save by ordering components in larger quantities based on your normal maintenance program.

7 92193W Lint-free wipes. Buy in bulk and save! One bag of 100 lint-free thermal-bonded polyester wipes. Safe to use on all HP equipment surfaces. 3 × 5-inch (7.6 × 12.7 cm) each.
(1–4 bags)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

8 92193F Magnetic head cleaning solution for easy, safe, effective maintenance of mag tape and flexible and rigid disc drives. Use this 100 percent Freon TF solution with cleaning swabs and compressed air on drive read-and-write heads, capstans and guides. Each bottle contains 12 fluid ounces.
(1–4 bottles)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

9 92193Y Compressed air cleaner. A box of two 8-ounce cans of compressed air cleaner. Use to clean hard-to-reach spots and to speed evaporation of cleaning solutions. Safe and handy to use. Includes extension spray tube.
(1–4 boxes)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

10 9300-0468 Box of 50 lint-free wooden swabs with soft urethane foam tips. Use 9300-0767 for cleaning the high-density data cartridge transports.
(1–2 boxes)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

9300-0767 Box of 50 lint-free plastic swabs with soft urethane foam tips. Recommended for use in cleaning tape head and capstan in HP 7908/11/12/14 tape transports. Use with 92193F magnetic head cleaning solution.
(1–2 boxes)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

11 92193G Cleaning gloves. Protect your equipment and keep your hands clean when using HP cleaning supplies. Twenty-five pairs of gloves to the bag.
(1–4 bags)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

MAGNETIC MEDIA

Stellar performance starts with HP magnetic media.

You know that the up-time of your equipment directly generates savings through increased productivity. The reliability of **HP magnetic media** lets you cash in on these savings. Our products also minimize the wear of both media and read/write heads, which means less maintenance and lower service costs.

Tests on HP drives show significant differences between media in terms of wear and data integrity. Only media meeting very high specifications are approved for our customer shipments. With HP products, you can feel confident that you will obtain consistent, high-quality results and an increase in overall performance.

HP engineers spend many person-months designing and selecting the optimum (not just "compatible") media for their drives. Many vendors offer media "compatible" with some of

HP's tape or disc drives; however, media from HP has been designed, produced and/or selected based on its superior performance characteristics on HP drives.

Disc drive/media warranty

Any damage sustained to the heads or media, or any consequential damage resulting from the use of non-HP media or cleaned disc media is excluded from warranty or service contract coverage, but will be repaired subject to HP's standard time and material charges. Use of non-HP media or cleaned disc media, however, does not affect warranty or service contract coverage of other components of the disc drive not associated with the head-media interface.

Flexible discs

Hewlett-Packard's premium-quality flexible discs optimize performance of HP drives.

HP flexible discs do make a difference. *When you buy HP flexible discs, you are assured they are carefully matched to your HP disc drives for optimum performance. We select flexible discs for the HP label only after rigorous qualification tests based on three key characteristics—disc wear life, error rate, and the disc manufacturer's ability to consistently meet our specifications without batch-to-batch variations.*

Choose from HP's high-quality line-up of flexible discs: (L–R) 8-inch, 5.25-inch, 3.5-inch micro flexible discs.
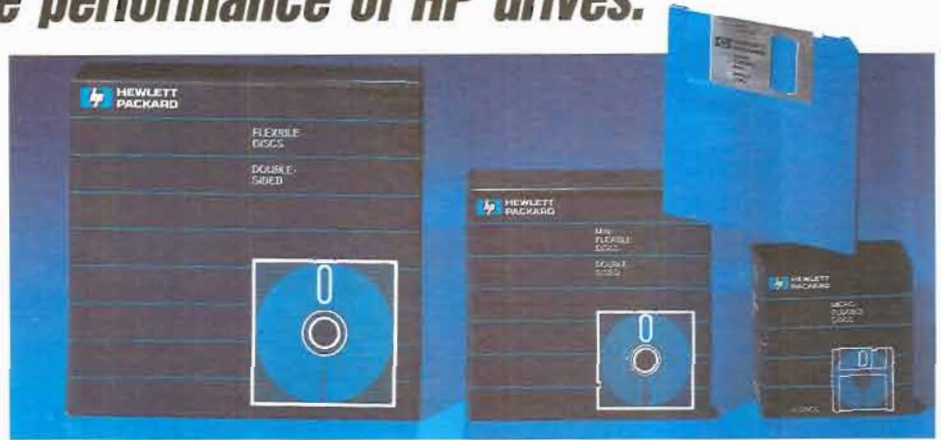
Flexible discs for HP drives

Each package contains 10 flexible discs in protective envelopes and includes write-protect, jacket and storage box labels. Unformatted discs must be initialized before storing data.

Product no.	Description	Systems	
92190A	Box 5.25 in., 0.27 Mb (formatted capacity) double-sided unformatted (also see 92190L below)	HP 82900 Series Disc Drives, 9135A Disc Drive, HP 2642/7A Display Terminal HP 9826/36 Desktop Computers, HP 9000 Model 20 Desktop Computer	1 box of 10 discs 2–4 5–19 20 –	SAVE WITH QUANTITY DISCOUNTS
92191A	Box 3.5 in., 0.27 Mb (formatted capacity) single-sided, auto-shutter unformatted	HP 9121D/S and 9133A/B, 9133V/XV Series Disc Drives used with Series 80, 100, 200 Personal Computers	1 box of 10 discs 2–4 5–19 20 –	SAVE WITH QUANTITY DISCOUNTS
92195A	Box 8 in., 1.2 Mb (formatted capacity) double-sided, unformatted (also see 92195L below)	HP 9895A Disc Drive and HP 250, 300, 3000/30, 3000/33 Systems	1 box of 10 discs 2–4 5–19 20 +	SAVE WITH QUANTITY DISCOUNTS
92195F	Box 8 in., 1.2 Mb (formatted capacity) double-sided HP 250 formatted	HP 250	1 box of 10 discs 2–4 5–19 20 –	SAVE WITH QUANTITY DISCOUNTS
9164-0105	Box 8 in., 0.5 Mb (formatted capacity) single-sided, unformatted	HP 9885M/S Disc Drive, HP 1000 Models 20 & 25 (2174A/B & 2175A/B), Subsystems	1–2 boxes of 10 discs 3–9 10 +	SAVE WITH QUANTITY DISCOUNTS
09885-90045	One 8 in., 0.5 Mb (formatted capacity) single-sided, HP 9885/9825 formatted	HP 9885M/S Drives used with HP 9825A/S Desktop Computers	Single disc	

SAVE on HP FlexFiles (described on page 105) when you buy quality HP discs in the handy packages below. Each package contains five FlexFile units and 50 flexible discs in protective envelopes and includes write-protect, jacket and storage box labels and instructions.

Product no.	Description	Flex Disc		
92190L	5 FlexFiles, 50 5.25-in., unformatted, double-sided flex discs	92190A	(1–3 pkgs.) (4+)	SAVE WITH QUANTITY DISCOUNTS
92195L	5 FlexFiles, 50 8-in., unformatted, double-sided flex discs	92195A	(1–3 pkgs.) (4+)	SAVE WITH QUANTITY DISCOUNTS

Flexible disc definitions

Single-sided: For single head drives, data is recorded on one side only.
Double-sided: For dual head drives, data is recorded on both sides.

Format: The method in which data is organized in a record. Formatted discs already are encoded with track and

sector information or identifying physical track and sector locations.

5.25- and 8-inch flexible disc accessories

Your flexible discs are worth much more than the retail price suggests. A truer measure of their value is the worth of the important data stored on each one. With HP storage products, you minimize your chances of accidentally misplacing or damaging media. Our racks, binders, and files make it easy to take care of your media—so it can take care of you.

Binder storage

Three-hole, 1.5-inch easel binder kit with pebbled, static-resistant vinyl pages for safe, convenient and economical filing of flexible discs with supporting documentation. File cards are included to help identify each disc. The easel binder provides efficient access and replacement of the discs at the user's workstation.

1 **92194J Easel binder kit** for 5.25-inch discs. Capacity 40 discs.
92194K Easel binder kit for 8-inch discs. Capacity 40 discs.
(1 kit)
(2−4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Portable album file

Fragile flexible discs will be protected, organized and easily accessed because of this filing system's unique features. Crimped pockets cushion each disc, preventing wrinkles or bends. The floating axle design eliminates additional stress if the binder is dropped or closed. Discs are kept secure in a vinyl cover with a Velcro® fastener. Easy and fast access and re-filing are aided by color-coded index stripes for each pocket. File organi-

zation is further enhanced with an index on the spine of the album for listing discs. Capacity 20 discs.

2 **92194G Album** file for 5.25-inch discs.
(1 unit)
(2−4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

92194H Album file for 8-inch discs.
(1 unit)
(2−4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Hanging file pages

Protect and organize your valuable discs by filing them on any U.S. standard 12.25-inch (311mm) wide suspension frame. These heavy-duty pages are made of static-resistant vinyl. File cards are included to help identify each disc.

3 **92194P Package of 20 hanging file pages** for 5.25-inch flexible discs. For 330mm wide pages, order 92195P. Capacity 20 discs.
92194Q Package of 20 hanging file pages for 8-inch flexible discs. For 330mm wide pages, order 92195Q. Capacity 20 discs.
(1 pkg.)
(2−4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Rotary filing stand

Combine filing with protection for your 5.25-inch flexible discs. This attractive and well-made rotary stand offers easy access for up to 100 discs. Includes heavy-duty vinyl file pages and colored index strips. Weight 20 pounds (9.1 kg.).

4 **92194T Rotary stand** for 5.25-inch flexible discs.
(1−2 stands)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

Cardboard disc mailers

Safe and inexpensive way to ship flexible discs. Each mailer holds five discs.

5 **92194V Package of 10 cardboard mailers** for 5.25-inch flexible discs.
6 × 6 × .75 inches (15.2 × 15.2 × 1.9cm.)
(1−4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS
92194W Package of 10 cardboard mailers for 8-inch flexible discs.
8.5 × 8.5 × .75 inch (21.6 × 21.6 × 1.9cm.)
(1−4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Desktop file

Designed to provide protection, organization and easy retrieval of invaluable data and programs. This attractive, durable, smoke-colored acrylic file holds up to 60 discs. Aiding the organization and retrieval of discs are five index dividers with adjustable tabs.

6 **92194A Desktop file** for 5.25-inch flexible discs.
(1 unit)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

92194B Desktop file for 8-inch flexible discs.
(1 unit)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

FlexFile storage system

The HP FlexFile provides you with the most "flexible" disc storage system! Its modular interlocking design allows you to add new units as your needs expand and makes the most of your work space. Individually or in stacks, they can be used vertically or horizontally by simply readjusting the inside disc retaining gate. Open the FlexFile drawer and the discs are automatically flipped forward for easy access. The FlexFile offers sturdy, portable, dust-free protection and takes only seconds to interlock or separate. Constructed of high-impact polystyrene.

7 **92194E FlexFiles** for 5.25-inch flexible discs. A package of five FlexFiles. Each FlexFile holds up to 10 discs. Includes adhesive index labels and instructions.

92194F FlexFiles for 8-inch flexible discs. A package of five FlexFiles. Each FlexFile holds up to 10 discs. Includes adhesive index labels and instructions.
(1 pkg.)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

Flexible disc mailers

These mailers provide a stress-free journey for up to five discs mailed in envelopes or carried in a briefcase. The heavy-duty vinyl construction gives a clean, sturdy and reuseable technique for distributing programs and data on flexible discs. The Velcro® fastener is secure, eliminating any pressure on the discs during opening and closing.

8 **92194R Box of five mailers** for 5.25-inch flexible discs. Each mailer holds up to five discs.
(1 box)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

92194S Box of five mailers for 8-inch flexible discs. Each mailer holds up to five discs.
(1 box)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

Carrying cases

Keep your flexible discs clean and prevent crimping with our sturdy carrying cases. Cases snap securely closed until you need to retrieve your discs.

9 **NEW** **92195R Package of five carrying cases** for 5.25-inch flexible discs.
Each case holds up to three discs.
(1–4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

NEW **92195S Package of five carrying cases** for 8-inch flexible discs. Each case holds up to three discs.
(1–4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Three-ring binder pages

A package of pebbled, static-resistant vinyl pages for filing flexible discs. File cards are included to help identify each disc.

92194L Package of 20 pages for 5.25-inch discs. Capacity 40 discs.

92194M Package of 20 pages for 8-inch discs. Capacity 20 discs.
(1 pkg.)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

Clean disc drive heads quickly and easily

HP recommends cleaning of flexible disc drive heads when there is suspicion of contamination, after an incidence of media damage or when read errors are occurring at a higher than normal rate.

For 5.25- and 8-inch drives:

New, easier-to-use cleaning kits eliminate the need for messy cleaning solutions. Simply insert the double-sided disc in the drive, load your system, and the drive head is clean in 30 seconds. Each disc is good for 25 cleanings. A usage record is included for tracking periodic maintenance. May require mainframe utility program.

92193K Head cleaning kit for 5.25-inch flexible disc drives. Includes protective case and two cleaning discs in envelopes.

92193L Head cleaning kit for 8-inch flexible disc drives. Includes protective case for two cleaning discs in envelopes.
(1 kit)   SAVE WITH
(2–4)   QUANTITY DISCOUNTS
(5+)

92193K/L Head cleaning kits

Micro flexible discs

Exclusive drive-media monitor tracks each disc's use and tells you when to replace it.

Automatic protective metal guard slides over the read/write opening when disc is not in use.

Hard polymer housing protects media from damage due to jacket bending or improper filing.

Two protective disc liners clean and remove debris, ensuring greater surface durability and more resistance to wear.

New media offers 270 Kb of formatted capacity on a single side!

Hard disc center permits accurate and reliable high-density recording because the disc is centered precisely on the read/write head.

Compact power: new 3.5-inch micro flexible discs

HP's new 3.5-inch mass storage systems for Series 80, 100 and 200 Personal Computers save precious space on your desk or lab bench. Yet, each 3.5-inch micro flexible disc has a full 270-Kbyte capacity; two discs in the 9121D dual system can give you 540 Kbytes of formatted storage at double the speed of many 5.25-inch systems!

HP is committed to this compact media as its new standard, and major software packages are already available on 3.5-inch micro flexible discs.

3.5-inch Micro flexible discs

Product no.	Description	Systems	
92191A	Box of 3.5 in., 0.27 Mb (formatted capacity) single-sided, auto-shutter unformatted	HP 9121D/S and 9133A/B, 9133V/XV Series Disc Drives used with Series 80, 100, 200 Personal Computers	(1 box of 10 discs) (2–4) (5–19) (20+) SAVE WITH QUANTITY DISCOUNTS

3.5-inch Micro flexible disc accessories

Now that you have your system and your 3.5-inch micro flexible discs, get organized with HP's new family of micro disc accessories. All are specially designed to provide protection, organization, and easy retrieval of your 3.5-inch discs.

Desktop file

The micro desktop file lets you easily protect, store, file 3.5-inch discs. The file allows for flat horizontal storage of up to 50 discs when closed. Open the smoke-colored acrylic file and your discs flip forward and up for easy access.

Built-in divider tabs help organize discs. And a non-metal lock and key prevent their unwanted removal.

1 **NEW** **92191D Micro desktop file** for 3.5-inch micro flexible discs.

(1 unit)
(2–4)
(5+)

SAVE WITH
QUANTITY DISCOUNTS

3.5-inch Micro flexible disc accessories (cont.)
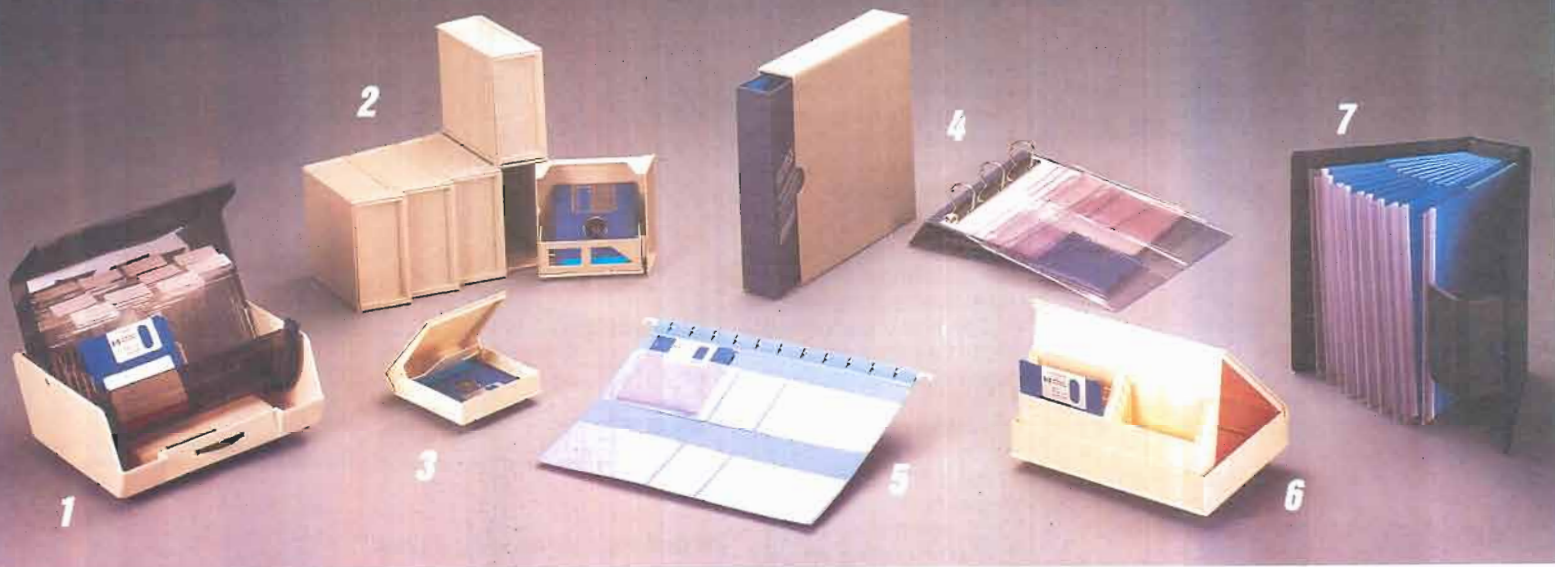
FlexFile storage system

The HP FlexFile's modular interlocking design allows you to add new units as your needs expand, and makes the most of your work space. Individually or in stacks, they can be used vertically or horizontally by simply readjusting the inside disc retaining gate. Open the FlexFile drawer and the discs are automatically flipped forward for easy access. The FlexFile offers sturdy, portable, dust-free protection and takes only seconds to interlock or separate. Constructed of high-impact polystyrene.

2 **92191E FlexFiles** for 3.5-inch micro flexible discs. A package of five FlexFiles. Each FlexFile holds up to 10 discs. Includes adhesive index labels and instructions.
(1 pkg.)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Carrying case pack

Each convenient pop-open case holds up to five micro discs for easy, safe storage and transport. Self-locking lid snaps shut for extra safety.

3 **92191M Micro carrying case pack** for 3.5-inch micro flexible discs. (Package of 3 cases)

Library album case

A perfect way to conveniently store up to 20 micro discs. This case features a sturdy cloth-covered slip cover and album with 10 standard-size 1.5-inch vinyl pages. The pages are static resistant. Filing cards included.

4 **92191C Library album case** for 3.5-inch micro flexible discs.
(1–4 cases)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Hanging file pages

Protect and organize your valuable discs by filing them on any 12.25-inch (311mm) wide suspension frame. These heavy-duty pages are made of sturdy, static-resistant vinyl. File cards are included to help identify each disc.

5 **92191P Package of 10 hanging file pages** for 3.5-inch flexible discs, sized to U.S. standard. Capacity 40 discs.
(1 pkg.)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Micro case

This durable plastic 3.5-inch micro disc case holds 10 flexible discs in library-like fashion for easy fingertip retrieval. The disc holder slides open to reveal your discs with step filing. Slide it closed and file snaps shut for library storage or for convenient transport. Disc identification and spine labels included.

6 **92191T Micro disc case** for 3.5-inch micro flexible discs.
(1 case)

Portable album file

Fragile flexible discs will be protected, organized and easily accessed because of this filing system's unique features. Crimped pockets cushion each disc, preventing wrinkles or bends. The floating axle design eliminates additional stress if the binder is dropped or closed. Discs are kept secure in a vinyl cover with a Velcro® fastener. Easy and fast access and re-filing are aided by color-coded index strips for each pocket. File organization is further enhanced with an index on the spine of the album for listing discs. Capacity 20 discs.

7 **92191F Portable album** file for 3.5-inch micro flexible discs. Keep up to 20 discs secure and at your fingertips in this vinyl-covered file. Velcro® cover fastener for fast and easy access. Re-filing is aided by color-coded index strips for each disc pocket. Outside spine has index card for listing discs.
(1 unit)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Three-ring binder pages

A package of static-resistant vinyl pages for filing flexible discs. File cards are included to help identify each disc. Pages have standard size hole spacing.
92191L Package of 20 pages for 3.5-inch discs. Capacity 40 discs.
(1 pkg.)
(2–4)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

Rigid discs

High-performance disc drives require high-performance media

Sophisticated design

Your HP disc drive is one of the most sophisticated computer products made today. Its design and manufacturing involves more engineering disciplines than any other single computer component. In fact, each drive is a hybrid combination of not only electrical engineering, mechanical engineering and magnetics, but also fluid mechanics, aerodynamics and metallurgy.

Precision interplay

It is attention to detail in all of these fields throughout the design and manufacturing of our media products that allows Hewlett-Packard to offer exceptional levels of reliability and performance in our disc drives. The head/media interface is a prime example of the precision required for high performance operation. On the 7925 disc drive, the read/write heads:

- Detect as many as 7.5 million individual data bits each second
- Fly 27 millionths of an inch off of the media surface on a thin air bearing at over 100 miles per hour

This flying height may best be visualized by comparing it with the sizes of contaminants present in a typical operating environment. (See Figure 1.)

Media quality is essential

Because of the precision tolerances existing at the head/media interface, the quality of the media is critical to drive performance and reliability. There is no room for less than the best. Consequently, the time we spend ensuring the integrity of the media will be returned in terms of increased drive reliability, a proportionately lower cost of ownership, and performance at the level that the drive was designed to offer.

Figure 1

13356A formatted disc pack, left. 12940A disc cartridge, right.
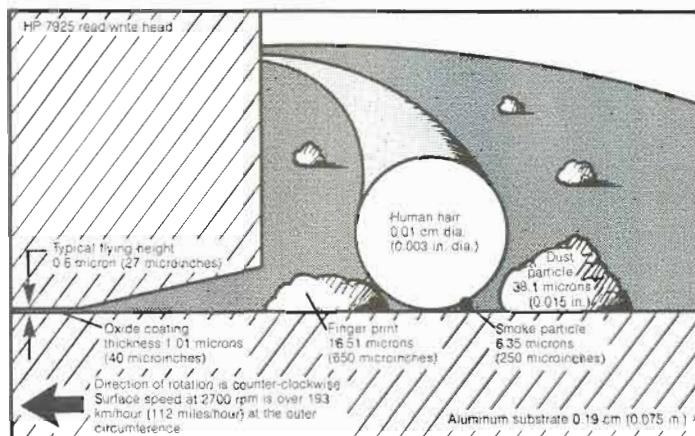
HP rigid discs are 100 percent tested

Every HP rigid disc pack and cartridge is 100 percent tested and certified for use on HP drives (see story next page on how HP tests disc packs). Dynamic testing dramatically increases reliability by reducing surface imperfections or imbalances. Our media also undergo exhaustive electromagnetic data transfer testing under "worst case" conditions. This ensures optimum media error performance, as well as interchangeability of disc packs and cartridges between similar model disc drives.

Because of the unique interdependence of total disc performance and the head/media interface, disc drive specifications and reliability can be assured when using HP media products.

Two more reasons to use HP rigid discs:

1. They are formatted and ready for immediate use on their respective drives, saving up to 30 minutes per disc pack.
2. HP rigid discs are guaranteed to have available spare tracks on every surface.

Undesirable alteration of the media surface environment can result from improper cleaning. The cleaning of HP media products is, therefore, not recommended.

Any damage sustained by the heads or media, or any consequential damage resulting from the use of non-HP media or improperly cleaned media will not be covered under warranty service contract.

Rigid discs

Product no.	Description	Systems		
12869A	2.5 Mb Disc Cartridge formatted front loading	HP 7900A, 7901A, 9880B, 12960A, 12961A, 30110A Disc Drives and Subsystems	1–3 units 4–41 42 +	SAVE WITH QUANTITY DISCOUNTS
12940A	9.8 Mb Disc Cartridge formatted front loading	HP 7905A, 7906H/M/S, 12962C/D, 13180A/B Disc Drives and Subsystems	1–3 units 4–41 42 +	SAVE WITH QUANTITY DISCOUNTS
13394A	50 Mb Disc Pack removable formatted	HP 7920 H/M/S Disc Drives	1–5 packs 6–19 20 +	SAVE WITH QUANTITY DISCOUNTS
13356A	120 Mb Disc Pack removable formatted	HP 7925 H/M/S Disc Drives	1–5 packs 6–19 20 +	SAVE WITH QUANTITY DISCOUNTS
97935A	404 Mb Disc Pack removable formatted	HP 7935 Disc Drives	1–5 modules 6–19 20 +	SAVE WITH QUANTITY DISCOUNTS

The 10 steps to quality in HP packs

1. Visually inspect raw disc platters.
2. Mechanically analyze for disc flatness and roughness.
3. Electronically evaluate magnetic properties.
4. Assemble into multi-disc packs (see photo).
5. Dynamically balance for vibration-free rotation.
6. Mechanically analyze, a second time, for disc flatness and roughness.
7. Burnish disc surfaces.
8. Magnetically purify (degauss) all surfaces.
9. Write permanent servo code bands on one disc in the pack.
10. Fully test each pack on a drive similar to yours under "worst case conditions."

Rigid disc accessories

Storage and protection for disc cartridges.

92206D Rigid disc rack. Keep your cartridges right where you want them. Our mobile nine-disc capacity storage rack makes organization and retrieval of invaluable data and programs easy. This superior-quality rack features heavy-gauge steel wire with nickel-chrome plating. Rubber non-skid feet protect your furniture.

(1–2 units)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92206H Protective bottom cover for disc cartridges. Box of six bottom covers for the HP 12940A and HP 12869A disc cartridges. Protects cartridge from damage caused by operater mishandling and minimizes contamination of disc surfaces. (Please note that the HP 92206D rack will not hold HP disc cartridges with 92206H bottom covers.)

- Easy to attach and remove.
- Built-in latch keeps cartridge access door closed when not in drive.
- Positive, safe horizontal stacking of up to six cartridges.
- Lightweight—approximately 0.9 pounds (0.4kg).
- Made of heavy-duty, high-impact plastic.
- Three sturdy positive-action clips keep 92206H in contact with cartridge bottom preventing contamination buildup.

(1–2 boxes)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

Tape cartridges
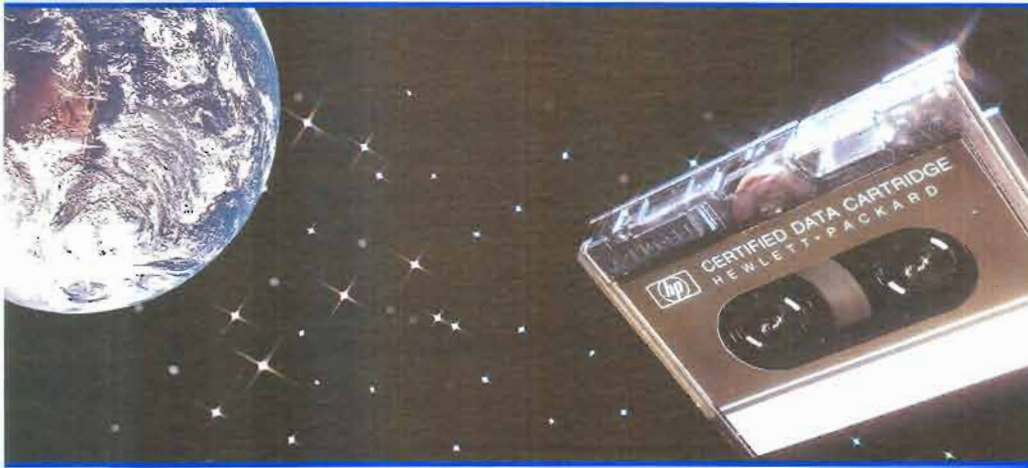
Better turn-on, longer life with HP mini data cartridge

Through HP's new improved manufacturing process, our HP 98200A minicartridge now offers better turn-on (start-up) performance and longer operating life—minimum 6000 cycles (a cycle is one roundtrip pass of the tape from one end to the other, and return) in most general-use applications. Actual performance will vary, depending on specific application.

NOTE: All minicartridges work best when "conditioned" before use (by making one total forward/rewind cycle), and by rewinding after each use.

Mini data cartridges

These rugged HP-manufactured storage devices are each 100 percent tested mechanically (for proper tape tension and drive force requirements) and electromagnetically for error-free data recording). Metal backplate construction helps ensure accurate alignment of tape guides and other internal parts, while providing a grounding surface to protect the minicartridge from effects of static electricity.
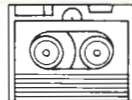
98200A Box of five mini data cartridges, each with own protective plastic box. Used with HP Series 1000 and 3000 Computer Systems; HP 264X Series Display Terminals; HP 85A, 9815A/S, 9825A/S, 9831A, 9835A/B (System 35) and 9845A/B/C/S/T (System 45) Desktop Computers; HP 9915A option 001 Modular Computer, 9875A, 9877A Tape Units. Also used on non-HP products where reliable, high-performance minicartridges are desired. For larger end-user and OEM quantity discounts, contact us.

(1 box of 5 cartridges)
(2–4)
(5–19)
(20+)

SAVE WITH
QUANTITY DISCOUNTS

Certified high-density data cartridge

These formatted and certified data cartridges are used for backup with the HP 7908/11/12/14 disc drives. Secondary uses are as a data exchange medium among HP systems, personal I/O (software distribution), and data/transaction logging. Formatted into 1K user data blocks. You no longer have to certify each tape cartridge. This saves up to 15 minutes per 150-foot tape and up to 75 minutes per 600-foot tape.

88140LC Box of five certified cartridges.
600-foot, 67 Mb, each with own protective plastic box.
(1 box of 5 cartridges)
(2–4)
(5–19)
(20+)

SAVE WITH
QUANTITY DISCOUNTS

88140SC Box of five certified cartridges.
150-foot, 16 Mb, each with own protective plastic box.
(1 box of 5 cartridges)
(2–4)
(5–19)
(20+)

SAVE WITH
QUANTITY DISCOUNTS
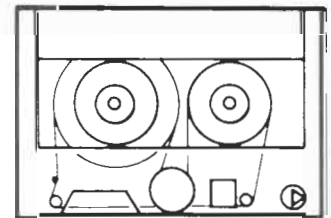
Digital tape cassettes

1 **82176A Package of 10 mini data cassettes.** Each stores up to 131K bytes and is used on 82161A digital cassette drive.
See photo next page.
Pkg. of 10

9162-0050 Individual digital cassette. With HP label

and index card, and sealed in plastic storage box. Used with HP 9821A Calculator, 9830A/B Desktop Computer, 9865A Cassette Memory; also non-HP products requiring high-quality digital cassettes.
(1–9 cassettes)
(10–99)
(100+)

SAVE WITH
QUANTITY DISCOUNTS

9162-0053 Unlabeled individual digital cassette. Identical to HP 9162-0050, but without HP label. For OEMs and other customers who record their own software and prefer to apply their own labels.
(1–9 cassettes)
(10–99)
(100+)

SAVE WITH
QUANTITY DISCOUNTS

Tape cartridge accessories

Convenient space-saving storage products organize and protect your valuable media.

Stop searching for those misplaced cartridges and cassettes. With our racks, binders and files, you can be sure your cartridges and cassettes will be where you want them, when you want them!

2 **92167M Storage binder** holds six mini data cartridges inside front cover. The cartridges are held secure in the molded storage compartments while in their protective plastic boxes. One or two molded binder inserts can be placed in this binder increasing the storage capacity to 12–18 cartridges (see 92167N).

Documentation pertinent to the data and programs recorded on the cartridges can be organized in the standard 2-inch, three-ring mechanism and in a vinyl pocket inside back cover. Protection for the three-hole documentation is provided by two sturdy page protectors. The outside of the binder is finished in padded bone-colored vinyl.

(1 binder)	SAVE WITH
(2–4)	QUANTITY DISCOUNTS
(5+)	

3 **92167N Molded binder insert.** Package of three inserts. Each insert holds six minicartridges (while in their plastic boxes) and can be held by the sturdy brass-ringed eyelets in a three-ring binder (sizes 0.5 in. and up). The molded storage compartments are the same quality design and construction as used in the 92167M storage binder. These inserts provide an excellent technique for consolidating programs and data on minicartridges with supporting documentation in standard three-ring binders. One or two inserts can be added to the storage binders increasing the storage capacity to 12–18.

(1 pkg. of 3 inserts)	SAVE WITH
(2–4)	QUANTITY DISCOUNTS
(5+)	

4 **92194D Desktop file for mini data cartridge.** Designed to provide protection, organization and easy retrieval of invaluable data and programs. This attractive, durable, smoke-colored acrylic file holds up to 24 mini data cartridges (HP 98200A).

(1 unit)	SAVE WITH
(2–4)	QUANTITY DISCOUNTS
(5+)	

5 **92194C Desktop file for cassettes** for HP digital cassettes. Designed to provide protection, organization and easy retrieval of invaluable data and programs. This attractive, durable, smoke-colored acrylic file holds up to 18 digital cassettes.

(1 unit)	SAVE WITH
(2–4)	QUANTITY DISCOUNTS
(5+)	

High-density data cartridge storage albums

Now you can organize and transport your HP 88140 cartridge in a dust-free album that helps eliminate the mishandling and misplacing of individual cartridges. The albums are constructed of sturdy vinyl, hinged for easy access. Each album holds four cartridges; two in the molded front cover and two in the back cover inserts.

6 **92167L Package of five high-density data cartridge albums.** Each album holds up to four HP 88140 cartridges.

(1 pkg.)	SAVE WITH
(2–4)	QUANTITY DISCOUNTS
(5+)	

7 **92206A Mini data cartridge rack.** Mobile and stackable! Chrome-finished steel racks are designed for fingertip accessiblity of up to 16 cartridges or digital cassettes. Racks are stackable for space-saving convenience. Buy three and save.

(1–2 units)	SAVE WITH
(3+)	QUANTITY DISCOUNTS

Magnetic tape

Certified to 6250 BPI. Use on all HP 7970, 7971, 7974, 7976, and 7978 tape units and tape subsystems using 0.5-inch (12.7mm) wide tape.

HP's 0.5-inch (12.7mm) computer tape has an extra layer for extra protection of your valuable data. HP tape has a textured substrate (backside coating) which helps protect your data by protecting itself in day-to-day storage and operational use. The backside coating allows air lubrication between tape layers, enabling uniform sliding and the reduction of cinching, thus less lateral tape movement and fewer worn edges that result in lost data.

The exposed polyester backside on conventional tapes is a major cause of debris that can create dropouts and attendant information loss. HP's new tape with its textured substance backing resists scratching and the generation of debris. At the same time, HP tape resists static attraction of airborne particles.

Better
- Data integrity
- Protection of your information

Less
- Edge damage
- Contamination
- Distortion

Magnetic tapes

Product no.	Description	Systems	
92150D	Box of 10 600-ft. (183m) tapes on reels, in seals 0.5 in (12.7 mm) wide	HP 7970, 7971, 7974, 7976, 7978 Tape Drives and subsystems	1 box of 10 tapes 2–5 SAVE WITH 6 + QUANTITY DISCOUNTS
92150E	Box of 10 1200-ft. (366m) tapes on reels, in seals 0.5 in (12.7 mm) wide	HP 7970, 7971, 7974, 7976, 7978 Tape Drives and subsystems	1 box of 10 tapes 2–5 SAVE WITH 6 + QUANTITY DISCOUNTS
92150F	Box of 10 2400-ft. (732m) tapes on reels, in seals 0.5 in. (12.7 m) wide	HP 7970, 7971, 7974, 7976, 7978 Tape Drives and subsystems	1 box of 10 tapes 2–5 SAVE WITH 6 + QUANTITY DISCOUNTS
92150P	Box of 10 2400-ft. (732m) tapes on reels, in Easy Load II cartridges 0.5 in. (12.7 mm) wide	HP 7976 Tape drive	1 box of 10 tapes 2–5 SAVE WITH 6 + QUANTITY DISCOUNTS

Magnetic tape accessories

92150Q Box of 10 empty Easy Load II self-threading cartridges. To be used on 2400-foot tapes (10.5-inch reels) when using the auto-load feature on HP 7976 Tape Drives.
(1 box of 10)
(2–5) SAVE WITH
(6+) QUANTITY DISCOUNTS

92150K Magnetic Tape reel labels. Blank white adhesive labels. For quick identification and indexing of your tapes and other items. Roll of 1000 labels.
(1–4 rolls) SAVE WITH
(5+) QUANTITY DISCOUNTS

92150X Box of magnetic tape take-up reels. Replace broken reels and keep extras on hand. Five 10.5-inch reels to a box. Clear plastic front, HP blue-colored back. (1 box of 5)

92150L Mag tape color/numbering kit. Prevent misfiling! Our simple color-coded numbering system will help you eliminate misfiles in your magnetic tape library. 1000 labels (numbered 0–999).
- Designed with pressure-sensitive labels, which are inserted into label area of Tape-in-Seal cartridges.
- Each label is provided with location tabs which can be used on library tape racks or cabinets to quickly identify filing spot.

92150M Mag tape sense markers. These reflective, pressure-sensitive markers offer convenient tape beginning and ending indicators. 250 markers to a card.
(1–9 cards) SAVE WITH
(10+) QUANTITY DISCOUNTS
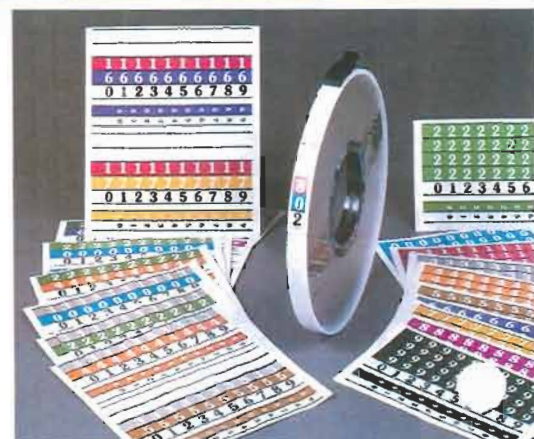
92150L Mag tape color/numbering kit

Magnetic tape accessories (cont.)

2 **92150R Tape crimper.** Hand-operated carbon steel cutter which forms and cuts the end of 0.5-inch (12.7mm) mylar computer tape for positive loading on HP 7976 Auto Load Tape Drives.

3 **92150U Package of 10 cardboard mailers** for 1200-foot mag tapes. 9.5 × 9.5 × 1.25 inches (24 × 24 × 3.2 cm)
(1–4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

92150W Package of 10 cardboard mailers for 2400-foot mag tapes.
12 × 12 × 1.25 inches (30.5 × 30.5 × 3.2 cm)
(1–4 pkgs.)   SAVE WITH
(5+)   QUANTITY DISCOUNTS

9162-0027 Head alignment tape. Has tracks, recorded at 800 BPI, precisely located on its 600-foot (183m) length. Used during testing or adjustment of 7- and 9-track head alignment on 0.5-inch (12.7mm) tape units. In protective canister.

> **Be sure to see our magnetic tape head cleaning supplies on pages 100–101.**

92150T Transport/ carrying case
for 2400-foot magnetic tapes. Holds up to six reels in either tape seals or Easy Load Cartridges. This case combines durable impact-resistant polyethylene construction on the outside with shock absorbing foam on the inside to ensure reliable protection when carrying or shipping your valuable data and software. Built-in hasp for your personal padlock. Dimensions: 15.8 × 17 × 6.5 inches (40 × 43.2 × 16.5 cm) Weight: 7.5 pounds (3.4 kg)
(1–2 cases)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

1 **92206T Magnetic tape rack.** Organization means time savings! Our mobile 15-reel capacity storage rack will help you and your people stay organized. Chrome-finished steel rack designed for use with 600-foot, 1200-foot, or 2400-foot tapes in seals. Order today and transform your desk or shelf into an organized data library. Buy three and save.
(1–2 racks)   SAVE WITH
(3+)   QUANTITY DISCOUNTS

92172E Library tape storage rack. Organize your tapes and conserve valuable floor space. Our high-density library tape rack provides time- and space-saving organization of your magnetic tape. Up to 300 of either 600-foot, 1200-foot, or 2400-foot tape reels in seals may be stored in any combination. Spring-loaded rear panel makes retrieval easy and fast. Library racks are preassembled for immmediate use and are extremely well-built for enduring strength and long life.
Exterior dimensions: height 79.5 inches (200cm); width 49.8 inches (127cm); depth 13.2 inches (33cm).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS.

92172D Magnetic tape storage cabinet. The tape hanger bars are designed to accommodate .5-inch industry-compatible magnetic tape in tape seal only. Up to 175 of either 600-foot, 1200-foot, or 2400-foot reels of tape may be stored in any combination. Spring-loaded rear panel makes retrieval easy and fast. Mag tape hanger bars are all pre-installed. (Media pictured is not included in cabinet price.)
Exterior dimensions: height 71 inches (180cm); width 36.1 inches (92cm); depth 18.6 inches (47cm).
   Cabinet and door are both pearl gray. NOTE: Shipped by truck. Shipping weight—224 lbs. (102kg).
(1)   SAVE WITH
(2+)   QUANTITY DISCOUNTS

92172E Library tape storage rack
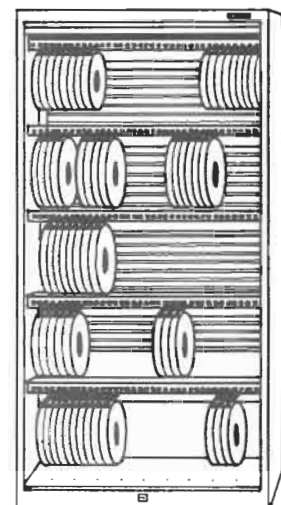
92172D Magnetic tape storage cabinet. See photo, page 71.

Specific HP content

Language and style
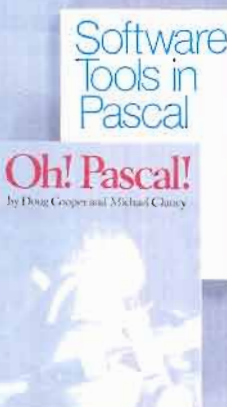
Special books for special interests

We are pleased to offer for your convenience a selection of computer-related books which can be ordered without leaving your desk. These books have been carefully selected for excellence in their subject areas and also provide a selection of topics that should interest many people in different parts of any organization. For easy reference, the titles have been organized into major subject areas.

Specific HP content

Inventions of Opportunity: Matching Technology with Market Needs Introduction by William R. Hewlett/Hewlett-Packard

Learn about HP's most significant technological developments of the last three decades. This book presents selections from the *HP Journal* which, in the opinion of William Hewlett and a panel of HP experts, best illuminate HP's most significant technological contributions to the marketplace.

The introduction by Mr. Hewlett provides rare insights into the dynamics of innovation—where a need, a technology, and creative people come together to produce a successful invention. This handsome volume is clothbound, comes with a dust cover and is more than 350 pages in length.

92233B

Programming in Pascal with Pascal/1000 Peter Grogono/Addison-Wesley 1980

Help yourself get started in programming with Pascal. This book explains the computer programming language Pascal, as described by the DRAFT ANSI Standard and the enhancements to standard Pascal provided by the Hewlett-Packard Pascal/1000 Compiler. Throughout the 10 chapters, each extension to standard Pascal is identified and a separate appendix section summarizes the differences between standard Pascal and HP Pascal/1000. The book assumes no prior knowledge of other programming languages and is written for those who want to write Pascal programs.

92832-90002

Structured FORTRAN 77 Programming with Hewlett-Packard Computers Seymour V. Pollack/Boyd & Fraser 1983

Learn structured FORTRAN 77 programming from the ground up. This book is an effective introductory text for beginners. For those with experience, it provides an orderly presentation of FORTRAN 77 and its effective use. And numerous well-structured examples illustrate the use of key features of this language. All examples and programs have been tested on the HP 1000/9000.

92836-90005

The HP-IL System: An Introductory Guide to the Hewlett-Packard Interface Loop G. Kane. S. Harper and D. Ushijima/Osborne/McGraw-Hill 1982

Use this definitive guide to learn about the new Hewlett-Packard Interface Loop (HP-IL), an eight-bit serial interface designed for small low-cost battery-operable systems. HP-IL makes a new generation of portable systems and peripherals possible by linking programmable calculators such as the HP-41C/CV and the new Series 80 Personal Computers to low-power, low-cost peripheral devices and test equipment.

The first third of the book is an overview of HP-IL. The remainder presents an in-depth description of HP-IL and its inner workings.

92233A

Language and style

Software Tools in Pascal B. Kernighan and P. Plaugher/Addison-Wesley 1981

Writing good programs that make good tools is the subject of this book. This goal is accomplished by presenting a set of programs, each of which provides lessons in design and implementation. The programs are tools that have proved valuable in the production of other programs. They are complete, documented, written in standard Pascal, and tested directly from the text. Top-down design and structured programming are emphasized throughout the book, as are principles of sound design, testing, efficiency and portability. "Software Tools in Pascal" takes a pragmatic approach in that principles of good programming are not treated as abstract sermons. Rather, they are concrete lessons presented in the context of actual working programs.

92234J

An Introduction to Programming & Problem Solving in Pascal M. Schneider, S. Weingardt and D. Perlman/Wiley & Sons 1978

An excellent general introductory book that teaches Pascal by using it as a vehicle to illustrate the fundamentals of programming and good style. Appendices contain the complete syntax of Pascal and a list of all standard Pascal identifiers, along with a description of all functions and operators. A recommended reference tool for Series 200 Pascal users.

09826-90072

Operating systems

Graphics

Professional reference
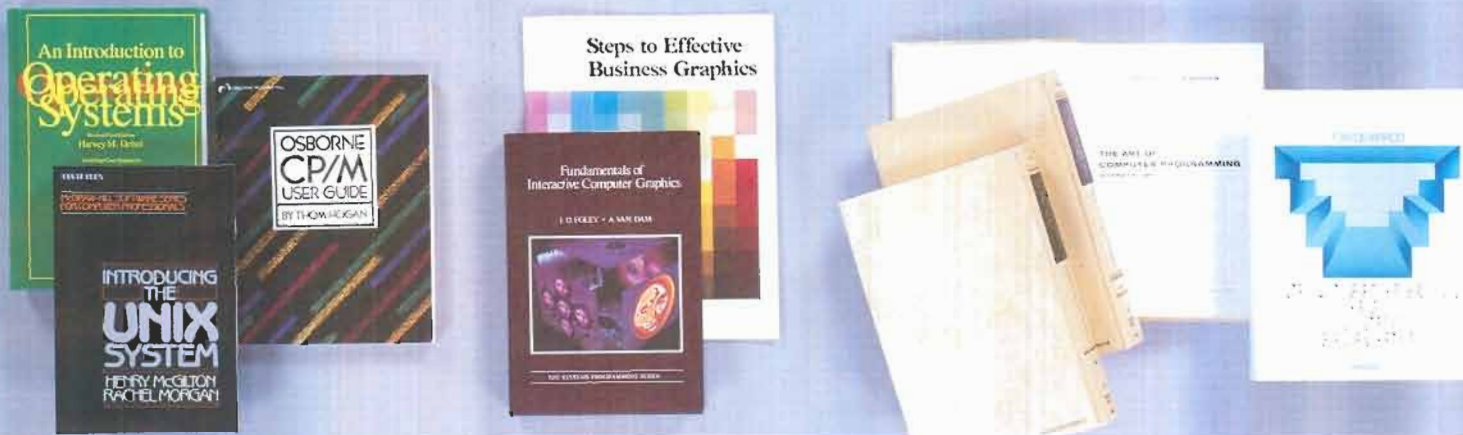
OH! Pascal! D. Cooper and M. Clancy/ Norton 1982

A self-teaching guide offering a clear, nonmathematical introduction to the standard version of Pascal. Detailed enough for independent study. "Oh! Pascal!" emphasizes: general program solving techniques; early discussion of procedures; examples suitable for interactive use—which are then modified for batch; antibugging and debugging sections in each chapter; self-check questions; and chapter tests. See also: the Pascal books in the Personal Computer book section.

92233C

The C Programming Language B. Kernighan and D. Ritchie/Prentice Hall 1978

Learn to program C quickly and easily. This book contains a tutorial section to get you started, separate chapters on each major feature, and a reference manual. Considered "the" book on the C language. See also the UNIX™ System book in the Operating Systems section.

97089-90000

BASIC 2nd Edition R. Albrecht, L. Finkel and J. Brown/Wiley & Sons 1978

Teach yourself BASIC with this step-by-step beginners' guide. Every BASIC command is explained using a short working program and illustrated in a variety of business applications. BASIC varies slightly from computer to computer so consult your machine's reference manual for clarification of these differences.

The BASIC used here is very similar to the Dartmouth version, which can be considered the "common denominator" of most versions of BASIC. For Microsoft™ BASIC (HP Series 100 computers), see the books in the Personal Computer book section.

92233D

Operating systems

An Introduction to Operating Systems H. Deitel/Addison-Wesley. 1983

An up-to-date professional reference covering all the fundamental concepts of operating systems. Major topics include: an introduction and history of operating systems, process management, storage management, processor management, auxiliary software management, system performance, networking and security issues. A final section presents five detailed case studies of major operating systems including UNIX™.

92234K

Introducing UNIX ™ H. McGilton and R. Morgan/McGraw-Hill 1983

This book is both an introduction for beginners, as well as a reference for those with some UNIX™ experience. Beginners will learn to use UNIX™ in a simple fashion and how to gain more information by reading available documentation. Experienced readers will learn how to use some of the more sophisticated features such as the VI editor, nroff, and systems administration.

98680-90025

Osborne CP/M ® User Guide T. Hogan/ Osborne/McGraw-Hill 1981

Written for all levels of expertise, this book introduces the reader to CP/M's function within a microcomputer system as well as the use of built-in and transient commands, assembly language utilities, high-level languages and application programs.

92233Y

Graphics

Steps to Effective Business Graphics B. Matkowski/Hewlett-Packard 1983

A well-illustrated guide to the production of professional business graphics for information, presentation or publications. Clearly written instructions and full color examples lead the reader through all the steps involved in the preparation of effective 35 mm slides, flip charts, overhead transparencies and report graphics. Other topics include audience analysis, effective graphics techniques and selecting a computer graphics system to do the job you need.

5957-6979

Fundamentals of Interactive Computer Graphics J. Foley and A. Van Dam/Addison-Wesley 1982

An excellent presentation of basic graphics concepts and recent advances in graphics hardware and software. A graphics applications program is developed in Pascal, using the new Core System of standard graphics subroutines. The sequence of subjects presented allows you to quickly begin programming projects and then study hardware and software issues in parallel.

Topics include:
- Systems organization, and device technology of raster and vector devices
- Core system-like subroutine package including 2D and 3D viewing, clipping segmentation, interaction handling and device driver structure
- 3D geometrical transformers, projections and bicubic surfaces
- Hierarchical data structures for graphics
- The first comprehensive treatment of color theory practice for computer graphics

92233X

Professional reference

Art of Computer Programming—Volumes I, II & III Donald Knuth/Prentice Hall 1973, 1981 and 1973

These books are known worldwide as "classic" technical references in their subject areas by programmers, system analysts and software developers. They may be purchased as a set or individually to complete your collection.

Volume I: Fundamental Algorithms

A unified, readable and theoretically sound summary of computer programming techniques for information structures. Discusses representation of information inside the computer, and structural interrelationships between data elements and how to deal with them efficiently. Also covers applications to simulation, numerical methods, software design and other factors.

92233S

Volume II: Seminumerical Algorithms

Included here are readable, coherent and up-to-date summaries of the major paradigms and basic theory of seminumerical algorithms.
Topics
Random Numbers: generation, statistical tests, other random quantities, and random sequence.
Arithmetic: positional number systems, floating point arithmetic, multiple precision arithmetic, radix conversion, rational arithmetic, polynomial arithmetic, and manipulation of power series.

92233T

Professional reference

Books for managers

Word processing

Volume III: Sorting and Searching

Though largely self-contained, this is a logical sequel to Volume I. It includes a comprehensive survey of computer techniques for sorting and searching and extends the treatment of data structures, considering both internal and external memories and both large and small databases. See photo previous page.

92233U

Structured Analysis and System Specification
T. Demarco/Prentice Hall 1979

The objective of this best seller is to provide tools and methods for analysts that can bring order to the specification process. You are guided step by step through the development of a structured specification. The test emphasizes: the extensive use of graphics—diagrams of the system; partitioning—i.e., mini specifications; top-down hierarchies—from a broad scope to the detailed; conciseness; iterativeness—elements that stand on their own; systems that are maintained and updatable; and finally the development of paper models-to-be. Numerous examples are given and a detailed case study is included. See photo previous page.

92233J

An Introduction to Database Systems—Vol. I
C. Date/Addison-Wesley 1981

A best seller in the field of relational, hierarchial and network databases. This comprehensive "basic" course is intended as an advanced text or professional reference book. Reasonable knowledge of a modern computer system's capabilities and file-handling features is assumed.

92233W

An Introduction to Database Systems—Vol. II
C. Date/Addison-Wesley 1983

Volume II ties together eight loosely related database topics omitted from Volume I. Included are the following system aspects: recovery, integrity, concurrence and security. Also covered are data models, RM/I, distributed databases and database machines. The reader is expected to have a general knowledge of database system structures, concepts and objectives. Familiarity with the major aspects of the relational model discussed in depth in Volume I is also expected.

92233K

Computer Networks A. Tanenbaum/Prentice Hall 1981

A comprehensive introduction to the expanding field of computer networks. Discusses network architectures and protocols from the physical layer to the application layer, and from local networks to satellite networks. No prior background in computer networks is assumed, though a general familiarity with computer systems and programming is desirable.

92233V

Touring Datacomm: A Data Communications Primer Hewlett-Packard 1983

The Data Communications Primer introduces you to the basic concepts of data communications, beginning with a discussion of simple communications concepts and gradually moving toward more complex topics. Covers hardware and software, transmissions methods and channels, line configurations and interfaces, signal conversion, multiplexing, common carrier services, network structures and capabilities, protocols, and architectures. Designed for readers with little or no previous knowledge of data communications.

5957-4622

Books for managers

Mythical Man-Month F. Brooks/Addison-Wesley 1982

A collection of essays on the management of computer programming projects by an eminent computer expert and project manager. The author passes on valuable lessons learned from experience by combining facts about software engineering with practical approaches to problems.

The central argument is that large programming projects have management problems different from small projects due to division of labor. This book explores the difficulties of preserving the conceptual integrity of the project itself and methods of achieving this goal.

92233L

Psychology of Computer Programming
G. Weinberg/Van Nostrand Rheinhold 1971

Programming is not just a matter of hardware and software. Learn about human psychological factors affecting computer programming that are as important as, if not more important than, the actual hardware. Too often programmers, managers and other people involved with the programming process neglect or discount the fact that programming is a human activity.

92233M

Managing a Programming Project P. Metzger/Prentice Hall 1981

Learn practical approaches to managing a typical, modern computer programming job of any size and complexity. Everything needed to successfully organize and manage a project is discussed as you are guided through a project from start to finish. Topics include the cycle, definition, design, programming, testing, acceptance, installation, and operation. Also, how to construct plans for: outlining, introduction, organization, testing, change control, documentation, training, reviewing, installation and operation.

92233P

Word processing

Writing in the Computer Age: Word Processing Skills and Style for Every Writer
A. Fluegelman and J. Hewes/Anchor Press/Doubleday 1983

A book that demystifies word processing and explains how it can be the ultimate tool in creating and refining your work. Fully illustrated, this step-by-step manual teaches you everything you need to know about word processing. Covers: hardware and software—what they are and what they do; the mechanics of working on word processors; screen and print formatting; setting up, organizing and maintaining file systems; editing techniques; styles and strategies; and much more. An excellent generic book on word processing.

92233N

Personal computers
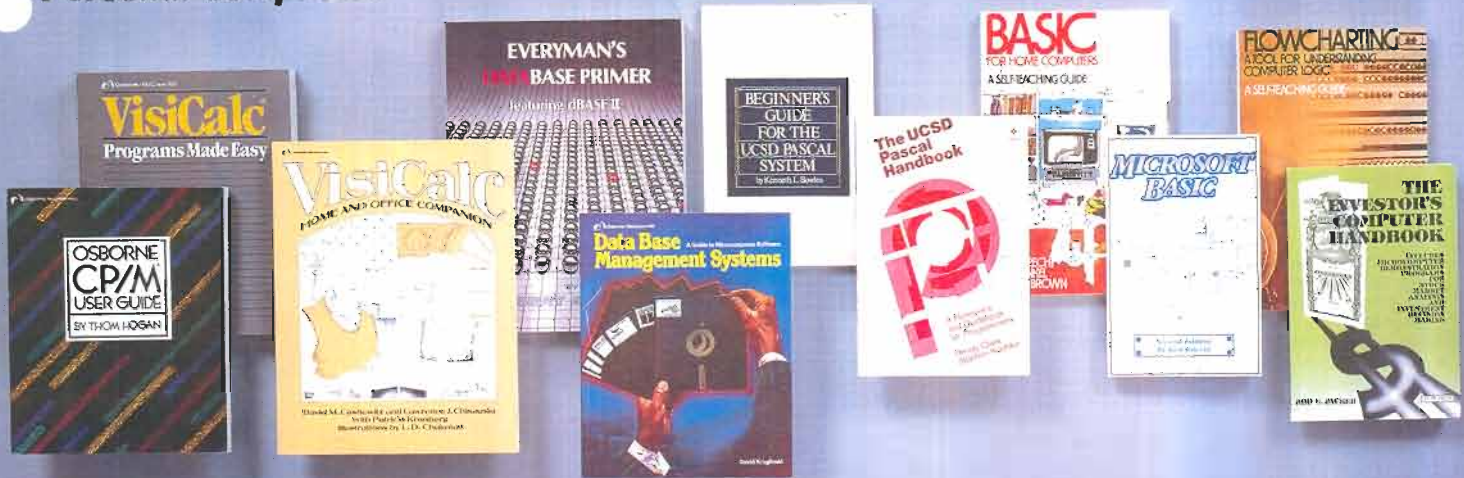
Personal computers

VisiCalc® Programs Made Easy D. Castlewitz/Osborne/McGraw-Hill 1983

A series of easy "hands-on" lessons designed to introduce you to the program's format and its many versatile commands. Numerous exercises and examples allow even first-time users of VisiCalc® to achieve professional results. You begin with the basic skills needed to build and edit a worksheet and move on to advanced uses and special tricks that extend the program's capabilities.

92233Q

VisiCalc®: Home and Office Companion
D. Castlewitz and L. Chisausky with P. Kronberg/Osborne/McGraw-Hill 1982

For beginners and experts. This book contains 50 models beginners can use immediately for personal and business applications. And it is a source of new ideas and techniques for those with experience. Arranged by application, the book provides models for loans and investments, advertising and sales, inventory control, personnel, household aids, and more. Each model includes the VisiCalc® entry grid, a descriptive narrative, and sample printed report.

92233Z

Everyman's Database Primer: Featuring dBASE II R. Byers/Ashton Tate 1982

A "noncomputer" person's reference to relational database management systems on a microcomputer dBASE II™ is the database management system used to illustrate the primer's main points. Hence, the primer is an excellent reference for users or potential users of dBASE II, as well as an excellent introduction to the capabilities of a relational database system on a microcomputer. In this regard, it proceeds, in a well-organized and clearly written fashion, from elementary points of introduction to some reasonably sophisticated concepts and capabilities.

92233R

Database Management Systems: A Guide to Microcomputer Software D. Krugliniski/Osborne/McGraw-Hill 1983

An excellent introduction to databases on microcomputers that also presents information and criteria which will enable you to select a database management system. The author first defines and explains capabilities of the three main categories of database management systems and then examines methods for evaluating commercially available packages. A number of these packages are then examined in detail. Condor Series 20™, dBASE II™, FMS-80™, MDBS III™, Pearl Level 3®, DataStar™ and more.

92234A

Beginner's Guide for the UCSD PASCAL System K. Bowles/McGraw-Hill 1980

Written by the originator of UCSD Pascal, this highly informative book is intended as an orientation guide to those learning to use UCSD p-System. For the novice, this book steps through the p-system bringing the user to a sophisticated level of expertise. The intent is to make it easy to learn the UCSD p-System by working with this book and the computer. Recommended as a reference for HP 86/87 users. Those looking for the many advanced features of the UCSD Pascal System should consider the UCSD Pascal Handbook listed below. See also the Language & Style section for "OH! Pascal!," an excellent self-teaching guide using a general approach to Pascal programming.

92234B

The UCSD Pascal Handbook: A Reference and Guidebook for Programmers R. Clark and S. Koehler/Prentice Hall 1982

Written as a reference for all users of UCSD Pascal, this book attempts to describe UCSD Pascal in the greatest detail feasible. The first part is a definition of the language starting with lexical details, then data types, then syntax and statements, and finally more advanced topics. The second part attempts to teach UCSD Pascal to experienced programmers who have no knowledge of any Pascal dialect. Recommended as a reference for the HP 86/87 user.

92234C

BASIC for Home Computers R. Albrecht, L. Finkel and J. Brown/Wiley & Sons 1978

Learn Microsoft™ BASIC with this step-by-step, self-teaching guide. Microsoft BASIC is a version of BASIC used on HP's Series 100 computers. Written by the same authors of the popular book "BASIC 2nd Edition" (see Language & Style), this book utilizes the same successful style and format. It is suitable for the novice who has never programmed before. Commands are explained using a short working program and then illustrated in a variety of applications. See also. "Microsoft BASIC."

92234D

Microsoft™ BASIC K. Knecht/Dilithium Press 1983

An excellent tutorial on programming in Microsoft BASIC. Its approach is more advanced than "BASIC for Home Computers" and it covers more sophisticated features. Appropriate for a person who already programs in another version of BASIC or in another language. Also appropriate as a follow-up to the previous book.

92234E

Flowcharting—A Tool for Understanding Computer Logic H. Stern/Wiley & Sons 1975

Programming in any language requires an understanding of computer logic, which you can acquire with this step-by-step guide. You construct your own flow charts, and develop your knowledge by comparing your work with established guidelines. No experience required.

92234F

The Investor's Computer Handbook R. Packer/Hayden Books 1982

A valuable guide written to help you manage your investments better with your personal computer. The book, its programs and examples are directed toward the stock market but are easily transferable to other types of dynamic markets and portfolios such as bonds, options, commodities, money markets, etc. The general types of programs explained are portfolio management and trading, research filing and retrieval, chart generation and portfolio maintenance. The demonstration programs are written in Microsoft™ BASIC.

92234G

Note: product names followed by ® or ™ are trademarks of their respective companies. For a complete listing, see page 126.

Self-paced learning courses

Learning COBOL II/3000

This is an entry-level course to teach beginning programmers or programmers who have experience with other languages to write COBOL II programs interactively on the HP 3000 Computer. It has no formal prerequisites but familiarity with basic computer concepts is desirable.

Course Content:
- Simple COBOL programming
- Program variations
- The structure and syntax of COBOL
- Simple arithmetic statements, comments, diagnostics
- Advanced arithmetic and control statements
- Additional data concepts
- All about files
- Applied interactive COBOL

22832A Learning COBOL II/3000. Course materials include: Set of nine audio cassettes (playable on any standard cassette player) with storage binder, one student workbook, one "COBOL II/3000 Reference Manual" and one "Using the HP 3000 Manual." Course completion time is approximately 25 hours.

22832-93001 Learning COBOL II/3000 Student Workbook. Extra workbook for course.

Using Dictionary/3000

This self-paced course is an introduction to Dictionary/3000, HP's data dictionary facility. It does not teach database design but leads you through the steps of defining entries in the data dictionary and of creating and maintaining IMAGE/3000 databases. This course is designed for the non-technical user and is intended for a database administrator or for a programmer acting as a database administrator. Prerequisites for this course are the course "HP 3000, A Guided Tour" (See 22835A) or general knowledge of the HP 3000 gained through experience. Knowledge of IMAGE/3000 is helpful but not necessary for those who will not be designing new databases. Course content:
- Presenting Dictionary/3000
- IMAGE data structures
- Interactive data basics
- Commanding your files
- File security
- Dictionary/3000 utilities

There are system prerequisites for the course. Hardware needed: HP 3000, character or block mode terminal. Software needed: MPE III or IV, IMAGE/3000 and Dictionary/3000.

22843A Using Dictionary/3000 Kit

22843A Using Dictionary/3000. Course materials include a 1600 BPI tape (for data cartridge format, specify option 022), one set of self-paced booklets containing reading material, practice exercises, answers to exercises, and one copy of "Dictionary/3000 Reference Manual." Complete instructions are included for the system manager to install the course on your 3000. Course completion time is approximately 12 hours.

Specify Opt. 022 for data cartridge format.

22843-60001 Self-Paced Booklets. Extra set of booklets for Using Dictionary/3000.

HP 3000: A Guided Tour

22835A HP 3000 Guided Tour Kit

"A Guided Tour" is a self-paced learning course that acquaints you with the range of information handling tools that are directly available on your HP 3000. It is designed for all non-programmers, administrative, clerical, professional people who want to know about and use the HP 3000 Computer System. Course Content:
- General concepts—Operating the terminal, logging on and off, executing a program
- Issuing commands—Commonly used commands discussed, HELP facility and user commands
- File system—Files on the HP 3000: what they are, how they are used and how to access them
- Account structure—Discussion of security/user structure
- Entering data—Application program used to explain data entry functions
- Databases—Discussion of how data is stored after entry and how QUERY can be used to access the data

- Entering text—A brief lesson in EDIT/3000. Introduces you to the idea of using the computer for such common tasks as report generation

There are system prerequisites for the course. Hardware needed: HP 3000, HP terminal which supports V/3000 (block mode). Software needed: MPE date coded 2011 or later. Editor, IMAGE/3000, QUERY/3000 and V/3000.

22835B HP 3000: A Guided Tour. Course materials include a 1600 BPI magnetic tape (for data cartridge format, specify option 022), three sets of self-paced booklets (one terminal per user is required), and complete instructions for the systems manager to install the course on your HP 3000. Course time is approximately seven hours.

Specify Opt. 022 for data cartridge format.

22835-60001 Self-Paced Booklets. Extra set of booklets for "A Guided Tour."

HPSlate Trial

Try out this easy-to-use HP3000 word processing package for a 30-day trial period. The offer includes the HPSlate package, installation instructions and a self-paced training guide which takes you step by step through the system.

For 30 days you get all the benefits of this easy-to-use word processing package especially designed for the casual/infrequent word processor user. Then if you are entirely happy with HPSlate, you can purchase the software ($3000) and still have access to all the documents created during the trial period.

Product Support: The trial program does not require that you purchase an HPSlate software support product from HP. Assistance will be provided via a telephone support service.

Note: HPSlate will run on any HP terminal except the 2621AB, the 2640AB, the 2700 and the 2627. The software will be issued on a 600-foot, 1600 BPI tape.

92180R

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Course Content:
- Getting started—An introduction to Transact/3000
- Using data items
- Rounding out Transact
- Data management overview
- Using IMAGE with Transact
- Using VPLUS with Transact

There are system prerequisites for this course. Hardware: HP 3000, character or block mode terminal for content modules 1 through 5 and a terminal that supports VPLUS/3000 for content module 5. Software: MPE III or IV, Transact/3000, IMAGE 3000 and VPLUS/3000.

22842A Programming in Transact/3000. Course materials include a 1600 BPI tape (for data cartridge format, specify option 022), one set of self-paced booklets containing reading material, practice exercises, answers to the exercises, and one copy of the "Transact/3000 Reference Manual." Complete instructions are included for the system manager to install the course on your HP 3000. Course completion time is approximately 32 hours.

Specify Option 022 for data cartridge format.

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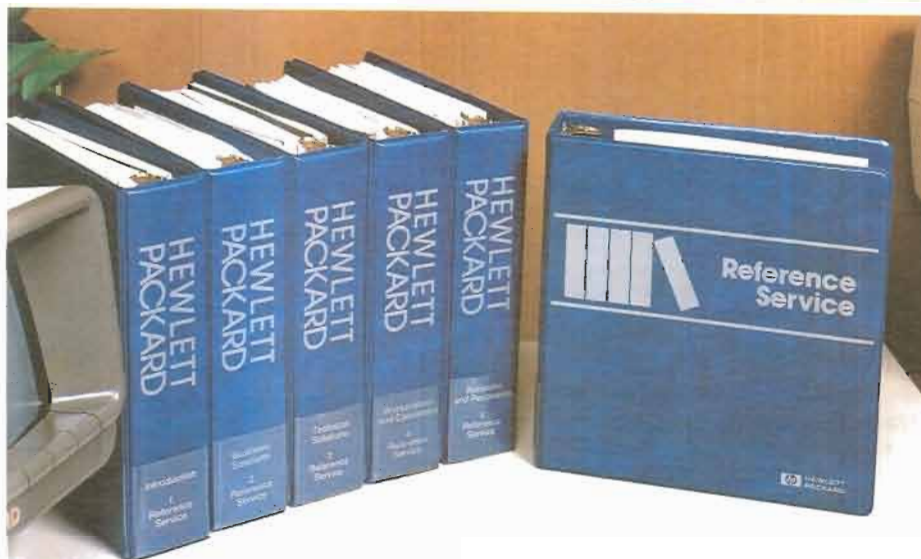
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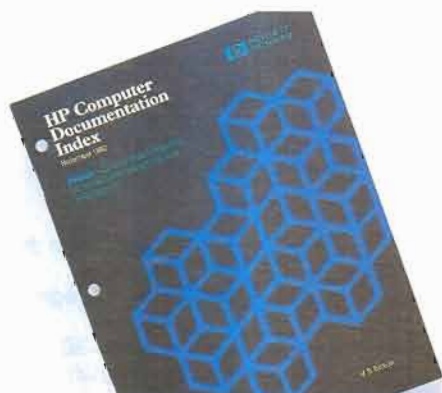
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7976A Operating Manual	07976-90901

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9121D/S Operator's Manual (English)	09121-90000

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