HEWLETT PACKARD

HP 1000 A-Series
Computer Systems

Hardware, Software, Peripherals,
and Support Ordering Guide

Based on April 1, 1989
HP Corporate Price List

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About This Ordering Guide

Configuration Information

This Guide provides information on configuration rules and peripheral device support that includes interface and cable product numbers required for connection. In addition, there are four pages of card cage and interface use records that can be copied and used to keep track of your configuration as you develop it, helping you to avoid exceeding the interfacing capacity of your selected System Processor Unit (SPU) or computer. Additional configuration assistance is provided in the Fourth Edition A-Series Computer Handbook, literature stock number 5954-8591, which provides connection diagrams for the various types of peripheral devices that are supported on HP 1000 A-Series Systems.
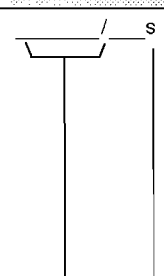
Ordering Information

Pages 17 through 60 give the product numbers and related requirements for HP 1000 Systems and the memory, interfaces, cables, accessories, peripherals, software, and system software support. For details, see the facing Table of Contents.

Price Table Explanation

Where applicable, Supplying Divisions for products are noted in the Price Tables of this guide. Supplying Division is noted immediately beneath the product number, as indicated in the example below.

Display Terminals

Prod.No., Description, & Options	Price/BMMC
HP 700/92 TERMINALS	

C1001A HP 700/92 (amber) Display Ter-
(D700) minal, with:
  – 14-inch display.
  – 8 pages of display memory.
  – 80 or 132 columns x 24 line display.
  – VT220 compatibilty.
  – RS-232C printer port
  – Appropriate Localization Kit, specified from those listed following the C1003G Terminal.
	___/___s

Product Number (Supplying Div.) — Name and Description (and Requirements if applicable)

Space for List Price

Monthly Maintenance Charge (SMMC in this case)

New Products in This Guide

H2005A HP TeamLine Software Support.

H2006A HP ResponseLine Software Support.

H2007A HP BasicLine Software Support.

H2008A Operating System Update materials.

H2009A Software Product Update materials.

2277A DeskJet Plus Printer.

2342A HP Baseband LAN 8-Port Terminal Server.

3082B Industrial Terminal.

9145A 32-track Cartridge Tape Subsystem.

91780A ARPA/1000 Networking Software.

9262B 152 MB Removable Winchester Disk Drive.

9263B 304 MB Removable Winchester Disk Drive.

97902B Additional 152 MB Removable Disk for installation in 9262B or 9263B.

97903B Additional 304 MB Removable Disk for installation in 9262B or 9263B.

Products Deleted from This Guide

7957A and 7958A Disks (discontinued).

Previous software support products, except for Communications Interface Firmware Support (replaced by new support products).

Configuration Rules

Base Requirements

HP 1000 A-Series Computer Systems, like most other computer systems, require:

1. Operating software.
2. System communications console.
3. A bootup device.

Operating Software

Computers are designed to execute programmed instructions (software), without which they are no more than inert assemblies of hardware parts. The operating software (or operating system) is the basic software used in a computer system. It manages input/output with peripheral devices, carries out user's program scheduling commands or program requests, manages main memory and disk memory files, and performs other operations that may be required to support the overall functioning of the computer system. The operating system for HP 1000 A-Series computers is the RTE-A Real-Time Executive system (see Figure 1). RTE-A is a time and event scheduled,

modular, multi-user, multiprogramming system that can be configured for either memory-based or disk-based operation. For details, see the RTE Operating Systems, RTE-A, and VC + data sheets in the A-Series Computer Handbook, 5954-8591 or a later revision.

HP 1000 A-Series System Processor Units all include an A-Series computer, RTE-A primary system with VC +. and all relocatable modules that are required for generation of other RTE-A system configurations. The software is available on several types of media. The customer can configure memory or disc based systems for single or multiuser applications.

HP 1000 A400 and A600 + Box Computers include rights-to-execute configured RTE-A based systems, excluding the right to develop programs or generate other systems. Customers who want to develop programs or generate systems must purchase the RTE-A (software and manuals) product for their first computer and rights to copy that software to additional computers. Rights to execute RTE-A must be purchased separately for HP 1000 A700 and A900 box computers and A-Series Board Computers.
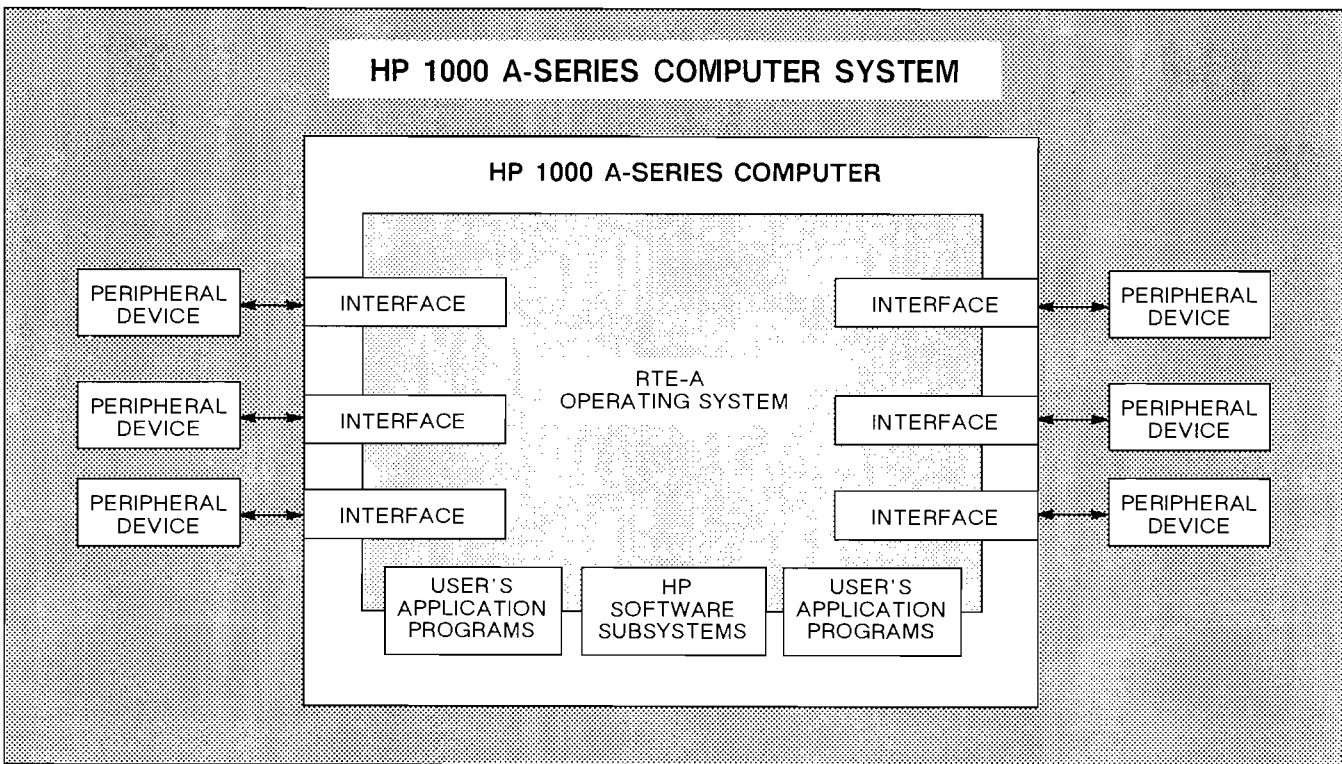
Figure 1. HP 1000 A-Series Computer System, Simplified Functional Diagram

A System Communications Console

HP 1000 A-Series Computer Systems have a ROM-based Virtual Control Panel (VCP) program. As its name suggests, the VCP enables an operator to perform control functions via a local or remote connected display terminal or a display terminal at an adjacent HP 1000 Computer System. The operator uses the

VCP terminal to initiate self test, select a bootstrap loader, and initiate the boot-up of an RTE- A operating system. A display terminal functioning as a VCP terminal is thus a basic requirement for operation of an HP 1000 A-Series system. Figure 2 shows how system communications support can be provided for HP 1000 A-Series Computer Systems.

HP 1000 A-Series System Processor Units all require an interface to a **local** system console. Both the interface and the console are required for system operation. The A400 computers include an integral 4-port multiplexer, so separate purchase of a console interface is not needed with A400 System Processor Units.

HP 1000 A-Series Box Computers and Board Computers offer the customer maximum configuration flexibility. The customer can use a computer-to-computer communications interface for VCP communication via a terminal at a remote HP 1000 Computer System or a via local system console interface.
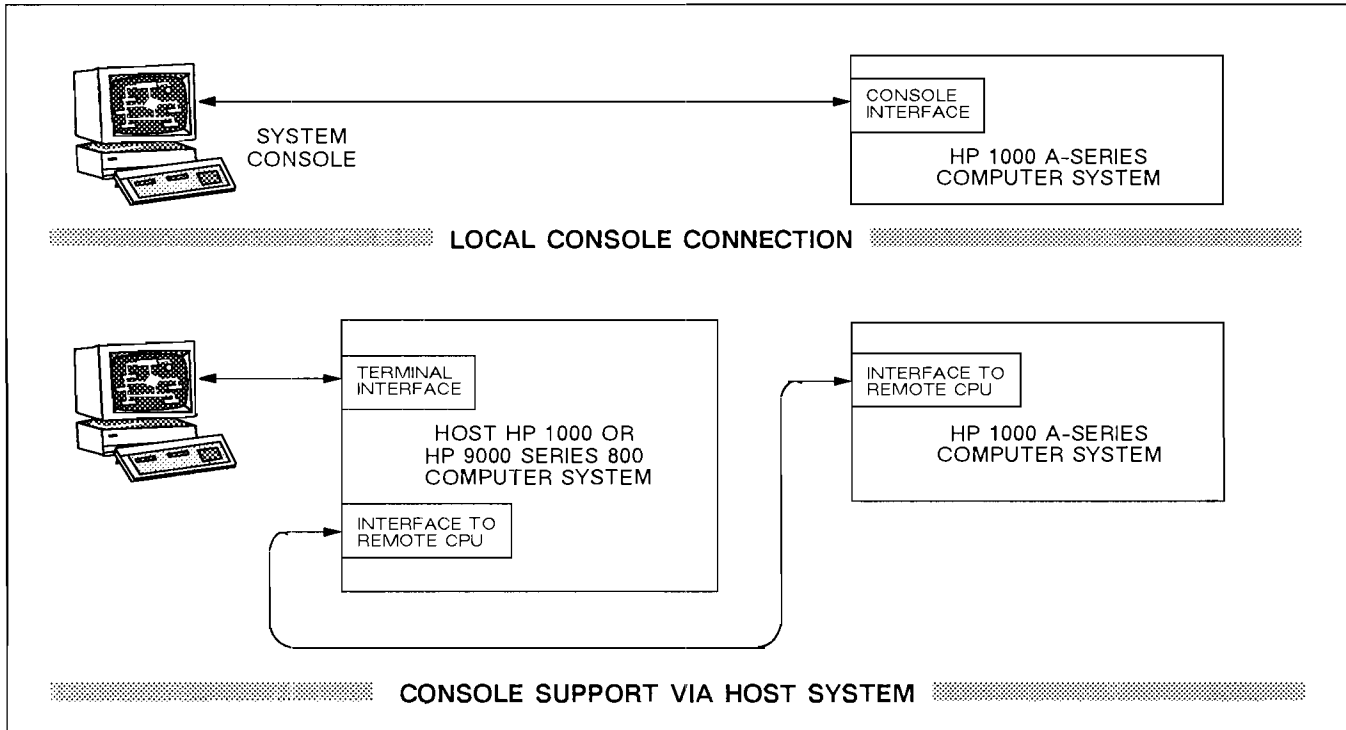
Figure 2. System Communications Support in HP 1000 A-Series Computer Systems

A Bootup Device

In addition to the system console that is used to command boot-up of the system, HP 1000 A-Series Computer Systems require a boot-up device. This device is usually the system disk, which also requires, and may incorporate, a flexible disk, cartridge tape, or magnetic tape drive for software installation. Figure 3 shows how system disk support can be provided for HP 1000 A-Series Computer Systems.

HP 1000 A-Series System Processor Units (SPUs) include an interface to a local system disk, which is thus the required boot-up device for system operation.

The system disk is required for program development and the generation of RTE-A system configurations other than the primary system which is supplied with HP 1000 A-Series SPUs. The cartridge tape, magnetic tape, or flexible disk drive associated with the the system disk supports the installation and backup of the RTE-A operating system and other software.

The SPU provides the basis of an HP 1000 System that can be used to develop application programs and generate configurations for target systems. The target systems can be disk based, like the SPU, or memory based configurations assembled from box computers or board computers.

HP 1000 A-Series Box Computers and Board Computers do not include a system disk interface, leaving the customer maximum configuration flexibility. Since the RTE-A operating system can be configured for memory based operation, the boot-up device for box computers and board computers does **not** have to be a local system disk. Instead, systems based on box computers and board computers can also be booted up from any of the following other sources:

1. An adjacent HP 1000 System in a DS/1000-IV network via a point-to-point network interface.
2. A magnetic tape unit via an HP-IB (disk) interface.
3. A PROM Storage Module(s).
4. An RS-232/422/423 Link (A400 only) or a 12005B Asynchronous Serial Interface.
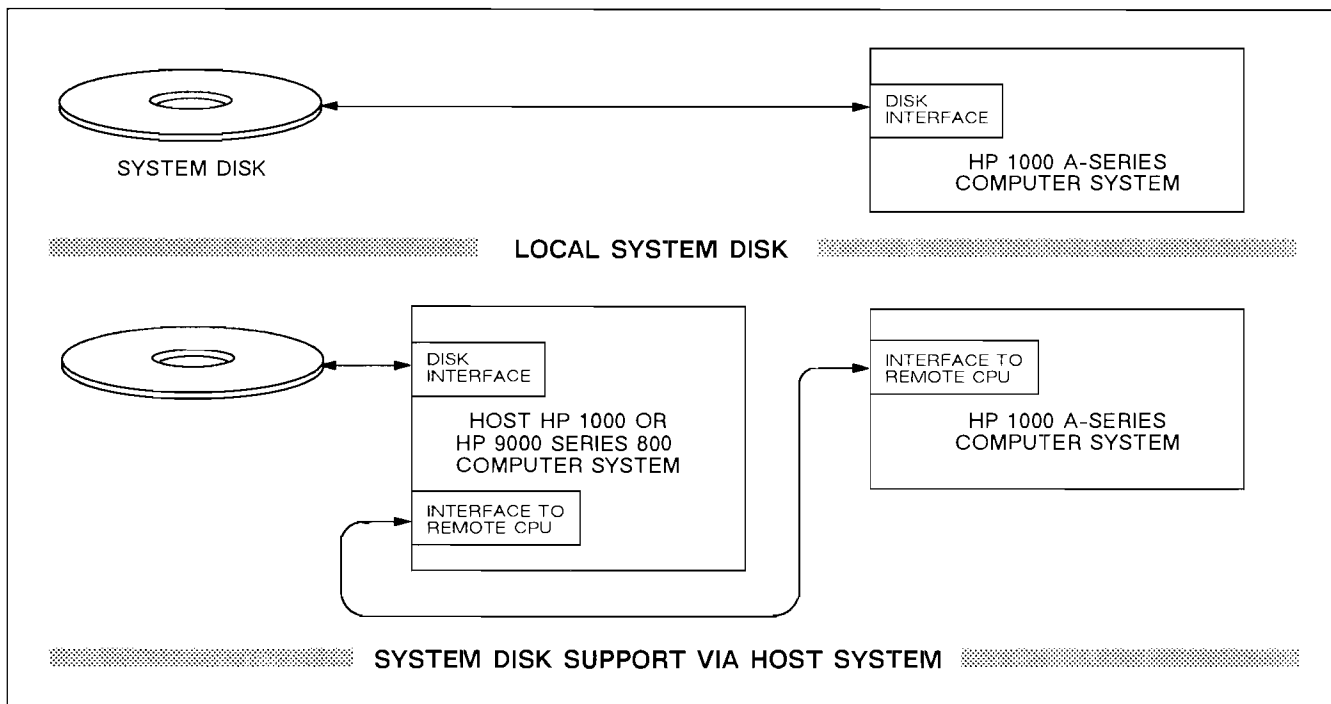
Figure 3. System Disk Support in HP 1000 A-Series Computer Systems

Supportability Definitions

Supported

A device or configuration that has been tested. HP guarantees its performance, quality, and reliability in accordance with published specifications.

Unsupported

A device or configuration that has NOT been tested by HP. Although it may function, HP does not guarantees its performance, quality, and reliability. Use of an unsupported configuration and any adverse consequence arising from such use is solely the customer's responsibility.

Not Recommended

A device or configuration that has been tested by HP and HP will guarantee its quality and reliability. However, performance is application dependent and therefore may not meet all customer's expectations.

General Rules

Memory

Main and disk memory must be sufficient to satisfy the memory requirements of the operating system, all additional Hewlett-Packard software, and anticipated requirements for user-developed applications.

Tested Peripheral Devices

Only the peripheral devices listed on pages 11 and 12 of this Ordering Guide are supported by Hewlett-Packard for use with HP 1000 A-Series Systems. These devices have been tested for correct functioning when interfaced as indicated and when used in accordance with the configuration rules in this section. As appropriate, they have also been qualified for safety under UL, CSA, and IEC standards and have been checked to assure that they meet U.S. and German regulatory requirements for Electro-Magnetic Interference (EMI). Other devices, including new Hewlett-Packard terminals, printers, disks, etc., or older discontinued ones may be functionally compatible and usable, but until they have been tested and appear in the Ordering Guide, along with appropriate interface and use recommendations, they are **NOT SUPPORTED** for use on HP 1000 A-Series Systems. Such use and any adverse consequence arising from it is solely the customer's responsibility.

Maximum I/O Channels

Effective with RTE-A revision 2440, a maximum of 48 I/O interfaces is supported in A-Series computers and I/O Extenders. However, the number of usable devices is limited by RTE-A system table space.

Card Cage Capacity

The computer must provide enough card cage slots to house the CPU card(s), all required memory cards, and all interfaces and any other plug-ins that use card cage slots, with the addition of an I/O Extender if necessary.

Rear Doors

The rear doors must be installed on all packages to support proper cooling and to avoid damage to the installed cards from excessive heat buildup.

I/O Extender Exclusions

All disk interfaces must be installed in the computer card cage. Disk interfacing is **NOT** supported in the I/O Extender.The battery backup card and the control store cards are **NOT** supported in the I/O Extender.

Maximum Number of Magnetic Tape Units per System

Two (2). No more than two magnetic tape units are supported per HP 1000 A-Series System This applies only to magnetic tape units, **NOT** cartridge tape units.

HP-IB Configuration Rules

High Speed and Normal Speed Devices Can't Be Used Together on the Same HP–IB Interface. IEEE Standard 488-1978 identifies two modes of operation for the bus. The two modes allow designers to trade design complexity for bus speed. The Normal Speed mode offers maximum flexibility, lowest cost design, and longest cable lengths at a bus speed to 500 KB/second. The High Speed mode supports data rates to 1 MB/second, subject to the conditions noted in the next paragraph.

The following conditions must be met for High Speed mode operation:

1. All devices expected to talk need a 350 ns T1 data settling time.
2. High speed devices must use 48 milliampere tri-state line drivers.
3. Capacitive load on any lead except REN or IFC must be less than 50 picofarads.
4. All devices in the system must be powered on.
5. Cable length is limited to 1 meter per device load (a total maximum of 15 meters).

IEEE Standard 488-1978 warns "WARNING: Anytime a device following condition 1 is placed on a system, even if higher speed is not intended, there may be data transfer errors if conditions 2 through 5 are not met for that system." If conditions 2 through 5 are not met, the talker cannot guarantee that the data has settled before it asserts DAV (DAta Valid). This error mechanism is likely to be a problem in systems with longer cable length.

NOTE: Speeds of HP-IB devices are indicated in the tables in the Peripheral Device Support section, pages 11 and 12.

Customer needs have generated specific peripheral configurations that do not completely conform to the aforementioned requirements. Extensive field testing has been conducted on these systems to ensure satisfactory performance and supportability.

These systems have stringent requirements that **MUST** be followed to guarantee reliability and quality.

The system requirements for various peripheral configurations are listed in the remaining paragraphs of this section. Any violation of these requirements will result in a system for which HP cannot guarantee reliable operation. Such systems will **NOT** be supported.

Basic HP-IB Capacity: fourteen (14) Normal Speed devices per 12009A interface or eight (8) High Speed devices per 12009A interface.

A Maximum of Four (4) disks and/or Cartridge Tape Units per 12009A interface is supported because of the electrical loading of the HP-IB bus drivers by the disks, EXCEPT for the 12122A Integrated Disks. (The 12122A Integrated Disks use their own exclusive 12009A interface and no other disks or connections are supported from that interface.) *For most satisfactory performance,* the disks and cartridge tape units should be the only devices connected to their HP-IB interface. The HP-IB interface must be set to High Speed, the load resistors must be installed, and the cable length must be limited to 1 meter per device load for a maximum 12 meter cable length (7 resistors + 1 12009A card + 4 devices = 12 loads).

A Maximum of Two (2) Magnetic Tape Units per 12009A interface is supported because of the electrical loading of the HP-IB bus drivers by the tape units. For a 7970E* Magnetic Unit, the HP-IB interface must be set to Normal Speed. For a 7974A*, 7978B*, 7979A, 7980A, or 7980XC Magnetic Tape Unit, the HP-IB interface must be set to High Speed, the load resistors must be installed, and the cable length must be limited to 1 meter per device load for a maximum 10 meter cable length (7 resistors + 1 12009A card + 2 devices = 10 loads).

* Discontinued product, listed for reference.

Configuration Rules, continued

Magnetic Tape Unit on Same Bus as Disks or Cartridge Tape Units (NOT RECOMMENDED).

If an HP 7974A, 7978B, 7979A, 7980A, or 7980XC (high speed) Magnetic Tape Unit is on the same bus as disks and/or cartridge tape units, the following three rules must be followed:

1. The 12009A interface must be set to high speed.
2. The load resistor pack must be installed in the high speed position on the 12009A interface.
3. The total cable length must not exceed 8 meters.

Otherwise, NO other device is supportable on the same 12009A HP-IB interface as a magnetic tape unit. *For most satisfactory performance,* magnetic tape units should be connected via their own 12009A HP-IB interface and disks and/or cartridge tape units should be connected via their own 12009A HP-IB interfaces.

HP-IB Extender Exclusion. Disks, magnetic tape units, and cartridge tape units are **NOT** supported via the 37203A (discontinued) or 37204A HP-IB Extender.

A Maximum of Two (2) HP 256xA/B Line Printers per 12009A interface is supported because of the electrical loading of the HP-IB bus drivers by the line printers. *No other device is supportable on the same 12009A HP-IB interface as one or two HP 256xA/B Line Printers.*

For other HP-IB Printers, a Maximum of Eight (8) Printers is supported per 12009A interface.

A Maximum of Fourteen (14) HP-IB Instruments or Plotters is supported on the 12009A interface with the card configured in the Normal Speed mode. *For most satisfactory performance,* plotters should be connected via their own 12009A interface and instruments via their own 12009A interface.

Processor/Interface Specific Rules

CPU, Memory, and Control Store Frontplane Connections in the Micro/1000 Package

Frontplane connections require that the CPU, memory, and control store cards all be adjacent to each other in the card cage. In the Micro/1000 package, which has a maximum of seven adjacent card cage slots, as shown below, this configuration rule limits the maximum number of memory array cards that can be used in a Micro 27 or Micro 29 computer or SPU. The Micro 27 and Micro 29 computers and SPUs require four (4) slots for CPU and memory controller cards. Three (3) memory array and control store cards can be used in a Micro 27. Two (2) memory array cards and one (1) control store card can be used in a Micro 29. (The two sections of the Micro/1000 card cage provide a total of 14 slots.)

Micro 2x Card Cage — CPU and memory cards install on this side

Battery Backup (BBU) Cd	25 kHz Sine Wave Card

25 kHz AC Supply for 1206xA/B Interfaces

The HP 12060B, 12061A, 12062A, and 12063A Analog and Digital I/O Interface cards all require 25 kHz AC from the computer power supply. Internally these interfaces convert the 25 kHz AC supply to isolated DC, which makes possible the isolation of inputs from outputs for maximum noise immunity. 25 kHz power ready for direct use by these interfaces is provided by the power supply in the HP 213xA/B and HP 2156C/D 20-slot Computers and the HP 219xG/H SPUs that incorporate those computers. An additional HP 12159A 25 kHz Sine Wave Card is required for filtering of 25 kHz power in HP 243xA/B/G/H and HP 248xA/B/G/H Micro/1000 Computers and SPUs. The HP 242xA/G/H 6-slot Computers do **NOT** have 25 kHz ac power supply available.

Peripheral Device Support

Only the peripherals listed in this HP 1000 A-Series Peripheral Device Support section are supported for use with HP 1000 A-Series Systems, effective with RTE-A revision 5.1. Use must comply with the configuration rules in the previous section. The devices listed here have been tested for correct functioning when interfaced as indicated and, where applicable, have also been qualified for safety under UL, CSA, and IEC standards and have been checked to assure that they meet U.S. and German regulatory requirements for Electro-Magnetic Interference (EMI). Currently-available peripherals are listed in **boldface** type. Discontinued peripherals are listed in lighter type with their names tagged with an asterisk (*).

Other devices, including new HP terminals, printers, disks, etc., or older discontinued ones may be functionally compatible and usable, but until they have been tested and appear in this section, along with appropriate interface and use recommendations, they are NOT supported for use on HP 1000 A-Series Systems. Such use and any adverse consequence arising from it is solely the customer's responsibility.

System Console and Additional Terminals

Product Number and Name		Connects to system via	
		12040D or A400 Mpxer and	12005B w/Cable Option
C1001x‡	700/92 Dis. Terminal	40242M cable (40242Y cable for A400 mpxer)	002
C1003x‡	700/41 Terminal†		
2393A	Graphics Terminal		
2397A	Color Graphics Terminal		
72425A☆	Vectra Model 25 PC*	24542M cable	Not supported
72445A☆	Vectra Model 45 PC*		
2382A	Office Display Terminal*	40242M cable (40242Y cable for A400 mpxer)	
2392A	Display Terminal*		
2621B	Display Terminal*		
2625A	Dual Syst Terminal*		
2628A	Word Processing Terminal*		
45610B	Touchscreen Terminal*		
2622A	Display Terminal*	13222Y cable	001 or 005
2623A	Graphics Terminal*		
2624B	Display Terminal*		
2626A	Display Station*		
2627A	Color Graphics Ter.*		

‡ C1001x can be C1001A/G/W (Amber/Green/White background display); C1003x can be C1003A/G.

† C1003x is a DUMB terminal that is NOT usable as a system console. It does not support "CI stack" or Edit/1000 screen mode. Users must write their own device driver for the C1003x terminal.

☆ 724x5A Vectra PC requires AdvanceLink software, monitor, video adapter, serial or serial/parallel interface, and Vectra disk operating system for operation.

Disks

Product Number and Name or Type		Connects via interface product no.	Support Code
12122A	Integrated 20 MB Fixed and 270 kB Microfloppy Disks	Includes 12009A	B, L
7936H	307 MB Fixed Disk	12009A (Fast)	B ☆
7936XP	307 MB Fixed Disk with Cache	12009A (Fast)	B ☆
7937H	571 MB Fixed Disk	12009A (Fast)	B ☆
7937XP	571 MB Fixed Disk with cache	12009A (Fast)	B ☆
7957B	81 MB Fixed Disk	12009A (Fast)	B ☆
7958B	152 MB Fixed Disk	12009A (Fast)	B ☆
7959B	304 MB Fixed Disk	12009A (Fast)	B ☆
7962B	152 MB Fixed Disk	12009A (Fast)	B ☆
7963B	304 MB Fixed Disk	12009A (Fast)	B ☆
9122C	Dual 2 MB Micro-floppy Disk	12009A (Nor)	P
9153C	20/40 MB Winchester Disk+2 MB Flex Disk	12009A (Nor)	B, L
9262B	152 MB Rem. Disk	12009A (Fast)	B ☆
9263B	304 MB Rem. Disk	12009A (Fast)	B ☆
7907A	41 MB Fixed and Removable Disks*	12009A (Fast)	B ☆
7911P/R	28 MB Fixed w/CTU*	12009A (Fast)	B, L
7912P/R	65 MB Fixed w/CTU*	12009A (Fast)	B, L
7914P/R	131 MB Fixed w/CTU*	12009A (Fast)	B, L
7914CT	131 MB Fixed w/CTU*	12009A (Fast)	B, L
7914TD	131 MB Fixed Disk with 1600 cpi MTU*	12009A †	B, L
7914ST	131 MB Fixed Disk with 1600 cpi MTU*	12009A (Fast)	B, L
7933H	404 MB Fixed Disk*	12009A (Fast)	B ☆
7933XP	404 MB Fixed Disk with Cache*	12009A (Fast)	B ☆
7935H	404 MB Removable Media Disk*	12009A (Fast)	B ☆
7935XP	404 MB Removable Media Disk w/Cache*	12009A (Fast)	B ☆
7941A	23 MB Fixed Disk*	12009A (Fast)	B ☆
7942A	23 MB Fixed w/CTU*	12009A (Fast)	B, L
7945A	55 MB Fixed Disk*	12009A (Fast)	B ☆
7946A	55 MB Fixed w/CTU*	12009A (Fast)	B, L
7957A	81 MB Fixed Disk*	12009A (Fast)	B ☆
7958A	130 MB Fixed Disk*	12009A (Fast)	B ☆
9895A	2.3 MB Dual Flexible Disk Drive*	12009A (Nor)	P
7906M	19.6 MB MAC Master Cartridge Disk*	12009A‡(Fast)	P
7920M	50 MB MAC Master*	12009A‡(Fast)	P
7925M	120 MB MAC Master*	12009A‡(Fast)	P

Support Codes: B = Boot device   L = Load Device
                P = Usable only as peripheral disk

☆ Requires a separate 1600 cpi Magnetic Tape Unit or Cartridge Tape Subsystem for software installation and/or backup.

† The 7914TD requires a Fast 12009A interface to the Disk, a Normal 12009A interface to the MTU.

‡ The 7906M, 7920M, or 7925M Disk also requires a 12745D HP-IB Adapter* in its disk controller.

Magnetic Tape Units (MTUs) and Cartridge Tape Subsystems

Product Number and Name		Connects via interface product no.	Support Code
7979A	Autoloading 1600 cpi◆ MTU	12009A (Fast)	B, L
7980A	Autoloading 1600/6250 cpi◆ MTU	12009A (Fast)	B, L
7980XC	Autoloading 1600/6250 cpi◆ MTU w/data compression	12009A (Fast)	B, L
35401A	Autochanger Cartridge Tape S/S	12009A (Fast)	B, L
9144A	Cartridge Tape S/S	12009A (Fast)	B, L
9145A	Cartridge Tape S/S	12009A (Fast)	B, L
7974A	1600 cpi◆ MTU*	12009A (Fast)	B. L
7978B	6250/1600 cpi MTU*	12009A (Fast)	B. L
7970E†	1600 cpi MTU*	12009A (Nor)	B. L
7971A‡	1600 cpi MTU*	12009A (Nor)	B. L

Support Codes: B = Boot device L = Load Device

◆ *7979A, 7980A, or 7974A Option 800, which adds 800 cpi capability, is also supported.*

* *Identifies discontinued MTU, listed here for reference only. Currently marketed MTUs and interfaces supported on the HP 1000 A-Series are listed in **boldface**.*

† *7970E requires interface option 626 or 636.*

‡ *7971A requires interface option 140.*

Currently Marketed Printers

Product Number and Name		Connects to system via Interface+Cable
2225D	150 cps ThinkJet	12040D◆+13242N
2227A	160 cps QuietJet Plus	
2228A	160 cps QuietJet	
2276A	240 cps DeskJet	
2277A	240 cps DeskJet Plus	
2563B+049	300 LPM Line Printer	12040D◆+92219G
2564B+049	600 LPM Line Printer	
2566B+049	750 LPM Line Printer	
2235B	480 cps RuggedWriter	
2934A	200 cps Office Printer	
2684D	LaserJet/2000 Printer	12040D◆+40242M
33440A	LaserJet II Printer	
3630A+001	167 cps PaintJet	
2563B+214	300 LPM Line Printer	12009A (Normal) (supports two 256xB Opt 214 printers; second printer will require a 10833C cable)
2564B+214	600 LPM Line Printer	
2566B+214	880 LPM Line Printer	
2235B	480 cps RuggedWriter	12009A (Normal) (+10883x cable for 2nd through 8th device on the HP-IB bus)
2934A+046	200 cps Office Printer	

◆ *12040D supports up to 8 devices, each requiring its own cable*

Discontinued Printers*

Product Number and Name		Connects to system via Interface+Cable
2563A+049	300 LPM Line Printer*	12040D◆+92219G
2565A+049	600 LPM Line Printer*	
2566A+049	750 LPM Line Printer*	
2932A	200 cps G. P. Printer*	
2686A	LaserJet Printer*	12040D◆+13242N
2686A+300	LaserJet Plus Printer*	
2563A+214	300 LPM Line Printer*	12009A (Normal) (supports two 256xA or 2608SR option 214 printers; second printer will require a 10833C cable)
2565A+214	600 LPM Line Printer*	
2566A+214	880 LPM Line Printer*	
2608SR+214	400 LPM Line Printer*	
2671A/G	120 cps Thermal Printer*	12009A (Normal) (+10833x cable for 2nd through 8th device on the HP-IB bus)
2673A	120 cps Intelligent Graphics Printer*	
2932A+046	200 cps G. P. Printer*	
82906A	160 cps ImpactPrinter*	

* *Discontinued printer are listed here for reference only.*

◆ *12040D supports up to 8 devices, each requiring its own cable.*

Plotters and Graphics Tablet

Product Number and Name		Connects to system via Interface+Cable
7440A+001	ColorPro Plotter	12040D◆+13242N
7475A+001	Graphics Plotter	
7570A	DraftPro Plotter	
7595A	DraftMaster Plotter	
7596A	DraftMaster Plotter	
7550A	Graphics Plotter	12040D◆+17355D
7440A+002	ColorPro Plotter	12009A (Normal) (+10833x cable for 2nd through 8th device on the HP-IB bus)
7475A+002	Graphics Plotter	
7550A	Graphics Plotter	
7570A+17570A	DraftPro Plotter	
7470A+001	Graphics Plotter*	12040D◆+13242N
7580A/B+060	Drafting Plotter*	
7585A/B+060	Drafting Plotter*	
7586A/B+060	Drafting Plotter*	
7510A	Film Recorder*	12040D◆+17355D
7470A+002	Graphics Plotter*	12009A (Normal) (+10833x cable for 2nd through 8th device on the HP-IB bus)
7580A/B+060	Drafting Plotter*	
7585A/B+060	Drafting Plotter*	
7586A/B+060	Drafting Plotter*	
9111A+100	Graphics Tablet*	

◆ *12040D supports up to 8 devices, each requiring its own cable.*

* *Identifies discontinued product, listed here for reference only. Currently marketed plotters and interfaces supported on the HP 1000 A-Series are listed in **boldface**.*

Card Cage/Interface Use Records

A400/A600+ COMPUTER CARD CAGE RECORD:

Please make a copy of this page and use the copy to keep track of your configuration as you select it. Enter CPU, memory, and I/O Cards by product number in the appropriate card cage for your system as items are ordered. Identify mulltiplexer interfaces as 12040D-1, –2, etc. and HP-IB interfaces as 12009A-D1, -D2, –M1, –P1, –G1, etc., for keying with the use records on page 15.

A400 SPU and Computers

- SPU includes the 12100A CPU card with 512 kB Parity Memory and a four-port multiplexer and a 12009A HP-IB interface card to disk.
- Computer includes only the 12100A CPU card.
- Additional memory cards (4, max.) go above or to the right of the CPU card, I/O interfaces to the left of the CPU card.
- I/O Extender is **NOT** supported with A400 SPUs or Computers.

Micro 14 Computer

Model 24 Computer

CPU and memory cards install on this side

Micro 24 SPU or Computer

Battery Backup (BBU) Cd	25 kHz Sine Wave Card

A600+ SPUs and Computers

- SPU includes the 12105-60001 CPU card, a 12102B Memory Controller with 512 kB Parity Memory or a 12110B Memory Controller with 1 MB ECC Memory, and a 12009A HP-IB interface card to disk. It requires a system console interface card.
- Computer includes only the 12105-60001 CPU card and 12102B Memory Controller with 512 kB Parity Memory or 12110B Memory Controller with 1 MB ECC Memory.
- Additional memory cards (4, max.) go above or to the right of the CPU card, I/O interfaces to the left of the CPU card.

Micro 16 Computer

Model 26 SPU or Computer

CPU and memory cards install on this side

Micro 26 SPU or Computer

Battery Backup (BBU) Cd	25 kHz Sine Wave Card

A700/A900 COMPUTER CARD CAGE RECORD:

Please make a copy of this page and use the copy to keep track of your configuration as you select it. Enter CPU, memory, WCS/PCS, and I/O Cards by product number in the appropriate card cage for your system as items are ordered. Identify mulltiplexer interfaces as 12040D-1, -2, etc. and HP-IB interfaces as 12009A-D1, -D2, -M1, -P1, -G1, etc., for keying with the use records on page 15.

A700 SPUS and Computers

- SPU includes a three-card CPU (including floating point processor), a memory controller card, and a 12009A HP-IB interface card to disk. It requires a parity or ECC memory card and a system console interface card.
- Computer includes only the three-card CPU (including floating point processor) and memory controller card. It requires a parity or ECC memory card.
- Memory cards (4, max.) go above or to the right of the CPU card, WCS/PCS and I/O interfaces to the left of, or below the CPU card.

Model 27 SPU or Computer

CPU and memory cards install on this side

Micro 27 SPU or Computer

Battery Backup (BBU) Cd	25 kHz Sine Wave Card

A900 SPUs and Computers

- SPU includes a three-card CPU (including floating point processor), a memory controller card, and a 12009A HP-IB interface card to disk. It requires an ECC memory card and a system console interface card.
- Computer includes only the three-card CPU (including floating point processor) and memory controller card. It requires an ECC memory card.
- WCS card (or an interface card installs in the uppermost or right-most slot, with the CPU cards immediately to the left.
- Memory cards (4, max.) go below or to the left of the CPU card, followed by I/O interfaces farther below or to the left.

Model 29 SPU or Computer

CPU and memory cards install on this side

Micro 29 SPU or Computer

Battery Backup (BBU) Cd	25 kHz Sine Wave Card

MULTIPLEXER AND HP-IB INTERFACE USE RECORD:

Please make a copy of this page and use the copy to help you keep track of interface usage. As each multiplexer and/or HP-IB interface is ordered, check by its title and enter the product numbers of each of the devices it interfaces and the cable used for connection of that device. In this way you will be able to continuously keep track of how many more devices can be connected by the multiplexers and HP-IB interfaces you've ordered, and thereby determine if and when you have to order the next multiplexer or HP-IB interface. Make an additional copy of this page if you don't have enough space here.

12100A On-Board I/O Multiplexer

Device P/N	Cable P/N

12040D Multiplexer No. 1

Device P/N	Cable P/N

12040D Multiplexer No. 2

Device P/N	Cable P/N

12040D Multiplexer No. 3

Device P/N	Cable P/N

12009A HP-IB Interface No. D1 for Disks and CTUs

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. D2 for Disks and CTUs

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. D3 for Disks and CTUs

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. M1 for Magnetic Tape Units

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. G1 for General HP-IB Devices

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. G2 for General HP-IB Devices

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. P1 for HP 256xB+214 Line Printers

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. P2 for HP 256xB+214 Line Printers

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. P3 for HP 256xB+214 Line Printers

Device P/N	Cable P/N
	Included with I/F

12009A HP-IB Interface No. G3 for General HP-IB Devices

Device P/N	Cable P/N
	Included with I/F

Card Cage/Interface Use Records, continued

I/O EXTENDER CARD CAGE RECORD

Please make a copy of this page and use the copy to keep track of I/O Extender usage as you select your configuration. Each I/O Extender uses one slot in the computer card cage for an I/O Control Card and one slot in its card cage for an Extender Control Card (shown in dark shading here as an occupied slot in the I/O Extenders). The Computer Card Cage Slot used for an I/O Extender must be set aside and identified as such on the previous page to assure an accurate accounting for available card cage slots. As with the Computer Card Cage, enter I/O Card product numbers in the appropriate I/O Extender card cage slot as items are ordered. Identify mulltiplexer interfaces as 12040D-2, –3, etc. and HP-IB interfaces as 12009A–P3, –G2 –G3 etc., for keying with the use records on page 15. HP-IB interfaces for disks or magnetic tape units are NOT supported for use in I/O Extenders.

NOTE: A400 SPUs and Computers do NOT support use of I/O Extenders.

HP 12025B I/O Extender No. 1

HP 12025A I/O Extender No. 1

	25 kHz Sine Wave Card

HP 12025B I/O Extender No. 2

HP 12025A I/O Extender No. 2

	25 kHz Sine Wave Card

Ordering System Processor Units and Computers

A400 System Processor Unit

NOTE: All systems orders must specify coordinated shipment with system console and system disk on the same section of the order as the SPU and must include ONE software Media Option.

Prod.No., Description, & Options	Price/BMMC

MICRO 24 SYSTEM PROCESSOR UNIT (SPU)

		Price/BMMC
2484B (4700)	Micro 24 SPU with:	_____/____
	–12100A Single-Board Computer with 512 kB parity memory and four on-board serial I/O ports with breakout panel.	
	–12009A+D01 HP-IB interface to system disk with 12009A interface reference manual.	
	– In 02430-60022 Micro/1000 package with power supply, 12 available card cage slots, and power cable.	
	– RTE-A Primary System with VC+ Enhancement to RTE-A, RTE-A and VC+ masters, and 24612A and 24398B Diagnostics on Option 022, 044, or 061 Media. one of which MUST BE ORDERED.	
	– License to use RTE-A and VC+ on one system.	
	– A400 Computer Reference Manual, Micro/1000 Computer System Installation and Service Manual, Computer I/O Interfacing Guide, and RTE-A, VC+, and diagnostics manuals.	
	– On-site installation assistance and checkout by a Hewlett-Packard service engineer, including integration and test with primary system.	
	– 90-day on-site warranty.	
-010	Discount for upgrade from E/F-Series system	_____/____
-015	230V/50 Hz ac power	0/ 0
-022	CS/80 cartridge tape media	0/ 0
-044	270 kB Microfloppy Disk media	0/ 0
-061	1600 cpi mag tape media	0/ 0
-151	Installation prep kit for 12122A integrated disks.	0/ 0

A400 Computers

Prod.No., Description, & Options	Price/BMMC

MICRO 24 COMPUTER

		Price/BMMC
2434A (4700)	Micro 24 Computer with:	_____/____
	– 12100A Single-Board Computer with 512 kB parity memory and four on-board serial I/O ports with breakout panel.	
	– In 02430-60022 Micro/1000 package with power supply, 13 available card cage slots, and power cable.	
	– A400 Computer Reference Manual, Micro/1000 Computer System Installation and Service Manual, and Computer I/O Interfacing Guide.	
-92077E	Right-to-Execute RTE-A.	
	– 90-day return-to-HP warranty.	

A400 Computers, continued

Prod.No., Description, & Options	Price/BMMC

MICRO 24 COMPUTER, continued

		Price/BMMC
2434A	Micro 24 Computer, continued	
-010	Discount for upgrade from E/F-Series System	_____/____
-015	230V/50 Hz ac power	0/ 0
-151	Installation prep kit for 12122A integrated disks.	0/ 0

MODEL 24 COMPUTER

		Price/BMMC
2134A (4700)	Model 24 Computer with:	_____/____
	– 12100A Single-Board Computer with 512 kB parity memory and four on-board serial I/O ports with breakout panel.	
	– In 12151A 20-slot box with power supply, including filtered 25 kHz ac supply, and 19 available card cage slots.	
	– A400 Computer Reference Manual, Computer Installation and Service Manual, and Computer I/O Interfacing Guide.	
	– 92077E Right-to-Execute RTE-A.	
	– 90-day return-to-HP warranty.	
-010	Discount for upgrade from E/F-Series System	_____/____
-015	230V/50 Hz ac power	0/ 0

MICRO 14 COMPUTER

		Price/BMMC
2424A (4700)	Micro 14 Computer with:	_____/____
	– 12100A Single-Board Computer with 512 kB parity memory and four on-board serial I/O ports with breakout panel.	
	– In 02420-60101 6-slot box with power supply, but no 25 kHz ac supply, and 5 available card cage slots.	
	– A400 Computer Reference Manual, Micro 14/16 Installation and Service Manual, and Computer I/O Interfacing Guide.	
	– 92077E Right-to-Execute RTE-A.	
	– 90-day return-to-HP warranty.	
-010	Discount for upgrade from E/F-Series System	_____/____
-015	230V/50 Hz ac power	0/ 0

SINGLE BOARD COMPUTER

		Price/BMMC
12100A (4700)	Single Board Computer with:	_____/____
	– with 512 kB parity memory and four on-board serial I/O ports with breakout panel.	
	– A400 Computer Reference Manual.	

A700 System Processor Units

NOTE: All systems orders must specify coordinated ship-
ment with parity or ECC memory, system console, console
interface, and system disk on the same section of the
order as the SPU and must include ONE software Media
Option.

Prod.No., Description, & Options	Price/BMMC

MODEL 27 SYSTEM PROCESSOR UNIT (SPU)

Prod.No., Description, & Options	Price/BMMC
2197E (4700) Model 27 SPU with: – A700 CPU, including Upper and Lower Processor Cards, Memory Controller, and In-struction set and VCP ROMs. – 12156A Hardware Floating Point Processor Card with Scientific Instruction Set and Vector Instruction Set firm-ware, and floating point front-plane connector. – 12009A+D01 HP-IB interface to system disk with 12009A interface reference manual and HP-IB User's Guide. – In 12151A 20-slot box with power supply, including filtered 25 kHz ac supply and 13 avail-able card cage slots*. – Installation of SPU hardware in HP 29429A Cabinet or 29431G Option 053 Cabinet, one of which MUST BE PURCHASED ON THE SAME ORDER TO HOUSE THE 2197E TO ASSURE EMI AND SAFETY COMPLIANCE – RTE-A Primary System with VC+ Enhancement to RTE-A, RTE-A and VC+ masters, and 24612A and 24398B Diagnostics on Option 022 or 061 Media, one of which MUST BE ORDERED. – License to use RTE-A and VC+ on one system. – A700 Computer Reference Manual, A700 Computer Installation and Service Manual, Model 26/27/29 Computer Sys-tem Installation and Service Manual, Computer I/O Inter-facing Guide, and RTE-A, VC+, and diagnostics manuals. – On-site installation assistance and checkout by a Hewlett-Packard service engineer, including integration and test with primary system. – 90-day on-site warranty.	_____/____
-010 Discount for upgrade from E/F-Series system	_____/____
-015 230V/50 Hz ac power	0/ 0
-022 CS/80 cartridge tape media	0/ 0
-061 1600 cpi mag tape media	0/ 0

* After allowance for the slots used for the separately-
purchased memory array and console interface cards
required for operation.

A700 System Processor Units, continued

NOTE: All systems orders must specify coordinated ship-
ment with parity or ECC memory, system console, console
interface, and system disk on the same section of the
order as the SPU and must include ONE software Media
Option.

Prod.No., Description, & Options	Price/BMMC

MICRO 27 SYSTEM PROCESSOR UNIT (SPU)

Prod.No., Description, & Options	Price/BMMC
2487B (4700) Micro 27 SPU with: – A700 CPU, including Upper and Lower Processor Cards, Memory Controller, and In-struction set and VCP ROMs. – 12156A Hardware Floating Point Processor Card with Scientific Instruction Set and Vector Instruction Set firm-ware, and floating point front-plane connector. – 12009A+D01 HP-IB interface to system disk with 12009A interface reference manual and HP-IB User's Guide. – In 02430-60022 Micro/1000 package with power supply, 7 available card cage slots*, and power cable. – RTE-A Primary System with VC+ Enhancement to RTE-A, RTE-A and VC+ masters, and 24612A and 24398B Diagnostics on Option 022, 044 or 061 Media, one of which MUST BE ORDERED. – License to use RTE-A and VC+ on one system. – A700 Computer Reference Manual, A700 Computer Installation and Service Manual, Micro/1000 Computer System Installation and Service Manual, Computer I/O Inter-facing Guide, and RTE-A, VC+, and diagnostics manuals. – On-site installation assistance and checkout by a Hewlett-Packard service engineer, including integration and test with primary system. – 90-day on-site warranty.	_____/____
-015 230V/50 Hz ac power	0/ 0
-022 CS/80 cartridge tape media	0/ 0
-044 270 kB Microfloppy Disk media	0/ 0
-061 1600 cpi mag tape media	0/ 0
-151 Installation prep kit for 12122A integrated disks.	0/ 0

* After allowance for the slots used for the separately-
purchased memory array and console interface cards
required for operation.

A700 Computers

NOTE: The A700 computers require separately-purchased parity or ECC memory.

Prod.No., Description, & Options	Price/BMMC
MODEL 27 COMPUTER	
2137B Model 27 Computer with:	_____/____
(4700) – A700 CPU, including Upper and Lower Processor Cards, Memory Controller, and Instruction set and VCP ROMs.	
– 12156A Hardware Floating Point Processor Card with Scientific Instruction Set and Vector Instruction Set firmware, and floating point front-plane connector.	
– In 12151A 20-slot box with power supply, including filtered 25 kHz ac supply and 15 available card cage slots*.	
– A700 Computer Reference Manual, A700 Computer Installation and Service Manual, and Computer I/O Interfacing Guide.	
– 90-day return-to-HP warranty.	
-015 230V/50 Hz ac power	0/ 0
MICRO 27 COMPUTER	
2437B Micro 27 Computer with:	_____/____
(4700) – A700 CPU, including Upper and Lower Processor Cards, Memory Controller, and Instruction set and VCP ROMs.	
– 12156A Hardware Floating Point Processor Card with Scientific Instruction Set and Vector Instruction Set firmware, and floating point front-plane connector.	
– In 02430-60022 Micro/1000 package with power supply, 9 available card cage slots*, and power cable.	
– A700 Computer Reference Manual, A700 Computer Installation and Service Manual, and Computer I/O Interfacing Guide.	
– 90-day return-to-HP warranty.	
-015 230V/50 Hz ac power	0/ 0
-151 Installation prep kit for 12122A integrated disks.	0/ 0

* After allowance for the slot used for the separately-purchased memory array card required for operation.

A900 System Processor Units

NOTE: All systems orders must specify coordinated shipment with ECC memory, system console, console interface, and system disk on the same section of the order as the SPU and must include ONE software Media Option.

Prod.No., Description, & Options	Price/BMMC
MODEL 29 SYSTEM PROCESSOR UNIT (SPU)	
2199E Model 29 SPU with:	_____/____
(4700) – A900 CPU, including Sequencer, Data Path (with floating point processors), Cache Control (with VCP ROMs), and Memory Controller cards.	
– 12009A+D01 HP-IB interface to system disk with 12009A interface reference manual and HP-IB User's Guide.	
– In 12210A 20-slot box with power supply, including filtered 25 kHz ac supply and 13 available card cage slots*.	
– Installation of SPU hardware in HP 29429A Cabinet or 29431G Option 053 Cabinet, one of which MUST BE PURCHASED ON THE SAME ORDER TO HOUSE THE 2199E TO ASSURE EMI AND SAFETY COMPLIANCE	
– RTE-A Primary System with VC+ Enhancement to RTE-A. RTE-A and VC+ masters, and 24612A and 24398B Diagnostics on Option 022 or 061 Media, one of which MUST BE ORDERED.	
– License to use RTE-A and VC+ on one system.	
– A900 Computer Reference Manual, A900 Computer Installation and Service Manual, Model 26/27/29 Computer System Installation and Service Manual, Computer I/O Interfacing Guide, and RTE-A, VC+, and diagnostics manuals.	
– On-site installation assistance and checkout by a Hewlett-Packard service engineer, including integration and test with primary system.	
– 90-day on-site warranty.	
-0CM Discount for upgrade from A400 computer or system.	_____/____
-0C1 Discount for upgrade from A600 computer or system.	_____/____
-0C2 Discount for upgrade from A700 computer or system.	_____/____
-010 Discount for upgrade from E/F-Series system.	_____/____
-015 230V/50 Hz ac power	0/ 0
-022 CS/80 cartridge tape media	0/ 0
-061 1600 cpi mag tape media	0/ 0

* After allowance for the slots used for the separately-purchased memory array and console interface cards required for operation.

Ordering System Processor Units and Computers, continued

A900 System Processor Units, continued

NOTE: All systems orders must specify coordinated ship-ment with ECC memory, system console, console inter-face, and system disk on the same section of the order as the SPU and must include ONE software Media Option.

Prod.No., Description, & Options	Price/BMMC

MICRO 29 SYSTEM PROCESSOR UNIT (SPU)

Prod.No., Description, & Options	Price/BMMC
2489B (4700) Micro 29 SPU with: – A900 CPU, including Sequen-cer, Data Path (with floating point processors), Cache Control (with VCP ROMs), and Memory Controller cards. – 12009A+D01 HP-IB interface to system disk with 12009A interface reference manual and HP-IB User's Guide. – In 02430-60023 Micro/1000 package with power supply, 7 available card cage slots*, and power cable. – RTE-A Primary System with VC+ Enhancement to RTE-A, RTE-A and VC+ masters, and 24612A and 24398B Diagnostics on Option 022, 044, or 061 Media, one of which MUST BE ORDERED. – License to use RTE-A and VC+ on one system. – A900 Computer Reference Manual, A900 Computer Installation and Service Manual, Micro/1000 Computer System Installation and Service Manual, Computer I/O Inter-facing Guide, and RTE-A, VC+, and diagnostics manuals. – On-site installation assistance and checkout by a Hewlett-Packard service engineer, including integration and test with primary system. – 90-day on-site warranty.	_____/____
-0CM Discount for upgrade from A400 computer or system.	_____/____
-0C1 Discount for upgrade from A600 computer or system.	_____/____
-0C2 Discount for upgrade from A700 computer or system.	_____/____
-010 Discount for upgrade from E/F-Series system	_____/____
-015 230V/50 Hz ac power	0/ 0
-022 CS/80 cartridge tape media	0/ 0
-044 270 kB Microfloppy Disk media	0/ 0
-061 1600 cpi mag tape media	0/ 0
-151 Installation prep kit for 12122A integrated disks.	0/ 0

* After allowance for the slots used for the separately-purchased memory array and console interface cards required for operation.

A900 Computers

NOTE: The A900 computers require separately-purchased ECC memory.

Prod.No., Description, & Options	Price/BMMC

MODEL 29 COMPUTER

Prod.No., Description, & Options	Price/BMMC
2139B (4700) Model 29 Computer with: – A900 CPU, including Sequen-cer, Data Path (with floating point processors), Cache Control (with VCP ROMs), and Memory Controller cards. – In 12210A 20-slot box with power supply, including filtered 25 kHz ac supply and 15 avail-able card cage slots*. – A900 Computer Reference Manual, A900 Computer Installation and Service Manual, and Computer I/O Interfacing Guide. – 90-day return-to-HP warranty.	_____/____
-0CM Discount for upgrade from A400 computer or system.	_____/____
-0C1 Discount for upgrade from A600 computer or system.	_____/____
-0C2 Discount for upgrade from A700 computer or system.	_____/____
-010 Discount for upgrade from E/F-Series system	_____/____
-015 230V/50 Hz ac power	0/ 0

MICRO 29 COMPUTER

Prod.No., Description, & Options	Price/BMMC
2439B (4700) Micro 29 Computer with: – A900 CPU, including Sequen-cer, Data Path (with floating point processors), Cache Control (with VCP ROMs), and Memory Controller cards. – In 02430-60023 Micro/1000 package with power supply, 9 available card cage slots*, and power cable. – A900 Computer Reference Manual, A900 Computer Installation and Service Manual, and Computer I/O Interfacing Guide. – 90-day return-to-HP warranty.	_____/____
-0CM Discount for upgrade from A400 computer or system.	_____/____
-0C1 Discount for upgrade from A600 computer or system.	_____/____
-0C2 Discount for upgrade from A700 computer or system.	_____/____
-010 Discount for upgrade from E/F-Series system	_____/____
-015 230V/50 Hz ac power	0/ 0
-151 Installation prep kit for 12122A integrated disks.	0/ 0

* After allowance for the slot used for the separately-purchased memory array card required for operation.

Ordering Memory and SPU/Computer Accessories

Memory Cards & Connectors

Prod.No., Description, & Options	Price/BMMC

PARITY MEMORY ARRAY CARDS FOR A400, A600+, AND A700 SPUs AND COMPUTERS*

Prod.No.	Description	Price/BMMC
12103C (5600)	0.5 MB Parity Memory Array Card	____/____
12103D (5600)	1 MB Parity Memory Array Card (in A400 or A600+, must have 1 MB memory in system to add this card)	____/____
12103K (5600)	2 MB Parity Memory Array Card	____/____
12103L (5600)	4 MB Parity Memory Array Card	____/____
12103M (5600)	8 MB Parity Memory Array Card	____/____

ECC MEMORY ARRAY CARDS FOR A600+ AND A700 SPUs AND COMPUTERS*

Prod.No.	Description	Price/BMMC
12111B (5600)	1 MB ECC Memory Array Card	____/____
12111C (5600)	2 MB ECC Memory Array Card (in A600+, must have 2 MB ECC memory in system to add this card)	____/____

MEMORY CONNECTORS FOR A400, A600+, AND A700 SPUs AND COMPUTERS

Prod.No.	Description	Price/BMMC
12038A (4700)	Memory Connector to 1 Array Card	____/____
12038B (4700)	Memory Connector to 2 Array Cards	____/____
12038C (4700)	Memory Connector to 3 Array Cards	____/____
12038D (4700)	Memory Connector to 4 Array Cards	____/____

ECC MEMORY ARRAY CARDS FOR A900 SPUs AND COMPUTERS (4, maximum, per system)

Prod.No.	Description	Price/BMMC
12220A (5600)	0.75 MB ECC Memory Array Card	____/____
12221A (5600)	3 MB ECC Memory Array Card	____/____
12221B (5600)	8 MB ECC Memory Array Card	____/____

MEMORY CONNECTORS FOR A900 SPUs AND COMPUTERS

Prod.No.	Description	Price/BMMC
12222A (4700)	Memory Connector to 1 Array Card	____/____
12222B (4700)	Memory Connector to 2 Array Cards	____/____
12222C (4700)	Memory Connector to 3 Array Cards	____/____
12222D (4700)	Memory Connector to 4 Array Cards	____/____

* A maximum of four parity and/or ECC memory array cards is supported per system.

SPU/Computer Accessories

Prod.No., Description, & Options	Price/BMMC

ACCESSORIES FOR MICRO 24/26/27/29 SPUs AND COMPUTERS

Prod.No.	Description	Price/BMMC
12122A (4700)	Integrated Disks for Micro 2x SPU or Computer, with: – 19.4M byte fixed, hard disk. – single microfloppy drive with both 630k byte double-sided and 270k byte single-sided capability. – HP-IB disk controller for both disk drives. – 12009A HP-IB disk interface and cable to the HP-IB disk controller only. – Installation in 248xB+151 SPU or 243xB+151 computer at the factory.	____/____
12154A (4700)	Battery Backup Card for Micro 2x SPU or Computer. Reduces number of available I/O channels by two.	____/____
12159A (4700)	25 kHz Sine Wave Card for Micro 2x SPU or Computer. This card uses a dedicated slot, so it doesn't affect I/O channel availabilty.	____/____
40025A (4700)	Vertical Floor Mount for Micro 2x SPU or Computer	____/____

BATTERY BACKUP FOR MODEL 24/26/27/29 SPUs AND COMPUTERS

Prod.No.	Description	Price/BMMC
12157B (4700)	Battery Backup System for Model 2x SPU or computer with Serial Prefix 2648 or greater. Customers who want to add battery backup to Model 2x SPU or Computer with serial prefix smaller than 2648 will have to replace their power supply with that used in Model 2x Computers with Serial Prefix 2648 or greater, which is compatible with the 12157B product. Contact your nearest HP Sales and Service Office for more information.	____/____

A700 CONTROL STORE CARDS

Prod.No.	Description	Price/BMMC
12153A (4700)	Writable Control Store Card with 4k word capacity.	____/____
12155A (4700)	PROM Control Store Card with 8k word capacity	____/____

A900 WRITABLE CONTROL STORE

Prod.No.	Description	Price/BMMC
12205A (4700)	Control Store Board with 4k word capacity.	____/____

OTHER ACCESSORIES

Prod.No.	Description	Price/BMMC
12008A (5200)	PROM Storage Module (64 kB)	____/____
93568P (2230)	PROM Storage Module (2 MB)	Call factory for quote
12011A (5200)	Extender Card.	____/____
12012A (5200)	Priority Jumper Card.	____/____

Ordering I/O Interfaces, Extenders, Cables, & Modems

I/O Interfaces

Prod.No., Description, & Options	Price/BMMC
HP-IB AND MULTIPLEXER INTERFACES	
12009A (5200) HP-IB Interface to Disks, Cartridge Tape Subsystems, Magnetic Tape Units, Printers, Plotters, and other HP-IB Devices. 12009A can support up to 14 "normal" (slow) devices or up to 8 "fast" devices. However, unit loads limit maximum number of magnetic tape units or 256xB option 214 Line Printers to 2 devices per 12009A interface, the maximum number of disks and cartridge tape subsystems to 4 units per 12009A interface.	____/____
−001 Substitutes 4m (13 ft.) cable for std 2m (6.5 ft.) cable	____/____
12040D (5200) 8-Channel Async Multiplexer to Terminals, Printers, Plotters, Gould-Modicon and Texas Instruments PLCs, and other RS-232-C devices, with 8-connector breakout panel and 3m (10 ft) connecting cable to the multiplexer.	____/____
−001 Firmware for upgrade of 12040C to 12040D (deletes rest of the interface).	____/____
−002 Substitutes cable to HP 37214A Systems Modem for breakout panel and its connecting cable.	____/____
−003 Substitutes edge connector kit for breakout panel and its connecting cable.	____/____
12041B (5200) Multi-Use 8-Channel Multiplexer to Allen-Bradley, Siemens, Telemecanique, and General Electric PLCs (Requires 94200B PCIF/1000 and appropriate 9420xA Device Handlers.)	____/____
−003 Substitutes edge connector kit for breakout panel and its connecting cable.	____/____
NS/1000 (LAN/1000 LINK) INTERFACE	
12076A (5200) LAN/1000 Link Interface with card connector cable, 6m (19.7 ft.) FEP AUI cable, Medium Attachment Unit (MAU) to IEEE 802.3 coaxial media, and Coaxial Cable Tap Kit. High level communication with other HP 1000, HP 3000, or HP 9000 Systems or DEC VAX systems on the LAN requires support of HP 91790A NS/1000 Networking Software.	____/____
−001 Ethernet connect cable instead of the AUI cable and MAU	____/____
−002 Latest firmware ROMs and manual only (deletes rest of interface)	____/____
−241 Deletes AUI and MAU	____/____

I/O Interfaces, continued

Prod.No., Description, & Options	Price/BMMC
X.25 INTERFACE (requires support of HP 91751A X.25 Networking Software)	
12075A (5200) X.25 Network Interface	____/____
−001 Discount for providing one set of the latest firmware ROMs and manual only (excludes the rest of the 12075A interface) for customer not subscribing to 91751A+S/W91 support of LAP-B firmware.	____/____
−002 RS-449 Cable instead of RS-232-C Cable	____/____
DS/1000-IV INTERFACES (require support of HP 91790A NS/1000 or HP 91750A DS/1000-IV Networking Software)	
12007B (5200) HDLC Modem (point-to-point) Interface to other HP 1000 System with 5m (16.4 ft.) RS-232-C Cable.	____/____
−001 Latest firmware ROMs and manual only (deletes rest of I/F) for customer not subscribing to HP 91750A+S71 support.	____/____
−002 5m/16.4 ft RS-449 cable instead of RS-232-C cable.	____/____
12044A (5200) HDLC Direct Connect (point-to-point) Interface to other HP 1000 System with two (male and female) 5m (16.4 ft.) direct connect cables and verifier hood.	____/____
−001 Latest firmware ROMs and manual only (deletes rest of I/F) for customer not subscribing to HP 91750A+S/W71 Support.	____/____
−002 Deletes cables and verifier hood from second direct connect HDLC interface.	____/____
12073A (5200) Bisync Modem (point-to-point) Interface to HP 3000 System with 5m (16.4 ft.) RS-232-C Cable.	____/____
−001 Latest firmware ROMs and manual only (deletes rest of I/F) for customer not subscribing to HP 91750A+S/W81 support.	____/____
−002 5m/16.4 ft RFI RS-449 cable instead of RS-232-C cable.	____/____
12082A (5200) Bisync Direct Connect (point-to-point) Interface to HP 3000 System with one 5m (16.4 ft.) direct connect cables and verifier hood.	____/____
−001 Latest firmware ROMs and manual only (deletes rest of Interface for customer not subscribing to HP 91750A+S/W81 Support.	____/____

Prod.No., Description, & Options	Price/BMMC

MEASUREMENT AND CONTROL INTERFACES

(require 25 kHz ac supply, which is not available in 2424A 2426G, or 2426H Computer; prerequisite in Micro 24, 26, 27, and 29 SPUs and Computers is the 12159A 25 kHz Sine Wave Card)

Prod.No., Description, & Options	Price/BMMC
12060B (5200)	High-Level Analog Input Card with 8 differential inputs, ±1.23V to 10.23V full scale, data rate to 55,000 channels per second. 12060BC cable is recommended for input signal connection.	_____/___
-001	Edge connector kit	_____/___
12060BC (5200)	3m (9.6 ft.) Analog Input Cable for 12060B, unterminated at application end.	_____/___
12061A (5200)	Expansion Multiplexer Card which adds 32 differential inputs to 12060B capacity, bringing total analog input channels to 40. HP 12060B is prerequisite, with a maximum of one 12061A per 12060B. A 12061AC cable is recommended for input signal connection.	_____/___
-001	Edge connector kit	_____/___
12061AC (5200)	3m (9.6 ft.) Analog Input Cable for 12061A, unterminated at application end.	_____/___
12062A (5200)	Analog Output Card with 4 independent, isolated bipolar ±10.23V full scale outputs at 12-bit resolution. 12062AC cable is recommended for output signal connection.	_____/___
-001	Edge connector kit	_____/___
12062AC (5200)	3m (9.6 ft.) Analog Output Cable for 12062A, unterminated at application end.	_____/___
12063A (5200)	Isolated Digital I/O Card with 16 opto-isolated inputs and 16 relay-isolated ouputs. 12063AC cable is recommended for signal connection.	_____/___
-001	Edge connector kit	_____/___
12063AC (5200)	3m (9.6 ft.) Digital I/O Cable for 12063A, unterminated at application end.	_____/___
12064A (5200)	68-Circuit Screw-Terminal Termination Accessory for use with 1206xA/B Interface Cards and 1206xxC cables.	_____/___

OTHER INTERFACES

Prod.No., Description, & Options	Price/BMMC
12005B (5200)	Async Serial Interface (must order one of the following cable options):	_____/___
-001	5m (16.4 ft.) RFI filtered cable to discontinued 262x terminals using a 50-pin connector.	_____/___
-002	5m (16.4 ft.) RFI filtered cable to terminals using a 25-pin connector.	_____/___
-003	5m (16.4 ft.) cable to RS-232C modem.	_____/___
-004	5m (16.4 ft.) cable to 264x Terminals.	_____/___

OTHER INTERFACES, continued

Prod.No., Description, & Options	Price/BMMC
12005B -005	Async Serial Interface, cont'd 15m (49 ft.) Fiber optic cable adapter to discontinued 262x terminals using a 50-pin conn.	_____/___
-006	48-pin connector kit.	_____/___
12006A (5200)	Parallel Interface, 8 or 16 bits, +5V or +12V logic levels.	_____/___
12010A (5200)	Breadboard Interface, with I/O Master and space for up to 60 16-pin wire wrap sockets.	_____/___
12042B (5200)	Programmable Serial (modem) Interface for OEM/End User Development of communications interfaces for specific applica- tions, with 5m (16.4 ft.) RS-232-C cable. The 24602A Development Pack is recom- mended for 12042B pro- gramming.	_____/___
-001	5m (16.4 ft.) RS-449 cable instead of RS-232-C cable.	_____/___
-002	Edge connector instead of RS-232AC cable.	_____/___
-003	Deletes Self-Test PROM and Diaganostic Hood.	_____/___
24602A (5200)	Firmware Development Package for 12042B Interface.	_____/___
-001	Deletes DDM EPROM and Cable	_____/___
12043A (5200)	Multi-Use Programmable Serial (modem) Interface to IBM or Plug-Compatible System for use with 91781A RJE/1000-II, 91782A MRJE/1000, or 91784A PMF/1000 communications software, with 5m (16.4 ft.) RS-232-C Cable to user- furnished modem.	_____/___
-001	5m (16.4 ft.) RS-449 Cable instead of RS-232-C Cable.	_____/___
12065A (5200)	Color Video Interface to RGB Color Monitor with 3m (9.8 ft.) video cable to Color Monitor.	_____/___
-001	Dual 3m (9.8 ft.) RS-232-C Cable.	_____/___
12072A (5200)	Data Link Slave Interface for Multidrop Data Link Commu- nication with a 12092A Data Link Master Interface in another HP 1000 System. with 5m (16.4 ft.) cable to 92901A Connection Box. (Requires support of 91750A DS/1000-IV Networking software.)	_____/___
12092A (5200)	Data Link Master Interface for Multidrop Data Link Commu- nication with 12072A Data Link Slave Interfaces in other HP 1000 Systems, with 5m (16.4 ft.) cable to HP 3074A Data Link Adapter. Requires 91732A Data Link Software (discontin- ued, but with 91732R rights to copy still available). and HP 91750A DS/1000-IV Net- working software.	_____/___
-001	Latest firmware ROMs and manual only (deletes rest of Interface).	_____/___

Extenders

Prod.No., Description, & Options	Price/BMMC
I/O EXTENDERS AND ACCESSORIES	
12025A (4700) — I/O Extender providing 12 additional I/O channels in a Micro/1000 package.	_____/___
12159A (4700) — 25 kHz Sine Wave Card for 12025A I/O Extender	_____/___
40025A (4700) — Vertical Floor Mount for 12025A I/O Extender	_____/___
12025B (4700) — I/O Extender providing 18 additional I/O channels in a 20-slot card cage.	_____/___
MULTIPOINT HP-IB EXTENDER AND CABLES	
37204A (1400) — Multipoint HP-IB Extender (Requires two 37204As connected together via a user-specified length of 92179G (or Belden type 9248 or equivalent) 75 ohm coaxial cabling up to 1.25 km (4100 feet). Two coaxial ports support multipoint connection. as illustrated in the A-Series Computer Handbook. page 4-3.	_____/___
−001 Adds one fiber optic port for use at one end of a multipoint extension link up to 1.25 km (4100 feet) long to the next 37204A HP-IB Extender, connected via HP 39200B Fiber Optic Cable.	_____/___
−002 Adds two fiber optic ports for use in the middle of multipoint extension links up to 1.25 km (4100 feet) long to the next 37204A HP-IB Extenders, connected via HP 39200B Fiber Optic Cable.	_____/___
−305 Adapter for rack mounting one or two 37204As in a 19-inch EIA Rack Cabinet.	_____/___
92179G (A500) — 75 Ohm Coaxial Cabling (Specify desired length in meters in Qty).	_____
92226A (A500) — 75 Ohm Male BNC Connector (Specify twice the number of coaxial cable links in Qty).	_____/___
39213B (0165) — 10m (32.8 ft.) Dual-Channel Fiber Optic Cable	_____/___
39214B (0165) — 30m (98.4 ft.) Dual-Channel Fiber Optic Cable	_____/___
39215B (0165) — 50m (164 ft.) Dual-Channel Fiber Optic Cable	_____/___
39216B (0166) — 100m (328 ft.) Dual-Channel Fiber Optic Cable	_____/___

NOTE: For non-standard lengths of Fiber Optic Cable. contact OCD Marketing Services at (408) 935-6806.

Cables

Prod.No., Description, & Options	Price/BMMC
MULTIPLEXER CABLES	
40242M (5600) — 5m/16.4 ft Cable to 25-pin DCE/DTE Terminal Connector	_____/___
40242Y (5600) — 5m/16.4 ft Cable to 25-pin DTE Terminal Connector	_____/___
13242N (5600) — 7.6m/25 ft Cable to 222xA/D or 3630A Printer or most plotters	_____/___
24542M (5600) — 3m/9.8 ft Cable to 25-pin connector on Vectra PC	_____/___
92219G (D700) — 3.8m/12.5 ft. Cable to 2235B, 293xA, or 256xB+049 Printer	_____/___
92219Q (5600) — 5m/16 ft Cable to Data Set	_____/___
17355D (D700) — 3.m/9.9 ft. Cable to 7550A, Plotter	_____/___
40242X (A500) — 5m/16.4 ft Cable to 92922A Channel Adapter to 3081A Industrial Workstation Terminal	_____/___
13242-60005 5m/16.4 ft Cable to 3980xA Bar Code Reader	_____/___
HP-IB CABLES	
10833A (D700) — 1m/3.2 ft. HP-IB Cable to disk. cartridge tape subsystem. printer, plotter, etc.	_____/___
10833B (D700) — 2m/6.5 ft. HP-IB Cable to disk. cartridge tape subsystem. printer, plotter, etc.	_____/___
10833C (D700) — 4m/13.1 ft. HP-IB Cable to printer, plotter, etc.	_____/___
DS/1000-IV DIRECT CONN. EXTENSION PRODUCTS	
91712A (5200) — 75m (246 ft.) Direct-Connect Extension Cable for use with 12044A and 12082A interfaces and their counterpart interfaces in remote HP 1000 and HP 3000 systems.	_____/___
91713A (5200) — Connector Kit for User Fabricated Direct-Connect Cable for use with 12044A and 12082A interfaces and their counterpart interfaces in remote HP 1000 and HP 3000 systems.	_____/___
−001 One pair of edge connectors for 12044A/12082A Interfaces	_____/___
91714A (5200) — 300m (984 ft.) Cable Kit with Connectors for User Fabricated Direct-Connect Cable for use with 12044A and 12082A interfaces and their counterpart interfaces in remote HP 1000 and HP 3000 systems.	_____/___

Cables, continued

Prod.No., Description, & Options	Price/BMMC
LAN CONNECTION HARDWARE AND CABLES	
30241A (A500) LAN Medium Attachment Unit and LAN Coaxial Cable Tap	_____/____
30241B (A500) Additional LAN Coaxial Cable Tap	_____/____
92253A (A500) 23.4m (76.7 ft.) Unconnectored LAN FEP Coaxial Cable Kit*.	_____/____
92253B (A500) 23.4m (76.7 ft.) Connectored LAN FEP Coaxial Cable Kit.	_____/____
92253C (A500) 117m (383.8 ft.) Unconnectored LAN FEP Coaxial Cable Kit*.	_____/____
92253D (A500) 500m (1640.5 ft.) Connectored LAN FEP Coaxial Cable Kit.	_____/____
92253E (A500) 23.4m (76.7 ft.) Unconnectored LAN PVC Coaxial Cable Kit*.	_____/____
92253F (A500) 23.4m (76.7 ft.) Connectored LAN PVC Coaxial Cable Kit.	_____/____
92253G (A500) 117m (383.8 ft.) Unconnectored LAN PVC Coaxial Cable Kit*.	_____/____
92253H (A500) 500m (1640.5 ft.) Connectored LAN PVC Coaxial Cable Kit.	_____/____
92253J (A500) Male N-Connectors Package with four male N-connectors for use on 92253A-H cable kits (additional to connectors supplied with the 92253A-H kits).	_____/____
92253K (A500) Barrel N-Connectors Package with two female-to-female barrel connectors and two barrel insulators for use on 92253A-H cable kits (additional to connectors supplied with the 92253A-H kits).	_____/____
92253L (A500) Terminator Kit with one grounded and one non-grounded terminator and one terminal insulator for use on 92253A-H cable kits (additional to terminators supplied with the 92253A-H kits).	_____/____
92254A (A500) 6m (19.6 ft.) Attachment Unit Interface FEP Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254B (A500) 12m (39.3 ft.) Attachment Unit Interface FEP Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254C (A500) 24m (78.7 ft.) Attachment Unit Interface FEP Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____

*Includes connectors for assembly by the customer.

Cables, continued

Prod.No., Description, & Options	Price/BMMC
LAN CONNECTION HARDWARE AND CABLES, continued	
92254D (A500) 48m (157.4 ft.) Attachment Unit Interface FEP Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254E (A500) 6m (19.6 ft.) Attachment Unit Interface PVC Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254F (A500) 12m (39.3 ft.) Attachment Unit Interface PVC Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254G (A500) 24m (78.7 ft.) Attachment Unit Interface PVC Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92254H (A500) 48m (157.4 ft.) Attachment Unit Interface PVC Cable for connecting the 12076A LAN/1000 Link interface to its MAU tap on the 92253x Coaxial Cable.	_____/____
92255A (A500) Cut-to-Measure Attachment Unit Interface FEP Cabling for connecting the 12076A LAN/1000 Link interface (15 m. min.) to its MAU tap on the 92253x LAN Coaxial Cable.	_____/____
92255B (A500) Cut-to-Measure Attachment Unit Interface PVC Cabling for connecting the 12076A LAN/1000 Link interface (15 m. min.) to its MAU tap on the 92253x LAN Coaxial Cable.	_____/____
92255C (A500) Attachment Unit Interface Connector Kit for use with 92255A/B Cabling.	_____/____
92256A (A500) LAN Attachment Unit Interface Tool Kit for installing N connectors on 92253A-H Coaxial Cable Kits.	_____/____
92256C (A500) LAN MAU/TAP Tool Kit for installing tap on coaxial cable and attaching to the MAU.	_____/____
92256D (A500) LAN AIU/TAP Wallplate Kit with two wallplates forAUI connectors (connectors not included).	_____/____
92256E (A500) Surge Protector	_____/____
92257B (A500) Loopback Hood for operation of node diagnostic for fault isolation.	_____/____

Modems

Prod.No., Description, & Options		Price/BMMC
37214A (1400)	Systems Modem (Requires one to seven 3721xA cards and 1556xA cables, selected from those listed below, and 12040D Option 002 interface.)	___/___
-001	United Kingdom Autodialing Operation.	0/ 0
37213A (1400)	300/1200 BPS Modem Card	___/___
37215A (1400)	Interface Card to External Modem	___/___
37216A (1400)	Direct Connect Interface Card to Terminal	___/___
15561A (1400)	2.1m/7 ft. Modem Cable with Bell Telephone Jack.	___/___
15562A (1400)	3m/9.8 ft. Modem Cable with with British Telecom Modular Telephone Jack.	___/___
15563A (1400)	3m/9.8 ft. Modem Cable with Spade Terminals.	___/___
15564A (1400)	5m/16.4 ft. Cable for Connecting 37215A to External Modem.	___/___
92205A (A500)	1200 BPI (Hayes) Modem. (Order 92205C for use in Canada.)	___/___
92205B (A500)	2400 BPI (Hayes) Modem.	___/___
92205C (A500)	1200 BPI (Hayes) Modem for use in Canada.	___/___

LAN-Connected Terminal Server

Prod.No., Description, & Options		Price/BMMC
2342A (5200)	HP Baseband LAN 8-Port Terminal Server. Must order one of options 240 or 242. Network (can have multiple 2342As) requires HP 2350A and HP Vectra PC.	___/___
-240	ThickLAN connection.	___/___
-242	ThinLAN connection.	___/___
2350A (5200)	Local Server Manager Installation Kit for 2342As. Must order one of options 240 or 242. HP 2350A requires separately-purchased HP Vectra APlus (from date code 2621). ES, ES/12, and CS with at least 512 kB memory, single or double density 5.25-inch flexible disk drive, 45985A disk controller interface with 20 or 40 MB disk, multimode monochrome or color monitor, and a serial interface (24540B Serial-Parallel , 24541B dual serial, or integrated serial-parallel).	___/___
-240	ThickLAN connection.	___/___
-242	ThinLAN connection.	___/___

Ordering Cabinets, and Documentation

Cabinets and Accessories

Prod.No., Description, & Options	Price/BMMC
19-INCH EIA RACK CABINETS	
29429A (4700) — Short Cabinet for Rack Mounting 20-Slot Box Computer and other front-to-rear ventilated system components.	_____/_____
29431G (4700) — Two-Compartment Tall Cabinet for Rack Mounting 20-Slot Box Computer and other front-to-rear ventilated system components in the lower compartment, other equipment in the upper compartment. Includes power distribution unit, internal power outlets, and upper compartment ventilation fans.	_____/_____
−015 — 230V power	0/ 0
−051 — Adaptation for mounting 7970E MTU in upper compartment	0/ 0
−053 — Lower door with Louvers	0/ 0
40026A (4700) — Tie-Together Kit for 29431G Cabinets.	_____/_____

SUPPORT RAILS, BLANK PANELS, and ADAPTERS for 19-INCH EIA CABINETS

Prod.No., Description, & Options	Price/BMMC
12679B (4700) — Pair of Support Rails with 150 lb capacity for use in 29431G Cabinet.	_____/_____
12679C (4700) — Pair of Support Rails with 75 lb capacity for use in 29431G Cabinet.	_____/_____
12680B (4700) — 45mm (1.75 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12681B (4700) — 89mm (3.5 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12682B (4700) — 133mm (5.25 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12683B (4700) — 178mm (7 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12684B (4700) — 222mm (8.75 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12685B (4700) — 276mm (10.5 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12686B (4700) — 311mm (12.25 in.) Blank Panel for 29429A/29431G Cabinet.	_____/_____
12905A (0440) — Adapter for Rack Mounting 6-Slot Box Computer in 29429A, 29431G, or other 19-inch EIA Rack Cabinet.	_____/_____

Cabinets and Accessories, continued

Prod.No., Description, & Options	Price/BMMC
DESIGN PLUS CABINETS	
92211L (A500) — Taboret Cabinet for 2424A or 2426G/H Computer and other Design-Plus equipment.	_____ (1-2) _____ (3-9) _____ (10+)
92211R (A500) — Minirack Cabinet for 2424A or 2426G/H Computer and other Design-Plus equipment.	_____ (1-2) _____ (3-9) _____ (10+)
19511A (A500) — Minirack Cabinet for one or two 7936H/XP or 7937H/XP Disks.	_____/_____

SUPPORT RAILS AND FILLER PANELS FOR 92211R MINIRACK CABINET

Prod.No., Description, & Options	Price/BMMC
92211S (A500) — Four sets of support rails and module locks for equipment mounting in 92211R Cabinet.	_____ (1-2) _____ (3-9) _____ (10+)
92211T (A500) — Kit of 20 snap-in panels used to fill empty panel space in 92211R Cabinet.	_____ (1-2) _____ (3-9) _____ (10+)

Documentation Products

Prod.No., Description, & Options	Price/BMMC
92077K (5007) — RTE-A Manuals Package (one RTE-A Manuals Set).	_____
92131Z (5007) — QDM/1000 Manuals (one set of QDM/1000 Manuals).	_____
94200Z (5007) — PCIF/1000 Manuals (one set of PCIF/1000 Manuals, including self-paced familiarization programs on no-charge Media Option 022, 044, or 051, one of which must be ordered).	_____
94202Z (5007) — Reference Manual for using Allen-Bradley PLCs with PCIF/1000.	_____
94203Z (5007) — Reference Manual for using Gould-Modicon PLCs with PCIF/1000.	_____
94204Z (5007) — Reference Manual for using Siemens PLCs with PCIF/1000.	_____
94205Z (5007) — Reference Manual for using Telemecanique PLCs with PCIF/1000.	_____
94206Z (5007) — Reference Manual for using General Electric PLCs with PCIF/1000.	_____
94207Z (5007) — Reference Manual for using Texas Instruments PLCs with PCIF/1000.	_____
94250ZB (5007) — FORMS/1000 Manual Package.	_____

Printers, continued

Prod.No., Description, & Options	Price/BMMC
DOT-MATRIX SERIAL IMPACT PRINTERS AND ACCESSORIES	
2235B (D700) RuggedWriter Printer. 136-col, 480/240 cps, 24-wire printer with HP-IB and RS-232C Interfaces, U.S. version.	___ / ___
12235A (D700) Font Cartridge and Add'l Buffer Memory for 2235B RuggedWriter provides Prestige Elite 12, Letter Gothic 12, Times Roman PS, Helvetica 10, and 16K RAM for download or buffer.	___ / ___
12235D (D700) Arabic Font Cartridge for 2235B RuggedWriter.	___ / ___
12239A (D700) Sheetfeeder, 8.5 X 11 inch, for 2235B RuggedWriter	___ / ___
12239B (D700) Sheetfeeder, ISO A4 Size, for 2235B RuggedWriter	___ / ___
2934A (D700) Business Printer, 132-column, 200/67/40 cps printer with RS-232-C/V.24 interface. Sixteen different 92188x typefont cartridges are available for the 2934A Printer.	___ / ___
-046 HP-IB Interface instead of RS-232-C Interface	___ / ___
92214P (A500) Stand for 2934A Printer.	___ / ___

NATIONAL VERSIONS OF INKJET AND RUGGEDWRITER PRINTERS (National versions of the printers are indicated by a second suffix letter at the end of the respective product numbers, as listed below. Prices are the same as for the U.S. versions; supplying division may differ.)

```
2225D ─────────────────────┐
2227A ───────────────────┐ │
2228A ─────────────────┐ │ │
227xA ───────────────┐ │ │ │
3630A ─────────────┐ │ │ │ │
2235B ───────────┐ │ │ │ │ │
              │ │ │ │ │ │      National Version
              A A A A A        South African
              B B B B B  B     European
                  D   D D       German
                  E   E E  E    Spanish
                  F   F F        French
                    G G G        Australian
                             J   Japanese (Katakana)
              J                  Intercon
              K     K
              P         P P      Swiss French
                Q Q Q Q  Q       Swiss
              U U U U U  U        United Kingdom
              Y Y Y Y Y  Y        Danish
                  Z   Z Z         Italian
```

Printers, continued

Prod.No., Description, & Options	Price/BMMC
LASER PRINTERS	
2684D (D700) LaserJet 2000 Model D Printer. 20 pages/min, 2,000 sheet input deck. Requires 26843A RS-232/422 interface.	___ / ___
26843A (D700) RS-232/422 Interface for LaserJet 2000 Printer.	___ / ___
33440A (D700) LaserJet Series II Printer. 8 pages/min, 200 sheet input tray, 100 sheet output tray, with RS-232C/422 and Centronics Parallel interfaces. Courier medium and bold and compressed lline printer fonts are standard. Twenty-one 33411xx and 33412xx soft font products are also available.	___ / ___

NATIONAL VERSIONS OF LASER PRINTERS (National versions of the laser printers are indicated by a second suffix letter at the end of the respective product numbers, as listed below. Prices are the same as for the U.S. versions; supplying division may differ.)

```
2684D ────────┐
33440A ──────┐ │      National Version

           A  A       South African
           B  B       European
           D          German
           E          Spanish
           F  F       French
              K       Intercon
           P          Swiss French
           Q  Q       Swiss
           U  U       United Kingdom
           Y  Y       Danish
           Z          Italian
```

Prod.No., Description, & Options	Price/BMMC
DOT-MATRIX IMPACT LINE PRINTERS	
2563B (4600) 300 LPM x 132 Column Printer, with quietized cabinet stand and paper stacker. Requires Option 049 or 214.	_____/_____
-001 Line Drawing, Math, and Block Character Sets	_____/_____
-002 Katakana Character Set instead of standard	0/ 0
-003 High-Density OCR Character Set (150 LPM)	_____/_____
-004 High-Density Roman Character Set (150 LPM)	_____/_____
-005 High-Density Roman Italics Character Set (150 LPM)	_____/_____
-006 High-Density Katakana Character Set (150 LPM)	_____/_____
-008 High-Density Bar Codes, including UPC Version A and E and EAN Version 8 and 13 bar codes and Interleaved 2 of 5, Industrial 2 of 5, and Code 3 of 9. Codes print at 14.5 IPM with low to medium resolution.	_____/_____
-009 Low-Density Compressed Roman Character Set (12 and 13.3 characters per inch, 300 LPM)	_____/_____
-012 Low-Density Compressed Roman Character Set (12 and 15 characters per inch, 300 LPM)	_____/_____
-013 Low-Density Compressed Roman Character Set (13.3 and 15 characters per inch, 300 LPM)	_____/_____
-015 220V operation	0/ 0
-016 100V operation	0/ 0
-017 240V operation	0/ 0
-024 Adds HP Label Card Graphics for printing variable-sized characters, graphics, and bar codes, using QMS Magnum® language.	_____/_____
-030 Low-Density Line Drawing and Arabic Character Sets (300 LPM)	_____/_____
-031 High-Density Arabic-8 Character Set (150 LPM)	_____/_____
-032 Low-Density USASCII, Line Drawing, and Turkish-8 Character Sets (300 LPM)	_____/_____
-033 High-Density USASCII and Turkish-8 Character Sets (150 LPM)	_____/_____
-034 Low-Density USASCII, Line Drawing, and Greek-8 Character Sets (300 LPM)	_____/_____
-035 High-Density USASCII and Greek-8 Character Sets (150 LPM)	_____/_____
-036 Low-Density USASCII, Line Drawing, and Hebrew-8 Character Sets (300 LPM)	_____/_____
-037 High-Density USASCII and Hebrew-8 Character Sets (150 LPM)	_____/_____
-038 Low-Density USASCII, Line Drawing, and Hebrew-7 Character Sets (300 LPM)	_____/_____
-039 High-Density USASCII and Hebrew-7 Character Sets (150 LPM)	_____/_____
-049 RS-232C Interface to 12100A OBIO port or 12040D multiplexer channel, connected via 92219G cable.	_____/_____
-068 Pack of three ribbons	_____/_____

Prod.No., Description, & Options	Price/BMMC
DOT-MATRIX IMPACT LINE PRINTERS, continued	
2563B 300 LPM, 132 column Printer, continued	
-114 Deletes Quietized cabinet stand and passive paper stacker leaving non-quietized desktop version.	_____/_____
-214 HP-IB Interface to 12009A interface card; connection to second 2563B option 214 Printer will require 10833x cable.	_____/_____
-510 Extended capabilities package of options 004, 005, 008, and 068.	_____/_____
2564B (4600) 600 LPM, 132 column Printer, with quietized stand and paper stacker. Requires Option 049 or 214.	_____/_____
-001 through 039 Same as for 2563B, above.	
-049 RS-232-C Interface to 12100A OBIO port or 12040D multiplexer channel, connected via 92219G cable.	_____/_____
-068 Pack of three ribbons	_____/_____
-114 Deletes paper stacker and substitutes non-quietized cabinet for quietized cabinet.	_____/_____
-214 HP-IB Interface to 12009A interface card; connection to second 2564B option 214 Printer will require 10833x cable.	_____/_____
-510 Extended capabilities package of options 004, 005, 008, and 068.	_____/_____
2566B (4600) 900 LPM (nominal) x 132 columns Printer. Requires Option 049 or 214 (720 or 880 LPM).	_____/_____
-001 through 039 Same as for 2563B, above.	
-049 RS-232-C Interface to 12100A OBIO port or 12040D multiplexer channel, connected via 92219G cable. Maximum print speed with this interface is 720 LPM.	_____/_____
-115 Adds passive paper stacker	_____/_____
-214 HP-IB Interface to 12009A interface card; connection to second 2566B option 214 Printer will require 10833x cable. Maximum print speed with this interface is 880 LPM.	_____/_____
-500 Extended capabilities package of options 004, 005, and 115.	_____/_____

Graphics Input Devices

Prod.No., Description, & Options	Price/BMMC
46060A (D700) Two-button HP Mouse, used with 2393A or 2397A Graphics Terminal via HP-HIL connection.	_____/_____
46087B (4000) A-Size (ISO A4) Graphics Digitizer Tablet, used with 2393A or 2397A Graphics Terminal via HP-HIL connection.	_____/_____
46088B (4000) B-Size (ISO A3) Graphics Digitizer Tablet, used with 2393A or 2397A Graphics Terminal via HP-HIL connection.	_____/_____

Ordering Peripherals, continued

Graphics Plotters

Prod.No., Description, & Options	Price/BMMC
A AND B SIZE PLOTTERS	
7440A A-Size (ISO A4) ColorPro Plotter, (1100) 8-pen, U.S. Version*. Requires Option 001 or 002.	____/____
-001 RS-232C interface in plotter, for use with 12040D multiplexer.	0/ 0
-002 HP-IB interface in plotter, for use with 12009A interface.	0/ 0
7475A B-Size (ISO A3) Graphics Plotter, (1100) 6-pen, U.S. Version*. Requires Option 001 or 002.	____/____
-001 RS-232C interface in plotter, for use with 12040D multiplexer.	0/ 0
-002 HP-IB interface in plotter, for use with 12009A interface.	0/ 0
7550A B-Size (ISO A3) Graphics Plotter, (1100) 8-pen, with autosheet feed and RS-232-C and HP-IB interfaces. U.S. Version*.	____/____
17525A B-Size Media Handler for 7550A (1100) Plotter	____/____
17526A ISO A3 Size Media Handler for (1100) 7550A Plotter	____/____

DRAFTING PLOTTERS

Prod.No., Description, & Options	Price/BMMC
7570A D-Size (ISO A1) DraftPro Plotter, (1100) 8-pen, with RS-232C interface. Must order 17570A or 17571A for HP-IB interface, U.S. Version*.	____/____
17570A HP-IB Interface for 7570A Plotter. (1100)	____/____
17571A HP-IB Interface with Kanjii character set for 7570A Plotter.	____/____
7595A E-Size (ISO A0) DraftMaster I (1100) Plotter, 8-pen, with RS-232C and HP-IB interfaces, U.S. Version*.	____/____
-010 Kanjii character set for use in Japan.	0/ 0
7596A E-Size (ISO A0) DraftMaster II (1100) Plotter, 8-pen, with auto roll feed and RS-232C and HP-IB interfaces, U.S. Version*.	____/____
-010 Kanjii character set for use in Japan.	0/ 0

*For other national versions, see the next column.

NOTE: Order plotter pens and plotting and drafting media from the Hewlett-Packard Computer User's Catalog, 5953-2450(D) or a later revision.

Graphics Plotters, continued

NATIONAL VERSIONS OF GRAPHICS PLOTTERS
National versions of the printers are indicated by a second suffix letter at the end of the respective product numbers, as listed below. Prices are the same as for the U.S. versions; supplying division may differ.

```
7440A*
7475A*
7550A
7570A
7595A
7596A                          National Version
  A   A   A   A   A   A   South African
  B   B   B   B   B   B   European
  D   D   D   D   D   D   German
  E   E   E   E   E   E   Spanish
  F   F   F   F   F   F   French
  Q   Q   Q   Q   Q   Q   Swiss
  U   U   U   U   U   U   United Kingdom
  Y   Y   Y   Y   Y   Y   Danish
  Z   Z   Z   Z   Z   Z   Italian
```

* 7440AA through AZ and 7475AA through AZ order the plotter with RS-232C interface; 7440BB through BZ and 7475BA through BZ order the plotter with HP-IB interface.

Bar Code Readers

Prod.No., Description, & Options	Price/BMMC
39800A Programmable Bar Code (6300) Reader, with: – HP 16380A Digital Wand – Support for 3 of 9 Code, Interleaved 2 of 5 Code, and Industrial 2 of 5 code – Programmable enabling/disabling of data entry codes, control of transmission modes, addition of user-definable header, control of feedback tones to the operator, and reader activation/deactivation and status reporting.	____/____
NOTE: 39800A Options follow the 39801A, below.	
39801A Non-Programmable Bar Code (6300) Reader, with: – HP 16380A Digital Wand – Support for 3 of 9 Code, Interleaved 2 of 5 Code, and Industrial 2 of 5 code	____/____
-001 Substitutes UPC/EAN/JAN code for Industrial 2 of 5 code	0/ 0
-002 Substitutes Codabar code for Industrial 2 of 5 code	0/ 0
-210 100V ac operation	0/ 0
-222 220V ac operation	0/ 0
-224 240V ac operation	0/ 0
-320 High-resolution HP 16832A Wand instead of HP 16380A Wand	0/ 0
-400 Standard Industrial Wand instead of HP 16380A Wand	0/ 0
-420 High Resolution Industrial Wand instead of HP 16380A Wand	0/ 0
-610 Wall Mounting Kit	____/____
13242-60005 5m/16.4 ft Mulltiplexer-to- (A500) 3980xA Bar Code Reader Cable	____/____

Disks and Accessories

Prod.No., Description, & Options	Price/BMMC
12122A Integrated Disks for Micro/1000 SPU or Computer. See page 22.	
7907A 41 MB (Cartridge) Disk with half (4800) of its capacity fixed and half on a removable HP 97907A (hard) Disk Cartridge.	____/____
-015 230V/50 Hz operation	0/ 0
19507A Rackmount Kit for installing (4800) 7907A in a 19-inch EIA cabinet	____/____
97907A 20.5 MB Removable Disk Cart-(4800) ridge for 7907A.	____/____
7936H 307 MB Fixed Disk (7936H op-(4800) tions are listed under 7937XP)	____/____
7936XP 307 MB Fixed Disk with Cache (4800 (7936XP options are listed under 7937XP)	____/____
7937H 571 MB Fixed Disk (7937H op-(4800) tions are listed under 7937XP)	____/____
7937XP 571 MB Fixed Disk with Cache (4800)	____/____
-015 50 Hz operation	0/ 0
-017 180-264V operation	0/ 0
19511A Cabinet for one or two 7936 or (4800) 7937 Disks	____/____
19512A Rack Slide Kit for installing (4800) 7936/7937 Disk in 19-inch EIA rack cabinet	____/____
19514A Cabinet for up to eight 7936 or (4800) 7937 Disks	____/____
19521H Two 7937H Disks in 19514A (4800) Cabinet	____/____
19521XP Two 7937XP Disks in 19514A (4800) Cabinet	____/____
19522H Four 7937H Disks in 19514A (4800) Cabinet	____/____
19522XP Four 7937XP Disks in 19514A (4800) Cabinet	____/____
19524H Eight 7937H Disks in 19514A (4800) Cabinet	____/____
19524XP Eight 7937XP Disks in 19514A (4800) Cabinet	____/____
7957A 81 MB Fixed Disk (4800)	____/____
-015 230V/50 Hz operation	0/ 0
7957B 81 MB Fixed Disk (4800)	____/____
-015 230V/50 Hz operation	0/ 0
7958A 130 MB Fixed Disk (4800)	____/____
-015 230V/50 Hz operation	0/ 0
7958B 152 MB Fixed Disk (4800)	____/____
-015 230V/50 Hz operation	0/ 0
7959B 304 MB Fixed Disk (4800)	____/____
-015 230V/50 Hz operation	0/ 0
19500B Rackmount Kit for installing (4800) 795xA/B Disk in a 19-inch EIA rack cabinet	____/____

Disks and Accessories, continued

Prod.No., Description, & Options	Price/BMMC
7962B 152 MB Fixed Disk in cabinet (4800) with capacity for two additional drives	____/____
-015 230V/50 Hz operation	0/ 0
97962B 152 MB Fixed Disk Drive for (4800) installation in 796xB Disk	____/____
7963B 304 MB Fixed Disk in cabinet (4800) with capacity for two additional drives	____/____
-015 230V/50 Hz operation	0/ 0
97963B 304 MB Fixed Disk Drive for (4800) installation in 796xB Disk	____/____
19560B Rackmount Kit for installing (4800) 796xB Disk in a 19-inch EIA rack cabinet	____/____
9262B 152 MB Removable Disk in (04G7) cabinet with capacity for one additional removable drive.	____/____
-015 230V/50 Hz operation	0/ 0
97902B 152 MB Removable Disk Drive (04G7) for installation in 926xB Disk.	____/____
D03 Delete installation hardware	____/____
9263B 304 MB Removable Disk in (4800) cabinet with capacity for one additional removable drive.	____/____
-015 230V/50 Hz operation	0/ 0
97903B 304 MB Removable Disk Drive (4800) for installation in 926xB Disk.	____/____
D03 Delete installation hardware	____/____
9153C Winchester Disk Drive (4800)	0/ 0
-040 40 MB hard disk with integrated 2 MB microfloppy drive.	____/____
-041 40 MB hard disk only	____/____
9122C Dual 2 MB Microfloppy Disk (4800) Drive	____/____
-001 Deletes one of the two drives	____/____
19500B Rackmount Kit for installing (4800) 9122C/9153C Disk in a 19-inch EIA rack cabinet	____/____
92192X Box of 10 Double-sided, high-(A700) density Disks for 9122C/9153C Disk Drive	____/____

Ordering Peripherals, continued

Cartridge Tape Subsytems and Accessories

Prod.No., Description, & Options	Price/BMMC
35401A Autochanger Cartridge Tape (C600) Subsystem (CTS), 16-track	_____/____
35940A Rackmount Kit for installing (C600) 35401A CTS in 19-in. EIA rack cabinet	_____/____
92192C Additional Data Cartridge (A500) Magazine for 35401A CTS	_____/____
9144A 16-track Cartridge Tape (C600) Subsystem	_____/____
9145A 32-track Cartridge Tape (C600) Subsystem	_____/____
88140LC Box of Five 67 MB Tape (A500) Cartridges for 35401A or 9144A CTS	_____/____

Magnetic Tape Units

Prod.No., Description, & Options	Price/BMMC
7979A Autoloading 1600 cpi Magnetic (5800) Tape Unit in 1m/39 in. cabinet.	_____/____
-133 Discount for additional unit mounting in the same cabinet as a first unit	_____/____
-137 Upgrade cabinet to accept a 7936H/XP or 7937H/XP Disk for mounting in the same cabinet as a first tape unit	_____/____
-800 Adds 800 cpi operation	_____/____
7980A Autoloading 6250/1600 cpi Mag- (5800) neticTape Unit in 1m/39 in. cabinet.	_____/____
-133 Discount for additional unit mounting in the same cabinet as a first unit	_____/____
-137 Upgrade cabinet to accept a 7936H/XP or 7937H/XP Disk for mounting in the same cabinet as a first tape unit	_____/____
-800 Adds 800 cpi operation	_____/____
7980XC Autoloading 6250/1600 cpi Mag- (5800) neticTape Unit with data com- pression in 1m/39 in. cabinet.	_____/____
-133 Discount for additional unit mounting in the same cabinet as a first unit	_____/____
-137 Upgrade cabinet to accept a 7936H/XP or 7937H/XP Disk for mounting in the same cabinet as a first tape unit.	_____/____

Ordering Software

Software Use Levels

Original Software Product. The highest use level is the Original software product, which has an A or B product number suffix. The Original product includes the software on the customer's choice of delivery media, a set of manuals, the right to use the product on **one** system, and the right to purchase right-to-copy (R-suffix) and right to execute (E-suffix) products.

Right-to-Copy Product. Purchase of the Original software product entitles the customer to purchase one or more rights to copy the software to an additional system(s), at a lower price than the Original product. The right to copy (R-suffix) product may include an additional set of manuals in addition to the right to use the copied original software on **one** additional system in any way in which the Original product can be used.

Right-to-Execute Product. Purchase of an Original operating system and a few other Original software products entitles the customer to purchase rights to execute that software on additional systems. At a lower price than the R-suffix product, the right-to-execute (E-suffix) product includes the right to run the original product and applications on **one** target system. It does **not** include manuals or the right to develop programs or generate systems on the target system.

Software Use Options

Most HP 1000 software products are matched to the processor on which the software is to be used by Use Options. This equates the price of the software with its execution value, which increases with the speed and power of the processor. Software for use with A400 computers is ordered with Use Option 400. At progressively higher prices, software for use with A600+ computers is ordered with Use Option 600, or in an upgrade situation, with Use Option 601, 602, etc.; software for use with A700 computers is ordered with Use Option 700, 701, 702, etc.; and software for use with A900 computers is ordered with Use Option 890, 891, 892, 894, 896, or 897. An appropriate Use Option must be specified for each sofware product ordered.

General License to Use

With some software products, as noted in the price tables, Use Option 890 or an upgrade to it licenses use in any supporting HP 1000 computer and includes the right to purchase rights to copy the original product with any of Use Options 400, 600, 700, or 890.

Ways to Purchase HP 1000 Software

Operating System Included in SPU. HP 1000 System Processor Units (SPUs) include the RTE-A system, which provides the foundation for other HP software and user-developed application programs. The RTE-A system is furnished on media specified by an SPU Media Option. The RTE-A system purchased in this way is like the **Original** product, as described above, except that its purchase with the SPU does **not** include the right to purchase rights to copy or rights to execute RTE-A on other systems.

Software Purchased in Development Pack. HP program development, data base management, and Device-independent Graphics Library software can be purchased in development packs at attractive package prices (see page 40 for details). The software purchased in this way is like the **Original** product, as described above, except that its purchase in the development pack does **not** include the right to purchase rights to copy or rights to execute any of the software in the development pack on other systems.

Software Purchased Individually. All HP 1000 software can be purchased individually, as Original software, with all accompanying rights, as discussed in the *Software Use Levels* section, above.

Software Media Options

HP 1000 software is available on a choice of distribution media, as listed below and in the price tables. Distribution media for HP 1000 A-Series software are specified by the following options, one of which must be specified for each software product ordered:

022	16-channel CS/80 Cartridge Tape
044	Microfloppy disks in single-sided 270 kB format
051	1600 cpi, 9-track magnetic tape
061	1600 cpi, 9-track magnetic tape in CS/80 format

Ordering Software, continued

RTE-A Operating System & VC+

Prod.No., Description, & Options	Price/BMMC
RTE-A PRODUCTS	
92077A RTE-A Real-Time Executive (5007) Operating System for first A-Series computer, with: – Primary system and master relocatable software modules on Option 022, 044, 051, or 061 Media, one of which MUST BE ORDERED. – License to use on one system. MUST ORDER appropriate Use Option, selected from 400 through 897. – 92077K RTE-A Manuals Pkg.	See options 400 400 through 897, below
-022 RTE-A software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 RTE-A software on 270 kB Microfloppy Disks.	0/ 0
-051 RTE-A software w/o Primary System on 1600 cpi Mag Tape.	0/ 0
-061 RTE-A software in CS/80 format on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	___/___
-600 Use in A600+ computer.	___/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	___/___
-700 Use in A700 computer.	___/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	___/___
-890 Use in A900 computer.	___/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	___/___
-894 Upgrade to use in A900 computer from use in A400 computer.	___/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	___/___
-897 Upgrade to use in A900 computer from use in A700 computer.	___/___
92077R Right-to-Copy RTE-A to one (5007) additional computer, with: – License to copy RTE-A to one system, including its use for program development and/or system generation. MUST ORDER appropriate Use Option, selected from 400 through 897. – 92077K RTE-A Manuals Pkg.	See options 400 through 897, below
-100 Deletes 92077K RTE-A Manuals Package.	___/___
-400 Use in A400 computer.	___/___
-600 Use in A600+ computer.	___/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	___/___
-700 Use in A700 computer.	___/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	___/___
-890 Use in A900 computer.	___/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	___/___

RTE-A and VC+, continued

Prod.No., Description, & Options	Price/BMMC
RTE-A PRODUCTS, continued	
92077R Right-to-Copy RTE-A, continued	
-894 Upgrade to use in A900 computer from use in A400 computer.	___/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	___/___
-897 Upgrade to use in A900 computer from use in A700 computer.	___/___
92077E Right-to-Execute RTE-A on one (5007) additional computer – Excludes program development and system generation on the target system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	___/___
-600 Use in A600+ computer.	___/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	___/___
-700 Use in A700 computer.	___/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	___/___
-890 Use in A900 computer.	___/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	___/___
-894 Upgrade to use in A900 computer from use in A400 computer.	___/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	___/___
-897 Upgrade to use in A900 computer from use in A700 computer.	___/___

VC+ PRODUCTS

NOTE: The HP 92078A VC+ Enhancement to RTE-A is also available along with the 92861A Graphics/1000-II Device-Independent Graphics Library (DGL), IMAGE/1000 or IMAGE/1000-II, FORTRAN 77, Pascal/1000, BASIC/1000C, and Symbolic Debug/1000 in the HP 91156A and 91156B Development Packs at an attractive package price; order the Development Packs on page 40.

Prod.No., Description, & Options	Price/BMMC
92078A VC+ Enchancement to RTE-A for (5007) first A-Series computer.with: – Master relocatable software modules on Option 022, 044, or 051 Media, one of which MUST BE ORDERED . – License to use on one system. MUST ORDER appropriate Use Option, selected from 400 through 897. – VC+ Manual.	See options 400 through 897, below
-022 VC+ software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 VC+ software on 270 kB Microfloppy Disks.	0/ 0
-051 VC+ Software on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	___/___
-600 Use in A600+ computer.	___/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	___/___

VC+ PRODUCTS, continued

Prod.No., Description, & Options	Price/BMMC
92078A VC+ Enchancement to RTE-A, continued	
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer	____/___
92078R Right-to-Copy VC+ to one addi- **(5007)** tional computer, with: – License to copy VC+ to one system including its use for program development and/or system generation. MUST ORDER appropriate Use Option, selected from 400 through 897. – VC+ Manual.	See options 400 through 897, below
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer.	____/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___

VC+ PRODUCTS, continued

Prod.No., Description, & Options	Price/BMMC
92078E Right-to-Execute VC+ on one **(5007)** additional computer – Usable only under 92077E Right-to-Execute RTE-A system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer.	____/___
-601 Upgrade to latest version in A600+ computer for user NOT subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 computer for user NOT subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 computer for user NOT subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600+ computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___

Diagnostics

Prod.No., Description, & Options	Price/BMMC
24398B A-Series Peripherals Diagnostics. **(5007)** Must order MediaOption 022.	____/___
-022 Diagnostics on 16-channel CS/80 Cartridge Tape.	0/ 0
24612A A-Series System Diagnostics on **(5007)** Option 022, 044, or 051 Media, one of which MUST BE ORDERED.	____/___
-022 Diagnostics on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 Diagnostics on 270 kB Micro-floppy Disks.	0/ 0
-051 Diagnostics on 1600 cpi Mag Tape.	0/ 0

Ordering Software, continued

Development Packs

Prod.No., Description, & Options	Price/BMMC

NOTE: The 91156A and 91156B Development Packs listed below are intended for HP 1000 A-Series Computers only, because these development packs include VC. All HP 1000 A-Series System Processor Units (SPUs) now include VC+, so the VC+ software provided in the 91156A/B Development Packs is redundant for SPUs. For SPUs, order the 91157A and 91157B Development Packs listed in the next column for HP 1000 A-Series System Processor Units.

Prod.No., Description, & Options		Price/BMMC
91156A (5007)	Development Pack for A-Series Computers with at least 1 MB of memory (3 MB) in A900) on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 890. This Development Pack provides: – 92078A VC+ Enhancement to RTE-A – 92081A IMAGE/1000-II DBMS – 92833A Pascal/1000 Compiler – 92836A FORTRAN 77 Compiler – 92857A BASIC/1000C Interpreter and Compiler – 92860A Symbolic Debug/1000 – 92861A Graphics/1000-II Device-Independent Graphics Library (DGL)	See options 400 through 890, below
-022	Development Pack software on 16-chan. CS/80 Cartridge Tape.	0/ 0
-044	Development Pack software on 270 kB Microfloppy Disks.	0/ 0
-051	Development Pack software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	___/___
-600	Use in A600+ computer	___/___
-700	Use in A700 computer.	___/___
-890	Use in A900 computer.	___/___
91156B (5007)	Development Pack for A-Series Computers with at least 1 MB of memory (3 MB) in A900) on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 890. This Development Pack provides: – 92078A VC+ Enhancement to RTE-A – 92069A IMAGE/1000 DBMS – 92833A Pascal/1000 Compiler – 92836A FORTRAN 77 Compiler – 92857A BASIC/1000C Interpreter and Compiler – 92860A Symbolic Debug/1000 – 92861A Graphics/1000-II Device-Independent Graphics Library (DGL)	See options 400 through 890, below
-022	Development Pack software on 16-chan. CS/80 Cartridge Tape.	0/ 0
-044	Development Pack software on 270 kB Microfloppy Disks.	0/ 0
-051	Development Pack software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	___/___
-600	Use in A600+ computer	___/___
-700	Use in A700 computer.	___/___
-890	Use in A900 computer.	___/___

Development Packs, continued

Prod.No., Description, & Options	Price/BMMC

NOTE: The 91157A and 91157B Development Packs listed below are intended for HP 1000 A-Series System Processor Units (SPUs), which already have, and therefore do not require, the VC+ software provided in the 91156A/B Development Packs listed in the previous column.

Prod.No., Description, & Options		Price/BMMC
91157A (5007)	Development Pack for A-Series Computers with at least 1 MB of memory (3 MB) in A900) on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 890. This Development Pack provides: – 92081A IMAGE/1000-II DBMS – 92833A Pascal/1000 Compiler – 92836A FORTRAN 77 Compiler – 92857A BASIC/1000C Interpreter and Compiler – 92860A Symbolic Debug/1000 – 92861A Graphics/1000-II Device-Independent Graphics Library (DGL)	See options 400 through 890, below
-022	Development Pack software on 16-chan. CS/80 Cartridge Tape.	0/ 0
-044	Development Pack software on 270 kB Microfloppy Disks.	0/ 0
-051	Development Pack software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	___/___
-600	Use in A600+ computer	___/___
-700	Use in A700 computer.	___/___
-890	Use in A900 computer.	___/___
91157B (5007)	Development Pack for A-Series Computers with at least 1 MB of memory (3 MB) in A900) on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 890. This Development Pack provides: – 92069A IMAGE/1000 DBMS – 92833A Pascal/1000 Compiler – 92836A FORTRAN 77 Compiler – 92857A BASIC/1000C Interpreter and Compiler – 92860A Symbolic Debug/1000 – 92861A Graphics/1000-II Device-Independent Graphics Library (DGL)	See options 400 through 890, below
-022	Development Pack software on 16-chan. CS/80 Cartridge Tape.	0/ 0
-044	Development Pack software on 270 kB Microfloppy Disks.	0/ 0
-051	Development Pack software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	___/___
-600	Use in A600+ computer	___/___
-700	Use in A700 computer.	___/___
-890	Use in A900 computer.	___/___

Disk Mirroring Software

Prod.No., Description, & Options	Price/BMMC
92050A Datapair/1000 software on Option 022 or 051 Media, one of (5007) which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
−022 Datapair/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
−051 Datapair/1000 software on 1600 cpi Mag Tape.	0/ 0
−400 Use in A400 computer.	_____/____
−600 Use in A600+ computer	_____/____
−700 Use in A700 computer.	_____/____
−890 Use in A900 computer.	_____/____
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/____
−896 Upgrade to use in A900 computer from use in A600 computer.	_____/____
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/____
92050R Right-to-Copy 92050A Software (5007) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
−400 Use in A400 computer.	_____/____
−600 Use in A600+ computer	_____/____
−700 Use in A700 computer.	_____/____
−890 Use in A900 computer.	_____/____
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/____
−896 Upgrade to use in A900 computer from use in A600 computer.	_____/____
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/____

Program Development Software

Prod.No., Description, & Options	Price/BMMC
MICROPROGRAMMING SOFTWARE	
92049A RTE Microprogramming Package (5007) for A900 Computers on Option 022, 044, or 051 Media, one of which MUST BE ORDERED.	_____/____
−022 RTE Microprogramming Package software on 16-channel CS/80 CartridgeTape.	0/ 0
−044 RTE Microprogramming Package software on 270 kB Microfloppy Disks.	0/ 0
−051 RTE Microprogramming Package software on 1600 cpi Mag Tape	0/ 0
92049R Right-to-Copy 92049A Software (5007) to one additional system.	_____/____

Program Development Software, continued

Prod.No., Description, & Options	Price/BMMC
PROGRAM PROFILING SOFTWARE	
92083A RTE Profile Monitor on Option (5007) 022, 044, or 051 Media, one of which MUST BE ORDERED.	_____/____
−022 RTE Profile Monitor software on 16-channel CS/80 Cartridge Tape	0/ 0
−051 RTE Profile Monitor software on 1600 cpi Mag Tape	0/ 0
92083R Right-to-Copy 92083A software (5007) to one additional system.	_____/____

Prod.No., Description, & Options	Price/BMMC
PROGRAM COMPILERS	
92833A Pascal/1000 Compiler on Option (5007) 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
−022 Pascal/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
−044 Pascal/1000 software on 270 kB Microfloppy Disks.	0/ 0
−051 Pascal/1000 software on 1600 cpi Mag Tape.	0/ 0
−400 Use in A400 computer.	_____/____
−600 Use in A600+ computer	_____/____
−700 Use in A700 computer.	_____/____
−890 Use in A900 computer.	_____/____
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/____
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/____
−896 Upgrade to use in A900 computer from use in A600 computer.	_____/____
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/____
92833R Right-to-Copy 92833A Software (5007) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
−400 Use in A400 computer.	_____/____
−600 Use in A600+ computer	_____/____
−700 Use in A700 computer.	_____/____
−890 Use in A900 computer.	_____/____
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/____
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/____
−896 Upgrade to use in A900 computer from use in A600 computer.	_____/____
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/____

Ordering Software, continued

Program Development Software, continued

Prod.No., Description, & Options	Price/BMMC
PROGRAM COMPILERS, continued	
92836A FORTRAN 77 Compiler on Option (5007) 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
–022 FORTRAN 77 software on 16- channel CS/80 Cartridge Tape.	0/ 0
–044 FORTRAN 77 software on 270 kB Microfloppy Disks.	0/ 0
–051 FORTRAN 77 software on 1600 cpi Mag Tape.	0/ 0
–400 Use in A400 computer.	_____/_____
–600 Use in A600+ computer	_____/_____
–700 Use in A700 computer.	_____/_____
–890 Use in A900 computer.	_____/_____
–891 Upgrade to latest version in A900 for user NOT subscribing to soft- ware support services.	_____/_____
–894 Upgrade to use in A900 computer from use in A400 computer.	_____/_____
–896 Upgrade to use in A900 computer from use in A600 computer.	_____/_____
–897 Upgrade to use in A900 computer from use in A700 computer.	_____/_____
92836R Right-to-Copy 92836A Software (5007) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
–400 Use in A400 computer.	_____/_____
–600 Use in A600+ computer	_____/_____
–700 Use in A700 computer.	_____/_____
–890 Use in A900 computer.	_____/_____
–891 Upgrade to latest version in A900 for user NOT subscribing to soft- ware support services.	_____/_____
–894 Upgrade to use in A900 computer from use in A400 computer.	_____/_____
–896 Upgrade to use in A900 computer from use in A600 computer.	_____/_____
–897 Upgrade to use in A900 computer from use in A700 computer.	_____/_____

Program Development Software, continued

Prod.No., Description, & Options	Price/BMMC
BASIC INTERPRETER AND COMPILER	
92857A BASIC/1000C Interpreter and (5007) Compiler on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
–022 BASIC/1000C software on 16- channel CS/80 Cartridge Tape.	0/ 0
–044 BASIC/1000C software on 270 kB Microfloppy Disks.	0/ 0
–051 BASIC/1000C software on 1600 cpi Mag Tape.	0/ 0
–400 Use in A400 computer.	_____/_____
–600 Use in A600+ computer	_____/_____
–700 Use in A700 computer.	_____/_____
–890 Use in A900 computer.	_____/_____
–891 Upgrade to latest version in A900 for user NOT subscribing to soft- ware support services.	_____/_____
–894 Upgrade to use in A900 computer from use in A400 computer.	_____/_____
–896 Upgrade to use in A900 computer from use in A600 computer.	_____/_____
–897 Upgrade to use in A900 computer from use in A700 computer.	_____/_____
92857R Right-to-Copy 92857A Software (5007) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
–400 Use in A400 computer.	_____/_____
–600 Use in A600+ computer	_____/_____
–700 Use in A700 computer.	_____/_____
–890 Use in A900 computer.	_____/_____
–891 Upgrade to latest version in A900 for user NOT subscribing to soft- ware support services.	_____/_____
–894 Upgrade to use in A900 computer from use in A400 computer.	_____/_____
–896 Upgrade to use in A900 computer from use in A600 computer.	_____/_____
–897 Upgrade to use in A900 computer from use in A700 computer.	_____/_____

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#900   Use on A990
#991   Upgrade from A900 → A990

Database Management Software, continued

Prod. No., Description, & Options	Price/BMMC
92081A (5007) IMAGE/1000-II software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-022 IMAGE/1000-II software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 IMAGE/1000-II software on 270 kB Microfloppy Disks.	0/ 0
-051 IMAGE/1000-II software on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer.	____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	____/___
-602 Upgrade from 92081A Option 600 for user subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	____/___
-702 Upgrade from 92081A Option 700 for user subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	____/___
-892 Upgrade from 92081A Option 890 for user subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___
92081R (5007) Right-to-Copy 92081A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer	____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	____/___
-602 Upgrade from 92081R Option 600 for user subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	____/___
-702 Upgrade from 92081R Option 700 for user subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	____/___
-892 Upgrade from 92081R Option 890 for user subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___

Forms Data Entry Software

Prod. No., Description, & Options	Price/BMMC
94250B (5007) FORMS/1000 software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-022 FORMS/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 FORMS/1000 software on 270 kB Microfloppy Disks.	0/ 0
-051 FORMS/1000 software on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer	____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___
94250R (5007) Right-to-Copy 94250B Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer	____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	____/___
-700 Use in A700 computer.	____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	____/___
-890 Use in A900 computer.	____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___
94250E (5007) Right-to-Execute 94250B Software on one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	____/___
-600 Use in A600+ computer	____/___
-700 Use in A700 computer.	____/___
-890 Use in A900 computer.	____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	____/___

Graphics Software

Prod.No., Description, & Options	Price/BMMC
NOTE: HP 92861A Graphics/1000-II Device-Independent Graphics Library (DGL) is also available along with IMAGE/ 1000 or IMAGE/1000-II, FORTRAN 77, Pascal/1000, BASIC/1000C, and Symbolic Debug/1000 in the HP 91156B, 91156A, 91157B, and 91157A Development Packs at attractive package prices; order the development packs on page 40.	

Prod.No.	Description, & Options	Price/BMMC
92861A (5007)	Graphcs/1000-II Device Independent Graphics Library (DGL) software on option 022, 044, or 051 Media, one of which MUST BE ORDERED.MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-022	DGL software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044	DGL software on 270 kB Micro-floppy Disks.	0/ 0
-051	DGL software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	_____/___
-600	Use in A600+ computer.	_____/___
-601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-602	Upgrade from 92841A option 600 for user subscribing to software support services.	0/ 0
-603	Upgrade from 92841A option 600 for user NOT subscribing to software support services.	_____/___
-700	Use in A700 computer.	_____/___
-701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-702	Upgrade from 92841A option 700 for user subscribing to software support services.	0/ 0
-703	Upgrade from 92841A option 700 for user NOT subscribing to software support services.	_____/___
-890	Use in A900 computer.	_____/___
-891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-892	Upgrade from 92841A option 890 for user subscribing to software support services.	0/ 0
-893	Upgrade from 92841A option 890 for user NOT subscribing to software support services.	_____/___
-894	Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897	Upgrade to use in A900 computer from use in A700 computer.	_____/___
92861R (5007)	Right-to-Copy 92861A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400	Use in A400 computer.	_____/___
-600	Use in A600+ computer.	_____/___
-601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-602	Upgrade from 92841R option 600 for user subscribing to software support services.	0/ 0
-603	Upgrade from 92841R option 600 for user NOT subscribing to software support services.	_____/___

Graphics Software, continued

Prod.No.	Description, & Options	Price/BMMC
92861R (5007)	Right-to-Copy 92861A software, continued	
-700	Use in A700 computer.	_____/___
-701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-702	Upgrade from 92841R option 700 for user subscribing to software support services.	0/ 0
-703	Upgrade from 92841R option 700 for user NOT subscribing to software support services.	_____/___
-890	Use in A900 computer.	_____/___
-891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-892	Upgrade from 92841R option 890 for user subscribing to software support services.	0/ 0
-893	Upgrade from 92841R option 890 for user NOT subscribing to software support services.	_____/___
-894	Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897	Upgrade to use in A900 computer from use in A700 computer.	_____/___
92862A (5007)	Graphcs/1000-II Advanced Graphics Package (AGP) software on option 022, 044, or 051 Media, one of which MUST BE ORDERED.MUST ALSO ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-022	AGP software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044	AGP software on 270 kB Micro-floppy Disks.	0/ 0
-051	AGP software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	_____/___
-600	Use in A600+ computer.	_____/___
-601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-602	Upgrade from 92842A option 600 for user subscribing to software support services.	0/ 0
-603	Upgrade from 92842A option 600 for user NOT subscribing to software support services.	_____/___
-700	Use in A700 computer.	_____/___
-701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-702	Upgrade from 92842A option 700 for user subscribing to software support services.	0/ 0
-703	Upgrade from 92842A option 700 for user NOT subscribing to software support services.	_____/___
-890	Use in A900 computer.	_____/___
-891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-892	Upgrade from 92842A option 890 for user subscribing to software support services.	0/ 0
-893	Upgrade from 92842A option 890 for user NOT subscribing to software support services.	_____/___

Ordering Software, continued

Graphics Software, continued

Prod.No., Description, & Options	Price/BMMC
92862A Graphcs/1000-II Advanced Graphics Package (AGP) software, (5007) continued	
-894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___
92862R Right-to-Copy 92862A Software (5007) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
-400 Use in A400 computer.	_____/___
-600 Use in A600+ computer	_____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-602 Upgrade from 92842R option 600 for user subscribing to software support services.	0/ 0
-603 Upgrade from 92842R option 600 for user NOT subscribing to software support services.	_____/___
-700 Use in A700 computer.	_____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-702 Upgrade from 92842R option 700 for user subscribing to software support services.	_____/___
-703 Upgrade from 92842R option 700 for user NOT subscribing to software support services.	_____/___
-890 Use in A900 computer.	_____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-892 Upgrade from 92842R option 890 for user subscribing to software support services.	0/ 0
-893 Upgrade from 92842R option 890 for user NOT subscribing to software support services.	_____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___

Communications Software

Prod.No., Description, & Options	Price/BMMC
FOR COMMUNICATION WITH OTHER HP SYSTEMS	
91790A NS/1000 Network Services software on Option 022, 044, or (5200) 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires appropriate LAN/1000 Link interface or point-to-point interface to other HP 1000 or to HP 3000 System.	See options 400 through 897. below
-022 NS/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 NS/1000 software on 270 kB Microfloppy Disks.	0/ 0
-051 NS/1000 software on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	_____/___
-401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	_____/___
-600 Use in A600+ computer.	_____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-700 Use in A700 computer.	_____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-890 Use in A900 computer.	_____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___
91790R Right-to-Copy 91790A Software (5200) to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires appropriate LAN/1000 Link interface or point-to-point interface to other HP 1000 or to HP 3000 System.	See options 400 through 897, below
-400 Use in A400 computer.	_____/___
-401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	_____/___
-600 Use in A600+ computer.	_____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-700 Use in A700 computer.	_____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-890 Use in A900 computer.	_____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH OTHER HP SYSTEMS, continued

Prod.No., Description, & Options	Price/BMMC
91750A (5200) DS/1000-IV Distributed Systems software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires appropriate point-to-point interface to other HP 1000 or to HP 3000 System.	See options 400 through 897, below
−022 NS/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
−044 NS/1000 software on 270 kB Microfloppy Disks.	0/ 0
−051 NS/1000 software on 1600 cpi Mag Tape.	0/ 0
−400 Use in A400 computer.	___/___
−401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	___/___
−600 Use in A600+ computer.	___/___
−601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	___/___
−700 Use in A700 computer.	___/___
−701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	___/___
−890 Use in A900 computer.	___/___
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	___/___
−894 Upgrade to use in A900 computer from use in A400 computer.	___/___
−896 Upgrade to use in A900 computer from use in A600 computer.	___/___
−897 Upgrade to use in A900 computer from use in A700 computer.	___/___
91750R (5200) Right-to-Copy 91750A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires appropriate point-to-point interface to other HP 1000 or to HP 3000 System.	See options 400 through 897, below
−400 Use in A400 computer.	___/___
−401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	___/___
−600 Use in A600+ computer.	___/___
−601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	___/___
−700 Use in A700 computer.	___/___
−701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	___/___
−890 Use in A900 computer.	___/___
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	___/___
−894 Upgrade to use in A900 computer from use in A400 computer.	___/___
−896 Upgrade to use in A900 computer from use in A600 computer.	___/___
−897 Upgrade to use in A900 computer from use in A700 computer.	___/___

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR MULTIVENDOR COMMUNICATION VIA LAN

Prod.No., Description, & Options	Price/BMMC
98170A (5200) ARPA Services/1000 (ARPA/1000 software on Option 022 or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12076A LAN/1000 Link interface to Local Area Network.	See options 400 through 897, below
−022 ARPA/1000 software on 16-chan. CS/80 Cartridge Tape.	0/ 0
−051 ARPA/1000 software on 1600 cpi Mag Tape.	0/ 0
−400 Use in A400 computer.	___/___
−401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	___/___
−600 Use in A600+ computer.	___/___
−601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	___/___
−700 Use in A700 computer.	___/___
−701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	___/___
−890 Use in A900 computer.	___/___
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	___/___
−894 Upgrade to use in A900 computer from use in A400 computer.	___/___
−896 Upgrade to use in A900 computer from use in A600 computer.	___/___
−897 Upgrade to use in A900 computer from use in A700 computer.	___/___
98170R (5200) Right-to-Copy 981750A Software to one additional sysem. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires appropriate point-to-point interface to other HP 1000 or to HP 3000 System.	See options 400 through 897, below
−400 Use in A400 computer.	___/___
−401 Upgrade to latest version in A400 for user NOT subscribing to software support services.	___/___
−600 Use in A600+ computer.	___/___
−601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	___/___
−700 Use in A700 computer.	___/___
−701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	___/___
−890 Use in A900 computer.	___/___
−891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	___/___
−894 Upgrade to use in A900 computer from use in A400 computer.	___/___
−896 Upgrade to use in A900 computer from use in A600 computer.	___/___
−897 Upgrade to use in A900 computer from use in A700 computer.	___/___

Ordering Software, continued

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR X.25 COMMUNICATION

Prod.No., Description, & Options	Price/BMMC
91751A (5200) X.25/1000 software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. Also requires 12075A X.25 interface to packet-switching network.	_____/___
-001 Discount for upgrade to latest version of 91751A for customer NOT subscribing to software support services.	_____/___
-022 X.25/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 X.25/1000 software on 270 kB Microfloppy Disks.	0/ 0
-051 X.25/1000 software on 1600 cpi Mag Tape.	0/ 0
91751R (5200) Right-to-Copy 91751A Software to one additional system. Also requires 12075A X.25 interface to packet-switching network.	_____/___
-001 Discount for copy of upgrade to latest version of 91751A for customer NOT subscribing to software support services.	_____/___

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH IBM SYSTEMS

Prod.No., Description, & Options	Price/BMMC
91781A (5200) RJE/1000-II Remote Job Entry software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
-022 RJE/1000-II software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044 RJE/1000-II software on 270 kB Microfloppy Disks.	0/ 0
-051 RJE/1000-II software on 1600 cpi Mag Tape.	0/ 0
-400 Use in A400 computer.	_____/___
-600 Use in A600+ computer	_____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-700 Use in A700 computer.	_____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-890 Use in A900 computer.	_____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___
91781R (5200) Right-to-Copy 91781A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
-400 Use in A400 computer.	_____/___
-600 Use in A600+ computer	_____/___
-601 Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
-700 Use in A700 computer.	_____/___
-701 Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
-890 Use in A900 computer.	_____/___
-891 Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
-896 Upgrade to use in A900 computer from use in A600 computer.	_____/___
-897 Upgrade to use in A900 computer from use in A700 computer.	_____/___

Prod.No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH IBM SYSTEMS, continued

91782A (5200)	MRJE/1000 Multileaving Remote Job Entry software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
–022	MRJE/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
–044	MRJE/1000 software on 270 kB Microfloppy Disks.	0/ 0
–051	MRJE/1000 software on 1600 cpi Mag Tape.	0/ 0
–400	Use in A400 computer.	_____/___
–600	Use in A600+ computer	_____/___
–601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
–700	Use in A700 computer.	_____/___
–701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
–890	Use in A900 computer.	_____/___
–891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
–896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
–897	Upgrade to use in A900 computer from use in A700 computer.	_____/___
91782R (5200)	Right-to-Copy 91782A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
–400	Use in A400 computer.	_____/___
–600	Use in A600+ computer	_____/___
–601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
–700	Use in A700 computer.	_____/___
–701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
–890	Use in A900 computer.	_____/___
–891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
–896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
–897	Upgrade to use in A900 computer from use in A700 computer.	_____/___

Prod.No., Description, & Options	Price/BMMC

91784A (5200)	PMF/1000 Programmable Main-fram Comm. software on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
–022	PMF/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
–044	PMF/1000 software on 270 kB Microfloppy Disks.	0/ 0
–051	PMF/1000 software on 1600 cpi Mag Tape.	0/ 0
–400	Use in A400 computer.	_____/___
–600	Use in A600+ computer	_____/___
–601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
–700	Use in A700 computer.	_____/___
–701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
–890	Use in A900 computer.	_____/___
–891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
–896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
–897	Upgrade to use in A900 computer from use in A700 computer.	_____/___
91784R (5200)	Right-to-Copy 91784A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12043A Multi-Use Programmable Serial Interface.	See options 400 through 897, below
–400	Use in A400 computer.	_____/___
–600	Use in A600+ computer	_____/___
–601	Upgrade to latest version in A600+ for user NOT subscribing to software support services.	_____/___
–700	Use in A700 computer.	_____/___
–701	Upgrade to latest version in A700 for user NOT subscribing to software support services.	_____/___
–890	Use in A900 computer.	_____/___
–891	Upgrade to latest version in A900 for user NOT subscribing to software support services.	_____/___
–896	Upgrade to use in A900 computer from use in A600 computer.	_____/___
–897	Upgrade to use in A900 computer from use in A700 computer.	_____/___

Ordering Software, continued

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH PLCs

94200B (5007)	PCIF/1000 software for interfacing Programmable Logic Controllers on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires one of 94202A through 94207A Device Handlers, listed below, and appropriate multiplexer interface.	See options 400 through 897, below
-022	PCIF/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044	PMF/1000 software on 270 kB Microfloppy Disks.	0/ 0
-051	PMF/1000 software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	____/___
-600	Use in A600+ computer.	____/___
-700	Use in A700 computer.	____/___
-890	Use in A900 computer.	____/___
-894	Upgrade to use in A900 computer from use in A600 computer.	____/___
-896	Upgrade to use in A900 computer from use in A600 computer.	____/___
-897	Upgrade to use in A900 computer from use in A700 computer.	____/___
94200R (5007)	Right-to-Copy 94200B Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires copy of one of 94202A through 94207A Device Handlers, listed below, and appropriate multiplexer interface.	See options 400 through 897, below
-400	Use in A400 computer.	____/___
-600	Use in A600+ computer.	____/___
-700	Use in A700 computer.	____/___
-890	Use in A900 computer.	____/___
-896	Upgrade to use in A900 computer from use in A400 computer.	____/___
-896	Upgrade to use in A900 computer from use in A600 computer.	____/___
-897	Upgrade to use in A900 computer from use in A700 computer.	____/___
94202A (5007)	PCIF/1000 Device Handler for Allen-Bradley PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B Interface to Allen-Bradley equipment. NOTE: 94202A options are listed following the 94207A Device Handler on the next page.	See options 400 through 897, which follow 94207A, next column
94203A (5007)	PCIF/1000 Device Handler for Gould-Modicon PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12040D Interface to Gould-Modicon equipment. NOTE: 94202A options are listed following the 94207A Device Handler on the next page.	See options 400 through 897, which follow 94207A, next column

Communications Software, continued

Prod.No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH PLCs, continued

94204A (5007)	PCIF/1000 Device Handler for Siemens PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B Interface to Siemens equipment. NOTE: 94204A options are listed following the 94207A Device Handler on the next page.	See options 400 through 897, which follow 94207A, below.
94205A (5007)	PCIF/1000 Device Handler for Telemecanique PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B Interface to Telemecanique equipment. NOTE: 94205A options are listed following the 94207A Device Handler on the next page.	See options 400 through 897, which follow 94207A, below.
94206A (5007)	PCIF/1000 Device Handler for General Electric PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B Interface to General Electric equipment. NOTE: 94206A options are listed following the 94207A Device Handler on the next page.	See options 400 through 897, which follow 94207A, below.
94207A (5007)	PCIF/1000 Device Handler for Texas Instruments PLCs on Option 022, 044, or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Also requires 12040D Interface to Texas Instruments equipment.	See options 400 through 897, below.
-022	Device Handler software on 16-channel CS/80 Cartridge Tape.	0/ 0
-044	Device Handler software on 270 kB Microfloppy Disks.	0/ 0
-051	Device Handler software on 1600 cpi Mag Tape.	0/ 0
-400	Use in A400 computer.	____/___
-600	Use in A600+ computer	____/___
-700	Use in A700 computer.	____/___
-890	Use in A900 computer.	____/___
-894	Upgrade to use in A900 computer from use in A600 computer.	____/___
-896	Upgrade to use in A900 computer from use in A600 computer.	____/___
-897	Upgrade to use in A900 computer from use in A700 computer.	____/___

Communications Software, continued

Prod. No., Description, & Options	Price/BMMC

FOR COMMUNICATION WITH PLCs, continued

| Prod. No., Description, & Options	Price/BMMC
94202R (5007) Right-to-Copy 94202A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B interface to Allen-Bradley equipment. NOTE: 94202R options are listed following 94207R, below.	See options 400 through 897, which follow 94207R, below.
94203R (5007) Right-to-Copy 94203A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12040D interface to Gould-Modicon equipment. NOTE: 94203R options are listed following 94207R, below.	See options 400 through 897, which follow 94207R, below.
94204R (5007) Right-to-Copy 94204A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B interface to Siemens equipment. NOTE: 94204R options are listed following 94207R, below.	See options 400 through 897, which follow 94207R, below.
94205R (5007) Right-to-Copy 94205A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B interface to Telemecanique equipment. NOTE: 94205R options are listed following 94207R, below.	See options 400 through 897, which follow 94207R, below.
94206R (5007) Right-to-Copy 94206A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12041B interface to General Electric equipment. NOTE: 94206R options are listed following 94207R, below.	See options 400 through 897, which follow 94207R, below.
94207R (5007) Right-to-Copy 94207A Software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897. Also requires 12040D interface to Texas Instruments equipment.	See options 400 through 897, below.
−400 Use in A400 computer.	_____/___
−600 Use in A600+ computer	_____/___
−700 Use in A700 computer.	_____/___
−890 Use in A900 computer.	_____/___
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
−896 Upgrade to use in A900 computer from use in A600+ computer.	_____/___
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/___

Quality Data Management Software

Prod. No., Description, & Options	Price/BMMC
92131A (5007) QDM/1000 Quality Data Management software on Option 022 or 051 Media, one of which MUST BE ORDERED. MUST ALSO ORDER appropriate Use Option, selected from 400 through 897. Requires RTE-A with VC+, 92081A IMAGE/1000-II, 92861A Graphics/1000-II Device-Independent Graphics Library, graphics display, and hard copy devices.	See 92131HA options 400 through 897, below
92131DA (5007) German Version of QDM/1000 software (same Media and Use Option ordering requirements and same requirements for co-requisite software and hardware as 92131A, above)	See 92131HA options 400 through 897, below
92131HA (5007) Dutch Version of QDM/1000 software (same Media and Use Option ordering requirements and same requirements for co-requisite software and hardware as 92131A, above)	See options 400 through 897, below
−022 QDM/1000 software on 16-channel CS/80 Cartridge Tape.	0/ 0
−051 QDM/1000 software on 1600 cpi Mag Tape.	0/ 0
−400 Use in A400 computer.	_____/___
−600 Use in A600+ computer	_____/___
−700 Use in A700 computer.	_____/___
−890 Use in A900 computer.	_____/___
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
−896 Upgrade to use in A900 computer from use in A600+ computer.	_____/___
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/___
92131R (5007) Right-to-Copy 92131A software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See 92131HR options 400 through 897, below
92131DR (5007) Right-to-Copy 92131DA software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See 92131HR options 400 through 897, below
92131HR (5007) Right-to-Copy 92131HA software to one additional system. MUST ORDER appropriate Use Option, selected from 400 through 897.	See options 400 through 897, below
−400 Use in A400 computer.	_____/___
−600 Use in A600+ computer	_____/___
−700 Use in A700 computer.	_____/___
−890 Use in A900 computer.	_____/___
−894 Upgrade to use in A900 computer from use in A400 computer.	_____/___
−896 Upgrade to use in A900 computer from use in A600+ computer.	_____/___
−897 Upgrade to use in A900 computer from use in A700 computer.	_____/___

Upgrades and Return Credit Products

HP 1000 Upgrade Paths

The HP 1000 Upgrade Program is one of the many ways in which Hewlett-Packard assures our customers that their investment in HP 1000 application development will be protected and highly leverageable in the future. The diagram below shows the upgrade paths that are supported by the HP 1000 Upgrade Program. Hewlett-Packard also offers upgrades from HP 1000 Systems to HP 9000 Series 800 Systems, a topic that is covered in HP 9000 Series 800 sales literature.
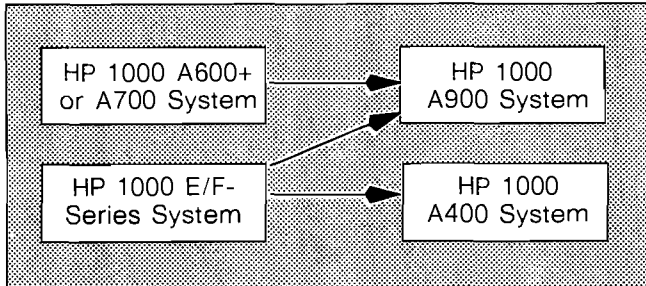
HP 1000 Family Upgrade Paths

Upgrade Credits

An extensive array of upgrade credits, outlined below, are offered to make upgrades attractive to HP 1000 customers.

A600+/A700-to-A900 Upgrade Path

Credit for Returned A600+ or A700 Computer or SPU. Credit of up to 25% of list price is available for return of A600+ or A700 computers or SPUs toward the purchase of an A900 computer or SPU.

Credit for Returned Memory. Credit of up to 50% is available for returned memory cards toward the purchase of an A900 computer or SPU.

Software License Credit. 100% credit is given for all software license upgrades. This means that cus-

tomers pay only the difference in price between a license to use their software on an A900 system and the license previously purchased to use the software on an A600 or A700 system. This is implemented by software Use Options 896 and 897 for all applicable software, as listed in the previous section on *Ordering Software*.

E/F-Series-to-A900 Upgrade Path

Credit for Upgrade from E/F-Series. Option 010 to all HP 1000 A900 Computers and SPUs provides a Credit of _____ for upgrade from an HP 1000 E/F-Series system.

Software License Credit. 100% credit is given for upgrades from Use Option 700 subsystem software licenses where the same software is usable on both HP 1000 E/F-Series and HP 1000 A900 systems. Customers pay only the difference in price between a license to use their software on an A900 system and the Use Option 700 license previously purchased to use the software on their E/F-Series system. This is implemented by Software Use Option 897 for all applicable software.

E/F-Series-to-A400 Upgrade Path

Credit for Upgrade from E/F-Series. Option 010 to all HP 1000 A400 Computers and SPUs provides a Credit of _____ for upgrade from an HP 1000 E/F-Series system.

Direct Software License Usability. The customer is granted the license to use on the new A400 system all subsystem software for which the customer holds a Use Option 700 license previously purchased for use with the E/F-Series system that is being replaced.

Return Credit Products

In addition to return credit for A600+ and A700 Computers or SPUs, Return Credit Products also offer credits for the return of certain interfaces. Return Credit Products may also be available on the return of certain peripheral devices, when the return credit is applied toward the purchase of a specific peripheral device(s).

Return Credit Products

Prod. No., Description, & Options	Price/BMMC
2139UN Trade-in Credit for Purchase of a (C100) 2139B Computer (must order return option; returned SPU or computer includes all cpu and memory controller cards	See options 601 through 704, below
-601 Return credit for 2196A-D.	–_____/___
-602 Return credit for 2486A.	–_____/___
-603 Return credit for 2156A/B.	–_____/___
-604 Return credit for 2436A/E.	–_____/___
-605 Return credit for 2186A.	–_____/___
-701 Return credit for 2197A-D.	–_____/___
-602 Return credit for 2487A.	–_____/___
-603 Return credit for 2137A.	–_____/___
-604 Return credit for 2437A.	–_____/___
2199UN Trade-in Credit for Purchase of a (C100) 2199E SPU (must order return option; returned SPU or com- puter includes all cpu and memory controller cards	See options 601 through 704, below
-601 Return credit for 2196A-D.	–_____/___
-602 Return credit for 2486A.	–_____/___
-603 Return credit for 2156A/B.	–_____/___
-604 Return credit for 2436A/E.	–_____/___
-605 Return credit for 2186A.	–_____/___
-701 Return credit for 2197A-D.	–_____/___
-602 Return credit for 2487A.	–_____/___
-603 Return credit for 2137A.	–_____/___
-604 Return credit for 2437A.	–_____/___
2439UN Trade-in Credit for Purchase of a (C100) 2439B Computer (must order return option; returned SPU or computer includes all cpu and memory controller cards	See options 601 through 704, below
-601 Return credit for 2196A-D.	–_____/___
-602 Return credit for 2486A.	–_____/___
-603 Return credit for 2156A/B.	–_____/___
-604 Return credit for 2436A/E.	–_____/___
-605 Return credit for 2186A.	–_____/___
-701 Return credit for 2197A-D.	–_____/___
-602 Return credit for 2487A.	–_____/___
-603 Return credit for 2137A.	–_____/___
-604 Return credit for 2437A.	–_____/___
2489UN Trade-in Credit for Purchase of a (C100) 2489B SPU (must order return option; returned SPU or com- puter includes all cpu and memory controller cards	See options 601 through 704, below
-601 Return credit for 2196A-D.	–_____/___
-602 Return credit for 2486A.	–_____/___
-603 Return credit for 2156A/B.	–_____/___
-604 Return credit for 2436A/E.	–_____/___
-605 Return credit for 2186A.	–_____/___
-701 Return credit for 2197A-D.	–_____/___
-602 Return credit for 2487A.	–_____/___
-603 Return credit for 2137A.	–_____/___
-604 Return credit for 2437A.	–_____/___
12005BN Trade-in Credit for 12005B (C100) Interface Card.	–_____/___
12156AN Trade-in Credit for 12156A (C100) Floating Point Processor Card.	–_____/___
12103AN Trade-in Credit for 12103A (C100) Memory Card toward purchase of A900 memory.	–_____/___
12103BN Trade-in Credit for 12103B (C100) Memory Card toward purchase of A900 memory.	–_____/___
12103CN Trade-in Credit for 12103C (C100) Memory Card toward purchase of A900 memory.	–_____/___

Return Credit Products, continued

Prod. No., Description, & Options	Price/BMMC
12103DN Trade-in Credit for 12103D (C100) Memory Card toward purchase of A900 memory.	–_____/___
12111AN Trade-in Credit for 12111A (C100) Memory Card toward purchase of A900 memory.	–_____/___
12111BN Trade-in Credit for 12111B (C100) Memory Card toward purchase of A900 memory.	–_____/___
12111CN Trade-in Credit for 12111C (C100) Memory Card toward purchase of A900 memory.	–_____/___
12220AN Trade-in Credit for 12220A (C100) Memory Card toward purchase of larger A900 memory.	–_____/___
12666HN Trade-in Credit for 12666H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12699HN Trade-in Credit for 12699H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12746HN Trade-in Credit for 12746H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12747HN Trade-in Credit for 12747H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12749HN Trade-in Credit for 12749H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12779HN Trade-in Credit for 12779H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12780HN Trade-in Credit for 12780H (C100) Memory Card toward purchase of A400 or A900 computer or memory.	–_____/___
12792AN Trade-in Credit for 12792A (C100) Multiplexer with panel toward purchase of 12040D multiplexer.	–_____/___
12792BN Trade-in Credit for 12792B (C100) Multiplexer with panel toward purchase of 12040D multiplexer.	–_____/___
12821AN Trade-in Credit for 12821A (C100) Interface toward purchase of 12009A Interface.	–_____/___
12966AN Trade-in Credit for 12966A (C100) Interface toward purchase of any A-Series Interface.	–_____/___
7970EN Trade-in Credit for 7970E Mag (C100) Tape Unit toward purchase of a 7980A Mag Tape Unit.	–_____/___
7974AN Trade-in Credit for 7974A Mag (C100) Tape Unit toward purchase of a 7980A Mag Tape Unit.	–_____/___
7978BN Trade-in Credit for 7978B Mag (C100) Tape Unit toward purchase of a 7980A Mag Tape Unit.	–_____/___

Ordering Consulting and Project Services

Prod.No., Description, & Options	Price

QDM/1000 ASSIST PRODUCTS

Prod.No.	Description	Price
92131A +60A	QDM Assist - Implementation Analysis Planning, Implementation Team Training, and Project Implementation Assistance (Must order quantity 12).	____
92131A +61A	QDM Assist - Implementation Analysis Planning (Must order quantity 12).	____
92131A +63A	QDM Assist - Implementation Team Training (Must order quantity 12).	____
92131A +65A	QDM Assist - Project Implementation Assistance (Must order quantity 12).	____
92131A +65Z	QDM Assist - Additional Service Unit available to customers who have purchased any other 92131A+6xA product.	____

CONSULTING SERVICES (Price is rate per hour x number of hours plus appropriate 51427A Travel Charge)

Prod.No.	Description	Price
51413A	Product Support Representative, normal hours.	____
51414A	Systems Engineer, normal hours.	____
51415A	Specialist, normal hours.	____
51419A	Product Support Representative, off-hours.	____
51420A	Systems Engineer, off-hours.	____
51421A	Specialist, off-hours.	____
51422A	Product Support Representative, weekend rate per hour.	____
51423A	Systems Engineer, weekend rate per hour.	____
51424A	Specialist, weekend rate per hour.	____
51427A	Travel Charge	See opt
-101	Within Zone 1.	____
-102	Within Zone 2.	____
-103	Within Zone 3.	____
-104	Within Zone 4.	____
-105	Beyond Zone 4	Special Quote

Prod.No., Description, & Options	Price

PROJECT SERVICES (Price is rate per hour x number of hours plus appropriate 35135T Travel Charge)

Prod.No.	Description	Price
35135C	Systems Engineer, normal hours. normal hours.	____
35135D	Specialist, normal hours. normal hours.	____
35135G	Product Support Representative, normal hours.	____
35135H	Product Support Representative, off-hours.	____
35135I	Systems Engineer, off-hours.	____
35135J	Specialist, off-hours.	____
35135K	Product Support Representative, weekend rate per hour.	____
35135L	Systems Engineer, weekend rate per hour.	____
35135M	Specialist, weekend rate per hour.	____
35135T	Travel Charge	See opt
-101	Within Zone 1.	____
-102	Within Zone 2.	____
-103	Within Zone 3.	____
-104	Within Zone 4.	____
-105	Beyond Zone 4	Special Quote

Ordering System Software Support

Why Order Software Support

Software support provides the mechanism whereby individual users can benefit from the experience of the entire community of users, as requested enhancements are incorporated and software and documentation defects are corrected in successive revisions of the product. Customers who subscribe to software support services automatically receive the latest revisions of the software and manuals. Many customers prefer this mode of obtaining the latest software revisions to the alternate means of ordering the latest software with an update option that grants a discount.

HP 1000 A-Series Software Support at a Glance

HP TeamLine software support (for customers who require proactive help in obtaining the maximum value from their HP 1000 systems)

For each supported system, order 12 x H2005A+T00 with processor option #0JJ (for A700 or A900) or #0JK (for A400 or A600) to provide:

a. Account-assigned SE.

b. Personalized Assistance.

c. Proactive Support Planning.

d. Software Problem Resolution.

e. Software Product Usage Assistance.

f. Defined Escalation Management Process.

g. Right to Use Software Materials Updates.

h. Access to HP SupportLine electronic database of current support information.

Other options:

#0FB   Additional response center caller.

#0FG   Support for factory automation applications.

#0FH   Additional Technical Review.

HP ResponseLine software support (for customers who have experience with HP 1000 systems or with a relatively stable environment that does not require the intensity of TeamLine support)

For each supported system, order 12 x H2006A+H00 with processor option #0JJ (for A700 or A900) or #0JK (for A400 or A600) to provide:

a. Software Problem Resolution.

b. Software Product Usage Assistance.

c. Defined Escalation Management Process.

e. Right to Use Software Materials Updates.

f. Access to HP SupportLine electronic database of current support information.

Other options:

#0FB   Additional response center caller.

#0FG   Support for factory automation applications.

HP BasicLine software support (for customers with an experienced system manager(s) who are capable of complete self-maintenance without recourse to ResponseLine support)

For each supported system, order 12 x H2007A+L00 with processor option #0JJ (for A700 or A900) or #0JK (for A400 or A600) to provide:

a. Right to Use Software Materials Updates.

b. Access to HP electronic database of current support information.

HP Software Materials Update (media containing software and one set of documentation)

* For operating system, order 12 x H2008A+S00 with processor option #0JJ (for A700 or A900) or #0JK (for A400 or A600) and one of media delivery options #AA0 through #AA7 (see list below).

* For software products, order 12 x the number of supported software products x H2009A+S00 with processor option #0JJ (for A700 or A900) or #0JK (for A400 or A600). This product requires the ordering of H2008A+S00 HP 1000 Operating System Updates.

Media delivery options:

#AA0 16-channel 1/4-inch cartridge tape   #AA5 8-inch double-sided flexible disk.
#AA1 1600 cpi, 9-track, 1/2-inch magnetic tape.   #AA6 5.25-inch flexible disk.
#AA3 800 cpi, 9-track, 1/2-inch magnetic tape.   #AA7 3.5-inch single-sided flexible disk.

How to Order Software Support

For a First System or Any System to Which Updates Cannot be Copied

For a first system, which requires update materials, order:

1. One of the following support products with appropriate processor option x 12 to obtain a full year's support (all of which include the right to use Software Materials Updates, as indicated in the Software Support at a Glance illustration on the previous page):

   - H2007A + L00 HP BasicLine software support.

   - H2006A + H00 HP ResponseLine software support.

   - H2005A + T00 HP TeamLine software support.

2. H2008A + S00 HP Operating System Materials with appropriate processor and media options x 12 to obtain a full year's support.

3. H2009A + S00 HP Software Product Materials with appropriate processor option x 12 x the number of software products to obtain a full year's support for all software products on the system.

For Each Additional System to Which Updates Can Be Copied

For each additional system to which updates can be copied from the first system, order:

1. One of the following support products with appropriate processor option x 12 to obtain a full year's support (all of which include the right to copy and use Software Materials Updates ordered for the first system, as indicated in the Software Support at a Glance illustration on the previous page):

   - H2007A + L00 HP BasicLine software support.

   - H2006A + H00 HP ResponseLine software support.

   - H2005A + T00 HP TeamLine software support.

2. Items 2 and 3 for the first system if there are any software products on the additional system that are not on the first system, and therefore cannot be copied from it. Item 2 is required because it provides the media on which update materials for the item 3 software products are delivered.

The level of support (HP BasicLine, HP ResponseLine, or HP TeamLine) for an additional system can differ from that ordered for a first system.

For Factory Automation Software

A system with HP ResponseLine or HP TeamLine support must add support for factory automation applications, such as QDM/1000, by ordering 12 x option #0FG to the respective support product.

For an Additional Response Center Caller

A system with HP ResponseLine or HP TeamLine support can add support for an additional response center caller by ordering 12 x option #0FB to the respective support product.

For Communications Interface Firmware

Firmware updates for communications interface cards are ordered as an Sxx option to the software product with which the interface is used. For example, firmware updates for a 12007B HDLC interface, which is used with 91750A DS/1000-IV Distributed Systems software, is orderd as 12 x 91750A option S71.

HP 1000 Software Support Examples

Example 1: RTE-A in A900 with QDM/1000

For an HP 1000 A900 system with 92078A VC+ and with 92131A QDM/1000, 92836A FORTRAN 77, 92860A Symbolic Debug/1000, 92081A IMAGE/1000-II, 92861A Graphics/1000-II DGL, and 91750A DS/1000-IV with HDLC interface and with a 1600 cpi magnetic tape unit as the software load device, the following software support products would be ordered to provide HP ResponseLine support:

Product:	Order:
HP Operating System Materials	12 x H2008A+S00
Processor Option (A700/A900)	12 x H2008A+S00#0JJ
Media Option (1600 cpi tape)	12 x H2008A+S00#AA1
HP Software Product Materials*	72 x H2009A+S00
Processor Option (A700/A900)	72 x H2009A+S00#0JJ
Firmware Update for HDLC I/F	12 x 91750A+S71
HP ResponseLine Support	12 x H2006A+H00
Processor Option (A700/A900)	12 x H2006A+H00#0JJ
Factory Automation Support	12 x H2006A+H00#0FG

* The order quantity of 72 is based on 12 months x purchase of updates for 6 software products.

Example 2: Additional System with Updates Copied from Example 1 System

For an additional system like that of Example 1, but without 92131A QDM/1000, the following products would be ordered to provide software support:

Product:	Order:
Firmware Update for HDLC I/F	12 x 91750A+S71
HP BasicLine Support	12 x H2007A+L00
Processor Opt (A700/A900)	12 x H2007A+L00#0JJ

Support for End Users

Prod.No., Description, & Options	Price/ Month

HP BasicLine Software Support

H2007A+L00	HP BasicLine Software Support (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	
#0JK	For A400 or A600+ Processor	_____

HP ResponseLine Software Support

H2006A+H00	HP ResponseLine Software Support (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____
#0FB	Additional Resonse Center Caller	_____
#0FG	Factory Automation Applications Support	_____

HP TeamLine Software Support

H2005A+T00	HP TeamLine Software Support (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____
#0FB	Additional Resonse Center Caller	_____
#0FG	Factory Automation Applications Support	_____
#0FH	Additional Technical Review	_____

RTE-A Operating System Update Materials

H2008A+S00	HP Operating System Update Materials (must order Processor option #0JJ or #0JK and one of Media options #AA0 thru #AA7).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____
#AA0	16-channel 1/4-inch Cartidge Tape Media.	0
#AA1	1600-cpi 1/2-inch Mag Tape Media.	0
#AA3	800-cpi 1/2-inch Mag Tape Media.	0
#AA5	8-inch double-sided Flexible Disk Media.	_____
#AA6	5.25-inch Flexible Disk Media.	_____
#AA7	3.5-inch double-sided Flexible Disk Media.	_____

HP Software Product Update Materials

The number of software products covered by product update materials is the number of different product-numbered software products other than the 92077A RTE-A operating system, including diagnostics that are installed on the system for which Software Product Update materials are being purchased.

H2009A+S00	HP Software Product Update Materials (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____

Support for Value-Added Businesses

Prod.No., Description, & Options	Price/ Month

HP BasicLine Software Support

H2030A+L00HP	BasicLine Software Support/ VAB (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	
#0JK	For A400 or A600+ Processor	_____

RTE-A Operating System Update Materials

H2035A+S00	HP Operating System Update/VAB Materials (must order Processor option #0JJ or #0JK and one of Media options #AA0 thru #AA7).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____
#AA0	16-channel 1/4-inch Cartidge Tape Media.	0
#AA1	1600-cpi 1/2-inch Mag Tape Media.	0
#AA3	800-cpi 1/2-inch Mag Tape Media.	0
#AA5	8-inch double-sided Flexible Disk Media.	_____
#AA6	5.25-inch Flexible Disk Media.	_____
#AA7	3.5-inch double-sided Flexible Disk Media.	_____

HP Software Product Update Materials

The number of software products covered by product update materials is the number of different product-numbered software products other than the 92077A RTE-A operating system, including diagnostics, that are installed on the system for which Software Product Update materials are being purchased.

H2036A+S00	HP Software Product Update/VAB Materials (must order Processor option #0JJ or #0JK).	See opt below
#0JJ	For A700 or A900 Processor	_____
#0JK	For A400 or A600+ Processor	_____

Communications Interface Firmware Update Support

Prod.No., Description, & Options	Price/ Month
91750A+S71	Firmware Update Support for 12007B or 12044A Interface.	_____
91750A+S81	Firmware Update Support for 12073A or 12082A Interface.	_____
91751A+S91	Firmware Update Support for 12075A Interface.	_____