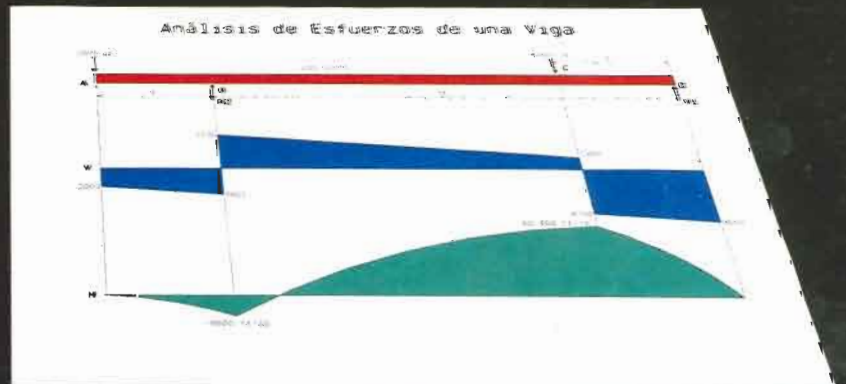
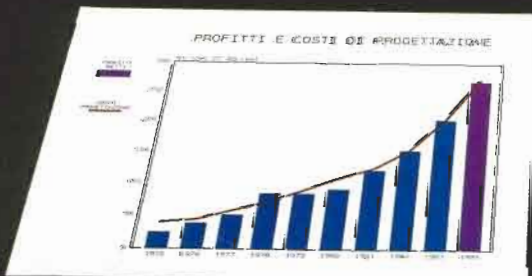
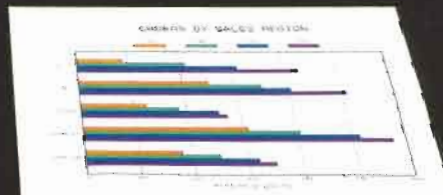
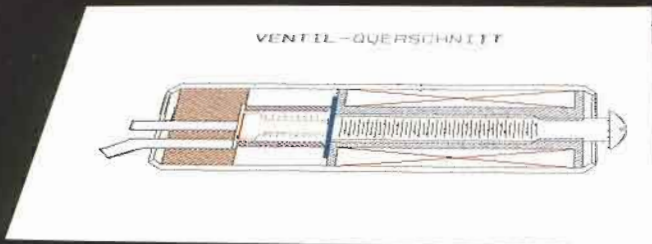
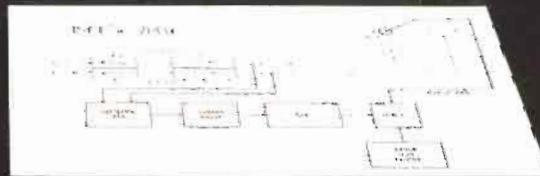
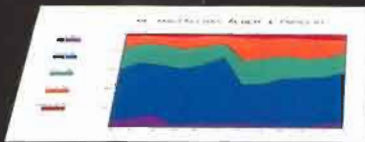


HP 7550 8-pen Graphics Plotter

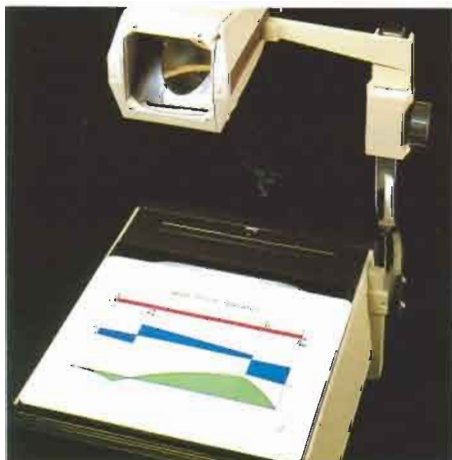
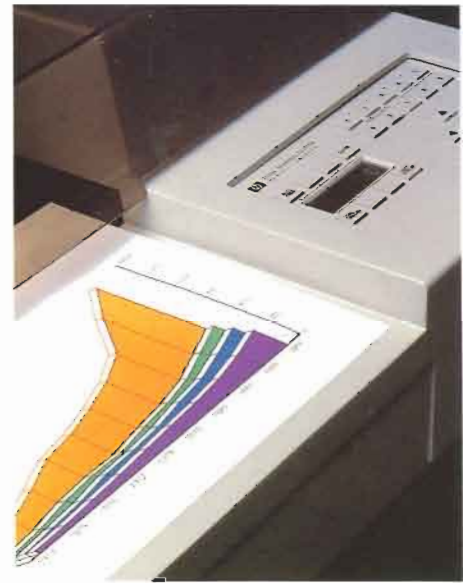
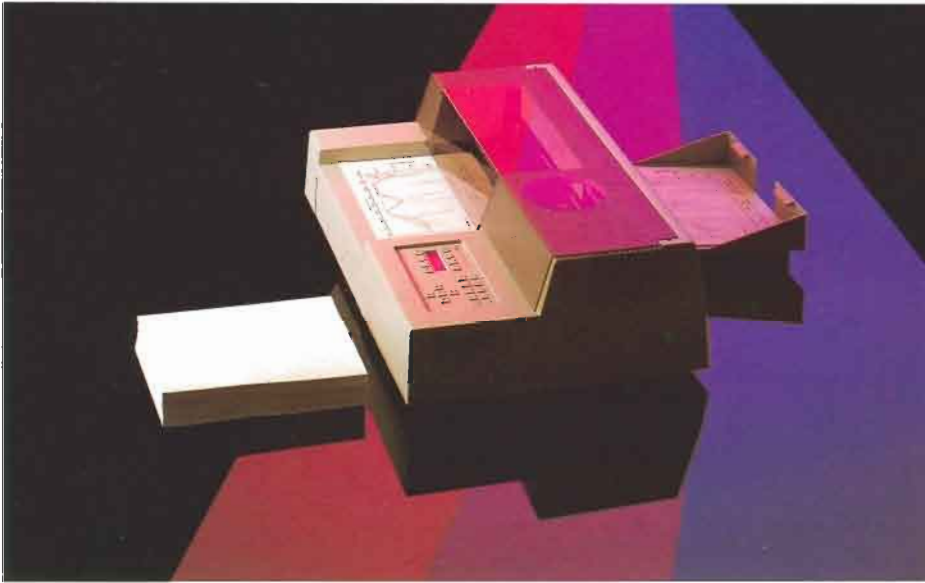
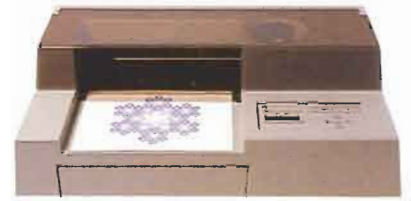
with Automatic Sheet Feed
for A4/A- and A3/B-size Media

 **HEWLETT
PACKARD**

TECHNICAL DATA, APRIL 1984



The HP 7550 — Quality Color Graphics in Quantity!



Need quality, color graphics in quantities for reports and presentations? Now you can have Hewlett-Packard quality *plus quantity*, quickly, with the HP 7550 graphics plotter including built-in automatic sheet feed for cut paper sheets.

Because the HP 7550 is designed to serve the graphics needs of either departments or individual users, you can make multiple copies of color graphics quickly and efficiently.

Take a look at these features — then choose the HP 7550 graphics plotter for *all* your plotting needs.

More Results — Less Effort

Increase efficiency with the HP 7550. Rather than load paper by hand, use the HP 7550's automatic sheet feeder to load each sheet for you! The large tray capacity lets you complete up to 150 pages of graphs before adding more paper.

Because the HP 7550 is designed to provide superior plotting performance, each chart is completed quickly. With 6 g's pen acceleration and 80 cm/s (31.5 in./s) maximum velocity, your charts are ready when you need them. For comparison, a plotter with 2 g's acceleration completes a typical area fill chart in 4½ minutes; but with the HP 7550's 6 g's acceleration, the same chart is completed in 2½ minutes.

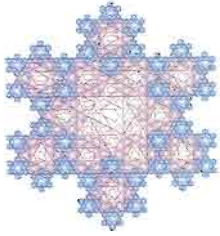
Place the easy-to-load 8-pen carousel in the plotter and a built-in microprocessor senses the pen type — paper, transpar-

ency, roller ball, or liquid-ink drafting. The HP 7550 then automatically adjusts pen force and speed based on your pen selection. When returned to the carousel, the pen is automatically capped so inks stay fresh and pens last longer.

With a liquid crystal display built into its front panel, the HP 7550 almost lets you "talk" with your plotter. The display, used together with function keys, lets you either respond to program messages or choose plotter states and functions when communicating with your computer.

Quality Graphics Every Time

You can be sure your graphics will be the highest quality possible when they're made on a Hewlett-Packard 7550. With an addressable resolution of 0.025 mm (0.001 in.) and a mechanical resolution of



0.006 mm (0.00025 in.), curved lines are smooth, not jagged, and straight lines are consistently straight. The exceptional repeatability of 0.1 mm (0.004 in.) assures you that edges align in bar or pie charts, that inks on area fills are applied evenly and smoothly, and that characters are smooth and completely formed.

Unlike other plotters in its price range, the HP 7550 keeps pen velocity and acceleration constant for both diagonal and axial pen movements. Thus, lines are drawn with the same visual quality and speed — regardless of direction.

Two Character Fonts

Each of the HP 7550's 20 character sets comes in two fonts: stick and arc-based, as shown in the example below. The stick font provides simple high resolution characters with equal spacing — fast and efficient for working drawings. The arc-based characters with proportional spacing provide superior resolution and readability, similar to LEROY* lettering.

Color Graphics in Quantity

With the HP 7550 it's now practical to make multiple copies of color graphics for your reports and presentations. Using the built-in automatic sheet feed for cut paper sheets, you can quickly produce up to 150 pages of graphs before refilling the paper tray. And you don't need to spend your time operating the plotter — it's automatic! Use the replot feature to get up to 99 copies of each graph — without rerunning the program.

Advanced Intelligence

The HP 7550 features some of the most advanced intelligence available in a graphics plotter today. Built-in intelligence takes the burden off your computer or controller. With its powerful

MC68000 16-bit microprocessor, the HP 7550 can plot in any of 20 character sets including ISO European and Katakana, read the carousel type in the plotter and automatically set pen speed and force, rotate the chart 90 degrees to fit either horizontal or vertical formats, sense media size and set correct plot parameters, and digitize point coordinates.

Software Compatible

Because the Hewlett-Packard Graphics Language (HP-GL) internal instruction set is incorporated into the HP 7550, your software investment is protected. The HP-GL programs you are currently using can also be used for the HP 7550 with little or no modification. A large base of HP-GL graphics software is widely available.

Programming is easy with HP-GL — you use simple instructions to perform a variety of operations like drawing arcs and circles, selecting pen velocity, and labeling. For example, with just three HP-GL instructions you can define and color an area of your chart.

Complete Media Support

Hewlett-Packard pens and writing media meet the same strict quality standards as HP's electronics products. Paper and pens act as a system to give you the highest quality results possible. With the HP 7550 you can choose fiber tip for either paper or transparencies, roller ball, or liquid-ink drafting pens. And your choices of media include plain paper, transparency film, polyester film, and vellum.

Dual Interface

The HP 7550 has one IEEE 488-1978 (HP-IB) connector and two RS-232-C/CCITT V.24 connectors on the back panel. The two RS-232-C connectors

provide flexibility to adapt to your needs. Using only one computer port, you can connect the HP 7550 either directly (hardwire or direct) to your computer, or in series (eavesdrop) between your computer and terminal. The HP-IB connector lets you use the HP 7550 with other computer systems offering this interface. Because the HP 7550 has these built-in interfaces, it's easy to share among many workstations and to adapt to your changing system requirements.

Reliability and Support

HP's been in the plotter business for more than 15 years — experience shows in the exceptional reliability of HP plotters. Closely associated with reliability is the support you'll receive if you need information or if your plotter ever needs repair. In addition to your standard warranty, HP offers a variety of on-site service plans. And HP plotters contain built-in self-tests to quickly isolate problems, thus reducing downtime.

When you need quality, color graphics in quantities, rely on the HP 7550. With built-in automatic sheet feed, the HP 7550 will serve your departmental and individual graphics needs — easily, quickly, and efficiently, for many years to come.

*LEROY is a registered trademark of Keuffel & Esser Company.

Each of the HP 7550's 20 character sets comes in two fonts.

For faster labeling, use the 'STICK' font with fixed spacing between characters

For highest quality lettering, use the 'ARC' font with proportional spacing between characters

Quality Plus Quantity for Your Business Graphics



Hewlett-Packard plotters are known worldwide for quality business graphics — exceptional line and letter quality, labeling flexibility, and color choices for truly professional-looking graphs and charts. Now the HP 7550 lets you make HP quality color charts in multiple copies — quickly and easily — for all your reports and presentations.

Check these features and choose the HP 7550 graphics plotter for your department or individual graphics needs.

Every "Copy" an Original

With the HP 7550's automatic sheet feed, each chart is an original, not a less-than-perfect duplicate. So whether you need 5, or 50, or 150 charts, each one will have the same vivid colors and fine line quality — to complement the quality of your work. And because original, quality color graphics are now so practical to produce, you can include multi-color graphics — not just black and white reproductions — in all your reports and presentations.

Easy to Use

The HP 7550 is easy to use. An easy-to-understand front panel incorporating a liquid crystal display and soft keys quickly and efficiently leads you through the easy steps to set up your plotter. The front panel communicates with you in basic English words and messages.

Fast Service

You'll get your individual charts and transparencies *fast* with the HP 7550. Or use the replot feature to make multiple copies of your charts — without rerunning the program each time. With its exceptional writing speed, the HP 7550 completes your charts in minutes!

Software Available

Anyone in the office can create pie, bar, line, and text charts with HP's friendly, menu-driven software, the HP 7550 graphics plotter, and a computer or intelligent terminal. HP has a complete selection of business graphics software to

suit your individual needs — ask your HP sales representative.

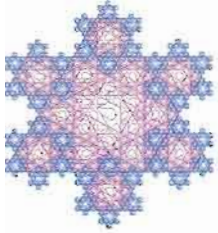
If you write programs for business graphics, you'll appreciate HP's programming tools such as graphics language extensions to BASIC, Pascal, FORTRAN, and COBOL.

Timeshare services and independent software companies also support the HP 7550. Your HP sales representative can give you more details.

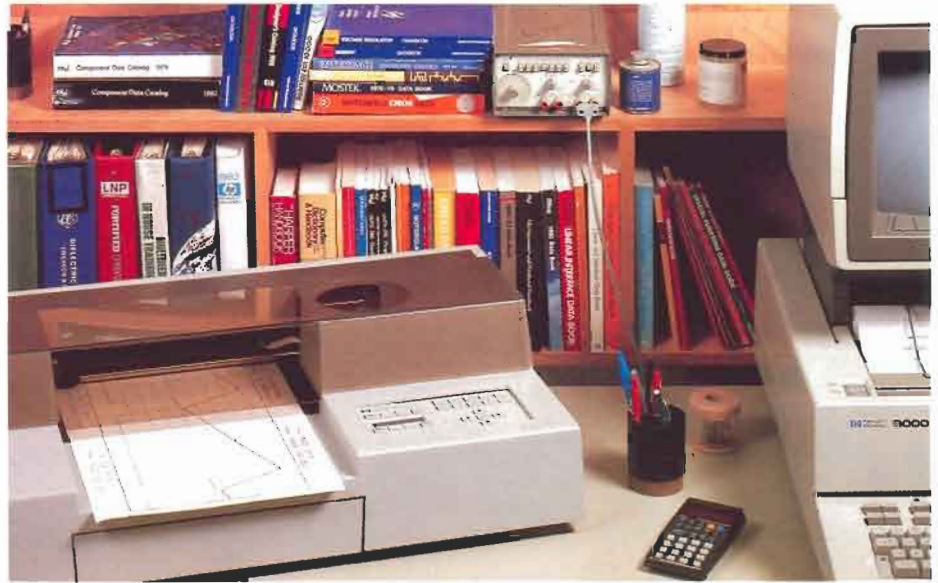
"Talk" to Your Audience

The HP 7550 contains 20 character sets (each in two fonts), including ISO European sets and Katakana, so your charts and overhead transparencies can "talk" to your audience — almost anywhere in the world.

When you need quality *plus* quantity for your business graphics, the HP 7550 plotter is the choice for you!



Quality and Flexibility for Your Technical Graphics



Quality and flexibility are yours with the HP 7550. The HP 7550 will chart mathematical models, record instrument measurements, prepare your engineering drawings — with quality and precision. And you can have your charts and graphs *quickly* with the HP 7550's automatic sheet feed for cut paper sheets.

Of course, the HP 7550 has a full range of software support on HP computers. Applications software helps solve specific problems such as statistical analysis, digital filter design, and linear systems analysis. Graphics tools for programmers give you high-level support with graphics commands and extensions to languages like FORTRAN, BASIC, and Pascal. And if you already use graphics applications software with standard FORTRAN plotting subroutines, HP-ISPP (Hewlett-Packard Industry Standard Plotting Package Model 17580) makes it easy to add the HP 7550 to your system.

Let's take a look at the particular features you'll appreciate for *your* special areas of application.

Research & Development

Add the HP 7550 to your computer or instrumentation controller and you'll have a flexible graphics system for every job — quick graphs for problem-solving, inexpensive graphs for lab notebooks, professional graphs for reports and presentations.

And you'll have a choice of two sheet sizes for plain paper (A4/A or A3/B), plus additional choices of overhead transparency film, vellum, or polyester film. HP also has the pens to match the media.

Simplify programming tasks with the powerful HP-GL instruction set built into the HP 7550. The two-letter mnemonics used in HP-GL control plotter functions and provide superior intelligence to get results quickly.

Measurement Applications

Many HP instruments communicate directly with the HP 7550 in HP-GL, so measurements can be plotted and annotated with the push of a button. The HP 7550 gives you high quality output — quickly and inexpensively.

Engineering Design

Use the HP 7550 in place of your overburdened drafting plotters for final and working drawings on A4/A- or A3/B-size media. The HP 7550 has features comparable to larger, more expensive plotters — such as an addressable resolution of 0.025 mm (0.001 in.), *LEROY-like lettering, high writing speed and acceleration, several types of media and four types of pens.

Computer-Aided Manufacturing

For process control and automatic test systems the HP 7550's built-in sheet feeder lets you draw up to 150 graphs, one after another, without operator attention.

In numerical control applications, the easy-to-understand yet powerful HP-GL instructions simplify your programming tasks. For example, you can use single instructions to draw arcs or circles or to draw line patterns in any of eight colors for distinguishing tool movements.

For *your* technical applications — R&D, measurement, engineering, computer-aided design or manufacturing — Hewlett-Packard's 7550 graphics plotter will give you the quality and flexibility you need.

*LEROY is a registered trademark of Keuffel & Esser Company.

Ordering Information



HP 7550 ACCESSORIES SUPPLIED

	HP Part No.		HP Part No.
Operation and Interconnection Guide	07550-90002	Single-color paper pen pack, 0.3 mm, black (5 pens to a package)	5060-6787
Interfacing and Programming Manual	07550-90001	4-color overhead transparency pen pack, 0.3 mm, 1 each black, red, blue, green	5060-6818
Pocket Guide	07550-90003	4-color overhead transparency pen pack, 0.3 mm, 1 each black, orange, violet, brown	5060-6834
Automatic Sheet Feed Equipment		Pen Carousels	
Note: The standard HP 7550 comes equipped to automatically handle A4- or A-size media. A3/B-size automatic load/catch equipment is available as an accessory. See Plotter Supplies Price List and Ordering Information.		8-pen carousel for fiber-tip paper pens	07550-60051
A4/A Media Loading Tray	07550-60152*	8-pen carousel for fiber-tip overhead transparency pens	07550-60050
A4/A Paper Catcher	07550-40167	Grit Wheel Brush	8710-1386
Plotter Media		Power cord (appropriate cord supplied based on destination)	
50 sheets, A4 or A plotter paper**		*Depending on plotter destination, either A-size (07550-60152) or A4-size (07550-60158) Media Loading Tray will be supplied with each HP 7550 plotter.	
5 sheets, A4 or A overhead transparency film**		**Depending on plotter destination, paper will be either 210 × 297 mm (9280-0588) or 8½ × 11 in. (9280-0589) for A4/A size; transparency film will be 210 × 297 mm (07550-60214) or 8½ × 11 in. (07550-60213).	
Plotter Pens			
4-color paper pen pack, 0.3 mm, 1 each black, red, green, blue	5060-6810		
6-color paper pen pack, 0.3 mm, 1 each burnt orange, brown, violet, turquoise, gold, lime green	5060-6894		

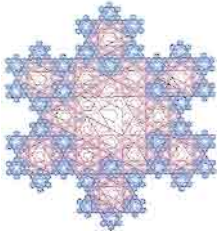
HP 7550 ORDERING INFORMATION

	HP Part No.		HP Part No.
Interface Options		RS-422-A adapter cable to connect RS-422-A devices to the HP 7550: 5 m (16.7 ft) long; 5-pin male (RS-422-A) to 25-pin female (RS-232-C/CCITT V.24).	07550-60200
The HP 7550 has one HP-IB and two RS-232-C/CCITT V.24 connectors built into the plotter.		HP-IB (IEEE 488-1978) cable	
Cables Available		1 m (3.3 ft) long: RFI shielded	10833A
Male-to-female RS-232-C/CCITT V.24 cable for use in remote modem environments and for use with Apple™ II and Apple™ /// personal computers; pins 1-25 wired end-to-end; 5 m (16.7 ft) long	31391A	2 m (6.6 ft) long: RFI shielded	10833B
Female-to-female RS-232-C/CCITT V.24 cable, adapted for use with IBM® Personal Computer interface: 1 m (3.3 ft) long; pins 1-1, 2-3, 3-2, 7-7, 20-5&6	17655A	Accessories Available	
Male-to-female RS-232-C/CCITT V.24 cable, adapted for use with HP 150 personal computer interface; 1 m (3.3 ft) long; pins 1-1, 2-3, 3-2, 7-7, 20-5&6	17755A	The HP 7550 includes the A4/A-size Media Handling Kit: Optional A3/B-size Media Handling Kits may be ordered.	
		A3-size Media Handling Kit includes A3 media loading tray, A3/B media catcher, 50 sheets A3 plotter paper	07550-60161
		B-size Media Handling Kit includes B media loading tray, B/A3 media catcher, 50 sheets B plotter paper	07550-60160

Apple is a trademark of Apple Computer, Inc.
IBM is a registered trademark of International Business Machines Corporation.

Technical Information

Media Sizes		210 × 297 mm (ISO A4) 8½ × 11 in. (ANSI A) 297 × 420 mm (ISO A3) 11 × 17 in. (ANSI B)
Pens	Number Type	8, automatic pen changing paper, transparency, roller ball, liquid-ink drafting
Media		Standard paper, transparency material, vellum, double matte mylar polyester film
Resolution	Smallest addressable step size Mechanical	0.025 mm (0.001 in.) 0.006 mm (0.00025 in.)

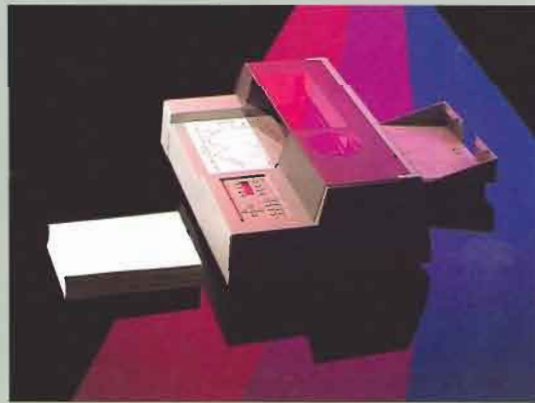
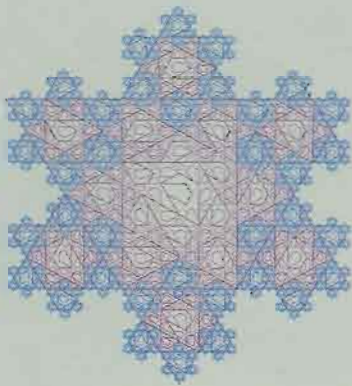


Technical Information (Continued)

Repeatability	With a given pen	0.1 mm (0.004 in.)
Pen Velocity	Pen Down	
	Maximum	80 cm/s (31.5 in./s)
	From the program From the front panel	1 to 80 cm/s (0.4 to 31.5 in./s) in increments of 1 cm/s 10 to 80 cm/s (4 to 31.5 in./s) in increments of 10 cm/s
	Pen Up	80 cm/s (31.5 in./s)
Acceleration	Maximum From program	Approximately 6 g's Approximately 1 to 6 g's in increments of 1 g
Pen Force	From the program or front panel	15 to 66 grams
Maximum Plotting Area	Pen Axis	254 mm (9.97 in.) for A/B 272 mm (10.65 in.) for A4/A3
	Paper Axis	411 mm (16.12 in.) for B 399 mm (15.65 in.) for A3 196 mm (7.68 in.) for A 190 mm (7.45 in.) for A4
Interfaces	HP-IB (IEEE 488-1978)	Implements the following HP-IB functions as defined in IEEE 488-1978: SH1, AH1, T6, L3, SR1, RL0, DC1, DT0, C0, PP0, for listen only, PP1 for address greater than 7, and PP2 for address of 7 or less. Device address front panel selectable. Default value — 5.
	RS-232-C/CCITT V.24	Asynchronous serial ASCII with front panel selectable baud rates of 75, 110, 150, 200, 300, 600, 1200, 2400, 4800, and 9600. Default value — 2400.
Power Requirements	Source	100, 120, 220, 240 V, -10%, +5%
	Frequency	48 — 66 Hz
	Consumption	100 W maximum
Environmental Range	Operating	0 °C to 55 °C
	Nonoperating	-40 °C to 75 °C
Size	Height	215 mm (8.5 in.)
	Width	670 mm (26.4 in.)
	Depth	
	With A4/A Loading Tray/No Catcher	432 mm (17.0 in.)
	With A4/A Loading Tray/A4/A Catcher	682 mm (26.8 in.)
Weight	Net	Approximately 17.3 kg (38.0 lb)
	Shipping	Approximately 25.0 kg (55.0 lb)
FCC	FCC certified to conform to limits set for radio frequency interference when used with a Class B computing device.	
Buffer Size	Default	1024 bytes
	From the program, expandable to	12 K-bytes
Character Sets	20 sets, each in two character fonts, including HP 9825 Character Set, French/German, Scandinavian, Spanish/Latin American, Special Symbols, Roman 8 Extensions, and the following ISO registered sets: International Reference Version (002); United Kingdom (004); US ASCII (006); Swedish (010); Swedish for Names (011); Katakana (013); JIS ASCII (014); Italian (015); Portuguese (016); Spanish (017); German (021); French (025); Norwegian (060); Norwegian II (061).	

AUTOMATIC SHEET FEEDER (A4/A-size included with HP 7550. A3/B-size may be ordered as an accessory.)

Media Sizes	210 × 297 mm (ISO A4)
	8½ × 11 in. (ANSI A)
	Hewlett-Packard Paper Recommended
Environmental Range	Operating
	10 °C to 40 °C
	20 to 80% RH
Nonoperating	-40 °C to 75 °C



Hewlett-Packard's 7550 graphics plotter is designed to meet *your* needs. Check these features — no other plotter in the HP 7550's price range can compare!

Built-in automatic sheet feed

Superior performance and plot quality

6 g's acceleration

80 cm/s (31.5 in./s) velocity

0.025 mm (0.001 in.) addressable resolution

Front panel display and function keys

HP-GL command language — software compatible

Complete pen and media support

Superior intelligence

20 character sets

Replot command

Large 12 K-byte available graphics memory

HP-IB and RS-232-C built-in interfaces



For more information, call your local HP sales office listed in the telephone directory white pages. Ask for a Computer representative or the Electronic Instruments Department. Or write to Hewlett-Packard: **U.S.A.** - P.O. Box 10301, Palo Alto, CA 94303-0890. **Europe** - P.O. Box 999, 1180 AZ Amstelveen, The Netherlands. **Canada** - 6877 Goreway Drive, Mississauga, L4V 1M6, Ontario. **Japan** - Yokogawa - Hewlett-Packard Ltd, 3-29-21, Takaido-Higashi, Suginami-ku, Tokyo 168. **Elsewhere** in the world, write to Hewlett-Packard Intercontinental, 3495 Deer Creek Road, Palo Alto, CA 94304.