

# HP DraftPro Series Plotters

## Large-format Drafting Plotters



## Data Sheet

**HP quality within every  
designer's reach**

### Features

#### HP DraftPro Series

- Compatible with a wide variety of hardware and software
- Powerful HP-GL command set
- HP quality and reliability
- Attractive price

#### HP DraftPro

- Very good line quality
- Medium throughput: 40 cm/s velocity

#### HP DraftPro DXL and EXL

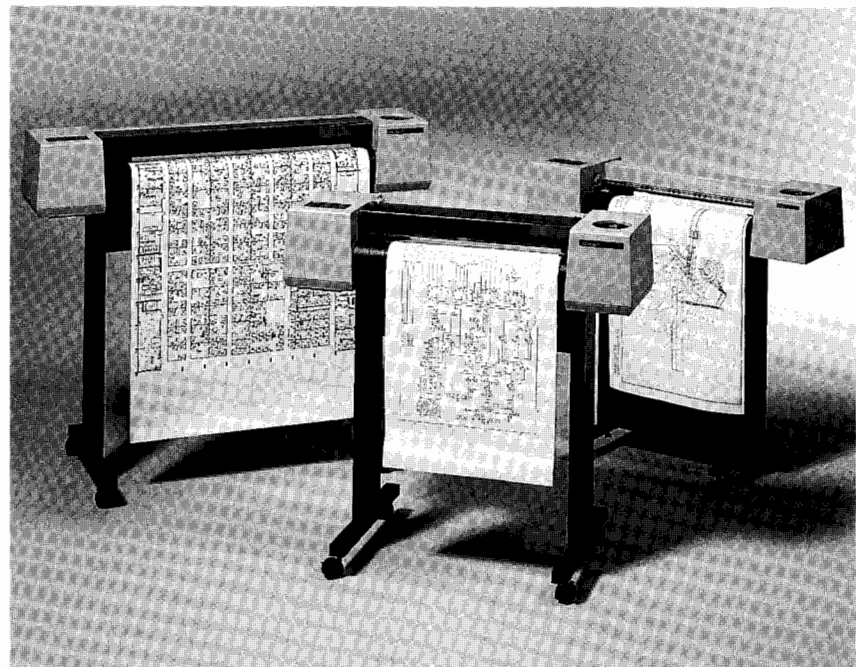
- Excellent line quality
- Improved throughput: 80 cm/s velocity (20% faster than DraftPro)
- One- and two-megabyte buffer options
- Enhanced media flexibility
- Quieter operation

The HP DraftPro series plotters are designed to meet the needs of today's CAD professionals.

The HP DraftPro plotter accepts C/A2 and D/A1 media; HP DraftPro DXL accepts A/A4 through D/A1 media; and the DraftPro EXL accepts A/A4 through E/A0 media. (All standard ISO, ANSI, and architectural sizes *except* 30 × 42-inch media.)

### Line Quality

With a mechanical resolution of 0.0125 mm (0.0005 in.) and an addressable resolution of 0.025 mm



(0.001 in.), the HP DraftPro series plotters draw well-defined lines, smooth curves, and crisp characters that help you and your designs look their best. The 0.10 mm (0.004 in.) repeatability means your drawings have the professional quality you need.

For many applications, accuracy is important. The HP DraftPro series plotters are accurate to within 0.5 mm (0.02 in.) or 0.2% of the specified line length, whichever is greater.

### Medium Throughput

In addition to 2.8 g maximum (diagonal) acceleration and 80 cm/s (32 in./s) velocity—40 cm/s (15.7 in./s) for the HP DraftPro—the HP DraftPro series plotters also include a pen sorting feature that minimizes pen changes for more efficient plotting.

### Two Extended Buffer Options

Two extended buffer options are available as accessories for both the HP DraftPro DXL and EXL plotters.

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Available in one- and two-megabyte options, these easy-to-install cartridges let you quickly download an entire plot, freeing your computer for other tasks. (For use with RS-232-C interface only.)

## Hardware and Software Compatibility

HP DraftPro series plotters connect easily to most HP and other personal computer/workstations. An RS-232-C serial interface is standard; HP-IB (IEEE 488-1978) can be ordered as an accessory.

Quiet operation makes these plotters a good fit in an office environment. And because HP DraftPro series plotters have their own set of wheels, they're easy to move and share.

Over 100 software packages work with HP DraftPro series plotters. All leading vendors in architectural, mechanical, and electronic PC CAD software support these plotters.

## Powerful Command Set

Programmers will be glad to know the HP DraftPro series plotters use HP-GL (Hewlett-Packard Graphics Language). With just a few commands you can label, draw lines, arcs, and circles, or select one of 21 international character sets (20 for the standard HP DraftPro model).

While most plotter manufacturers claim to have HP-GL compatibility, only HP plotters have the original HP-GL that's been tested and approved by Hewlett-Packard.

## Output for Every Application

The HP DraftPro series plotters have the pen and media flexibility you need to get the job done. Each plotter can plot on paper, vellum, and polyester film. And they draw with fiber-tip paper pens, disposable drafting pens, and refillable drafting

pens. For presentations, the HP DraftPro DXL and EXL can use glossy paper or transparency film with transparency pens.

From the front panel you can select the pen speed that optimizes performance and line quality for your pen/media combination. And the eight-pen carousel lets you use a variety of colors and line widths with ease. Pens are changed automatically during plotting. And to increase the life of your pens, they're automatically capped when not in use.

## HP Quality and Reliability

Equipment downtime costs you time and money. That's why the HP DraftPro series plotters meet the same tough standards for quality and reliability that have made HP pen plotters *leaders* in the industry. Solid HP engineering and sophisticated electronics reduce the number of parts and increase product reliability.

Our plotters are subjected to mechanical and electrical abuse, shock, vibration, and extreme temperature cycling—all to make sure your HP drafting plotter can handle the most demanding workload.

We feel so strongly about the reliability of our HP DraftPro series plotters, we back them with a one-year warranty. And if you'd like an on-site service contract after the first year, you'll pay the lowest prices in the industry.

## All at an Attractive Price

The HP DraftPro series plotters give you HP quality at an attractive price. The combination of reliability, quality, performance, flexibility, and support makes these plotters an *excellent* value and a *smart* choice in drafting plotters.

## Specifications

**Media Sizes:** The HP DraftPro series plotters accommodate the following standard ISO, ANSI, and architectural sizes:

*HP DraftPro—C/A2 to D/A1*, including: widths from 550 mm (21.65 in.) to 640 mm (25.20 in.); lengths from 400 mm (15.75 in.) to 1000 mm (39.37 in.)

*HP DraftPro DXL—A/A4 to D/A1*, including: widths from 205 mm (8.07 in.) to 485 mm (19.09 in.) and from 555 mm (21.85 in.) to 645 mm (25.39 in.); lengths from 215 mm (8.46 in.) to 1140 mm (44.88 in.)

*HP DraftPro EXL—A/A4 to E/A0*, including: widths from 207 mm (8.15 in.) to 634 mm (24.96 in.) and from 837 mm (32.95 in.) to 927 mm (36.50 in.); lengths from 215 mm (8.46 in.) to 1230 mm (48.43 in.); (Does not include 30 × 42-inch architectural media.)

**Number of Pens:** 8 in carousel

**Pen Type:** *HP DraftPro*—fiber-tip paper, disposable drafting, refillable drafting; *HP DraftPro DXL/EXL*—fiber-tip paper, fiber-tip transparency, disposable drafting, refillable drafting

**Media:** *HP DraftPro*—paper, vellum, double-matte polyester film; *HP DraftPro DXL/EXL*—paper, vellum, double-matte polyester film, glossy paper, transparency film

**Character Sets:**\* French/German, HP 9825, Scandinavian, Spanish/Latin American, Roman Extensions, Special Symbols, Drafting, Kanji, and these ISO registered sets: ANSI ASCII (006), French (025), German (021), International Reference Version (002), Italian (015), JIS ASCII (014), Katakana (013),

\*Kanji is also available with an optional cartridge.

Norwegian I (060), Norwegian II (061), Portuguese (016), Spanish (017), Swedish (010), Swedish for Names (011), United Kingdom (004); *HP DraftPro DXL/EXL* also use ECMA 94 Extensions (100).

**Resolution:** *Addressable*—0.025 mm (0.001 in.); *Mechanical*—0.0125 mm (0.0005 in.)

**Repeatability:** 0.10 mm (0.004 in.) for the same pen. (These specifications are for 0.08 mm (0.003 in.) double-matte polyester film at 10–30 degrees C, 20–80% relative humidity.)

**Accuracy:** 0.5 mm (0.02 in.) or 0.2% of the specified line length, whichever is greater. (These specifications are for 0.08 mm (0.003 in.) double-matte polyester film at 10–30 degrees C, 20–80% relative humidity.)

### Maximum Pen Velocity:

*HP DraftPro*—40 cm/s (15.7 in./s);  
*HP DraftPro DXL/EXL*—80 cm/s (32 in./s)

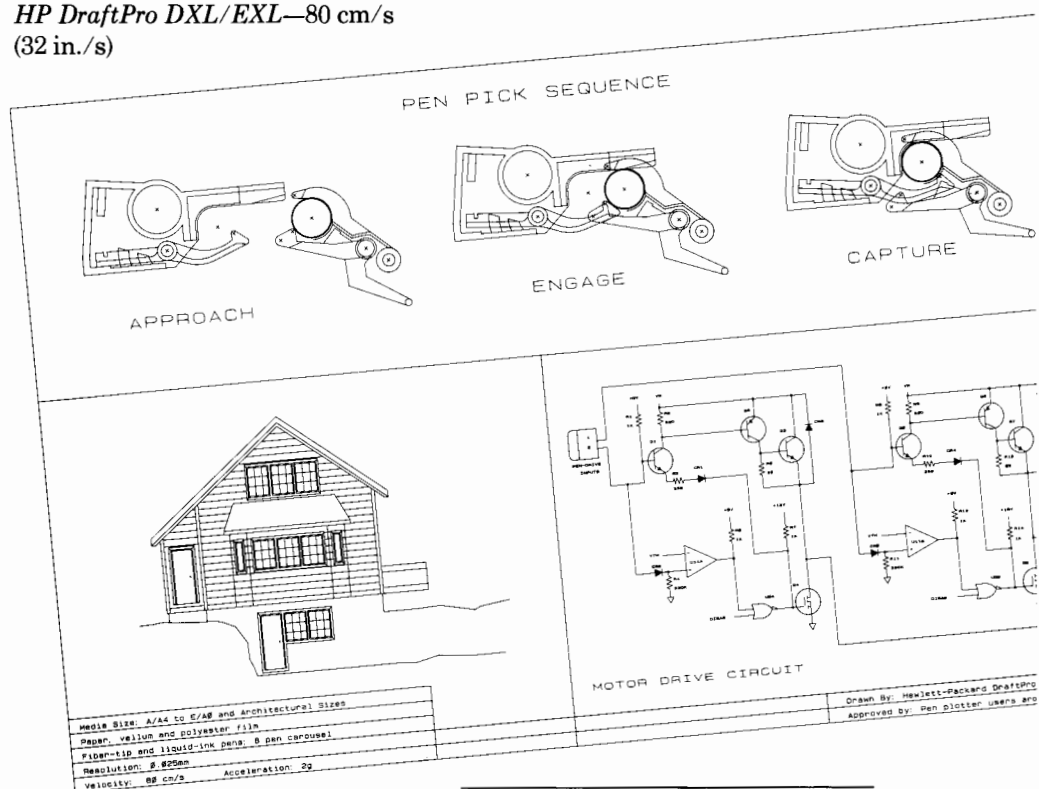
### Maximum Acceleration:

*Diagonal*—2.8 g; *Axial*—2.0 g

**Pen Cycle Time:** *HP DraftPro*—100 ms; *HP DraftPro DXL/EXL*—67 ms

**Margins:** *Expanded mode*—5.0 mm (0.2 in.) on three edges, 31.0 mm (1.2 in.) on the fourth; *Normal mode*—15.0 mm (0.59 in.) on three edges, 39.0 mm (1.5 in.) on the fourth

**Buffer Size:** *HP DraftPro*—7.2 Kbytes; *HP DraftPro DXL/EXL*—31 Kbyte standard buffer (shared between user-definable polygon and pen sort buffers). Optional one- and two-megabyte expandable buffers are available as accessories (for use with RS-232-C interface only).



**The demonstration plot, plotted on an HP DraftPro series plotter.**

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## Environmental Ranges

### Temperature

Operating: 0 to 55 degrees C  
(32 to 131 degrees F)

Storage: -40 to 75 degrees C  
(-40 to 167 degrees F)

### Humidity

5 to 95% (in 0 to 40 degrees C)

### Acoustics\*

Operating pressure: 58 dB(A)

Idle pressure: 42 dB(A)

(These specifications are typical  
sound pressures at one-meter  
bystander position.)

### Power Requirements

Source: 100, 120, 220, 240 V,  $\pm 10\%$

Frequency: 47.5-66 Hz

Consumption: less than 80 W  
maximum

### Physical Specifications

#### HP DraftPro

Height: 1,030 mm (40.6 in.)

Width: 1,140 mm (44.9 in.)

Depth: 520 mm (20.5 in.)

Net weight: 30 kg (66 lb)

Shipping weight: 45 kg (100 lb)

#### HP DraftPro DXL

Height: 1,105 mm (43.5 in.)

Width: 1,145 mm (45 in.)

Depth: 570 mm (22.5 in.)

Net weight: 34 kg (76 lb)

Shipping weight: 54 kg (120 lb)

#### HP DraftPro EXL

Height: 1,210 mm (47.5 in.)

Width: 1,450 mm (57 in.)

Depth: 620 mm (24.5 in.)

Net weight: 41 kg (91 lb)

Shipping weight: 61 kg (135 lb)

### Product Certifications: FCC

certified, Class B; meets or exceeds  
IEC-380, IEC-435, VDE 0806/08.81,  
UL-478, and CSA C22.2 No. 220.

## Interface and Cable Requirements

System	Interface	Cable
HP Vectra PC with HP 24540A/B serial/ parallel interface card or HP 24541A/B dual serial interface card using 9-pin connector	Serial	HP 24542G
HP Vectra PC with HP 24541A/B dual serial interface card using 25-pin connector	Serial	HP 17255M
HP Touchscreen PC	Serial	HP 17255M
HP Touchscreen PC, HP 9000, Series 200 and Series 300	HP-IB	HP 10833A (1.0 m) HP 10833B (2.0 m) HP 10833C (4.0 m) HP 10833D (5.0 m)
HP 3000 or DEC VAX in eavesdrop configuration	Serial	HP 17455A
IBM PS/2, PC, PC-XT, and compatibles	Serial	HP 17255D
IBM AT and compatibles	Serial	HP 24542G
Apple Macintosh 128K and 512K	Serial	HP 92219M
Apple Macintosh SE and Macintosh Plus	Serial	HP 92219M and Apple P/N M0199
Apple IIe	Serial	HP 17355M

## Ordering Information

### Standard Unit:

7570A—HP DraftPro drafting pen  
plotter

7575A—HP DraftPro DXL drafting  
pen plotter

7576A—HP DraftPro EXL drafting  
pen plotter

Note: Interface cables must be  
ordered separately.

\*HP DraftPro DXL and EXL only. Data  
not available for HP DraftPro.

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**Accessories Included:**

User's Guide  
Power cord (appropriate to plotter destination)  
Media sample kit (5 sheets of metric A-size paper [594 × 841 mm])  
Fiber-tip pens (0.3 mm)—package of 5 (black, blue, green, red, and yellow)  
Disposable drafting pens (0.35 mm)—package of 4 (black, blue, red, and green)  
Carousels (fiber-tip pen carousel and drafting pen carousel)  
Grit wheel brush  
Supplies catalog

**Accessories Available:**

17573A—One-megabyte extended buffer (available for RS-232-C interface only)  
17574A—Two-megabyte extended buffer (available for RS-232-C interface only)  
17570A—HP-IB interface cartridge  
17571A—HP-IB interface cartridge with Kanji  
07570-90014—HP-IB cartridge installation instructions  
07570-90001—HP DraftPro Programmer's Reference Manual  
07570-90000—HP DraftPro Hardware Support Manual  
07575-90001—HP DraftPro DXL/EXL Programmer's Reference Manual  
07575-90000—HP DraftPro DXL/EXL Hardware Support Manual

For a complete list of available supplies, check the current plotter supplies catalog or the Hewlett-Packard PC Peripherals Price Guide.

**United States:**

Hewlett-Packard Company  
4 Choke Cherry Road  
Rockville, MD 20850  
301 670 4300

Hewlett-Packard Company  
5201 Tollview Drive  
Rolling Meadows, IL 60008  
312 255 9800

Hewlett-Packard Company  
5161 Lankershim Blvd.  
No. Hollywood, CA 91601  
818 505 5600

Hewlett-Packard Company  
2015 South Park Place  
Atlanta, GA 30339  
404 955 1500

**Canada:**

Hewlett-Packard Ltd.  
6877 Goreway Drive  
Mississauga, Ontario L4V1M8  
416 678 9430

**Australia/New Zealand:**

Hewlett-Packard Australia Ltd.  
31-41 Joseph Street  
Blackburn, Victoria 3130  
Melbourne, Australia  
03 895 2895

**Germany:**

Hewlett-Packard GmbH  
Vertriebzentrale Deutschland  
Hewlett-Packard-Strasse  
Postfach 1641  
6380 Bad Homburg v.d.H.  
Federal Republic of Germany  
06172 400-0

**France:**

Hewlett-Packard France  
Parc d'activite du Bois Briard  
2, avenue du Lac  
91040 EVRY Cedex  
01 60 77 83 83

**United Kingdom:**

Hewlett-Packard Ltd.  
Customer Information Centre  
King Street Lane  
Winnersh  
Wokingham  
Berkshire  
RG11 5AR  
0734 777828

**Italy:**

Hewlett-Packard Italiana S.p.A.  
Via G. di Vittorio, 9  
20063 Cernusco Sul Naviglio (MI)  
Milano  
02 923691

**European Multi Country Region:**

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1217 Meyrin 2 — Geneva  
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41 22 83 81 11

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89 Queensway  
Central, Hong Kong  
5 848 7777

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29-21, Takaido-Higashi 3-chome  
Suginami-ku, Tokyo 168  
03 331 6111

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