

HEWLETT-PACKARD

HP LaserJet IID

Desktop Office Printer

Data Sheet

Features

Publication-quality laser printing with advanced paper handling

- High-resolution text and graphics
- Two paper input trays handle larger volumes
- Two-sided page printing for excellent paper usage
- Envelope feeder adds a third input source
- 24 fonts standard with the printer
- Extensive software support
- Expandable with more memory and fonts

The HP 33447A LaserJet IID printer is designed for business and technical professionals who require a quiet, high-resolution printer with the flexibility and paper capacity to serve one high-volume user or several users. Like the HP LaserJet Series II printer, the LaserJet IID printer is excellent for applications such as general, technical, and legal word processing, spreadsheets, reports, forms, and desktop publishing.

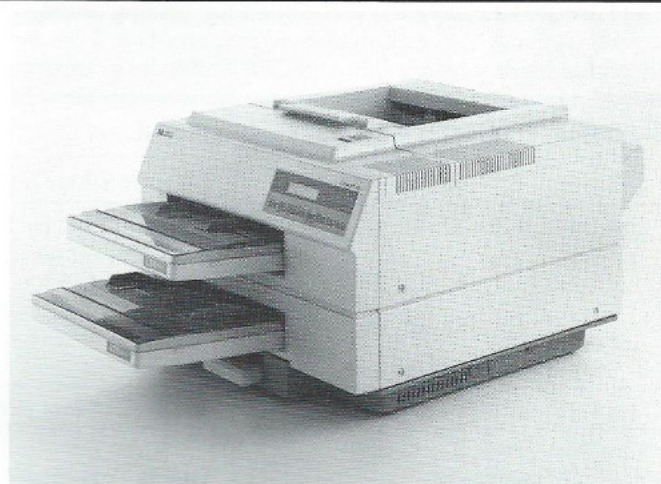
Printing That Looks Great

Printing at up to eight pages per minute, the LaserJet IID printer produces crisp, easy-to-read text and graphics at 300 × 300 dots-per-inch resolution. The toner composition and printer engine design ensure dense, even print coverage throughout each page.

Professional-looking documents can be produced from a variety of typefaces and type sizes available in built-in, cartridge, and disc-based (soft) fonts. The LaserJet IID printer comes standard with 14 built-in fonts and an S2 font cartridge containing 10 proportional fonts.

More Paper for More Users

The LaserJet IID printer holds up to 200 sheets in each of two input trays. Combined with duplex (two-sided) printing, up to 800 pages (400 sheets of paper) can be printed without reloading paper. The LaserJet IID paper trays are interchangeable with the LaserJet Series II printer trays and are offered in letter, legal, European A4, and Executive sizes. Heavier paper (up to 35 lb when simplex printing on one side only), labels, and overhead transparencies can be used in the upper paper tray.



Two-sided Printing Offers Savings

Duplex (two-sided) printing offers significant savings in paper purchase, filing, storage, and mailing costs. The LaserJet IID printer makes duplex printing easy to use by allowing a duplex document to be opened and read either book-style or calendar-style. Designating a long-edge or short-edge page binding makes the printer automatically rotate the second page on each sheet of paper for correct reading placement.

Envelope Feeder Adds Flexibility

The envelope feeder (available as an accessory) offers a third input source for printing a batch of envelopes or envelopes alternated with letters. With the two paper input trays, it allows printing on letterhead, plain paper, and envelopes without touching the printer. The feeder holds up to 50 envelopes in Commercial #10, Monarch, or DL sizes. Manual paper feed through the lower paper tray is still available with the envelope feeder installed on the printer.

Extensive Software Support

With HP's industry-standard PCL printer language built in, the LaserJet IID printer works with software packages covering a wide range of applications. It is compatible with the same software, font cartridges, and soft fonts that work with the LaserJet, LaserJet PLUS, LaserJet 500 PLUS, LaserJet Series II, and LaserJet 2000 printers. The printer is equipped with a front panel-selectable Centronics parallel and RS-232-C/RS-422-A serial interface for connectivity with most computers.

Expandable to Serve Several Users

The LaserJet IID printer is well suited for sharing among several users. A 1, 2, or 4 megabyte memory board can be added for users needing full-page 300 × 300 dpi graphics,

more downloaded fonts or macros, or memory-dependent applications. The printer's extended I/O slot allows the addition of a printer sharing or spooling device.

Easy to Use

The 16-character LCD control panel on the LaserJet IID printer provides convenient configuration and customization of the printing environment. A quick self-test printout lists the configuration and printing menu settings. A font printout will list all internal, cartridge, and soft fonts currently available in the printer, the escape sequences to access each font, and print samples of each font.

The single-component, easy-to-replace toner cartridge prints approximately 4000 pages of normal text. The print drum is part of each toner cartridge, keeping print quality high at a low printing cost (approximately 3 cents per single-sided page, excluding paper costs).

Feature Comparison Matrix

Feature	LaserJet Series II Printer	LaserJet IID Printer
Print speed	Up to 8 pages per min. (simplex printing on one side of 8 sheets of paper)	Up to 8 pages per min. (simplex printing on one side of 8 sheets of paper) Up to 7.4 pages per min. (duplex printing on both sides of 4 sheets of paper)
Text resolution	300 × 300 dots per in.	300 × 300 dots per in.
Graphics resolution with standard memory 75 dpi 100 dpi 150 dpi 300 dpi	Simplex printing: 1 page 1 page 1 page 0.5 page	Simplex: Duplex: 1 page 2 pages 1 page 1.5 pages 1 page 1 page 0.5 page 0.5 page
Memory required to print full-page 300 dpi graphics	Add 1, 2, or 4 Mbyte memory board	Add 1, 2, or 4 Mbyte memory board (simplex) Add 2 or 4 Mbyte memory board (duplex)
Number of input trays	One	Two
Number of sheets per input tray	200	200 each tray for a total of 400
Envelope printing capabilities	Envelope input tray Manual feed	Envelope feeder Envelope input tray Manual feed
Automatic duplex (two-sided) printing?	No	Yes
Page-binding considerations (for duplex printing)	Not applicable	Long-edge or short-edge binding in portrait or landscape orientations
Font orientations	Depends on font, not printer	Printer can rotate font to either portrait or landscape
Internal fonts	6 internal	14 internal
Internal symbol sets	24 internal	24 internal plus PC-850 and Legal
Standard font cartridges with printer	None	S2 cartridge provides 10 fonts (TmsRmn and Helv)
Font cartridge slots	Two	Two
Number of downloaded fonts or macros	Maximum of 32 or memory space limit, whichever is reached first	Limited only by memory space available

Feature Comparison Matrix (Continued)

Feature	LaserJet Series II Printer	LaserJet IID Printer
Number of fonts per page allowed	Maximum of 16 or memory space limit, whichever is reached first	Limited only by memory space available
Standard memory (user memory)	512 Kbytes (395 Kbytes)	640 Kbytes (395 Kbytes)
Additional memory available	1 Mbyte (33443A or B) 2 Mbytes (33444A or B) 4 Mbytes (33445A or B)	1 Mbyte (33443B) 2 Mbytes (33444B) 4 Mbytes (33445B)
Hardware interfaces	Centronics parallel RS-232-C/RS-422-A	Centronics parallel RS-232-C/RS-422-A
Video interface	Yes	No
Extended I/O slot	Yes	Yes (requires different printer sharing devices than LaserJet Series II printer)

Specifications

Printing Process

Dry-type electrophotography

Printing Speed

First sheet less than 16 seconds after receipt of data. Subsequent sheets at 8 pages per minute simplex printing, or up to 7.4 pages per minute duplex printing (printing pages on both sides of a sheet of paper). Job throughput is application and system dependent.

Warm-up Time

Less than 30 seconds from cold turn on

Text and Graphics

Text Resolution

300 × 300 dpi

Graphics Resolution

75, 100, 150, or 300 dpi

Memory Requirements for Graphics Printing

Pages of graphics:	Graphics resolution (dpi):				Printing mode:
	300 dpi	150 dpi	100 dpi	75 dpi	
0.5 pg*	640 KB	640 KB	640 KB	640 KB	simplex or duplex
1.0 pg	1.6 MB	640 KB	640 KB	640 KB	simplex or duplex
1.5 pgs	1.6 MB	1.6 MB	640 KB	640 KB	duplex
2.0 pgs	2.6 MB	1.6 MB	1.6 MB	640 KB	duplex

***NOTE:** The graphics page space shown for duplex printing represents the *total* space for graphics printed on both sides of a single sheet. For instance, a ¼-page, 300-dpi graphic may be printed on the front side and a ¼-page, 300-dpi graphic on the back side, for a total of ½ page of 300-dpi duplex printing with the standard 640 Kbytes memory. This table assumes nothing else is in printer memory, such as downloaded fonts or macros.

Printing Format

Simplex (single-sided) or duplex (two-sided) printing selectable from front control panel or via supporting software

Long-edge or short-edge page binding rotation (for duplex printing) selectable from front control panel or via supporting software

Portrait (printing across the width of the page) or landscape (printing across the length of the page) orientations selectable from front control panel or via supporting software

Duplex options:

	Long-edge binding	Short-edge binding
Portrait orientation	reads book-style	reads calendar-style
Landscape orientation	reads calendar-style	reads book-style

Internal Fonts

Typeface	Treatment	Pitch	Point	Orientation**
Courier*	Medium	10	12	Portrait and landscape
Courier	Bold	10	12	Portrait and landscape
Courier	Italic	10	12	Portrait and landscape
Courier	Medium	12	10	Portrait and landscape
Courier	Bold	12	10	Portrait and landscape
Courier	Italic	12	10	Portrait and landscape
Line Printer	Medium	16.66	8.5	Portrait and landscape

*The Courier Portrait 10-pitch (medium) font is the printer's factory default font. This font is used unless the user: selects another default using the control panel; sends a font selection command (via escape sequence or supporting software product) to request a font in place of the default; or installs a cartridge with a default font.

**The LaserJet IID printer automatically rotates fonts to the orientation specified.

Internal Symbol Sets

Roman-8, IBM-US, IBM-DN, ECMA-94 Latin 1, PC-850, Legal.

These additional symbol sets can be used with internal fonts: ISO 2, 4, 6, 10, 11, 14, 15, 16, 17, 21, 25, 57, 60, 61, 69, 84, 85, HP Spanish, and HP German. ISO denotes International Standards Organization symbol sets, primarily for use in Europe or for printing non-English characters.

S2 Cartridge Fonts

Typeface	Treatment	Pitch	Point	Orientation*
TmsRmn	Medium	Proportional	8	Portrait and landscape
TmsRmn	Medium	Proportional	12	Portrait and landscape
TmsRmn	Bold	Proportional	12	Portrait and landscape
TmsRmn	Italic	Proportional	12	Portrait and landscape
Helv	Bold	Proportional	14	Portrait and landscape

*The LaserJet IID printer automatically rotates fonts to the orientation specified.

S2 Cartridge Symbol Sets

Roman-8, PC-8, PC-8 D/N, ECMA-94 Latin 1.

Paper

Paper Type

Single-sheet copier paper

NOTE: The LaserJet IID printer is designed for use with copier bond paper of high-quality construction. To obtain the clearest, sharpest images, paper manufactured for photocopiers such as Canon NP, Xerox 4024, Gilbert, or NuTech should be used. Most cotton bond paper also works well on the LaserJet IID printer. The printer can also accommodate a variety of special application paper, such as label stock, colored and pre-printed paper, and overhead transparency film designed for laser printers. It is strongly recommended that all media be tested before purchasing. Consult the HP LaserJet IID Paper Specifications Guide for additional information.

Paper Weight

Top tray: 60 to 135 g/m² (16 to 35 lb) simplex printing
Bottom tray (or duplex printing from any source):
60 to 90 g/m² (16 to 24 lb)

Paper Size

Letter (8½ × 11 in.)
Legal (8½ × 14 in.)
A4 (European) (210 × 297 mm)
Executive (7½ × 10½ in.)

NOTE: Best results will be obtained if paper is stored and used within the listed ranges.

Temperature: 17 to 23 degrees C (63 to 73 degrees F)

Relative Humidity: 40 to 50%

Paper Handling

Two 200-sheet input trays
Correct-order output through top output tray
(100 sheets)
Reverse-order output through rear output tray
(20 sheets, simplex printing only)
Manual feed for envelopes, heavier paper stock, and odd-size paper
Envelope feeder or envelope input tray accessories also available

Printable Surface (Portrait)

	Letter	Legal	A4	Exec.
Width				
inches	8.0	8.0	7.8	6.75
mm	203	203	198	171
Length				
inches	10.6	13.6	11.3	10.1
mm	269	345	287	257

Envelopes

Envelope Handling

	Envelope feeder	Envelope tray	Manual feed
Capacity	Up to 50	Up to 15	One at a time
Types	Commercial #10 Monarch DL	Commercial #10 Monarch DL C5	Commercial #10 Monarch DL C5

Envelope Weight

Envelope feeder accessory: 60 to 90 g/m² (16 to 24 lb)

Envelope tray accessory: 60 to 90 g/m² (16 to 24 lb)

Manual feed: 60 to 90 g/m² (16 to 24 lb)

NOTE: For additional specifications on envelopes for laser printing, consult the HP LaserJet IID Paper Specifications Guide. It is strongly recommended that all media be tested before purchase.

Envelope Size

Commercial #10: 4½ × 9½ in.

Monarch: 3¾ × 7½ in.

DL: 110 × 220 mm

C5: 162 × 229 mm

NOTE: Best results are obtained if envelopes are stored and used within the listed ranges.

Temperature: 17 to 23 degrees C (63 to 73 degrees F)

Relative humidity: 45 to 55%

Printable Surface (Landscape)

	Comm. #10	Monarch	DL	C5
Width				
inches	9.10	7.10	8.27	8.62
mm	231	180	210	219
Length				
inches	3.72	3.47	3.86	5.91
mm	94	88	98	150

Control Panel

Buttons: on line, continue/reset, print fonts/test, form feed, enter/reset menu, menu, +, -

Indicators: (16-segment display indicator), ready, manual, duplex, on line, form feed

Interfaces

Centronics parallel, RS-232-C/RS-422-A
(300-19.2 Kbytes baud)

Buffer Size

640 Kbytes standard memory (395 Kbytes of user-accessible memory)

Environmental Ranges

Temperature (Printer and Toner Cartridge)

Operating: 10 to 32.5 degrees C (50 to 91 degrees F)

Storage: 0 to 35 degrees C (32 to 95 degrees F)

Altitude

Operating: 0 to 2500 m (0 to 8200 ft)

Storage: 0 to 15 000 m (0 to 49 200 ft)

Humidity

Operating: 20 to 80% RH

Storage: 10 to 80% RH

Acoustics (average sound pressure measured at 1 m per ISO 7779)

Printing:

Maximum sound power level-Lwa: 6.3 bels(A)

Maximum sound pressure level-Lpa: 50 dB(A)

Standby:

Maximum sound power level-Lwa: 5.3 bels(A)

Maximum sound pressure level-Lpa: 40 dB(A)

Power Requirements

Source: 100 to 115 volts (+10%, -10%) or 220 to 240 volts (+10%, -10%) (the printer's voltage range depends on the country in which the printer is purchased)

Frequency: 50 or 60 Hz

Consumption at 115 VAC:

Printing: 870 watts maximum

Standby: 170 watts (nominal)

Physical Specifications

Height: 31.3 cm (12.3 in.)

Width: 45.4 cm (18.0 in.)

Depth (body only): 62.5 cm (25.0 in.)

Depth (with tray): 88.8 cm (35.0 in. all trays but legal 37.5 in.)

Net Weight: 33.6 kg (74 lb)

Product Certifications

UL 478 listed; CSA 22.2 154 certified; complies with IEC 380 and IEC 435; FCC level B; VDE 0871B, VDE 0836, IEC-TC76, and VBG 93; BRH certified Class 1 Laser Product (safe for office/EDP use).

Estimated Typical Usage

Up to 7500 pages per month

NOTE: Estimated typical usage is offered as the recommended monthly volume to comfortably accommodate several users. It is given as a guideline for selecting the correct printer model. The usage limit of the LaserJet IID printer is 16 000 pages per month (simplex printing).

Interface and Cable Requirements

System	Interface	HP Cable	Cable Length
HP 150	Serial	13242G	5.0 m (16.7 ft)
HP 150	Parallel	13242D	2.0 m (6.6 ft)
(45643A interface required)			
HP Vectra	Serial	24542G	3.0 m (9.9 ft)
(24540A interface required)			
HP Vectra	Parallel	24542D	2.0 m (6.6 ft)
(24540A interface required)			
IBM PC-AT and most	Serial	24542G	3.0 m (9.9 ft)
AT compatibles	Parallel	24542D	2.0 m (6.6 ft)
IBM PC, PC-XT & PS/2	Serial	17255D	1.0 m (3.0 ft)
and most PC, PC-XT	Parallel	24542D	2.0 m (6.6 ft)
and PS/2 compatibles			
COMPAQ Portable	Serial	17255D	1.0 m (3.0 ft)
COMPAQ Portable	Parallel	24542D	2.0 m (6.6 ft)
COMPAQ DeskPro	Serial	24542G	3.0 m (9.9 ft)
COMPAQ DeskPro	Parallel	24542D	2.0 m (6.6 ft)
AT & T PC	Serial	17255D	1.0 m (3.0 ft)

NOTE: Some PCs require specific interface accessory cards installed to connect to a printer. Consult your PC salesperson for additional information.

Ordering Information

Standard Unit

33447A HP LaserJet IID printer, includes Getting Started Road Map, User's Manual, Quick Reference Card, Software Applications, Paper Specifications Guide, 640 Kbyte RAM memory (up to 395 Kbyte user memory), Centronics parallel and RS-232-C/RS-422-A interface, EP-S toner cartridge, two 200-sheet letter-size paper input trays, an S2 font cartridge, and a power cord. (Cables for computer interfaces are not supplied.)

Supplies

Toner Cartridge

92295A Black toner cartridge (EP-S)

Overhead Transparencies

92285J 50 sheets per box

Labels (100 sheets per box)

92285K 1 × 2 5/6 in. (33 per page)
92157K 1 × 2 5/6 in. (33 per page with border)
92285L 1 3/8 × 2 5/6 in. (24 per page)
92157N 1 1/2 × 2 5/6 in. (21 per page with border)
92157P 2 × 4 1/4 in. (10 per page with border)
92285M 2 3/4 × 4 1/4 in. (8 per page)
92285W 8 1/2 × 11 in. (1 per page)

Accessories

Memory Boards

33443B 1 Mbyte memory board
33444B 2 Mbyte memory board
33445B 4 Mbyte memory board

NOTE: HP 33443A, 33444A, and 33445A memory boards for the LaserJet Series II printer do not work with the LaserJet IID printer.

Envelope Feeders

33457A	Envelope feeder (holds up to 50 envelopes)
92295F	Envelope input tray (holds up to 15 envelopes)

Paper Trays

92295B	Letter-size paper tray (8½ × 11 in.)
92295C	Legal-size paper tray (8½ × 14 in.)
92295D	A4-size paper tray (210 × 297 mm)
92295E	Executive-size paper tray (7¼ × 10½ in.)
92295R	Replacement top cover for 92295B, D, and E paper trays
92295S	Replacement top cover for 92295C paper tray

Manuals

33447-90901	LaserJet IID Printer User's Manual
33447-90905	LaserJet IID Printer Technical Reference Manual
33447-90908	LaserJet IID Printer Getting Started Road Map
33447-90911	LaserJet IID Printer User's Quick Reference Card
33447-90912	LaserJet IID Printer Envelope Feeder User's Guide
33447-90914	LaserJet IID Printer Paper Specifications Guide
—	LaserJet IID Printer Software Application Notes (call 208-323-2551 in the United States)

Font Cartridges

92286A	Courier
92286B	TmsRmn Proportional 1
92286C	International 1
92286D	Prestige Elite
92286E	Letter Gothic
92286F	TmsRmn 2
92286G	Legal Elite
92286H	Legal Courier
92286J	Math Elite
92286K	Math TmsRmn
92286L	Courier P & L
92286M	Prestige Elite P & L
92286N	Letter Gothic P & L
92286P	TmsRmn P & L
92286Q	Memo 1
92286R	Presentations 1
92286T	Tax 1
92286U	Forms Portrait
92286V	Forms Landscape

92286W1	Bar Code 3-of-9/OCR-A
92286X	EAN/UPC/OCR-B
92286Y	Courier PC 1
92286Z	Microsoft® 1A

LaserJet Series II, LaserJet IID, and LaserJet 2000 printers only:

92290S1	Courier PC 1
92290S2	TmsRmn/Helv Report 1

Soft Fonts*

33412AC	Tms/Helv Base, ASCII, 5.25 in. disc
33412AD**	Tms/Helv Base, Roman-8, 5.25 in. disc
33412AE	Tms/Helv Supplement, ASCII, 5.25 in. disc
33412AF**	Tms/Helv Supplement, Roman-8, 5.25 in. disc
33412DA**	Letter Gothic Family, 5.25 in. disc
33412EA**	Prestige Elite Family, 5.25 in. disc
33412RA	ITC Garamond®, ASCII, 5.25 in. disc
33412RB	ITC Garamond, Roman-8, 5.25 in. disc
33412SA	Century Schoolbook®, ASCII, 5.25 in. disc
33412SB	Century Schoolbook, Roman-8, 5.25 in. disc
33412TA	Zapf Humanist™, ASCII, 5.25 in. disc
33412TB	Zapf Humanist, Roman-8, 5.25 in. disc
33412UA	Headline Typefaces™ 1, ASCII, 5.25 in. disc
33412UB	Headline Typefaces 1, Roman-8, 5.25 in. disc
33412AG	Helv Headlines, 5.25 in. disc
33407B	FontLoad™, 5.25 in. disc (utility)

NOTE: 33412AD and 33412AF also include the ASCII characters contained in 33412AC and 33412AE, respectively.

For print samples and other font information, ask your HP Dealer or Sales Representative for the brochure, "Supplies and Accessories for Your HP LaserJet Printer," Part Number 5956-4268.

Printer supplies are available at authorized HP dealers or through HP's Direct Marketing Operation in the U.S. (800-538-8787); in California, call (408) 738-4133 collect.

*Soft fonts are licensed for use with up to three printers.

**Also available with corporate license for use with up to 100 printers (option 100).

In the U.S.A., call toll-free 1-800-752-0900 for the sales office or dealer nearest you. **United States** — Hewlett-Packard Company: 4 Choke Cherry Road, Rockville, MD 20850, (301) 670-4300; 5201 Tollview Drive, Rolling Meadows, IL 60008, (312) 255-9800; 5161 Lankershim Blvd., No. Hollywood, CA 91601, (818) 505-5600; 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. **Europe/Africa/Middle East** — Hewlett-Packard S.A., Central Mailing Department, P.O. Box 529, 1180 AM Amstelveen, The Netherlands, (31) 20/547 9999. **Far East** — Hewlett-Packard Asia Headquarters, 22-30/F, Bond Centre, West Tower, 89 Queensway, Central, Hong Kong (5) 848-7777. **Japan** — Yokogawa-Hewlett-Packard Ltd., 29-21, Takaide-Higashi 3-chome, Suginami-ku, Tokyo 168 (03) 331-6111. **Latin America** — Latin American Region Headquarters, Monte Pelvoux Nbr. 111, Lomas de Chapultepec, 11000 Mexico D.F., Mexico (905) 596-79-33.

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