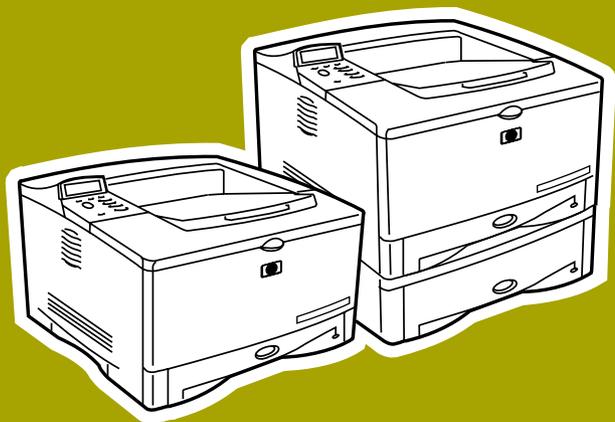


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hp LaserJet 5100 series printers

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Publication number  
Q1860-90918

First Edition, May 2002

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# 1

# Printer description

## Overview

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# Printer features

**Table 1. Printer features**

<b>Speed</b>	22 pages per minute (ppm) for A4-sized paper, or 21 ppm for letter-sized paper 300 MHz microprocessor First page out = 13 seconds
<b>Resolution</b>	HP ProRes 1200, a 1200-by-1200 dots-per-inch (dpi), HP FastRes 1200 and 600 dpi with Resolution Enhancement Technology (REt)
<b>Typefaces</b>	80 built-in scalable Printer Control Language (PCL) fonts, 80 internal PostScript® fonts
<b>Processor</b>	300 MHz
<b>Memory options</b>	<b>HP LaserJet 5100 printer and HP LaserJet 5100 Le printer:</b> 16 MB, expandable to 192 MB through three industry-standard dual inline memory module (DIMM) slots <b>HP LaserJet 5100tn printer and HP LaserJet 5100dtn printer:</b> 32 MB, expandable to 192 MB through three industry-standard DIMM slots
<b>Connectivity</b>	<b>HP LaserJet 5100 printer:</b> Bidirectional IEEE-1284-compliant parallel interface; two open enhancement input/output (EIO) slots (standard); HP Jetdirect internal print server (optional); 802.11 internal wireless connectivity card (optional) <b>HP LaserJet 5100tn printer and HP LaserJet 5100dtn printer:</b> Bidirectional IEEE-1284-compliant parallel interface; one open EIO slot; HP Jetdirect (EIO) print server for Fast Ethernet 10/100Base-TX in second slot (standard); 802.11 Internal Wireless connectivity card (optional) <b>HP LaserJet 5100Le printer:</b> Bidirectional IEEE-1284-compliant parallel interface
<b>Network compatibility</b>	Microsoft® Windows® 95, Windows NT® 4.0, Windows XP; NetWare; IBM OS/2 Warp; LAN manager; UNIX®, Appletalk; Linux®; HP-UX; LocalTalk through HP Jetdirect EIO print servers
<b>Mass-storage options</b>	>4 GB EIO hard disk
<b>Paper trays</b>	<b>Tray 1</b> <ul style="list-style-type: none"> <li>● Capacity: 100 sheets</li> <li>● Sizes: 76 by 127 mm (3 by 5 inches) to 312 by 470 mm (12.28 by 18.5 inches)</li> </ul> <b>Tray 2</b> <ul style="list-style-type: none"> <li>● Capacity: 250 sheets</li> <li>● Sizes: 149 by 210 mm (5.8 by 8.2 inches) to 279 by 432 mm (11 by 17 inches)</li> </ul> <b>250-sheet feeder</b> (optional for HP LaserJet 5100 printer, HP LaserJet 5100tn printer, and HP LaserJet 5100dtn printer) <ul style="list-style-type: none"> <li>● Capacity: 250 sheets</li> <li>● Sizes: 149 by 210 mm (5.8 by 8.2 inches) to 279 by 432 mm (11 by 17 inches)</li> </ul> <b>500-sheet feeder</b> (optional for HP LaserJet 5100 printer; standard for HP LaserJet 5100tn printer and HP LaserJet 5100dtn printer) <ul style="list-style-type: none"> <li>● Capacity: 500 sheets</li> <li>● Sizes: 149 by 210 mm (5.8 by 8.2 inches) to 279 by 432 mm (11 by 17 inches)</li> </ul>
<b>Paper path</b>	Standard path to top output bin Straight-through path from Tray 1 to the rear output bin
<b>Output capacity</b>	250-sheet top output bin 50-sheet rear output bin
<b>Paper-handling options</b>	Two-sided printing is automatic with the duplex printing accessory (duplexer). The duplexer is optional for the HP LaserJet 5100 printer, and is standard for the HP LaserJet 5100dtn printer.

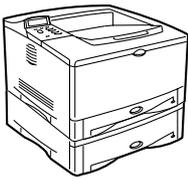
## Printer information

The printer is available in four configurations, as described here.



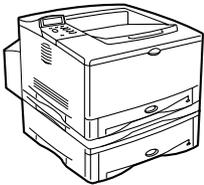
### HP LaserJet 5100 printer

The HP LaserJet 5100 printer (product number: Q1860A) is a 22 pages per minute (ppm) laser printer that comes standard with a 100-sheet multipurpose Tray 1, a 250-sheet Tray 2, and 16 MB of memory. It is designed for workgroups and can print on paper sizes up to A3 and 11 by 17 inches (279 by 432 mm).



### HP LaserJet 5100tn printer

The HP LaserJet 5100tn printer (product number: Q1861A) is a 22 ppm laser printer that comes standard with a 100-sheet multipurpose Tray 1, a 250-sheet Tray 2, a 500-sheet feeder, 32 MB of memory, and an HP Jetdirect print server for connecting to a fast Ethernet (10/100Base-TX) network. It is designed for network users and can print full-bleed images on paper sizes up to A3 and 11 by 17 inches (279 by 432 mm).



### HP LaserJet 5100dtn printer

The HP LaserJet 5100dtn printer (product number: Q1862A) is a 22 ppm laser printer that comes standard with a 100-sheet multipurpose Tray 1, a 250-sheet Tray 2, a 500-sheet feeder, 32 MB of memory, an HP Jetdirect print server for connecting to a fast Ethernet (10/100Base-TX) network, an embedded Web server DIMM for remote printer management, and a duplex printing accessory for printing on two sides of a sheet of print media. The printer is designed for network users and can print full-bleed images on paper sizes up to A3 and 11 by 17 inches (279 by 432 mm).



### HP LaserJet 5100Le printer

This printer (product number: Q1863A) is a 22 ppm laser printer that comes standard with a 100-sheet multipurpose Tray 1, a 250-sheet Tray 2, and 16 MB of memory. The printer can print full-bleed images on paper sizes up to A3 and 11 by 17 inches (279 by 432 mm). Paper-handling and EIO accessories are not available for the HP LaserJet 5100Le printer.

**Table 2. Comparison of HP LaserJet 5100 Series printers**

	<b>HP LaserJet 5100 (Q1860A)</b>	<b>HP LaserJet 5100tn (Q1861A)</b>	<b>HP LaserJet 5100dtn (Q1862A)</b>	<b>HP LaserJet 5100 LE (Q1863A)</b>
<b>Ethernet 10-T/ 10-2</b>	optional	standard	standard	not available
<b>Input bins (standard/ maximum)</b>	2/4	3/4	3/4	2/2
<b>Standard RAM</b>	16 MB internal	32 MB	32 MB	16 MB
<b>250-sheet feeders (Tray 2, Tray 3)</b>	1 standard 1 optional	1 standard 1 optional	1 standard 1 optional	1 standard
<b>500-sheet feeder</b>	optional	standard	standard	N/A
<b>EIO hard disk</b>	optional	optional	optional	N/A
<b>Duplexer</b>	optional	optional	standard	N/A
<b>LocalTalk</b>	optional	optional	optional	N/A
<b>Processor</b>	300 MHz	300 MHz	300 MHz	300 MHz

# Identification

## Model and serial numbers

The model and serial numbers are listed on identification labels that are located inside the top cover. The serial number is alphanumeric, such as USB0000146 for the HP LaserJet 5100 series printer.

The serial number contains information about the origin location, as well as the revision level, the production code, and the production number of the printer.

The labels also contain power rating and regulatory information as shown in figure 1.

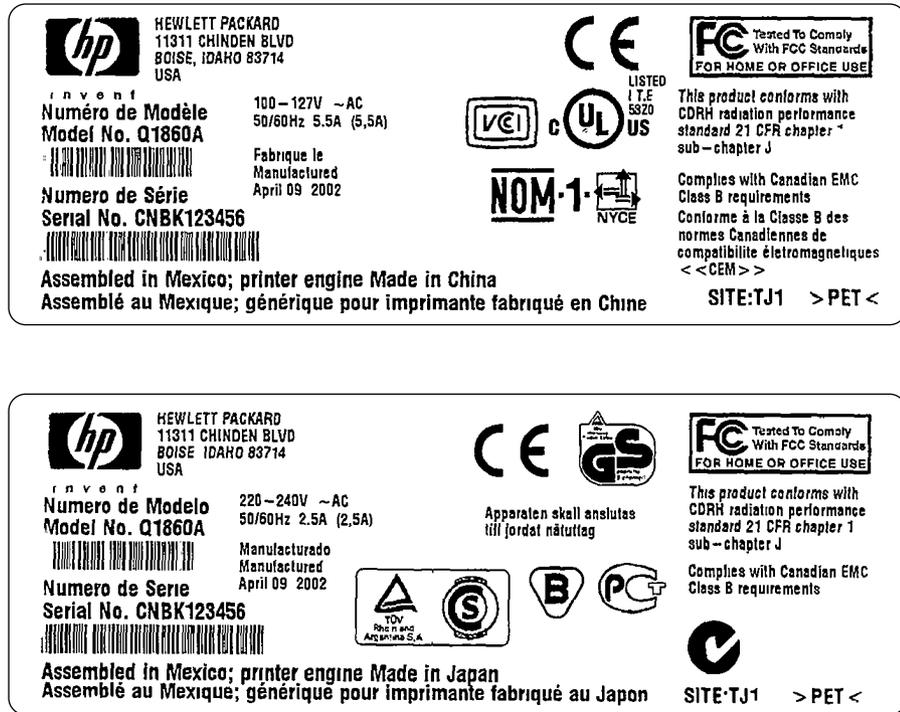


Figure 1. Sample identification labels

## Site requirements

### Environmental and power requirements

The following environmental specifications must be maintained to ensure the proper operation of the printer. Consider the following points before installing the printer:

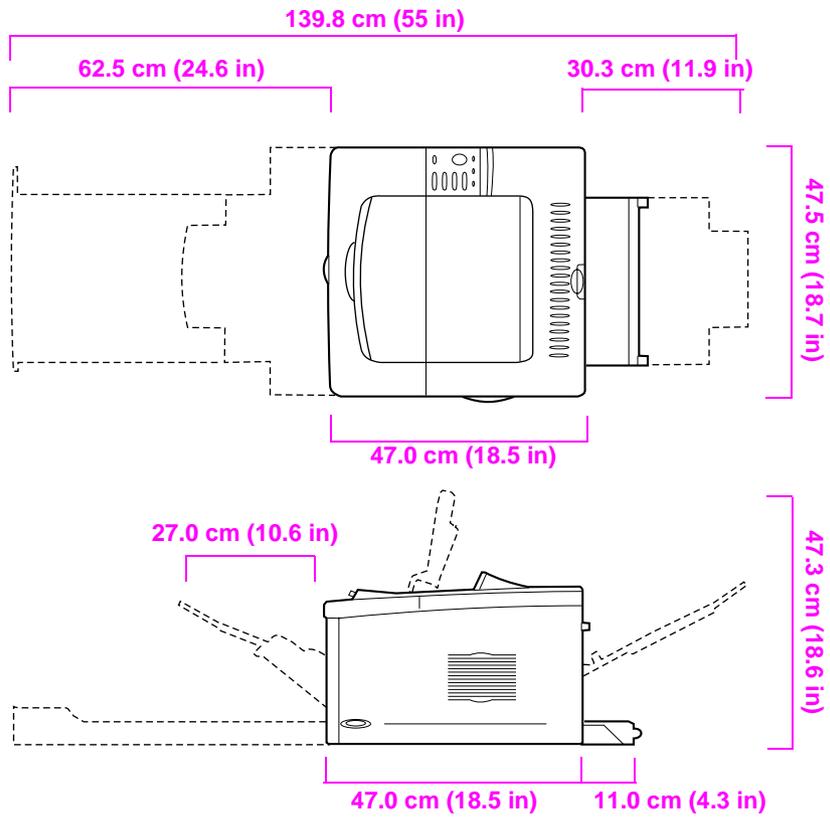
- Install the printer in a well-ventilated, dust-free area.
- Install the printer on a hard, flat, and continuous surface on which all four printer feet are level. Do not install the printer on carpet or other soft surfaces.
- Make sure that adequate power is supplied. The printer power requirements are listed in table 3.
- Install the printer where temperature and humidity are stable, and away from water sources, humidifiers, air conditioners, refrigerators, or other major appliances.
- Install the printer away from direct sunlight, open flames, or ammonia fumes. If the printer is placed near a window, make sure the window has a curtain or blind to block any direct sunlight.
- Install the printer with enough space around it for proper access and ventilation.
- Install the printer away from the direct flow of exhaust from air-ventilation systems.

**Table 3. Power requirements**

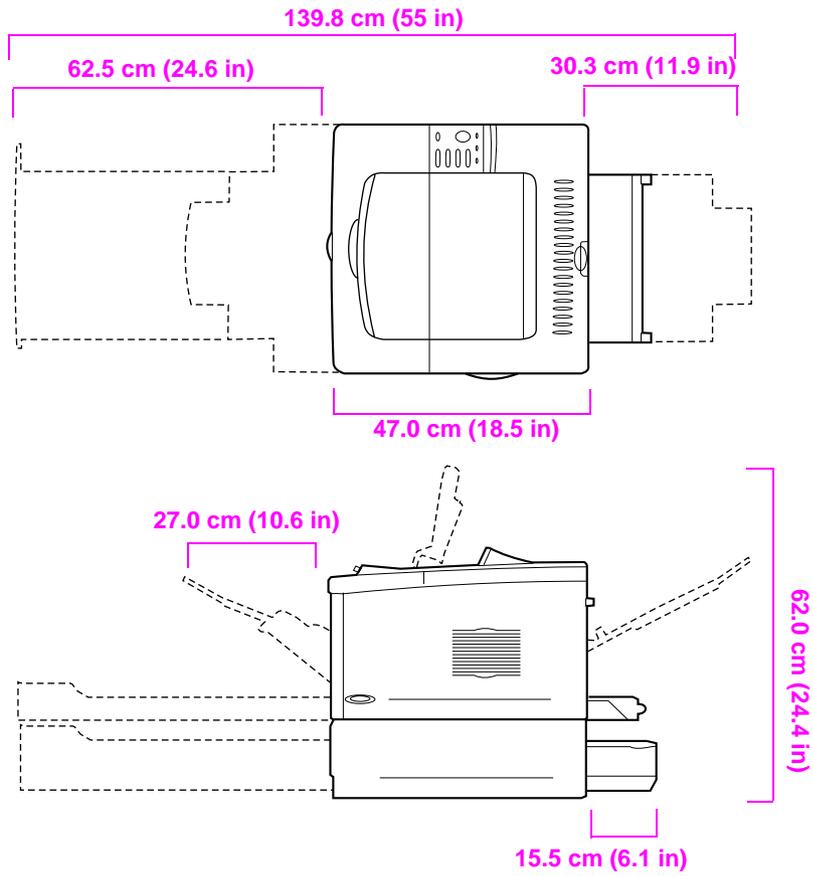
<b>Volts</b>	<b>Frequency</b>	<b>Amps (current rating)</b>	<b>Amps (rated short-term current)</b>	<b>Watts (average maximum, based on HP LaserJet 5100dtn printer)</b>
100 to 127 Vac (+/-10%)	50 to 60 Hz (+/-3 Hz)	5.4 amps	6 amps	printing = 480 standby = 24 PowerSave on = < 30 (ENERGY STAR®)* printer off = 0
220 to 240 Vac (+/-10%)	50 to 60 Hz (+/-3 Hz)	2.5 amps	3 amps	printing = 515 standby = 29 PowerSave on = < 30 (ENERGY STAR®)* printer off = 0

\*ENERGY STAR is a U.S. registered service mark of the United States Environmental Protection Agency.

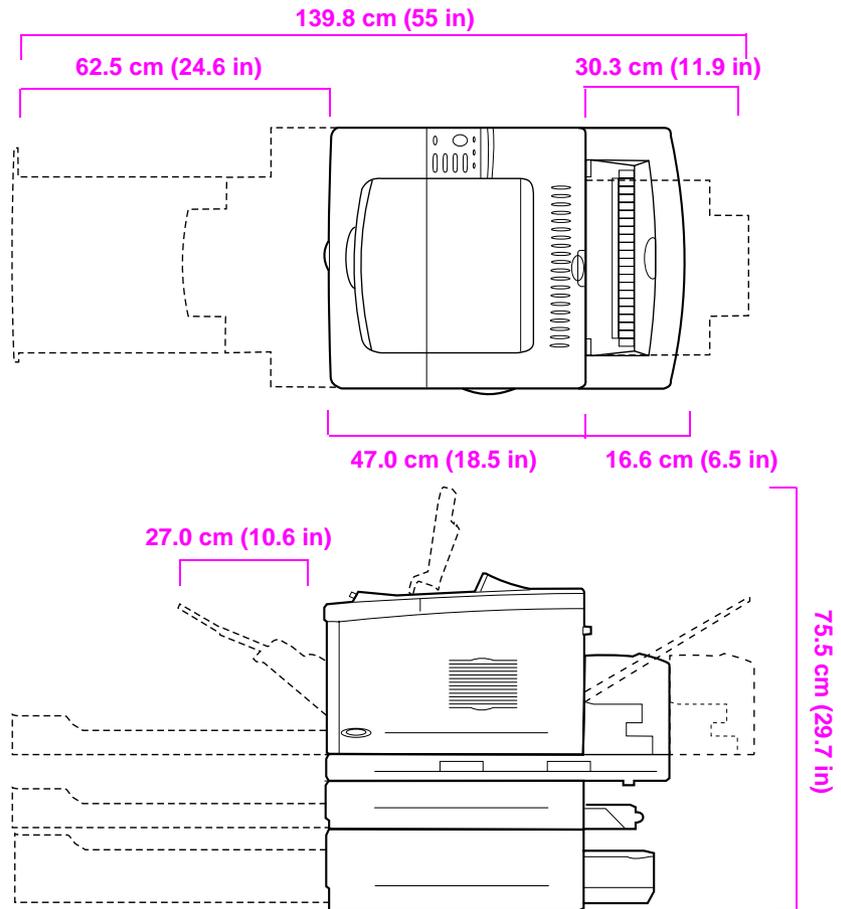
## Space requirements



**Figure 2.** Printer dimensions—HP LaserJet 5100 printer and HP LaserJet 5100Le printer



**Figure 3.** Printer dimensions—HP LaserJet 5100tn printer and HP LaserJet 5100dtn printer



**Figure 4. Printer dimensions, HP LaserJet 5100 series printer with accessories**

**Printer weight (without toner cartridge)**

- HP LaserJet 5100 printer: 23 kg (50 lb)
- HP LaserJet 5100tn printer with optional 500-sheet feeder: 34 kg (75 lb)
- HP LaserJet 5100dtn printer with duplexer and optional 500-sheet feeder: 52 kg (114 lb)
- HP LaserJet 5100Le printer: 23 kg (50 lb)

## Environmental requirements

**Table 4. Environmental specifications**

Item	Operating	Storage
Temperature	10° to 32° C (50° to 91° F)	-20° to 60° C (-4° to 140° F)
Relative humidity (RH)	20 to 80 percent RH (with no condensation)	10 percent to 95 percent RH

**Table 5. Acoustics specifications**

Printer state	Sound power	Bystander position	Operator position
Printing at 22 ppm	$L_{WA_d}$ = 6.8 bels (A)	$L_{pAm}$ = 53 dB	$L_{pAm}$ = 60 dB maximum*
Printing at 11 ppm	$L_{WA_d}$ = 6.4 bels (A)	$L_{pAm}$ = 50 dB	$L_{pAm}$ = 56 dB maximum*
PowerSave	$L_{WA_d}$ = 4.4 bels (A)	$L_{pAm}$ = 32 dB	$L_{pAm}$ = 37 dB maximum*

\*Maximum values are based on the HP LaserJet 5100dtn printer.

# Paper specifications

The following tables show paper specifications for the printer.

**Table 6. Paper specifications, Tray 1**

Supported paper	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Minimum size (custom)	76 by 127 mm (3 by 5 inches)	60 to 199 g/m <sup>2</sup> (16 to 53 lb)	100 sheets of 75-g/m <sup>2</sup> (20-lb) paper
Maximum size (custom)	312 by 470 mm (12.28 by 18.5 inches)		
Transparencies	Same as minimum and maximum paper sizes as listed above.	Thickness: 0.099 to 0.114 mm (0.0039 to 0.0045 in)	75 transparencies
Labels		Thickness: 0.127 to 0.178 mm (0.005 to 0.007 in)	50 labels
Envelopes		75 to 105 g/m <sup>2</sup> (20 to 28 lb)	10 envelopes

1. The printer supports a wide range of paper sizes. Check the printer software for supported sizes. To print custom-size paper see the user's guide.
2. Capacity might vary depending on paper weight and thickness, and environmental conditions.

**Table 7. Paper specifications, Tray 2 or other 250-sheet feeder**

Supported Paper	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Letter	216 by 279 mm (8.5 by 11 in)	60 to 105 g/m <sup>2</sup> (16 to 28 lb)	250 sheets of 75-g/m <sup>2</sup> (20-lb) paper
A4	210 by 297 mm (8.3 by 11.7 in)		50 to 100 transparencies
Executive	191 by 267 mm (7.3 by 10.5 in)		
Legal	216 by 356 mm (8.5 by 14 in)		
B5 (JIS)	182 by 257 mm (7.2 by 10 in)		
A5	148 by 210 mm (5.8 by 8.2 in)		
11 by 17	279 by 432 mm (11 by 17 in)		
A3	297 by 420 mm (11.7 by 16.5 in)		
B4 (JIS)	257 by 364 mm (10.1 by 14.3 in)		

1. The printer supports a wide range of media sizes. Check the printer software for supported sizes.
2. Capacity might vary depending on media weight and thickness, and environmental conditions.

**Table 8. Paper specifications, 500-sheet feeder**

Supported paper	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Letter Letter-R <sup>3</sup>	216 by 279 mm (8.5 by 11 inches)	60 to 105 g/m <sup>2</sup> (16 to 28 lb)	500 sheets of 75-g/m <sup>2</sup> (20-lb) paper 50 to 100 transparencies
A4 A4-R <sup>3</sup>	210 by 297 mm (8.3 by 11.7 inches)		
Executive	191 by 267 mm (7.3 by 10.5 inches)		
Legal	216 by 356 mm (8.5 by 14 inches)		
B5 (JIS)	182 by 257 mm (7.2 by 10 inches)		
A5	148 by 210 mm (5.8 by 8.2 inches)		
11 by 17	279 by 432 mm (11 by 17 inches)		
A3	297 by 420 mm (11.7 by 16.5 inches)		
B4 (JIS)	257 by 364 mm (10.1 by 14.3 inches)		
Minimum Size (Custom <sup>4</sup> )	148 by 210 mm (5.8 by 8.3 inches)		
Maximum Size (Custom <sup>4</sup> )	297 by 432 mm (11.7 by 17 inches)		

1. The printer supports a wide range of media sizes. Check the printer software for supported sizes.
2. Capacity may vary depending on media weight and thickness, and environmental conditions.
3. To print rotated paper, see the user's guide.
4. To print custom-size paper, see the user's guide.

**Table 9. Paper specifications, duplexer**

	Dimensions <sup>1</sup>	Weight
Minimum	148 by 210 mm (5.8 by 8.3 inches)	60 to 105 g/m <sup>2</sup> (16 to 28 lb)
Maximum	297 by 432 mm (11.7 by 17 inches)	

1. The printer supports a wide range of media sizes. Check the printer software for supported sizes.

## Supported types of paper

The printer supports a wide variety of media, such as:

- plain
- letterhead
- prepunched
- bond
- color
- rough
- vellum
- preprinted
- transparency
- labels
- recycled
- card stock
- user-defined (5 types)

## Guidelines for using paper

For best results, use conventional 75-g/m<sup>2</sup> (20-lb) paper. Make sure the paper is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

Some paper causes print-quality problems, jamming, or damage to the printer.

For more specific information, see “Image defects” on page 209.

**Table 10. Media issues**

Symptom	Problem with paper	Solution
Poor print quality or toner adhesion. Problems with feeding.	Too moist, too rough, too smooth, or embossed; faulty paper lot.	Try another kind of paper, between 100 and 250 Sheffield, and with 4% to 6% moisture content.
Dropouts, jamming, curl.	Stored improperly.	Store paper flat in its moisture-proof wrapping. Open the rear output bin.
Increased gray background shading.	Too heavy.	Use lighter paper. Open the rear output bin.
Excessive curl. Problems with feeding.	Too moist, wrong grain direction, or short-grain construction.	Open the rear output bin. Use long-grain paper. Set FUSER MODE=LOW.
Jamming, damage to the printer.	Cutouts or perforations.	Do not use paper with cutouts or perforations.
Problems with feeding.	Ragged edges.	Use higher quality paper.

### Note

Do not use letterhead paper that is printed with low-temperature inks, such as those used in some types of thermography.

Do not use raised letterhead.

The printer uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with the printer's temperature (200° C or 392° F for 0.1 second).

### Paper weight equivalence table

Use this table to determine approximate equivalent points in weight specifications other than U.S. bond weight. For example, to determine the equivalent of 20-lb U.S. bond-weight paper in U.S. cover weight, locate the bond weight (in row 3, second column) and scan across the row to the cover weight (in the fourth column). The equivalent is 28 lb.

Shaded areas indicate a standard weight for that grade.

	U.S. postcard <sup>1</sup> thickness (mm)	U.S. bond weight (lb)	U.S. text/book weight (lb)	U.S. cover weight (lb)	U.S. bristol weight (lb)	U.S. index weight (lb)	U.S. tag weight (lb)	Europe metric weight (g/m <sup>2</sup> )	Japan metric weight (g/m <sup>2</sup> )
1		16	41	22	27	33	37	60	60
2		17	43	24	29	35	39	64	64
3		20	50	28	34	42	46	75	75
4		21	54	30	36	44	49	80	80
5		22	56	31	38	46	51	81	81
6		24	60	33	41	50	55	90	90
7		27	68	37	45	55	61	100	100
8		28	70	39	49	58	65	105	105
9		32	80	44	55	67	74	120	120
10		34	86	47	58	71	79	128	128
11		36	90	50	62	75	83	135	135
12	.18	39	100	55	67	82	91	148	148
13	.19	42	107	58	72	87	97	157	157
14	.20	43	110	60	74	90	100	163	163
15	.23	47	119	65	80	97	108	176	176
16		53	134	74	90	110	122	199	199

1. U.S. postcard measurements are approximate. Use for reference only.