

Printers

Types of Printer

Inkjet Printer:

Inkjet or Ink Tank printers are one of the user friendly computer printers. It works by propelling variably-sized droplets of liquid or molten material (ink) onto almost any medium. They are the most common type of printer for the general consumer due to their low cost, high quality of output, capability of printing in glowing color, and easy to use and handle.

Laser Printer:

Laser printer uses LED-technology to obtain small particles of toner from a cartridge onto paper. They produce high quality text and graphics on plain paper. They are generally more economical to use than the ink of inkjet printers.

Plotters Printer:

Plotters printer are very different from others printers. Unlike other printer Pen Plotters print by moving a pen across the surface of a piece of paper. Plotters printer is the best way to produce color high-resolution vector-based artwork, or very large drawings efficiently.

Dot-matrix Printer:

This printer is somehow like typewriting. They create characters by striking pins against an ink ribbon. Each pin makes a dot, and combinations of dots form characters and illustrations. The printing involves mechanical pressure, so these printers can create carbon copies and carbonless copies as well. Mostly used for payment slip / receipt printing.

Thermal Printer:

Thermal printer is an inexpensive printer that works by pushing heated pins against heat-sensitive paper. Thermal printers are generally used in calculators and fax machines. Thermal printers print faster and more quietly than dot matrix printers. They are also more economical since their only consumable is the paper itself.

Things to be looked for in a Printer

Whether a user decided on an inkjet or a laser printer or a dot matrix printer, these are some features to look out for:

- **Speed:**
A printer's advertised speed is the maximum speed of the machine's engine, measured in pages per minute (ppm).
- **Status panels:**
Some printers will include an LCD display with menu options, either as text or with graphics. A detailed display with 'paper jam' and 'low toner' indicators can be helpful with troubleshooting.
- **Connections:**
Most modern printers will come with a USB port – and the necessary cables – for direct connection to a computer. Some may also have an Ethernet port for joining a wired network, which can be located away from the work desk, helping to save on space.
- **Wireless:**
Wireless connectivity will mean that can connect computers and other digital devices such as phone or tablet to the printer without worrying about cables. Variations include Google Cloudprint, AirPrint (iOS only), Pict-Bridge and Bluetooth.
- **Duplexing:**

Automatic double-sided printing can save a lot of paper costs and wastage over the life of the printer.

- **Tray size:**
The input tray on most personal colour laser MFPs will hold 150 to 250 sheets of A4 paper, and some printers have a second tray for a different paper type such as headed stationery.
- **Manual feed:**
This feature makes it easier to print on envelopes, letterhead or specialty papers.
- **Memory card slot:**
Many printers support memory cards. This can be very handy for printing a "contact sheet" of thumbnails and selected pictures without needing a computer. Some will be able to handle MiniSD cards with a separate adaptor.
- **Print heads on cartridge:**
A printer head that's not part of the cartridge will often last for the life of the printer itself, but if it does wear out it can be expensive to replace. Cartridges that include a print head won't usually wear out over the life of the single-fill cartridge, but this adds to the cartridge cost.
- **Printing options:**
There are several printing options a user may find:
 - **Page per sheet:**
Most printers can print multiple pages on one sheet of paper, but some can print up to 25 pages on one sheet.
 - **Poster printing:**
This option automatically segments a large file (designed as an A1 page for example) into smaller pages (e.g. multiple A4s) that can then be joined together after printing.
 - **A3 paper:**
Some printers can print on larger paper sizes – usually A3, but in some cases even larger.
 - **Booklets:**
Booklet printing sorts the pages so user can fold the output and staple it into a booklet.
 - **Borderless printing:**
Not all printers can print right up to the edge of the paper or a photographic print. If a user printing photos or graphics, this is an especially useful feature.
 - **Optical disc printing:**
This can be handy, but exists only on some inkjet printers and requires special printable CD/DVD blanks.
 - **Transparency:**
A few inkjet printers can print onto transparencies – this may require special ink.
 - **Watermark:**
A watermark function lets you print a light mark or outline on the page without requiring imaging software like Photoshop.
 - **OCR (optical character recognition):**
Most multifunctional printers come with OCR software so user can scan in a hard-copy document that will be read as a text or Microsoft Word file.

Ink Tank Printer

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture / Assembled	(Specify)		
Year of Manufacture	(Specify)		
Type	Inkjet - Ink Tank		
Printing Resolution	4800 (horizontal) x 1200 (vertical) dpi or higher		
Ink Type:	Individual Ink Bottle		
Number of Nozzles	(Specify)		
Ink Droplet Size	(Specify)		
Ink Bottle:	(Cyan, Magenta, Yellow, Black)		
Document: Colour ESAT / Simplex	Approx. 15ppm / 5.0ipm		
Document: B/W ESAT / Simplex	Approx. 13PPM / 8.8ipm		
Bordered	Up to 203.2mm (8-inch)		
Top margin	31.2mm		
Bottom margin	32.5mm		
Paper Size	A4, A5, B5, Letter, Legal, 4 x 6", 5 x 7", Envelopes (DL, COM10), Custom size (width 101.6 - 215.9mm, length 152.4 - 676mm)		
Interface	USB		
Cost Per Page	Should be Less than Rs.1 per page Please specify the Price of the Ink & the Yield Certified by the Manufactures		
Manufacturer Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network		

	<p>Documentary evidence to be provided of the following under bidders' name.</p> <p>(a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)</p>		
Warranty Information	<p>A sticker with</p> <ul style="list-style-type: none"> -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period <p>on all printers</p>		
Brochure	<p>Supplier should provide brochure of make/model quoted as per above specification</p>		

Mono Printer – Entry Level

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture / Assembled	(Specify)		
Year of Manufacture	(Specify)		
Technology	Laser – Ink Tank		
Print Speed	Black Draft Text 38 PPM or above		
Print Resolution	600 × 600 dpi, 1200 × 1200 dpi (equivalent)		
Memory	Specify		
Input Paper Tray	250 sheets, A4 Plain Paper		
Paper Sizes	Letter, A 4.		
Paper Types	Paper (bond, letterhead, plain, preprinted, recycled, rough, and light).		
Interface	USB, Fast Ethernet 10/100, & Wi-Fi		
Duplex Printing	Auto Duplex Printing		
Duty Cycle	25,000 or above		
Power Source	220 ~ 240V		
Operating Systems Support	Windows 7, Windows 10		
Software	Printer Driver Software with Media Kit for Windows 7, Ubuntu		
Certificates	Quoted Model should be Energy Star, CE Complied,(Documentary Evidence should be Provided)		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same Similar Product for last 5 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of		

	Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Cost per Page	Should be Less than Rs.1 per page Please specify the Price of the Ink /Toner & the Yield Certified by the Manufactures		
Warranty Information	A sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period On all printers		
Brochure	Supplier should provide original brochure of make/model quoted as per above specification		

Mono Laser Printer

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture / Assembled	(Specify)		
Year of Manufacture	(Specify)		
Technology	Laser		
Print Speed	Black Draft Text 42 PPM or above		
Print Resolution	600 × 600 dpi, 1200 × 1200 dpi (equivalent)		
Memory	Minimum 768MB Standard		
Input Paper Tray	250 sheets, A4 Plain Paper		
Paper Sizes	Letter, A 4.		
Paper Types	Paper (bond, letterhead, plain, preprinted, recycled, rough, and light).		
Interface	USB, Fast Ethernet 10x100,10x1000 & Wi-Fi		
Duplex Printing	Auto Duplex Printing		
Duty Cycle	75,000 or above		
Power Source	220 ~ 240V		
Operating Systems Support	Windows 7, Windows 10, mac OS, Linux		
Software	Printer Driver Software with Media Kit for Windows 7, Ubuntu		
Certificates	Quoted Model should be Energy Star, CE Complied, (Documentary Evidence should be Provided)		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of		

	Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Warranty Information	A sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period on all Printers		
Cost per Page	Should be Less than Rs.3 per page Please specify the Price of the Toner & the Yield Certified by the Manufactures		
Brochure	Supplier should provide original brochure of make/model quoted as per above specification		

Colour Laser Printer

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture / Assembled	(Specify)		
Year of Manufacture	(Specify)		
Technology	Laser		
Print Speed	(A4): Up to 18ppm (Mono/Colour)		
Print Resolution	Up to 9,600 (equivalent) x 600dpi		
Device Memory	Minimum 1GB Standard		
Input Paper Tray	250 sheets, A4 Plain Paper		
Paper Sizes	Letter, A 4.		
Paper Types	Paper (bond, letterhead, plain, preprinted, recycled, rough, and light).		
Interface	USB, Fast Ethernet 10/100, & Wi-Fi		
Duplex Printing	Auto Duplex Printing		
Duty Cycle	30,000 or above/25000		
Power Source	220 ~ 240V		
Operating Systems Support	Windows 8 or higher		
Software	Printer Driver Software with Media Kit for Windows 10, Ubuntu		
Energy Star Certificate	Quoted Model should be Energy Star Complied, Documentary Evidence should be Provided		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the		

	<p>following under bidders' name.</p> <p>(a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)</p>		
Warranty Information	<p>A sticker with</p> <ul style="list-style-type: none"> -Supplier name -Contact Numbers -Date of Commissioning of Hardwar -Warranty period <p>On all Printers</p>		
Brochure	Supplier should provide original brochure of make/model quoted as per above specification		

Dot Matrix Printer – Narrow

Item	Minimum Requirement	Bidder's Response	
		Yes/No	If "No", Bidders Response
Brand	(Specify)		
Model	(Specify)		
Country of Origin & Country of Manufacture / assembly	(Specify)		
Printing Technology	Print Method	Impact dot matrix	
	Number of Pins in Head	24 pins	
	Print Direction	Bi direction with logic seeking	
Print Speed	High Speed Draft 10 / 12 cpi	347 / 416 cps	
	Draft 10 / 12 / 15 cpi	260 / 312 / 390 cps	
	Draft Condensed 17 / 20 cpi	222 / 260 cps	
	Letter Quality 10 / 12 / 15 cpi	86 / 103 / 129 cps	
	Letter Quality Condensed 17 / 20 cpi	147 / 172 cps	
Print Characteristics	Character Sets	(Specify)	
	Bitmap Fonts	(Specify)	
	Scalable Fonts	(Specify)	
	Barcode Fonts	(Specify)	
Printable Columns	Pitch 10 / 12 / 15 / 17 / 20 cpi	80 / 96 / 120 / 137 / 160 cpl	
Paper Handling	Paper Path - Tractor	Rear in, Top out	
	Paper Path - Manual Insertion	Rear in, Top out	
Paper Size	Cut Sheet (Single Sheet)	(Specify Length, Width & Thickness)	
	Cut Sheet (Multi Part)	(Specify Length, Width & Thickness)	
	Envelope (No.6)	(Specify Length, Width & Thickness)	
	Envelope (No.10)	(Specify Length, Width & Thickness)	

	Continuous Paper (Single Sheet and Multi part)	(Specify Length, Width & Thickness)		
	Roll Paper	(Specify Length, Width & Thickness)		
Paper Feeding	Standard	Friction, Push Tractor		
	Optional	Roll Paper Holder		
Copies		Original + 3 copies		
Line Spacing		4.23mm (1/6") or programmable in increments of 0.118mm (1/216")		
Input Data Buffer		128KB or better		
Interface	Standard	Bi-directional parallel interface		
		USB 2.0 Full-Speed		
		Serial		
Ribbon Cartridge	Standard	Fabric Ribbon Cartridge (Black)		
	Ribbon Life	Approx. 2.5 million characters (Draft 10 cpi, 48 dots/character) or better		
Acoustic Noise		Approx. 53 dB(A) (ISO 7779 pattern)		
Reliability	Mean Print Volume Between Failure (MVBF)	Approx. 20 million lines or better		
	Mean Time Between Failure (MTBF)	Approx. 10,000 POH or better		
	Print Head Life	Approx. 400 million strokes/wire or better		
Environmental Conditions (Operating)	Temperature	5 ~ 35°C		
	Humidity	10 ~ 80 % RH		
Electrical Specification	Rated Voltage	AC 120V / AC 220 - 240V		
	Rated Frequency	50Hz ~ 60Hz		
	Power Consumption (Operating)	Approx. 22W		
Printer Driver / Utility	Operating System	Microsoft Windows 10 or better		
Manufacture Experience		Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		

Bidders Experience		The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate		Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty		Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Warranty Information		A sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period On all printers		
Brochure		Supplier should provide original brochure of make/model quoted as per above specification		

Dot Matrix Printer – Wide

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture / Assembled	(Specify)		
Year of Manufacture	(Specify)		
Technology	Serial impact dot matrix		
Number of pins	24 pins		
Columns	136 Columns		
Print direction	Bi-directional with logic seeking		
Print Speed	550 cps		
Paper/media	Cut sheet (single sheet, multi part), Continuous paper (single and multi-part), Roll paper, Envelope, Card, Label (cut sheet and fan fold)		
Paper feeding	Manual Insertion (Front or rear in, top out), Push Tractor (Front or rear in, top out), Pull Tractor (Front or rear or bottom in, top out)		
Fonts	1 Draft Bitmap and 4 scalable typefaces, 8 Barcode fonts		
Input buffer	128 Kbytes		
Interfaces	Standard: Bi-directional parallel interface (IEEE-1284 nibble mode supported) Standard: USB 2.0 (Full Speed) Option: Type B I/F level 2 (Network print server) Option: Serial interface		
Copy capability	1 original + 5 copies		
Consumables	Black fabric ribbon		
Reliability	MTBF: 25,000 POH (25% Duty) Print head life: 400 million strokes/ wire		
Noise level	<54 dB		
Voltage range	AC 220 to 240 V		
Energy Star compliant	Yes		

Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty Information	A sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period On all printers		
Brochure	Supplier should provide original brochure of make/model quoted as per above specification		

Content References:

- <https://byte-notes.com>
- <https://pcpartpicker.com>
- <https://www.choice.com.au>
- <https://www.cnet.com>
- <http://www.globusinfocom.com>
- <https://www.icta.lk>
- <https://www.itbusiness.ca>
- <https://www.pcworld.com>
- <https://www.streetdirectory.com>