

A BUYERS GUIDE TO CAD

A step by step guide to finding a large format printer that best fits your needs



WHICH LARGE FORMAT PRINTER DO YOU NEED?

Before you invest in a large format printer, it is better to have a clear understanding of the requirements you will have. Considering the answers to the following 12 questions will help you appreciate how Canon's imagePROGRAF family will meet them, as well as determine which product is your best fit.





imagePROGRAF TA-20



imagePROGRAF TA-30

TM Series



imagePROGRAF TM-200 & 205



imagePROGRAF TM-300 & 305

TX Series



imagePROGRAF TX-2000



imagePROGRAF TX-3000



imagePROGRAF TX-4000





12 QUESTIONS TO FIND YOUR IDEAL IMAGEPROGRAF PRINTER

- 1. How large is your print volume?
- 2. Which paper format do you mainly require?
- 3. What tasks should your new printer perform?
- 4. What print quality do you require?
- 5. How fast do you need your printer to be?
- 6. How important is efficient consumption?

- 7. What file formats do you need to print?
- 8. How much does connectivity and control matter?
- 9. What software and tools will benefit you?
- 10. How important is ease of use?
- 11. What additional services might be useful?
- 12. How important are environmental credentials?



HOW LARGE IS YOUR PRINT VOLUME?

First, you should estimate the amount of printing you will need to do.

If you require only 2 to 3 prints per day, or up to 100 per month, we recommend the imagePROGRAF TA Series. With its lower purchase price, it offers the optimum value for money.

If however your needs are for over 100 prints per month, the imagePROGRAF TM or TX Series are a better choice thanks to their higher production speeds - designed to ensure you never miss another deadline.



WHAT PAPER FORMAT DO YOU MAINLY REQUIRE?

Every imagePROGRAF printer is capable of borderless printing with a width of 61 cm, which is ideal for A1. If you usually print in A0 format, then you can choose from either a device offering a printing width of 91.4 cm or one with a printing width of 111.8 cm.

Another decisive feature for rapid production is printing length. All the imagePROGRAF models can print 18 m from the roll as standard and, using a RIP, the imagePROGRAF TM printers can print an impressive 100 m in length. Particularly productive are the imagePROGRAF TX models which incorporate a RIP, enabling prints up to 350 m (2× 175 m) in length, thanks to their second roll.





3.

WHAT TASKS SHOULD YOUR NEW PRINTER PERFORM?



Printing

All imagePROGRAF printers produce crisp text and high-precision lines, making them ideal for CAD drawings. They can also effortlessly render photographs in high quality and borderless printing is also simple thanks to an integrated cutting function.



Scanning and copying

If you want your printing system to scan and print simultaneously, it's best to opt for a multifunctional printer (MFP) with a connected scanner, from the imagePROGRAF TM or TX Series.

From design drawings and newspapers right through to drawings with marker pen corrections, these large format MFPs can scan all your originals quickly and reliably, so you can digitise your entire archive with ease.

Some all-in-one versions of the imagePROGRAF TM and TX Series printers are paired with a powerful PC and controlled via a touch-screen display.



4.

WHAT PRINT QUALITY DO YOU REQUIRE?

If you require absolute precision from your printing system, the imagePROGRAF Series printers are an ideal fit.

Ever printer has a high performance print head with 15,360 nozzles and a systems architecture that puts your data onto paper using a resolution of 2,400 × 1,200 dpi.

Printouts are absolutely true to size, matching your design with millimetre precision. The matt black pigment ink guarantees crisp lines and ensures even the smallest fonts are highly legible, with a line accuracy of ± 0.1%.

Gradients are smooth and harmonious with soft transitions – even neutral grey tones look great.

Prints are are always impressive due to their luminosity, colour fidelity and naturalness. In addition, they are resistant to UV light so they do not fade, lasting a period of up to 60 years.

Water splashes and even rough handling on building sites have little impact. And if special paper is used, you can even make sure your prints are weatherproof.



Need a bit more?

You can upgrade to the unique dual roll feed for unwinding and taking up prints for maximum productivity at any time. Plus, a stacker handling up to 100 Al sheets is available to keep everything in order.









Certified for economical power consumption and durability: the large format imagePROGRAF printers from Canon.



HOW FAST DO YOU NEED YOUR PRINTER TO BE?

Each printer within the imagePROGRAF family deliver prints quickly and reliably and can do so without borders on a wide variety of papers, and is able to cut them directly without any manual intervention.

The print speeds attainable depend on the model, print mode selected, and the media used, with the highest speeds achieved using high-speed mode and normal paper.

Even the entry-level imagePROGRAF TA-20 printer can deliver an A1 printout in 32 seconds, which equates to 56.3 m² per hour. By comparison, the high-end imagePROGRAF TX-4000 prints an A1 sheet in a mere 18.5 seconds and produces an impressive 97.3 m² per hour.



HOW IMPORTANT IS EFFICIENCY?

Canon's advanced FINE technology ensures no ink is wasted, with microfine droplets of pigment ink placed precisely on the paper by the print head's nozzles.

To produce an A1 printout in high-speed mode on normal paper, the imagePROGRAF printers only consume between 0.09 and 0.15 ml of ink. Since every last drop of ink from the cartridge is used, there's no wastage nor residue to be disposed of.

Power consumption is equally efficient with low consumption in both operation and sleep mode. This has enabled each printer to be certified with the Energy Star and to have achieved a silver rating with EPEAT, the global eco-label for IT products.



WHAT FILE FORMATS DO YOU **NEED TO PRINT?**

PDF files can be generated as an exchange format in all applications. The imagePROGRAF printers process them perfectly for optimal results. Thanks to HP-GL/2 support, you can also print directly from a CAD/GIS environment. And you can even print easily and directly from Microsoft Office programs using a free Canon plug-in.



HOW MUCH DOES CONNECTIVITY AND CONTROL MATTER?

In general, all imagePROGRAF printers can connect via ethernet or wireless network. For additional flexibility, you can also use the cloud in conjunction with your smartphone or tablet to print, even while out of the office. The imagePROGRAF TA and TM Series also enable you to print easily using AirPrint.

If scanning or printing onto or via a USB stick is helpful, you can do this with one of the MFP versions of our imagePROGRAF devices.







Print large format posters and banners directly from MS Office programs with the free Canon Plug-In for Office.





Changing the ink cartridges on an imagePROGRAF printer couldn't be simpler - and printing can continue while you do it.



Quiet operation means no unwanted interruptions when you are working.





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WHAT SOFTWARE AND TOOLS WILL BENEFIT YOU?

Canon provides a comprehensive, free software suite for its imagePROGRAF family to make work easier:

- Direct Print & Share: preview PDF, JPG, TIF and HP-GL/2 files before printing and without opening the original application
- Accounting Manager: undertake efficient cost management for your print jobs
- PosterArtist: create professional posters and banners using templates and royalty-free images and graphics
- Free Layout plus: achieve optimal layout of files on the printed sheet
- Media Configuration Tool: create and save paper profiles and material settings to save time
- Device Management Console: manage multiple imagePROGRAF printers on the network



HOW IMPORTANT IS EASE OF USE?

One of the defining characteristics of the imagePROGRAF printers is their user friendliness, minimising operator involvement while making things as intuitive as possible, right across the printing process.

A clear, easy to understand display makes operation at the device effortless.

Every printer is designed so that it can be operated from the front at all times. This makes, for example, changing ink cartridges easy for everyone. When ink does run out, the cartridge can even be changed without interrupting operation, thanks to the imagePROGRAF's handy sub ink tanks.

Paper is also conveniently loaded from the front and the imagePROGRAF TX Series even loads the paper and aligns it for you automatically.

When it comes to output, the imagePROGRAF printers can create borderless prints to your required size without any time-consuming, manual cutting needed.

Even the print head can be replaced, if necessary, without ever involving a service technician.



WHAT ADDITIONAL SERVICES MIGHT BE USEFUL?

With Canon's eService you can take advantage of a new type of support package that requires no initial hardware outlay - you simply pay based on what you print each month. It ensures you will enjoy automatic ink replenishment based on your usage - so you're never left short - plus in depth device monitoring and the highest levels of support and maintenance.



HOW IMPORTANT ARE ENVIRONMENTAL CREDENTIALS?

All the imagePROGRAF printers are Energy Star and EPEAT Silver certified. This is thanks to their lower environmental impact than comparable products, as they require less power when in use and have a longer service life.

Every printer is quiet during operation and in idle mode, with the TA and TM Series being especially quiet, printing at just 42 dB(A). This makes them suitable for small offices where just a bit of excess noise might be intrusive.

The pigment ink used within Canon's cartridges is solvent-free, so there are no harmful substances to consider nor unpleasant emissions. The imagePROGRAF printers also keep on printing until the last drop of ink is used, so there's no wastage and no residue to be disposed of. You can also opt to use recycled or FSC® certified paper as an additional, environmentally responsible measure.

magePROGRAF CAD PRINTERS						~		D					
AT A GLANCE		TA-20	TA-30	TM-200 / TM-205	TM-300 / TM-305	TX-2000	TX-3000	TX-4000	TM-200 MFP L24ei	TM-300 MFP L36ei	TM-305/300 MFP T36	TX-3000 MFP T36	TX-4000 MFP T36
Number of prints expected													
2 to 3 pages/day or up to 100 pages/month		•	•										
more than 5 pages/day or more than 100 pages/month				•	•	•	•	•	•	•	•	•	•
Paper formats													
up to 61 cm wide or A1		•		•		•			•				
up to 91.4 cm wide or A0			•		•		•	_		•	•	•	_
up to 118 cm wide or B0								•					•
Maximum printable paper length up to 18 m (standard)													
up to 100 m (with a RIP)		•	•	•	•	•	•	•	•	•	•	•	•
up to 350 m (2× 175 m with a 2nd roll and a RIP)				•	•	•	•	•	•	•	•		
Sheets from A4, up to 1.6 m long, 59.4 cm		59.4 cm	•	•	•	•	•	•	•	•	•	•	
Borderless printing		59.4 CITI	•	•	•	•	•	•	•	•	•	•	
Optional 2nd roll		•			-	Available	Available	Available	•		•	Available	Available
Pigment ink system						, wandole	, wallable	, wallable				, wallable	Available
Number of ink colours		5	5	5	5	5	5	5	5	5	5	5	5
nk cartridge availability per colour (in ml)		55	55	130/300	130/300	160/330/700	160/330/700	160/330/700	130/300	130/300	130/300	160/330/700	160/330/70
Applications				100,000	100,000	.00,000,700	.00,000,700	100,000,700	.00,000	100,000	100,000	.00,000,700	100,000,70
Printing CAD drawings		•	•	•	•	•	•	•	•	•	•	•	•
Printing photo quality renderings		•	•	•	•	•	•	•	•	•	•	•	•
ndelible print-outs							•	•				•	•
Simultaneous scanning and copying									•	•	•	•	•
Originals up to 96.5 cm wide, 15.2 m long and 2 mm thick											•	•	•
Originals up to 96.5 cm wide, 2.77 m long and 0.5 mm thick									•				
Originals up to 66 cm wide, 2.77 m long and 0.5 mm thick										•			
Print quality													
Resolution of 2,400 × 1,200 dpi		•	•	•	•	•	•	•	•	•	•	•	•
Line accuracy ±0.1%		•	•	•	•	•	•	•	•	•	•	•	•
Dimensional accuracy with millimetre precision		•	•	•	•	•	•	•	•	•	•	•	•
Gradients, soft transitions, neutral grey		•	•	•	•	•	•	•	•	•	•	•	•
Pigment ink for authenticity and naturalness of the colours		•	•	•	•	•	•	•	•	•	•	•	•
Indelibility and PTS certificate							•	•				•	•
Resistance to UV light of up to 60 years on normal paper (according to JEITA test conditions)		•	•	•	•	•	•	•	•	•	•	•	•
Printouts are splash-proof and scratch-resistant		•	•	•	•	•	•	•	•	•	•	•	•
Weather resistance when special paper is used		•	•	•	•	•	•	•	•	•	•	•	•
Printing speed and ink consumption													
	Printing speed Ink consumption	32 seconds 0.09 ml	26.5 seconds 0.09 ml	24 seconds 0.153 ml	20 seconds 0.153 ml	24 seconds 0.152 ml	18.5 seconds 0.152 ml	18.5 seconds 0.152 ml	24 seconds 0.153 ml	20 seconds 0.153 ml	20 seconds 0.153 ml	18.5 seconds 0.152 ml	18.5 seconds 0.152 ml
AO (economy mode, normal paper)	Printing speed Ink consumption	-	53 seconds 0.157 ml	-	40 seconds 0.241 ml	-	37 seconds 0.241 ml	37 seconds 0.241 ml	- -	40 seconds 0.241 ml	40 seconds 0.241 ml	37 seconds 0.241 ml	37 seconds 0.241 ml
Print volume per hour (normal paper)		56.3m ²	67.9m²	75.0m ²	90.0m²	75.0m ²	97.3m ²	97.3m ²	75.0m²	90.0m²	90.0m²	97.3m²	97.3m ²
Printable file formats													
PDF files directly from the application		•	•	•	•	•	•	•	•	•	•	•	•
HP-GL files directly from the CAD application		•	•	•	•	•	•	•	•	•	•	•	•
Printing controlled													
ria LAN, wireless network and the cloud		•	•	•	•	•	•	•	•	•	•	•	•
Airprint via USB		•	•	•	•	•	•	•	•	•	•	•	•
Software included: PosterArtist, Direct Print & Share, Free Layout p	us, Accounting	•	•	•	•	•	•	•	•	•	•	•	•
Manager, Media Configuration Tool Jser friendliness													
The display is clear, understandable and intuitive		•	•	•	•	•	•	•	•	•	•	•	•
Paper loaded automatically Ink cartridges changeable during the printing process		_	_	_	_	•	•	•	_	_	_	•	•
		•	•	•	•	•	•	•	•	•	•	•	•
Comprehensive security features Eco-friendliness		•	•	•	•				•	•			
		42 dD(A)	40 -ID(A)	4.4 -ID(A)	44 - 10(4)	E1 -ID(A)	E1 -ID/A	E1 -ID(A)	44 - 104 4 3	4.4 -ID(A)	E1 -ID(A)	E1 -ID(A)	E1 ID(A)
ow-noise printing (max.) loise on stand-by (max.)		42 dB(A)	42 dB(A)	44 dB(A)	44 dB(A)	51 dB(A)	51 dB(A)	51 dB(A)	44 dB(A)	44 dB(A)	51 dB(A)	51 dB(A)	51 dB(A)
EPEAT certification		35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver	35 dB(A) Silver
ENERGY STAR® certified		Silver	Sliver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver
excellent printouts on recycled and FSC papers		•	•	•	•	•	•	•	•	•	•	•	•
		_	_	_				_	-	_	_	_	_

To find out more about Canon's LFP printers visit:

https://www.canon-europe.com/lfp

