

Canon

imagePROGRAF®  
iPF820/810

# iPF820/810

TECHNICAL DOCUMENTS

LARGE-FORMAT PRODUCTION PRINTING SOLUTIONS



# Introducing the imagePROGRAF® iPF820 and iPF810 Printers

Large-format solutions for technical  
documents production printing



Are your large-format printers keeping  
pace with your need for technical  
documents in color and monochrome?

If not, then it's time to take a look at the  
new imagePROGRAF iPF820 and iPF810,  
Canon's single-solution, large-format  
printing systems developed specifically  
to meet the demands of manufacturing,  
engineering, construction and reprographic  
firms for seamless, uninterrupted production  
of razor-sharp monochrome plots and  
high-quality color prints.

With world-renown Canon technology at their core,  
these printers were built to keep you moving  
forward and ahead of the curve by consolidating  
printing operations, increasing workgroup productivity,  
and minimizing costs while improving the image  
quality of every print produced. Choose the one  
that's right for you.

#### **imagePROGRAF iPF820 PRINTER**

A 44"-wide powerhouse printing system that keeps  
workgroups productive, with dual media rolls that  
support multiple media types and long print runs.

#### **imagePROGRAF iPF810 PRINTER**

A highly versatile large-format printing system  
for high-volume production printing on media  
up to 44"-wide.

#### **imagePROGRAF iPF820 PRO/iPF810 PRO PRINTERS**

Select either the iPF820 PRO or iPF810 PRO for a  
complete technical documents production printing  
solution that includes CAD|STATION PS+, a True  
Adobe® PostScript® Color RIP that features print  
management and job accounting functionality.

# iPF820/810



## CAN YOU IMAGINE THE NEXT GENERATION IN TECHNICAL DOCUMENTS PRINTING?

What if you could upgrade your large-format printing operations from “the way it is” to the “way you know it needs to be”?

Now you can. With the introduction of the new 44"-wide imagePROGRAF iPF820/810 large-format printers, Canon has brought to market the next generation in technical documents printing. Built for high-speed production of both full-color and monochrome output, these single-solution printing systems effortlessly produce intricately detailed CAD drawings, color renderings, and GIS maps.

Start by choosing either the single- or dual-media-roll model, then add a large-format scanner, stacker, and production software with True Adobe PostScript RIP to configure the multifunction system solution you need for high-volume production printing and support for large workgroups.

Highly efficient, superb print quality, versatile options, and a remarkably low total cost of ownership – this is the large-format printing system you’ve been waiting for.



# Speed and Precision – Two D-Sized Prints Per Minute

Print speed is critical when you need to keep projects moving forward and meet tight deadlines. That's why the imagePROGRAF iPF820/810 printers are built for high-speed production of complex schematics, drawings, maps, and presentations.

## TWO D-SIZED PRINTS PER MINUTE, IN COLOR OR MONOCHROME

Canon's advanced system architecture achieves print speeds of up to 688 ft.<sup>2</sup>/hr. on plain papers. Or print a full-color, 2400 x 1200 dpi high-resolution, A0-sized image (10.76 ft.<sup>2</sup>) with full graphic coverage on heavyweight coated media in only three minutes.\*

## SPECTACULAR ACCURACY AND EXTRAORDINARY DETAIL

A large 1.07", super-high-density print-head with 15,360 nozzles and a double set of Matte Black ink channels ejects minuscule 4pl droplets of ink across a wide swath of media. The result is consistently accurate, 2400 x 1200 dpi output with fine lines that are accurate to +/- 0.10% and as thin as 0.02mm.

## FIVE-COLOR REACTIVE INK TECHNOLOGY

Print complex schematics with super-clear small text fonts and crisp lines over color backgrounds, even on uncoated technical papers. This unique, wide-color-gamut ink set features four colorfast dye inks and a pigment Matte Black ink that are chemically engineered to prevent excessive "bleeding" so text and lines are always sharp and legible.



\* Mechanical print time does not include data transfer time. Print time is measured for 60 consecutive minutes (including head cleaning and cutting time), printing multiple copies using Canon Printer Driver with Plain Paper setting at Draft (full-density) Mode.

# Productivity – Maximized

The new imagePROGRAF iPF820/810 printers are single-solution systems built to satisfy the full range of large-format technical document printing requirements professionals encounter every day.

## DUAL MEDIA ROLLS

Equipped with dual media rolls, the iPF820 printer eliminates the cause of many bottlenecks in busy printing environments. It can automatically switch between different size and types of media or print on the same media to enable fast, consecutive printing of jobs submitted by multiple users.

## VERSATILE OUTPUT UP TO 44"- WIDE

Print what you need, when you need it. With the auto rotation and nesting functionality on HP-GL/2 files, the iPF820/810 printers not only maximize throughput, but they also help save on media consumption and per-print costs.

## AUTOMATIC BLACK INK SELECTION

Based on the type of media being used, the printer will automatically select the right type of black ink for best results: pigment Matte Black for uncoated and technical papers or dye Black for coated and glossy media.

## BORDERLESS PRINTING

Print from edge-to-edge.\* Output can be ready to use without additional trimming and finishing when utilizing the borderless printing option.

## SELF-PROPELLED CUTTER

The double rotary blade cutter is driven separately from the print-head carriage so that cutting can start immediately after printing is finished. The result is faster, continuous throughput.

## PRINT LONGER WITHOUT INTERRUPTION

Canon's unique sub-ink tank system means you can replace ink on-the-fly, without stopping the printer. Choose the extra large 700ml ink tanks for even greater productivity.

## MEDIA DETECTION SYSTEM

The automatic media detection and management system keeps track of paper usage and warns the user if there's not enough media to complete a print task.

## HIGH-CAPACITY MEDIA BASKET

For long print runs, a high-capacity media basket comes standard on both the iPF820 and iPF810 printers.

\*Up to 42" wide

# imagePROGRAF®

## TECHNICAL DOCUMENTS: LARGE-FORMAT PRINTING



iPF810



iPF820

### MAXIMUM PRODUCTIVITY

- Print two D-sized prints per minute or 120 D-sized prints per hour, in color or monochrome
- The iPF820 is equipped to automatically switch between its dual media rolls to enable fast, consecutive printing of different media types and sizes
- Send large sets of files from multiple workstations to a built-in 80GB hard drive
- Economy Print Mode allows for lower cost of operation
- High-density print-head with 15,360 nozzles provides high-speed, accurate results
- Self-propelled cutter can start cutting immediately after printing is finished for fast throughput time of multipage documents
- Sub-ink tank system allows for changing ink without interrupting a print job

### VERSATILITY

- Direct printing support for HP-GL/2 and HP RTL
- The enhanced HDI Driver enables direct printing from AutoCAD® and AutoCAD LT
- Convenient media feed options for everyday use
- Intuitive printer driver UI enables easy selection of automatic roll switching functionality

### HIGH-QUALITY PRINTING

- High-resolution output up to 2400 x 1200 dpi
- Print fine 0.02mm thick lines with tiny 4-picoliter ink droplets
- Precise +0.1% line accuracy
- Unique five-color dye/pigment Reactive Ink technology optimizes imaging

# MULTIFUNCTION SOLUTIONS TO FIT YOUR WORKFLOW

## HIGH-CAPACITY PLAIN PAPER STACKER

- Optional stacker provides a flat surface to off-load prints, eliminating the need for operator handling
- Built for high productivity
- Stacker automatically picks up plain paper documents of mixed sizes and stacks them up to 300 sheets

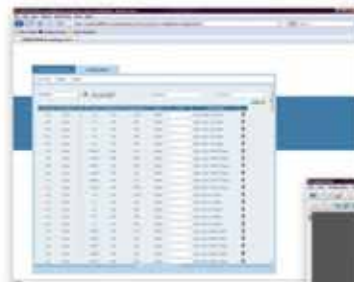


## LARGE-FORMAT SCANNER

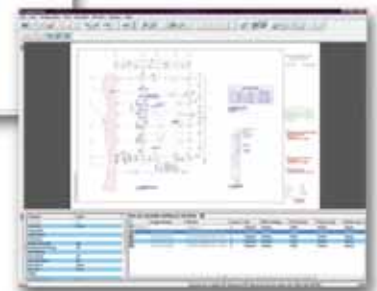
- Optional large-format scanner provides a powerful scan-to-copy/archive/e-mail integrated workflow solution
- Fast and effective large-format capture-to-output functionality

## CAD|STATION PS+ SOFTWARE (PRO Models Only)

- A full-color RIP with true Adobe PostScript processing, advanced job management features, and accounting functionality
- Web submission tools drag-and-drop hot folders, and client/server workflow features for significant increase in productivity



Cost Accounting  
Configuration



General View of Interface

# Operations – Optimized

Canon designed the large-format imagePROGRAF iPF820/810 printers to make producing technical documents faster, easier, and more efficient. To help you optimize daily operations, the enhanced features contribute directly to overall performance and simplified end-user tasks.

## WORKGROUP PRINTING

Waiting for large files to print can slow down an entire workgroup. That's where an 80GB hard drive makes all the difference. Now multiple users can organize and manage their print jobs easily via the system's remote user interface with up to 29 password-protected mail boxes. Once a large data file is sent, the printer stores it in the queue, freeing workstations for the next project. The large hard drive capacity means workgroups can be extra productive.

## ENHANCED REMOTE USER INTERFACE

The enhanced Remote User Interface includes password-protected mail boxes to help organize and manage print jobs from multiple users, so medium- to large-size workgroups can share the printer more efficiently.

## CANON PRINTER DRIVER

Intuitive operation with easy and advanced settings for both Windows and Macintosh users.

## FREE-LAYOUT FUNCTION

Assemble charts, tables, text documents, and graphics of different file formats onto a single page, and print them together to create high-impact posters and presentations.

## SCAN-TO-PRINT ENLARGEMENTS

Making enlargements is as easy as making copies when an imagePROGRAF large-format printer is seamlessly integrated with a Canon imageRUNNER® or imagePRESS™ multifunction system with Universal Send.

## REAL PREVIEW FUNCTION

Avoid unnecessary errors and reprints with this real-time preview function that enables users to modify settings, even after clicking "Print."

## COLOR EMULATION

The color emulation function helps these imagePROGRAF printers to approximate the colors produced by other legacy large-format ink-jet printers.

## ENHANCED HDI DRIVER

Print HP-GL/2 and HP RTL files directly from CAD applications, including AutoCAD and AutoCAD LT via Canon's enhanced HDI Driver. This high-speed HDI driver saves users time and improves workgroup efficiencies.

## HARD DRIVE SECURITY

The 80GB hard drive supports multiple methods of data erasure and document security, ranging from a quick and easy option that simply removes file system information to a triple overwrite of the hard drive that conforms to the DoD.52220.22-M standard of the U.S. Department of Defense.

## Costs – Minimized

In addition to the low initial acquisition cost of these printers, a number of important features minimize ink consumption, media waste, and maintenance costs to contribute to a significantly reduced total cost of operations while still producing technical documents of the highest quality.

- **Economy Print Mode lowers the cost per print:** Significantly reduce ink consumption and lower total printing costs by selecting Economy Print Mode when printing drafts and check plots.
- **Durable print-head reduces maintenance costs:** Canon's unique high-density print-head ejects fine droplets of ink with remarkable efficiency and accuracy. With 15,360 nozzles, there's less wear and tear on each individual nozzle, increasing the life of the print-head.
- **Large-Capacity Ink Tanks:** Large 330ml or 700ml ink tank helps lower total cost of ownership overtime while increasing your productivity.
- **Minimize media waste:** Canon's auto rotation and nesting feature with HP-GL/2 files helps you take full advantage of the printer's 44"-wide media capacity.

- **Ink technology improves print durability:**

Chemically engineered for improved durability and adhesion, Canon's unique five-color Reactive Ink technology can actually extend the life of your full-color maps, schematics, and construction plans. Even with the stress of constant handling, writing, and display, ink stays put, so you won't need to spend time and money reprinting large-format documents.

- **Energy Savings:** Engineered for efficiency and reliability, these ENERGY STAR® qualified printers draw only 190 watts of power during use.



# System Solutions – Simplified

## **imagePROGRAF iPF820 PRO AND imagePROGRAF iPF810 PRO PRINTERS**

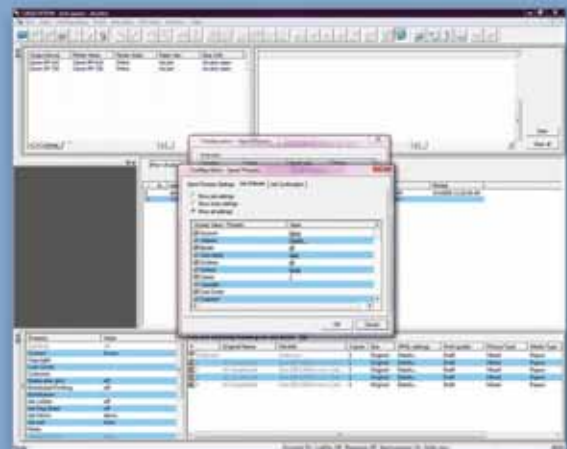
Choose either the iPF820 PRO or iPF810 PRO printer to further enhance your operations with a complete production printing solution that includes CAD|STATION PS+, a True Adobe PS color RIP with advanced job management and accounting functionality. CAD|STATION PS+ has a client/server architecture with the ability to set up an unlimited number of clients, giving these PRO model printers greater functionality. They also simplify batch printing procedures, relieve the image processing burden from end-user workstations for faster job throughput, and include advanced accounting and job-cost tracking functions.

- With the PRO model printers, you can print directly from Windows or AutoCAD HDI drivers.
- Printing of industry-specific file formats: HP-GL/2, HP RTL, CGM, CALS, AutoCAD, DWF, DXF, and DWG as well as PS, EPS, PDF, TIFF, BMP, and others.
- This tool set provides additional controls over output options and helps manage batch printing more efficiently.
- The color RIP includes profiles for a wide variety of media along with color calibration tools.
- Accounting functions track output activity and record details such as project, customer, or cost center information to simplify invoicing and project cost accounting.
- Web-based job submission

## CAD|STATION PS+



Submitting Jobs via Web Client



Job Configuration

These highly versatile printers can also be configured with additional options to fully optimize your productivity from input to output.

#### HIGH-CAPACITY STACKER

Add an optional high-capacity plain paper stacker for even greater efficiency. The stacker provides a sturdy flat surface to off-load plain paper prints and eliminates the need for operator handling. Multiple workstations can send jobs to the printer unattended and retrieve them later, without hampering the stacker's capacity.

- Automatically picks up documents and stacks them up to 300 sheets (plain paper)
- User-installable
- Stacker tray holds mixed output sizes

#### HIGH-SPEED, HIGH-RESOLUTION LARGE-FORMAT SCANNING

Need to archive, reproduce, or distribute large-format documents and presentations from hard-copy originals? Add a compatible high-speed, high-quality large-format scanner to your imagePROGRAF printer to create a complete multifunction, scan-to-copy solution.



# iPF 820/810

# iPF820/810

## SPECIFICATIONS



**Print-Head**  
PF-03

**Technology**  
FINE (Photolithography Ink-jet Nozzle Engineering)

**Print Resolution (Max.)**  
2400 x 1200 dpi

**Line Accuracy\***  
±0.1% or Less

**Minimum Line Weight\*\***  
0.02mm

**Number of Nozzles**  
Matte Black: 5,120 Nozzles  
Other Colors: 2,560 Nozzles per Color

**Droplet Size**  
4 Picoliter

**Nozzle Pitch (Head Resolution)**  
1200 dpi x Two Rows

**Print-Head Swath**  
1.07 inch

**Ink Type**  
**Dye:** Cyan (C), Magenta (M), Yellow (Y), Black (K)  
**Pigment:** Matte Black (MBK)

**Ink Tank**  
**Shipped with Printer:** PFI-303 (330ml) MBK, C, M, Y, K

**Replacement:** PFI-703 (700ml) MBK, C, M, Y, K  
PFI-303 (330ml) MBK, C, M, Y, K

**Ink Supply Method**  
Tubing System with Sub-Tanks for Continuous Ink Supply

**Nozzle Recovery System**  
Non-firing Nozzle Detection and Compensation

**Printer Controller**  
L-COA Controller

**Printer Memory**  
384MB

**Hard Drive**  
80GB

**Mail Boxes (User Job Storage)**  
One Common Inbox; 29 User Inboxes  
(Password-protected)

**Media Feed**  
**Roll Feed:** iPF810: One Roll, Front-loading, Front Output  
iPF820: Two Rolls, Front-loading, Front Output

**Media Width**  
**Roll Feed:** 10" - 44" (254mm - 1118mm)  
**Cut Sheet:** 8" - 44" (203.2mm - 1118mm)

**Printable Margins**  
**Roll Feed:** All Sides: 0.12" (3mm) or 0" for Borderless

**Maximum Print Length (Single Page)†**  
**Roll Feed:** 59' (18m)

**Cut Sheet:** 63' (1.6m)

**Borderless Printing Widths (Roll Media Only)**  
10", 14", 17", 24", 36", 42" B2 (20.28"/515mm),  
A1 (23.38"/594mm), B0 (40.6", 1030mm),  
A0 (33.11"/841mm)

**Media Cutter**  
Durable Dual-Blade Rotary Cutter

**Media Thickness**  
0.07 - 0.8mm (2.8 - 31.4mil)

**Media Core Sizes**  
2" and 3" Core (Adapter Included)

**Maximum Roll Outer Diameter**  
5.9" (150mm)

**Output Media Bin**  
Portable Media Basket (Standard), 44" Plain Paper  
Stacker (Optional), Media Take-Up Reel (Optional,  
iPF810 only)

**Printing Software**  
**iPF810/iPF820**  
imagePROGRAF Printer Driver, HDI Driver††, Printer Driver  
Extra Kit (Free Layout, imageRUNNER Linking Function),  
Print Plug-in for Microsoft® Office

**iPF820 PRO/iPF810 PRO‡**  
Above plus RATIO® CAD|STATION PS+  
CAD|STATION PS+ Server, PLOTCLIENT|SET,  
PLOTCLIENT|HDI, PLOTCLIENT|WEB, WINPRINT)

**Operating System**  
**Printer Driver**  
Windows 32-bit 2000/XP/Server 2003/Vista/Server  
2008, Windows 64-bit XP/Server 2003/Vista/Server  
2008, Macintosh® OS X (10.2.8, 10.3.x, 10.4.x),  
Macintosh OS X CUPS (10.4.9, 10.5.x)

**CAD|STATION Server**  
Windows 2000/XP/2003 Server/Vista

**Print Language**  
**Printer**  
GARO, HP-GL/2, HP RTL

**CAD|STATION PS+ (PRO Models Only)**  
Adobe® PostScript® 3, PDF 1.4, EPS, HP-GL,  
HP-GL/2, HP RTL, DWF, DWG, PLT, CALS,  
CGM, TIFF, JPEG, BMP, CALS, CGM

**Interface**  
**Standard (Built-in):** USB 2.0 Hi-Speed, 10/100Base-T/TX  
**Optional:** IEEE1394 (FireWire)

**Acoustic Noise**  
**Operation:** 52dB (A) or Less

**Standby:** 35dB (A) or Less

**Acoustic Power:** 6.8 Bels or Less

**Power Supply**  
AC 100-240V (50-60Hz)

**Power Consumption**  
**Maximum:** 190W or Less  
**Standby:** 6W or Less (11W or less when IEEE1394 is mounted)

**Power Off:** 1W or Less (Executive Order Compliant)

**Certifications**  
**Electrical Safety Regulations**  
UL (USA), C-UL (Canada), S mark  
(Argentina), CE mark (EN60950, EN55022  
classB, EN61000-3-2, EN-61000-3-3, EN55024)  
(EU), CB certification (Others)

**Electromagnetic Interface Regulations**  
FCC Class B (USA), IC Class B (Canada)

**Environmental Certifications**  
ENERGY STAR® (Worldwide), RoHS  
Directive, WEEE, Executive Order (USA)

**Operational Environment**  
**Temperature:** 59 - 86 F° (15 - 30 C°)

**Relative Humidity:** 10 - 80% (No Condensation)

**Printer Dimensions (H x W x D) and Weight with Stand**  
**iPF810/iPF810 PRO**  
45.1" x 74.6" x 50.9" (1144mm x 1893mm x 1291mm),  
Approx. 335 lb. (152kg)

**iPF820/iPF820 PRO**  
45.1" x 74.6" x 50.9" (1144mm x 1893mm x 1291mm),  
Approx. 417 lb. (189kg)

**Package Dimensions (H x W x D) and Weight**  
**iPF810/iPF810 PRO**  
49.8" x 92.5" x 62.4" (1263mm x 2384mm x 1585mm),  
Approx. 664 lb. (301kg)

**iPF820/iPF820 PRO**  
49.8" x 92.5" x 62.4" (1263mm x 2384mm x 1585mm),  
Approx. 768 lb. (348kg)

**Options**

- IEEE1394 Expansion Board (EB-05)
- 44" Plain Paper Stacker (STK1-94)
- Take-Up Unit (TU-06)
- Roll Holder Set (RH2-44)
- PosterArtist

**User-Replaceable Items**

- Ink Tank (PFI-303/PFI-703)
- Print-Head (PF-03)
- Maintenance Cartridge (MC-09)

**What's In The Box**  
**iPF810**  
Printer, Portable Media Basket, User Software CD  
(Printer Driver, HDI Driver, Utilities), 5 Ink Tanks  
(MBK, C, M, Y, K), 2/3" Core Media Spool, Print-Head,  
Maintenance Cartridge, Quick Setup Guide (Poster),  
Printer Reference Guide (Booklet), Power Cord,  
One-Year Onsite Limited Warranty, Registration  
Card, Stand, Hardware (For Setting Up the Printer)

**iPF820**  
All items included in iPF810, plus Secondary Roll Unit

**iPF820 PRO/iPF810 PRO**  
All items included in iPF810 or iPF820, plus  
CAD|STATION PS+ Package

\* Line accuracy repeatability is guaranteed after a user performs  
necessary adjustment and under the same environmental  
conditions. Applies to media for line drawing (Plain Paper,  
Coated Paper, CAD Translucent Matte Film, and CAD Tracing  
Paper) only.

\*\* Theoretical value based on data resolution.

† The maximum printable length varies, depending on the  
application, OS, and RIP used.

†† For AutoCAD or AutoCAD LT 2000/2000i/2002/2004/2005/  
2006/2007/2008/2009

‡ For high-speed and error-free printing of PostScript files  
such as PS, PDF or EPS, using CAD|STATION PS+ software  
in iPF810 PRO or iPF820 PRO is strongly recommended.  
Alternatively, other PostScript compatible RIP package may  
be used to print PostScript files. For a list of Canon  
recommended RIP packages, please consult with  
Canon Alliance and Industry Market program list  
of RIP vendors at [www.usa.canon.com](http://www.usa.canon.com).

**Canon**  
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