



## PLOTWAVE 450/550 PRINTING SYSTEMS

Large Format Technical Document  
Management with Advanced Security

8/10 D-size per minute, 2-4 rolls

**SMART CHANGE STARTS HERE.**



PlotWave 450/550  
printing systems



printer only, 2 Rolls



Multifunction, 4 rolls



with optional delivery tray




with optional PlotWave Folder and folder connection kit

## PLOTWAVE 450/550 PRINTING SYSTEMS

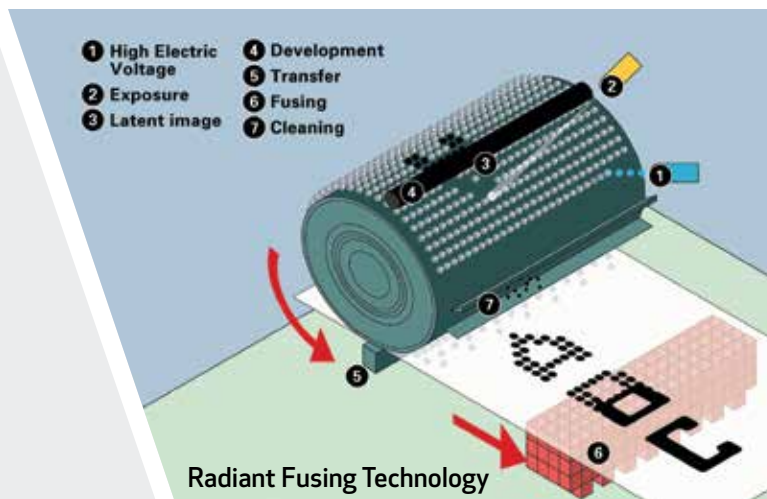
### Flexible and Secure Technical Document Management for Professionals

- Printer only or multifunction (print/copy/scan) system with integrated scanner
- Integrated Top Delivery Tray (neatly collates and stacks up to 100 E-size plots)
- Canon's ClearConnect user panel (intuitive touchscreen interface system)
- Cloud-integrated workflow option (scan to/print from cloud)
- Proven core technologies from Canon deliver unmatched productivity
- Dual or optional quad roll media capability (up to 650 feet per roll)
- Portfolio of options to add additional levels of security

### New Features!

- Canon's POWERsync controller with Microsoft® Windows Embedded 8, 64 bit
- Scan templates (customize and save your specifications)
- Advanced security options
- uniFLOW on the ClearConnect user interface (optional)
- Compatible with Canon's Publisher Select 3 job submission software
- EPEAT Bronze compliant 
- Compatible with PlotWave folder

## ClearConnect User Interface



## Large Format Technical Document Management with Advanced Security

Designed for CAD professionals, the PlotWave 450 and PlotWave 550 printing systems address end-to-end technical document workflow. From print drivers and job submission software to neatly stacked and collated documents, you can depend on our solutions, developed to meet and exceed real-world needs for decentralized or centralized (printroom) environments with mid- to large-sized CAD workgroups.

Touch the new way of walk-up printing, copying, and scanning with the large ClearConnect color touchscreen interface. Using the same multi-touch gestures as tablet computers and high-end smartphones, you can easily control the printer, copier, and scanner with your fingertips: tap, pinch, swipe, flick, spread, and more; zoom in on details of a drawing; print from and scan to your cloud of choice, USB flash drive, or network folder; configure Canon's Smart Inbox and send print files and jobs to a project or personal folder. Then simply walk up and select your files or jobs you wish to print. Documents are output to the integrated Top Delivery Tray using air separation for neatly stacked and collated documents.

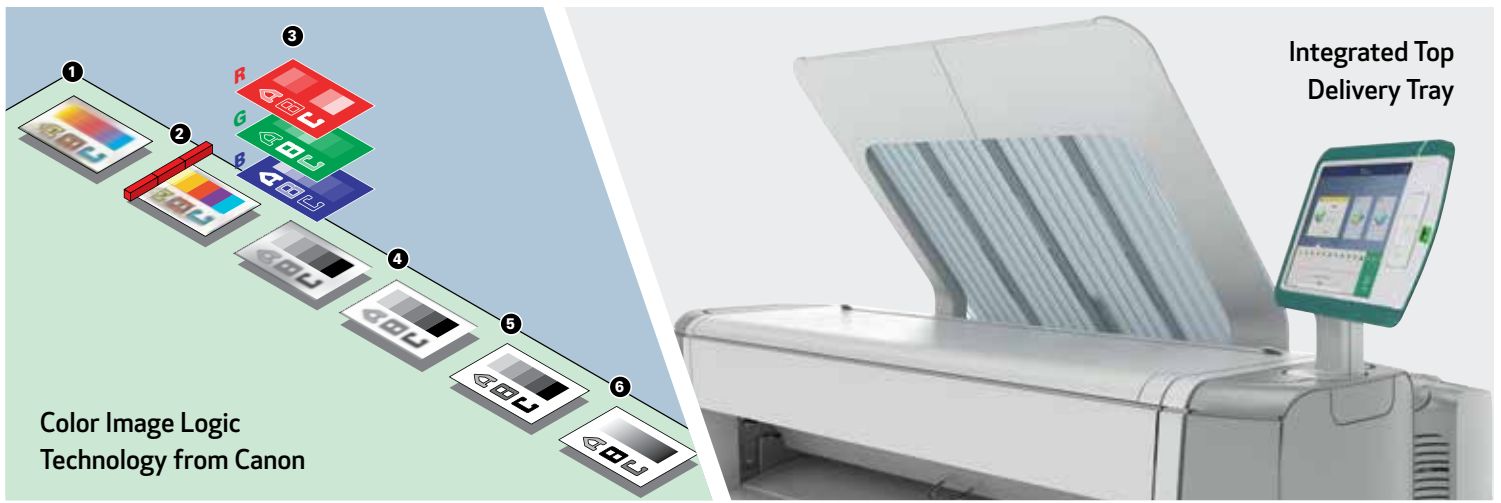
## Core Technologies

### Radiant Fusing Technology

An eco-friendly fusing method, providing instant-on with no warm-up time required. It consumes less energy and emits less noise when compared to conventional fusing.

Work faster by minimizing waiting time. It enables quick printer availability even from sleep mode. Go from cold sleep to print in hand—in less than 30 seconds. Compared to a slow three minutes for conventional large format printers, Radiant Fusing technology can save up to an hour per day in printing delays.

Reduce energy usage with ENERGY STAR®-recognized Radiant Fusing technology. During the fusing process, the toner melts and is fused to the media via heat rising from a grid of wires, without distorting the image. With no conventional pressure rollers required, maintain a lower temperature. Since the system heats and cools instantly, there is no need for noisy fans, and the system runs “whisper quiet” in standby, ready, and sleep modes. Radiant Fusing technology results in sharper printed output while preventing resolution loss, dot size degradation, and line fuzziness as a result of the toner melting exactly where it is placed on the media.



Color Image Logic  
Technology from Canon

## Color Image Logic Technology

Color Image Logic technology was developed and patented with the objective that 99 percent of all originals should be copied and scanned with the right quality the first time without any operator intervention. This improves efficiency as the process of copying and scanning can be a very time-consuming task. Technical document originals, even if imperfect — including dark backgrounds, fold lines, wrinkles, or text — result in quality copies and scans the first time.

## New Technologies!

### Canon's POWERsync Controller with Microsoft Windows Embedded 8, 64 bit

Engineered to handle complex operations efficiently, from enriched document previews to processing complex PDF files. The system is driven by a Microsoft Windows Embedded 8 platform, offering the latest security features to protect confidential documents.

### Scan Templates — Customize and Save Your Specifications

In the daily scan workflows of enterprises, there is a strong need for the standardization of scan jobs for consistency. In order to increase the scan productivity even more, the PlotWave 450 and PlotWave 550 printing systems introduce scan templates accessible on the home screen of the ClearConnect user panel. You can define up to 200 templates through Canon's Express WebTools software. All settings available within the scan menu can be stored in one template and named for easy recognition (for example, original type, file type, resolution, destination, filename prefix, etc.).

## Advanced Security Options

### Removable Hard Drive

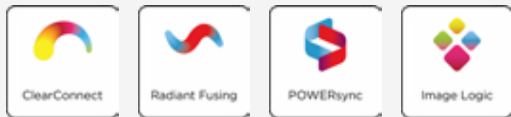
Removable Hard Drive Kit with option for additional hard drive to physically remove and lock away the system's hard drive.

### Access Management

Require users to authenticate themselves via the ClearConnect touchscreen interface or through a supported third-party smart card reader.

### Disk Encryption

Windows BitLocker Drive Encryption provides data protection for the controller via a Trusted Platform Module (TPM) microchip. Both the TPM and the Windows BitLocker Drive Encryption functionality used for data encryption are FIPS 140-2 level 1 validated.



### 1 Fast and easy with ClearConnect panel

- Touchscreen with multi-touch gestures for tablet/smartphone-like interaction.
- Easily control printer and scanner/copier with your fingertips using the simple screen movements.
- Swipe, spread, and zoom in on details of a drawing.
- Live Preview function to confirm documents are correctly scanned to avoid errors.

### 2 Neat document delivery

- Integrated Top Delivery Tray neatly stacks and collates up to 100 E-size/A0 documents.
- Air separation technology prevents large documents from cascading onto the floor like conventional top stackers.
- Optional Delivery Tray provides additional 150 sheets (E-size/A0) capacity.
- Optional PlotWave Folder.

### 3 Get better copy and color scanning results

- Image Logic technology from Canon automatically compensates for wrinkled and light-colored originals to produce superior results.
- Insert originals are inserted face-up, and width of original is detected automatically.
- Create one-touch scan templates to capture commonly used settings or to require standardized scan settings.

### 4 Instant productivity with Radiant Fusing Technology

- Get instant startup and use half the energy of comparable systems.
- Fast first printout from cold sleep to print in hand in less than 30 seconds.
- Increase productivity even more with the second media drawer option for multiple width rolls or longer unattended printing.

### 5 Effortless roll changing

- Up to 650-foot roll length for maximum efficiency.
- Built-in roll loading station in each drawer.
- Media is auto-fed into the printer and roll width is auto-detected and displayed on the ClearConnect touchscreen display.

### 6 Reliable quality and performance

- Take advantage of superb print quality with high-resolution Pico Printing at 600 x 1200 dpi.
- Award-winning industrial design with robust and durable materials.
- Extensively used areas of the printer are fabricated out of metal for commercial duty.

### 7 Eco-friendly system

- Has the lowest sound levels and heat compared to conventional fusing systems that operate on heat and pressure rollers and fans.
- Can be located and operated within workgroup environments.
- Closed toner system is easy to refill with no clumsy toner cartridges to unscrew or spill. Toner can be added while printing.

### 8 Productive and secure POWERsync controller

- Get the power to handle large and complex technical documents thanks to the productive POWERsync controller.
- Concurrency; Scan and copy while printing.
- Protect confidential information with the latest security and protection features supported by a Microsoft Windows Embedded 8 platform.
- The open interface of the POWERsync controller enables the printer to embed software such as uniFLOW.

### 9 Flexible workflow

- Designed to make it easier to prepare, produce, and manage complex technical documents and sets of drawings.
- Advanced tools make it easy to get documents where you need them, when you need them.



PRINT SYSTEM	
2-roll (standard) or 4-roll printing system	Productive large format monochrome printer with ClearConnect multi-touch user panel
Stacking systems (standard)	Integrated Top Delivery Tray; Up to 100 sheets E-size/A0 capacity
ClearConnect multi-touch user interface (standard)	Consistent look and feel from every angle of your workflow, standard, including Smart Inbox, Canon's SmartAccess, and Live Preview
Media switch (standard)	Fully automated media switch guides the printed documents to the Top Delivery Tray or back output depending on the user application
ClearConnect Workflow software (standard)	Canon's Wide Format Printer Driver 2 for Microsoft Windows, Printer Driver for Adobe® PostScript® 3™ driver, Mobile WebTools for Apple® iOS, Google Android™ and BlackBerry®, Publisher Mobile for iOS and Android, Publisher Express, Publisher Select 3
Productive scanning system (optional)	Canon's Scanner Express with Image Logic technology
Folding systems (optional)	PlotWave folder, PlotWave folder connection kit, optional belt delivery unit. PlotWave folder is fully-integrated (Level 3) with printer
Stacking systems (optional)	Delivery Tray provides an additional 150 sheets (E-size/A0) capacity. Increases total stacking capacity from 100 (Top Delivery Tray) to 250 sheets
Media capacity upgrade (optional)	Four roll printer option (addition of second media drawer) to increase media capacity from 3,900 to 7,800 ft. <sup>2</sup> (365 to 730 m <sup>2</sup> )
Workflow software (optional)	Canon's Direct Print Pro, Direct Print, Publisher Select 2, Adobe® PostScript 3™/PDF file interpreter, Repro Desk, Account Center, View Station
Hardware (optional)	Four-roll printer, Canon's Scanner Express, removable hard disk, climate control, PlotWave folder and PlotWave folder connection kit, Delivery Tray, TPM module (required with Disk Encryption option)
Starter kit includes	1 bottle toner (400 g), 1 bottle developer (1,750 g), 1 roll 36" 20 lb. bond paper (75 g/m <sup>2</sup> )
GENERAL	
Fast print speed	<ul style="list-style-type: none"> <li>• Print speed up to 8 ppm D-size/A1 (PlotWave 450 printer), up to 10 ppm D-size/A1 (PlotWave 550 printer)</li> <li>• One-click printing from USB</li> <li>• One-click printing from Smart Inbox or last send job (SmartAccess)</li> <li>• Instant start-up due to Radiant Fusing technology</li> </ul>
Virtually Silent* in Standby and Sleep modes (*under 25 dB)	Océ Radiant Fusing technology eliminates noise
Accelerated first printout time from standby mode (D-size/A1)	16 seconds
Accelerated first copy out time from standby mode (D-size/A1)	19 seconds
Average first print outtime from Sleep mode (D-size/A1)	30 seconds (including one-click USB printing, file processing, top delivery)





USER INTERFACE	
Description	ClearConnect multi-touch user panel
Size (W×D×H)	11.8" × 8.7" × 1.6" (300 × 220 × 40 mm); Touch screen: 10.4" (264 mm) color LCD (diagonal)
Resolution	800 × 600 pixels
Number of colors	16.2 million
Technology	Projective capacitive touch
Operation	Three hard buttons: [Wake-up], [Stop/interrupt/abort], [Home] Multi-touch functions: tap, double tap, pinch, two-finger pinch, swipe, flick, and spread
Interface design	Distinctive user interface with intuitive navigation and clearly defined levels of operation
Features	View optimization: Tilt (-4 to +45 degrees) and swivel (-45 to +180 degrees) Status light (red, orange, green); USB 2.0 interface with indication light
CONTROLLER	
Description	POWERsync controller with Microsoft Windows Embedded 8, 64 bit
Processor	Dual-Core G1620 @ 2.70 GHz
Memory	4 GB DDR3 (standard)
Video	Intel® HD Graphics, 1 GHz
Hard disk	500 GB, 7200 rpm (standard)
Interface	Ethernet 100 Mbits/s, 1 Gbit/s TCP/IP: DHCP, IPv4, IPv6, HTTPS Discovery: APIPA, WS-Discovery, SNMPv3
Page description language	TIFF, JPEG, HPGL, HPGL2, DWF, C4, Calcomp 906/907/951, CALS, NIRS, NIFF, PS/PDF (optional)
Printing protocol	LPR, FTP, WebDav, WSD print
Backchannel protocol	SNMPv3, PlotWave interface, WS-Discovery
Security	E-shredding, IPsec, IP filtering/Access Control Lists, HTTPS, SNMPv3, audit logging, AES256 Disk Encryption, 802.1x Authentication, network protocol enable/disable, LDAP integration, Active Directory Integration (optional), User authentication on local ClearConnect user panel and via Express WebTools (LDAP/Active Directory credentials, smart card) for scan/copy/print. Configure HTTPS Certificates. Allow disabling TLS1.0 and 1.1 protocols (no response to network scan) and enable TLS 1.2 with stronger cipher. Removable hard disk option, Optional FIPS 140-2 Certified Trusted Platform Module (TPM) and Windows BitLocker-based hard disk encryption, hard disk wipe (only with Disk Encryption), Configurable CA certificate, Disable Network Ports and Protocols, Security Event Logging, Optional Single Sign-on (on device).
Cloud support	Unlimited user- and/or administrator-authenticated cloud support via WebDav and/or third-party provider (e.g. Microsoft® SharePoint®, Dropbox®, Box.com, box.net, Google Drive™, Microsoft® OneDrive®, Amazon Cloud Drive®, Cloudsafe®, MyDisk®). The cloud user authentication can either be preconfigured by the administrator or done by the user at the time of accessing the specific cloud.



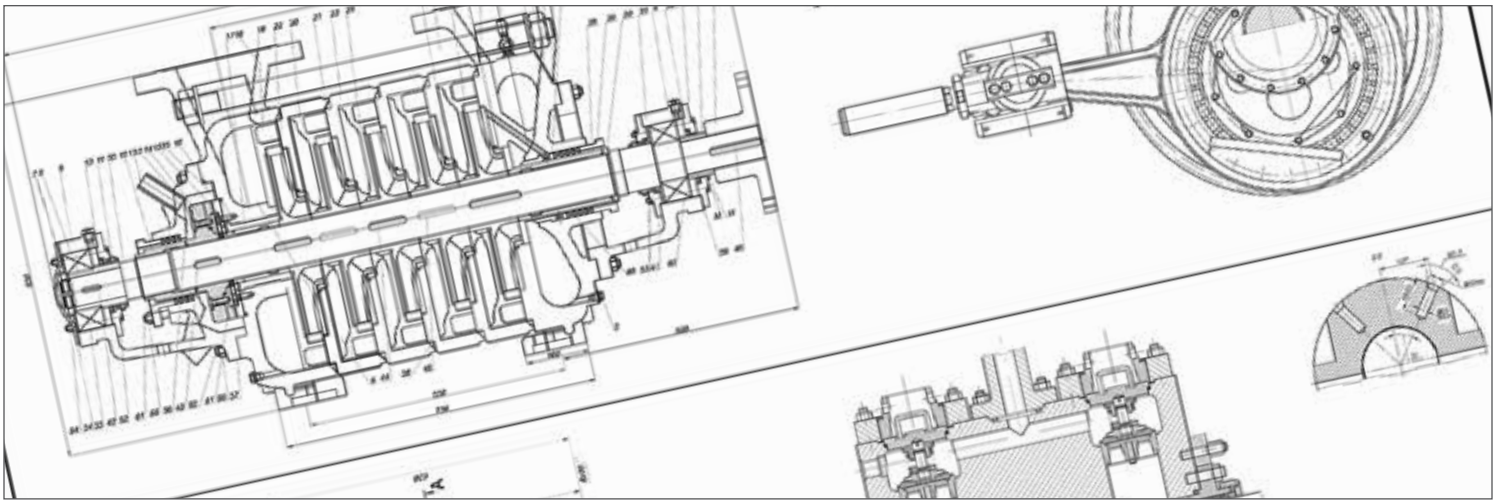


<b>Transformations</b>	Scaling (scale-to-fit page, reduce when image too large to avoid clipping or to custom factor, scale page size to standard size); Rotation; Shift (automatic or user-defined); Adding/removing trailing/leading edge; Mirror; Black intensity in poster mode; Print optimization (standard, lines/text, poster); Color Highlight and Dark Original; Area to erase (area of interest).
<b>SCANNER</b>	
<b>Description</b>	Contact Image Sensor (CIS) color scanner with Image Logic technology
<b>Scan resolution</b>	600 × 600 dpi. Selectable resolutions: 100, 200, 300, 400, or 600 dpi
<b>Scan speed</b>	Monochrome: Up to 47.9 ft./min (14.6 m/min.) Copying: Up to 31.8 ft./min (9.7 m/min.) Color: Up to 15.7 ft./min (4.8 m/min.)
<b>Scan formats</b>	TIFF, PDF, PDF/A, JPEG, CALS, multi-page PDF, multipage PDF/A, and multi-page TIFF
<b>Scan templates</b>	Virtually unlimited number of scan templates (200) to standardize common scan settings and destinations
<b>Scan destination</b>	Local USB flash drive, FTP, SMB, Smart Inbox on POWERSync Controller, optional local home folder (LDAP), mobile device via Mobile WebTools, WebDav Cloud
<b>Scan naming</b>	Preset naming with auto-numbering for productive scanning or create file name on the ClearConnect user panel keyboard
<b>Original width</b>	Minimum: 8.2" (208 mm); Maximum: 36" (914 mm)
<b>Original length</b>	Minimum: 8.2" (208 mm); Maximum: 52.5' (16 m)
<b>Original thickness</b>	Maximum 0.03" (0.8 mm); non-rigid documents
<b>Zoom (copy)</b>	1:1; Scale to media size; Scale to standard format; Custom: 10–1,000 %
<b>Original type presets</b>	Lines and text draft, lines and text standard, folded lines and text, photo, colored original, artwork, map, dark original, blueprint
<b>Scanner dimensions (W×D×H)</b>	43" × 12" × 5.5" (1,097 × 308 × 140 mm)
<b>Scanner weight</b>	55 lb. (25 kg)
<b>ENVIRONMENTAL</b>	
<b>Sound power level</b>	Standby and Sleep modes: <25 dB; Print mode: <55 dB
<b>Ozone concentration</b>	<0.001 mg/m <sup>3</sup> , <0.000473 ppm (0.05% of permitted limit value)
<b>Heat emission</b>	Ready: 72 W; Active: 1.6 kW
<b>Power requirements</b>	90–240 V, 50–60 Hz
<b>Power consumption</b>	Sleep: 1 W; Ready: 88 W; Active: 1.5 kW
<b>Safety/EMC marks and environmental labels</b>	CE, TÜV GS, CETECOM, c-UL-US, ENERGY STAR 2.0, FEMP, Rohs, CCC, VCCC
<b>Recyclables</b>	Printer: Made of steel and highly recyclable plastics, up to 95% of the engine can either be upcycled or recycled; Remaining 5% is non-toxic waste Toner: Bottles made of highly recyclable HDPE (High Density Polyethylene)



**CLEARCONNECT  
WORKFLOW SOFTWARE**

<p><b>Job submission</b></p>	<p>Create, retrieve, and/or send jobs from drivers (Wide Format Printer Driver 2 for Microsoft Windows, Print Driver for Adobe PostScript 3 driver for Microsoft Windows or Apple iOS), external locations (SMB, FTP, LPR, WebDav), Mobile devices via Express WebTools and Publisher Mobile, USB flash drive, cloud services, and optional home folder (LDAP).</p> <p>One-click printing from USB, one-click printing from last sent jobs via Print SmartAccess on ClearConnect user panel. The Smart Inbox on the ClearConnect user panel enables job preview: swipe between your jobs for print selection and preview. Pan to view the image in detail (zoom).</p> <p>With the template oriented Publisher Select 3 submitter for Microsoft Windows, multiple files are supported. Print multiple times and sort by page or set. Media saving automatically rotates print files to optimize media usage.</p>
<p><b>Queue management</b></p>	<p>Spool memory provides a queuing system for print and copy jobs. This allows multiple users to send print and copy jobs at the same time. Customize priority settings for copy and print jobs in the queue.</p> <p>The job queue overview gives access to job names, owners, and status including required media. Jobs can be paused, deleted, and placed on top of the queue.</p>
<p><b>Print management</b></p>	<p>View counter history at preferred time periods, per job, or total overview. View, create, edit, and delete stamp templates.</p> <p>Optional uniFLOW support; log your personal uniFLOW queue on the ClearConnect user interface. Supports manual authentication and card readers.</p>
<p><b>Scan-to-file</b></p>	<p>Scanner Express offers full hybrid performance with its template-based scan-to-file functionality.</p> <p>Scan-to-file in three easy steps: insert the original in the color scanner, select the template of your choice, and touch the scan button. Send files via SMB, FTP, WebDAV, or SNMPv3 (optional) to various locations such as local drives, personal smart inboxes, personal home folder via active directory (optional), or the cloud application of your choice.</p> <p>Scan to USB or use Mobile WebTools and Publisher Mobile to scan to mobile devices.</p> <p>Custom scan file naming to any location. Check plot functionality.</p> <p>ClearConnect user panel supports Live Preview during scanning on the user panel. Check and zoom in on details of your document thanks to the full preview functionality of the ClearConnect user panel or remote on your PC.</p>
<p><b>Scan to Canon color inkjet printer</b></p>	<p>Scan directly to Canon imagePROGRAF® IPF 800 series via Publisher Select 3</p>



**CLEARCONNECT  
WORKFLOW SOFTWARE (CONTINUED)**

**ClearConnect multi-touch  
user interface**

ClearConnect user enables a consistent view of your workflow from every possible angle, and job management is made easy. Default jobs can be performed by clicking the green button (SmartAccess for print, scan, and copy). Behavior is customizable via Express WebTools. Edit the most commonly used job settings for copy, scan, and print jobs. Presets can be defined in Express WebTools.

The Smart Inbox supports multi-user environments and one-click printing via SmartAccess for all users.

Thanks to the virtually unlimited number of scan templates (up to 200), scanning is as easy as 1-2-3. Insert your original, select the template of your choice, and touch the Scan button for the best scan quality thanks to Image Logic technology.

The Express WebTools controller application supports customizable workflows. Separate workspaces give you a complete overview and full control over print and scan job management. Tasks you can manage are: settings and configuration management, network connectivity management, queue management, license management, system monitoring, scan retrieval, and print job submission. You can access the integrated Express WebTools controller application from any networked workstation.

Job Queue view to check the status of your job in the print queue, available wherever you are with a single click.

The ClearConnect interface includes context-sensitive online help. Switch between languages easily on the ClearConnect user panel.

Use the Smart Inbox to view all jobs with status, job name, and owner. Actions to print, print all, edit, send to..., delete, and save. Custom sorting of jobs in list or group view.

What you see is what you print with Wide-Format Printer Driver 2.

Open API for third-party or own-developed applications integrated with the ClearConnect user panel.

Configurable accounting.

**Mobile and cloud**

Print from and scan to the cloud application of your choice. With the help of mobile applications such as Mobile WebTools and Publisher Mobile, the printer can be easily accessed and used from any location.

# WHY CANON SOLUTIONS AMERICA

Canon Solutions America recommends forward-thinking strategies to help achieve the highest levels of information management efficiency for your unique business needs. Using superior technology and innovative services, we then design, implement, and track solutions that help improve information flow throughout your organization while considering the environment, environment, which can aid in greater productivity and reduced costs.

There are many reasons why you should choose Canon Solutions America as your provider for document management solutions. Benefits include:

- A Canon U.S.A. Company
- Business Services
- Professional Services
- Global Monitoring Capabilities
- Certified Training and Support
- Flexible Finance Options
- Single-Source Solutions Provider
- Managed Document Services
- Nationwide Coverage
- Customized Industry Solutions
- Genuine Canon Parts and Supplies
- Diverse Range of Input-to-Output Technology

But that's not all. As a company that is dedicated to your needs, we support our solutions with highly skilled professionals and advanced diagnostic systems to help maintain peak performance. And with ongoing consultation, we can further your document management capabilities to help ensure the highest level of satisfaction and productivity.



CANON SOLUTIONS AMERICA

**Large Format Solutions**

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