![Canon – Because It Counts]
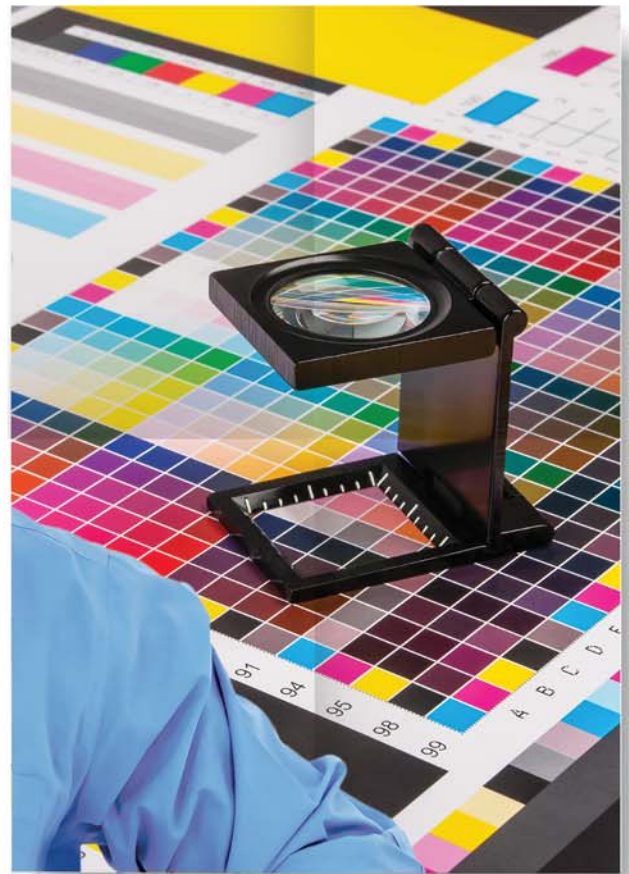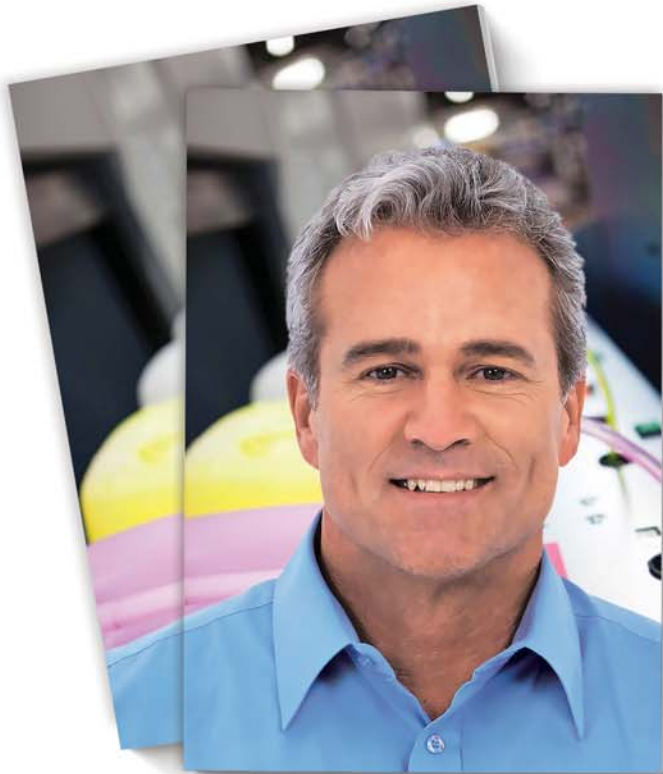
Océ VarioPrint i300

Océ VarioPrint i300

REDEFINING INKJET INNOVATION FOR NEW BUSINESS OPPORTUNITIES

Océ VarioPrint i300
model shown.

PRODUCT AT-A-GLANCE

IMPROVE YOUR BOTTOM LINE

• Accelerate offset-to-digital print migration

• Upgrade monochrome to higher-margin colour

• Consolidate monochrome and colour work

• High-speed output at low per-page cost

• True white paper workflow solution

ENJOY PEAK PRODUCTIVITY

• Production speeds of up to 294* ipm

• Up to 8,700* images per hour

• Up to 10 million* images per month

• Maximum paper capacity: 9,200* sheets

• Up to eight media trays

• DFD interface for connecting third-party, in-line finishing options

IMPRESS WITH SUPERB IMAGE QUALITY

• 1200-dpi perceived image quality with multilevel drop size modulation

• Drop-on-demand, piezoelectric inkjet technology

• iQuarius water-based pigment inks

• Nozzle failure detection and compensation

*Letter-sized

SHEETFED INKJET COLOUR PRESS ENGINEERED FOR PRODUCTIVITY, VERSATILITY, AND SAVINGS

STAY AHEAD OF THE MARKET

Today's print market is evolving rapidly and print providers need to keep pace. The confluence of technological advances, changing markets, and business requirements place ever-greater pressure on the ability to respond quickly and better serve customers' needs.

HANDLE NEW AND DIVERSE APPLICATIONS

The Océ VarioPrint i300 inkjet colour production press is the solution. Its iQuarius technologies allow it to bridge the gap between the application flexibility and efficiency of sheetfed presses and the economy and productivity of web-fed systems, without compromising quality. It enables print providers to handle new and more diverse applications with an eye toward profitability.

BE PREPARED FOR GROWTH

The system is one of the first sheetfed, inkjet, colour presses available on the market. It's a four-colour, up to 13.9" x 19.7" format digital press that offers premium quality output with proven inkjet productivity and flexibility. Built on a platform geared for growth, it provides the ability to enhance print functionality as your business grows into the future.

THE OCÉ VARIOPRINT i300 DELIVERS

With the Océ VarioPrint i300, you can now consolidate several digital workflows— sheetfed black-and-white, highlight colour, and full colour— into one production printing system. You can take on more jobs, manage shorter runs, handle variable data projects, and offer diverse media options. In short, it's a press that's remarkably efficient, thanks to a streamlined workflow, maximum job flexibility, and workhorse productivity.

The Océ VarioPrint i300 redefines inkjet innovation, combining the advantages of high productivity and low running cost with sheetfed versatility.

PRODUCT FEATURES

INKJET INNOVATION

- iQuarius technology innovations empower high-speed sheetfed inkjet versatility
- Print on a wide range of standard offset and inkjet media
- Flexible architecture enables future expansion

BUILT ON PROVEN TECHNOLOGY

- Océ VarioPrint 6000+ Series pre- and post-processing technologies
- Océ ColorStream inkjet print-head technology
- PRISMAsync controller technology
- Océ PRISMA workflow integration

MAXIMUM UPTIME AND ENHANCED SERVICEABILITY

- Efficient workflow automation
- Automated quality inspection
- Automated print-head and nozzle maintenance
- Key operator maintenance
- Secure remote service capability

CONSISTENT OUTPUT

QUALITY FROM START TO FINISH

MAKE MORE APPLICATIONS WORK

The Océ VarioPrint i300 press' patented inkjet printing system incorporates a range of proven Océ technologies to enable premium quality output on a diverse range of media, thereby ensuring optimum accuracy and appearance for each application. The Océ VarioPrint i300 also stands out for its ability to reproduce a broad colour gamut on different substrates.

IMPRESS CUSTOMERS WITH SUPERB IMAGE QUALITY

The press precisely delivers up to 80 million drops per second using three print-heads per colour and nearly 8,000 nozzles per print-head. With Océ-developed, multilevel, drop-size modulation technology, each ink droplet can be one of five sizes, resulting in smoother colour gradations usually achieved only on higher-resolution presses. In fact, this technology innovation enables 600 x 600 dpi image quality with the visual perception of a 1200-dpi system.
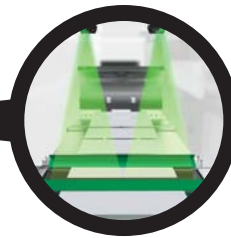
iQuarius Sheet Entry Control
Inspects and removes defective media automatically, without interrupting the printing process.

BENEFIT FROM AUTOMATED CONTROL

Quality control is intelligent, automated, and continuous. iQuarius Sheet Entry Control automatically inspects media at full speed at a point just before the print process begins. Any sheets with detected deformations that could lead to a print-head touch are removed and diverted to a top tray, without interrupting production. iQuarius Inline Quality Control helps ensure that output quality is maintained during printing. Print-head nozzles are monitored and nozzle failures are automatically compensated, giving you consistent, premium inkjet quality on all media.

THINK ABOUT INK

THE iQUARIUS INK ADVANTAGE

The Océ VarioPrint i300 uses water-based pigment inks that offer several advantages. They can print on a wide range of media, including offset uncoated, inkjet-treated, and inkjet coated papers. Water-based ink is more economical than toner, helping to offer a much lower running cost. The use of pigments helps them achieve a broader colour gamut. And iQuarius innovations help ensure they minimize paper deformation (waving and cockling) and help maintain the life of the print-heads. This results
in consistently high quality and robust prints that can stand up to the rigors of finishing.

INNOVATIVE DRYING TECHNOLOGIES

With inkjet printing, excess ink or uneven drying can cause paper fibers to swell, ripple, or otherwise show deformities (e.g., cockling). The iQuarius Drying System in the Océ VarioPrint i300 relies on the following four principles to deliver flat output consistently and at high speeds.

iQuarius Drying System
Standard drying time of this innovative module is two seconds per sheet at 294 ipm (Letter).

INDUCTION-HEATED DRUM

This controls the temperature to protect paper condition.

CARBON INFRARED SYSTEM

This provides outer heating very quickly to keep system start-up/ warm-up time as short as possible.

AIR IMPINGEMENT SYSTEM

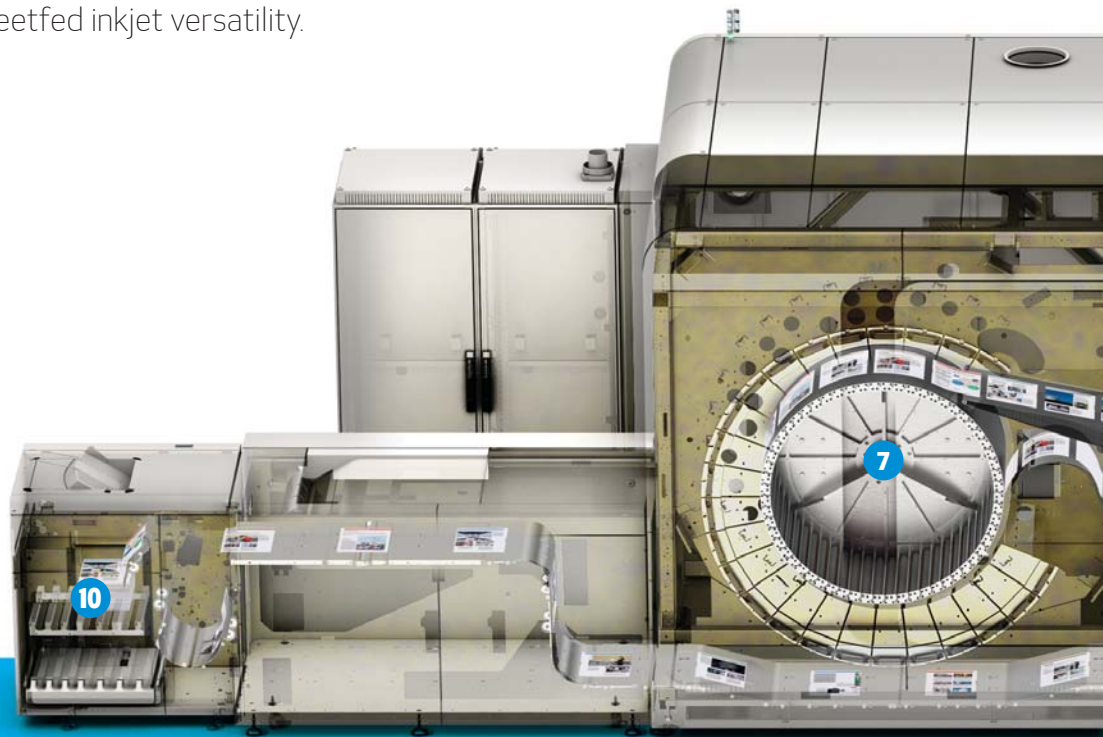This introduces hot air to speed up the drying process.

AIR EXHAUST MECHANISM

This collects accumulated water, which is then exhausted.

iQUARIUS INKJET INNOVATION WITH PROVEN TECHNOLOGY

iQuarius technologies empower high-speed, sheetfed inkjet versatility.

Océ iQuarius

KEY FEATURES

IMAGING

1 iQUARIUS CMYK INKS

Get outstanding quality and productivity with broad colour gamut, print robustness, and media compatibility at low inkjet cost.

2 PRECISION IMAGING

Each sheet of paper will have precision imaging with multilevel drop-size modulation, 600 x 600 dpi image quality with the visual perception of 1200 dpi, and receive up to 80 million ink drops per second.

QUALITY

3 INLINE QUALITY INSPECTION

Based on application, a nozzle failure detection sheet is printed in regular intervals (operator configurable) and scanned inline. Compensation is then automatically applied to maintain quality.

4 SHEET ENTRY CONTROL

Provides full-speed, automated detection of any paper deformations that could lead to print-head touch, by purging sheets without interrupting production.

TRANSPORT

**5 AIR SEPARATION, SUCTION FEEDING SYSTEM**

This system delivers reliable, high-performance feeding with seamless tray switching and true "all-media-from-all-trays" capability.*

6 PRECISION SHEET CONTROL

This technology holds sheets flat on a seamless stainless steel transport belt with air suction so they move smoothly, precisely, and at high speed through the press.

*With standard PIM only.
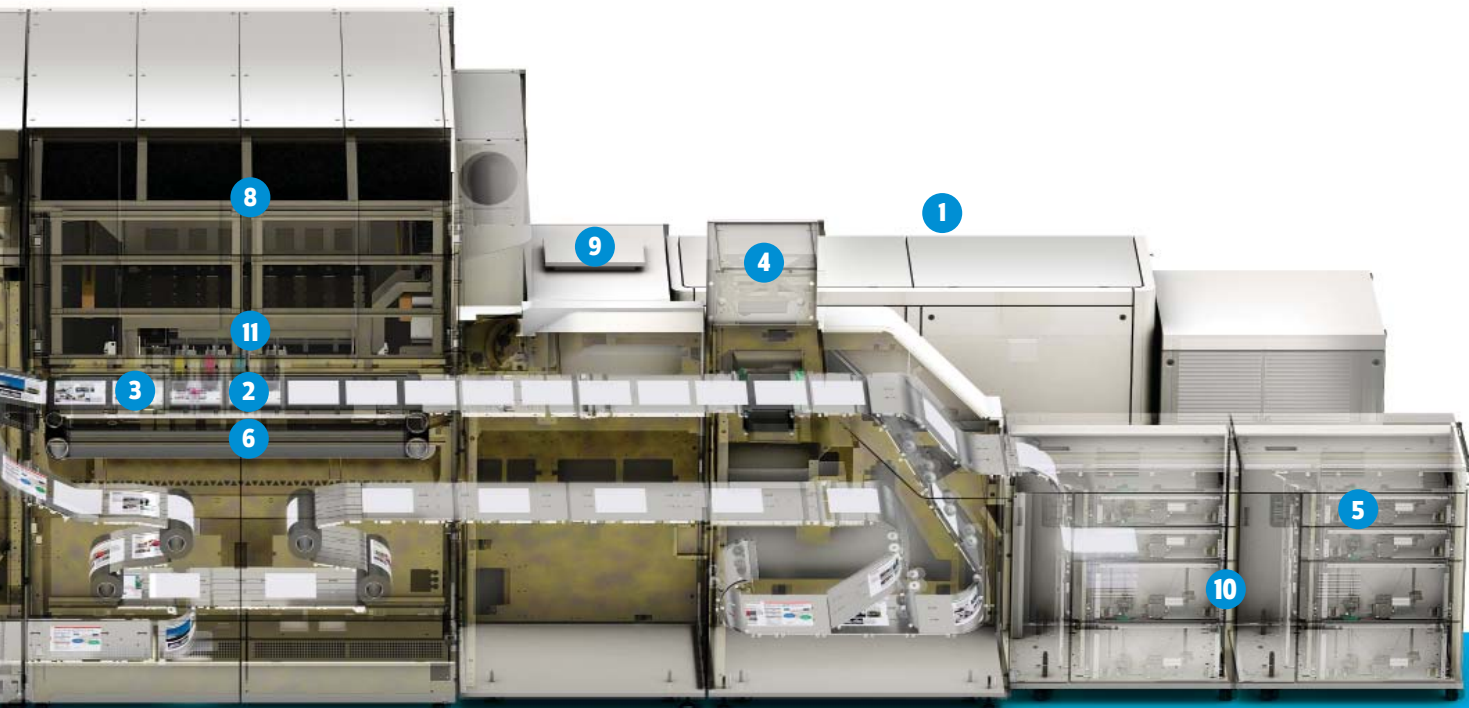
PRODUCTIVITY AND UPTIME

7 DRYING SYSTEM

This variable-speed drying system uses four distinct drying principles: induction-heated drum; carbon infrared radiation (CIR); air impingement; and air suction. Together, they help ensure controlled drying for a high quality and robust printed product.

8 AUTO-MAINTENANCE ROUTINES

Automatic print-head refresh modes and print-head maintenance during operation help maintain optimal quality and productivity, and reduce operator intervention.

9 "SENSE AND SUPPORT" SERVICE

Designed for advanced predictive maintenance, this helps to minimize operator intervention and maximize uptime.

PROVEN TECHNOLOGY

10 OCÉ VARIOPRINT 6000+ SERIES

Pre- and post-processing technologies

11 OCÉ COLORSTREAM

Inkjet print-head technology

12 PRISMASYNC**

Controller technology and Océ PRISMA workflow integration

**Not shown.

EMPOWERING PRODUCTIVITY

A GROUNDWORK FOR GROWTH

SUCCESSFULLY TAKE ON MORE JOBS

Productivity is one of the core attributes of a successful printing operation, and here is where the Océ VarioPrint i300 press excels. Today's market is about much shorter runs, along with a greater number of jobs with less setup time between them — and now Canon has designed a press that meets those requirements.

ACCELERATE YOUR PRODUCTION

The Océ VarioPrint i300 bridges the gap between higher-cost, less flexible inkjet web presses and lower-speed, toner-based, sheetfed presses, making it possible to address new market segments productively and cost-effectively. It delivers impressive production speeds of up to 294 letter impressions per minute on a wide range of media.

LEVERAGE YOUR INVESTMENT

In addition to speed, media size is also important. The Océ VarioPrint i300 features high-speed, duplex printing at up to 3,800 13.9" x 19.7" (B3) sheets per hour. This format lets you leverage finishing capabilities you may already have in place, enabling more efficient, automated document workflows. And the cost of entry is significantly less than half-size (B2) inkjet presses.

DRIVE PRESS EFFICIENCY

Seamless workflow integration, reduced setup and finishing times, and near-instantaneous drying ensure maximum, end-to-end productivity. As for uptime, the Océ VarioPrint i300 is designed with rock-solid reliability for fast, uninterrupted production. The press features built-in self-maintenance and diagnostic systems with automated corrective actions to maintain optimal quality and minimize operator intervention.

PLAN AHEAD

Designed for "Sense and Support" Predictive Maintenance, the Océ VarioPrint i300 delivers complete peace of mind by helping to minimize unplanned activities and maximize scheduled maintenance.

A dedicated Service Control Station maintains machine data completely separate from the job data that's stored on the PRISMAsync print server. This allows for secure remote service monitoring, thereby optimizing predictive maintenance and enabling 24/7 emergency support.

VERSATILE MEDIA HANDLING

INTERWEAVING

Intelligent sheet monitoring system helps ensure that the right image is on the right side of the right page.
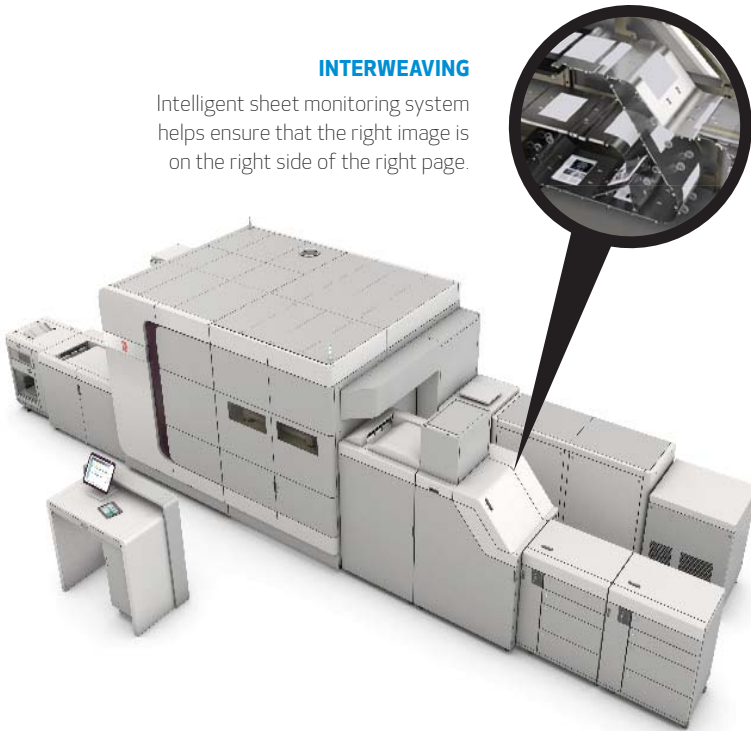
BENEFIT FROM SHEETFED FLEXIBILITY

With the Océ VarioPrint i300, you'll benefit from a completely automated workflow and highly intuitive operation. The press can handle a range of diverse media, such as uncoated offset, inkjet-treated, and inkjet coated materials, with papers for different applications easily loaded within or between jobs. Air-separated, suction-based feeding helps ensure reliable input from the high-capacity paper trays as well as smooth switching between substrates.

DELIVER PREMIUM QUALITY ON ALL MEDIA

With iQuarius Precision Sheet Control a seamless, stainless steel print belt moves sheets at high speed through the system, keeping them flat and securely in place during transport. Flat transport is required for a consistent distance between media and print-heads, helping to ensure precise ink placement and optimal print quality.

BREAKTHROUGH PERFORMANCE

PROVEN TECHNOLOGIES

Like many product breakthroughs, the Océ VarioPrint i300's productivity strengths are the result of innovations derived from performance-proven technology, including the following:

• Feeding, output, and standard DFD finishing connectivity from the market-leading Océ VarioPrint 6000+ sheetfed production press

• PRISMAsync controller technology that seamlessly integrates with the Océ PRISMA workflow software suite

• High-speed print-head technology developed for, and proven in, the successful Océ ColorStream Series of inkjet web presses

POWER YOUR BUSINESS

ENABLE END-TO-END EFFICIENCY

PROFIT FROM A WINNING COMBINATION

If a press represents the muscle of a print production environment, then workflow management software is the brain. The Océ VarioPrint i300 press, combined with Océ PRISMA workflow software, provides maximum efficiency and productivity. PRISMA is an end-to-end software suite that covers every stage in document production—from creation to print management to finishing and reporting.

MANAGE JOB DIVERSITY

By definition, sheetfed inkjet production printing means more jobs, varying applications, and diverse media. PRISMAsync print operation management optimizes productivity with a high-performance server, media-driven workflow, and the ability to schedule up to eight hours of production in advance. The PRISMAsync controller puts your team in control with an efficient, clearly defined workflow that distributes and localizes key tasks, enhanced with helpful operator alerts such as signals to load new media or consumables.

CREATE WORKFLOW ALIGNMENT

Print servers in the PRISMAsync family also drive other Canon sheetfed presses, such as the Océ VarioPrint 6000+ Series and imagePRESS colour production presses, enabling workflow alignment and minimizing operator learning curves. Its transaction printing mode builds on Océ SRA controller technology, which is uniquely designed for Océ inkjet web-fed presses and high-volume production printing environments. This compatibility makes it possible for the Océ VarioPrint i300 press to serve as a proofing and reprint device for other Océ inkjet presses. Advanced colour management capabilities are also built in to help ensure consistent and accurate colour fidelity.

EXPAND YOUR BUSINESS OPPORTUNITIES

PRISMAsync also features automatic data recognition that lets you handle both IPDS and/or PDF files from a variety of sources—Océ PRISMAproduction, PRISMAprepare, or other existing output management systems—without interrupting production. No system reboot is required to switch between transactional and document printing modes.

With PRISMAsync workflow, you benefit from increased predictability and flexibility, accelerated job turnarounds with fewer errors, and a smooth, highly productive workflow that can become the foundation of a growing business.
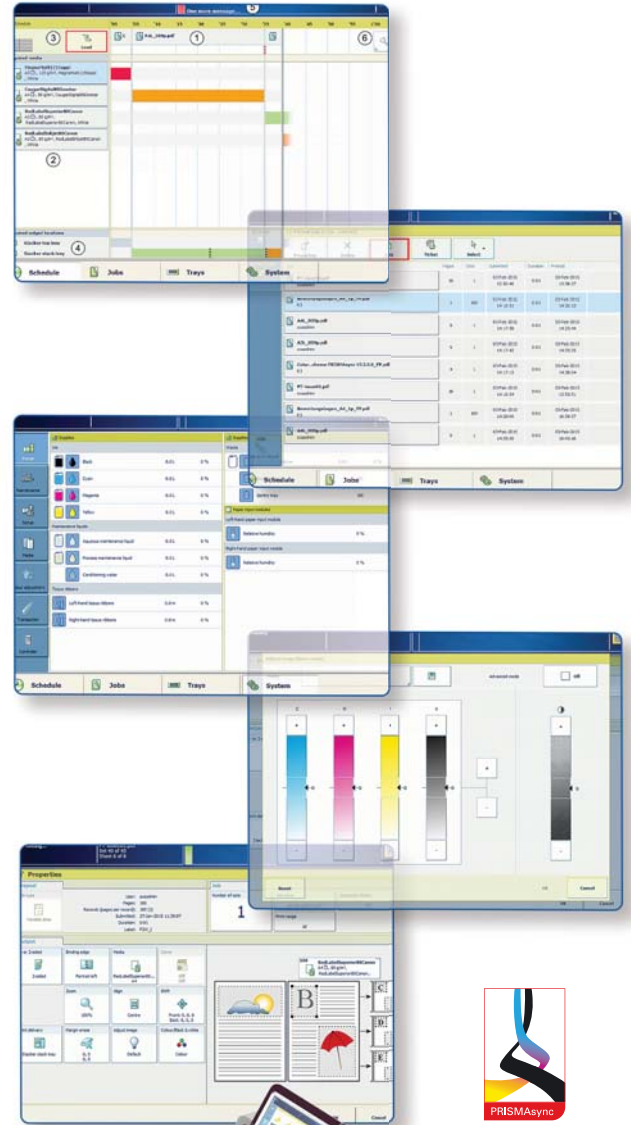
TARGET GROWTH

EXPAND YOUR OPPORTUNITIES

The Océ VarioPrint i300 press is ideal for service bureaus and transactional printers, direct mail houses, book and manual printers, and large in-plant print centers. It's also well suited for commercial printers looking to increase flexibility, expand their product offerings, take on more digital work, or leverage inkjet versatility.

Applications suitable for the Océ VarioPrint i300 include:

- **TRANSACTIONAL PRINTING**
  Allowing for offset, preprinted shell replacement
- **BOOKS AND MANUALS**
  Consolidating black and white and colour on one platform
- **DIRECT MAIL**
  On-demand production with digital added value (e.g., variable data printing)
- **COLLATERAL MATERIALS**
  Brochures, sell sheets, mailers, etc.

LEARN FROM EXPERIENCE

TEAMING WITH CANON

A COMPETITIVE ADVANTAGE

We'll help you increase productivity and improve your bottom line. Our extensive print experience translates to deep insight into industry characteristics and trends as well as customer goals and challenges. Canon's understanding of various printing markets allows us to tailor solutions to meet your specific needs.

TOTAL SOLUTIONS

The Canon portfolio of technology offerings is among the broadest in the industry. From digital, sheetfed, web-fed, and wide-format systems to inkjet, photo printers, and workflow solutions, Canon has a customized solution for your business.

MAIN UNIT

Printer Type:	Sheetfed Colour Inkjet Production Press
Technology:	Drop-on-demand Piezoelectric Inkjet Technology
Ink:	iQuarius Aqueous Pigment Inks
Colours:	CMYK Standard
Print Resolution:	600 x 600 dpi, with Drop Size Modulation (up to 5 Sizes)
AMPV:	Up to 10 Million (Letter Images)
Max. Print Speed (ipm)	Duplex Printing/Simplex Printing
Letter (8.5" x 11");	294 ipm / 147 ipm
Ledger (11" x 17"):	150 ipm / 80 ipm
Tabloid Extra (12" x 18"):	142 ipm / 76 ipm
Max. (13" x 19"):	132 ipm / 70 ipm
Paper Size*	
Minimum:	8" x 8"
Maximum:	12.6" x 19.2"
Optional Support:	Statement Size (7" x 10") 13.9" x 19.7"**
Maximum Imageable Area:	12.7" x 19.5"
Print Distance from Edge:	2 mm from each edge
Paper Weight:*	40 lb. Offset to 110 lb. Cover (60-300 gsm)***
Substrates:	Offset Uncoated, Offset Coated, Inkjet Treated, Inkjet Pigmented, and Inkjet Coated

PAPER INPUT

Paper Input Module (PIM)
(Maximum 2 PIM,**** any combination PIM or PIM-XL)

Paper Feeding Technology:	Air Separation, Suction Feeding, Paper Conditioning
Capacity:	4,600 Sheets (20 lb. Bond)
Tray 1 and 2:	600 Sheets (20 lb. Bond)
Tray 3 and 4:	1,700 Sheets Standard (20 lb. Bond)
Maximum:	9,200 Sheets (2 x 4,600 20 lb. Bond)
Paper Sizes (All Trays):	8" x 8" to 12.6" x 19.2"
Dimensions (H x W x D):	37.2" x 30.3" x 23.5" (1150 mm x 922 mm x 716 mm)
Weight:	485 lb. (220 kg)

Paper Input Module XL (PIM-XL)

Paper Feeding Technology:	Air Separation, Suction Feeding, Paper Conditioning
Capacity	4,600 Sheets (20 lb. Bond)
Tray 1 and 2:	600 Sheets (20 lb. Bond)
Tray 3 and 4:	1,700 Sheets Standard (20 lb. Bond)
Maximum:	9,200 Sheets (2 x 4,600 20 lb. Bond)
Paper Sizes:	
Tray 1:	8" x 8" to 12.6" x 19.2"
Tray 2, 3, and 4:	13.9" x 19.7" (Fixed)
Dimensions (H x W x D):	37.2" x 30.3" x 23.5" (1150 mm x 922 mm x 716 mm)
Weight:	485 lb. (220 kg)

PAPER OUTPUT

High-Capacity Stacker

Capacity:	Main Trays: 6,000 Sheets (2 Stacks x 3,000 Sheets - 20 lb. Bond) Top Tray: 200 Sheets
DFD Interface (Optional) :	For Integration with Third-party Finishing
Dimensions (H x W x D):	34.1" x29.5" x 24.4" (1040 mm x 899 mm x 745 mm) 34.1" x 41.0" x 24.4" (1040 mm x 1250 mm x 745 mm) (with Tray Ejected)
Weight:	265 lb. (120 kg)

ENVIRONMENT

Temperature:	Optimal Range 68°-79° F (20° to 26° C)
Relative Humidity:	Optimal Range 30-50% RH
Atmospheric Pressure Range:	840-1,060 mbar [Maximum Altitude 5,000 ft. (1500 m) Above Sea Level]
Noise Emissions:	Operation: 73 dB Standby: 61 dB

ELECTRICAL REQUIREMENTS

Mains Connection

Mains Power Connection:	50/60 Hz △	50/60 Hz △	50/60 Hz Y
	208 V ±10%	240 V ±10%	277 V/480 V ±10%
Rated Current:	135 A	115 A	65 A
Building Fuse:	175 A	175 A	82 A

Mains Connection Operating Cabinet

Mains Power Connection:	50/60 Hz 100-240 V ±10%
Rated Current:	5.5 A
Building Fuse:	13-20 A

Mains Connection Server Cabinet
(Contains Service Workstation)

Mains Power Connection:	50/60 Hz 200-240 V ±10%
Rated Current:	10 A
Building Fuse:	13-20 A

Mains Connection Controller Cabinet
(Contains RIP Server)

Mains Power Connection:	50/60 Hz 200-240 V ±10%
Rated Current:	10 A
Building Fuse:	13-20 A

POWER CONSUMPTION

During Printing:	<50 kW

PRINT OPERATION MANAGEMENT

PRISMAsync Controller

Server Type:	External
Operating System:	Windows 7
RIP Clients:	2 Standard (Up to 2 Optional, 4 Max.)
Supported PDLs (one standard)	
Document Printing:	PDF 1.7, Extension Level 3 (for Acrobat 9); PDF/X (APPE 3.2 RIP support)
Variable Data Printing:	PDF/VT (Level 1)
Transactional Printing:	Native IPDS (IS/3 Compliant; APPE 3.1 for PDF colour management in transaction mode)
Standard License Bundle:	1 x PDL (PDF or IPDS); Scheduler; Remote Viewer; Trapping; Streaming; Accounting; Hot Folders; Remote Service; E-shredding; Advanced Colour Management
Optional Licenses:	Additional PDL (IDPS or PDF); PDF for IPDS
Océ Workflow Modules (optional):	Océ PRISMAproduction Océ PRISMAprepare
Network Connectivity:	2 x 10 Gigabit Ethernet (10/100/1000Base-T), TCP/IP (LPR/LPD, 9100 Socket, SMB), Static IP/Auto IP (DHCP), IPv4, IPv6 (only in Document Printing mode)
Protocols:	SNMP v1, SNMP v3, Host Resources MIB, MIB II, Printer MIB, Job Monitoring MIB, Job Management MIB

PHYSICAL DATA

Configured with 1 PIM/1 HCS

Dimensions (H x W X D):	7.5' x 30.5' x 9.2' (2.3 m x 9.3m x 2.8 m)
Minimal Space Required (service clearance)	
Floor Space (W x D):	34.8' x 21.3' (10.5 m x 6.5 m)
Height:	9.8' (3 m)
Volume:	7239.5 ft^3 (205 m^3)
Weight:	17,968 lb. (8,150 kg)
Maximum Floor Load (Point load):	12N/mm^2 or 1,740 psi

  * Paper size and weight specifications apply for PIM, Main Engine, and HCS.
  ** Requires PIM XL option.
  *** Supported media weight depends on used media.
  **** Second PIM optional.

Canon

Because It Counts