OnsetX1

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Onset X takes the Scalable Architecture Concept of Future-Proof Technology Even Further

With a maximum throughput of 560 m²/hr* (equivalent to 112 full-bed sheets/hr), Onset X1 is ideal for companies producing a mix of fast-turnaround retail graphics for distance viewing and high-quality images for close-up viewing.

|		
C Y M K Maximum CMYK x1	**Up to 560** Throughput m²/hr*	**9 14 27** Drop Sizes (pl)
28 Printheads Per CMYK Colour	**8** Maximum Channels	**Q R S** Printhead Classes
224 Maximum Printheads	**25** Vacuum Table Zones	**2** UV Mercury Lamps

Need a Second Channel of CMYK? **OnsetX2** →

One Platform. Infinite Potential - With a maximum throughput of up to 560 m²/hr* (equivalent to 112 full-bed sheets/hr), Onset X1 is ideal for companies producing a mix of fast-turnaround retail graphics for distance viewing and high-quality images for close-up viewing. Of the eight channels, four print CMYK and the remainder can be configured as required using light cyan (Lc), light magenta (Lm), white (W) and orange (O). When the time is right, an additional six-channel carriage can be added to scale up to the Onset X2 or X3.

Fujifilm Dimatix Printheads - Depending on whether the applications are focused on quality or speed, one of three printhead classes can be selected, offering the option of 9-picolitre (Q Class), 14-picolitre (R Class) and 27-picolitre (S Class) drop sizes. White recirculating printheads (QSR Class) have a 40-picolitre drop size.

Choice of Handling Options - Users can specify different levels of automation. In the semi-automatic option, the substrate is loaded by the operator but automatically removed. Three-quarter automation involves the operator pre-aligning the substrate on a lay table before the handling system automatically places it and removes it. There are two fully-automated systems available allowing stack-to-stack printing for longer production runs.

25-Zone 'No-Masking' Vacuum Solution - Especially significant is the new-design 25-zone vacuum table, featuring a powerful new vacuum system and choice of skin design depending on the user's needs. This solution completely eliminates the need for bed masking when printing on substrates up to 3 mm thick, whatever the substrate size, and greatly reduces set-up times for POS substrates and increases throughput of short-run, fast-turnaround print.

New GUI - For the Onset X Series, Inca has developed a new GUI to provide a powerful yet simple-to-use printer and job management tool. It is easy to finalise and initiate jobs, save settings, create print queues and manage and optimise every stage of the print process. Improved off-machine job set-up means jobs arrive at the printer with more predefined parameters - substrates, print speed, quality mode, gloss level, etc. - already specified.
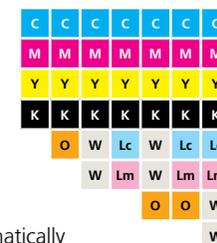
Standard Colour Configurations

C	C	C	C	C	C	C
M	M	M	M	M	M	M
Y	Y	Y	Y	Y	Y	Y
K	K	K	K	K	K	K
O	W	Lc	W	Lc	Lc	
	W	Lm	W	Lm	Lm	
		O	O	W		
			W			

* Based on an approximate 8 second load and unload time for a machine fitted with S class printheads and ¾ automatic handling

Technical Specification

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Product Description

- **Flatbed inkjet printing press**
  - Maximum print area 3.22 m x 1.6 m (126.8 in x 63 in)
  - Maximum substrate thickness 50 mm[1] (2 in) manual mode, 18 mm (0.71 in) automatic handling
  - Maximum substrate weight 20 kg (44 lb) evenly spread in manual mode at full speed, 80 kg (176 lb) evenly spread in manual mode at reduced speed, 10 kg (22 lb) evenly spread with automatic handling
- **Operator console including touch-screen, keyboard and mouse**
- **Automatic handling options**
  - Autoloader with manual lay table
  - Autoloader with automated feeder and alignment table
- **2 x UV curing lamps**
- **Uni-directional and bi-directional printing**
- **Including[2]**
  - Installation kit, operator manual and operator training

1   Reduced to 48 mm when print-a-shim and table skin are fitted.
2   RIP hardware, software and training is not included with machine

Media

Media	
Max Print Size	3.22 m x 1.6 m (126.8 in x 63 in)
Max Substrate Thickness	50 mm[1] (2 in) manual mode, 18 mm (0.71in) with automatic handling
Types[2]	Foam PVC, PVC sheets, foamboard, corrugated cardboard, display board/cardstock, compressed cardboard, polystyrene, paper, synthetic paper, banner material, corrugated polypropylene, polycarbonate

1   Reduced to 48 mm when print-a-shim and table skin are fitted.
2   List not exhaustive. Check specification and test performance of media before printing.

Printing Technology

Printing Technology			
Printheads	28 per CMYK colour	Technology	Piezoelectric DOD inkjet
Nominal Printhead Drop Size & Class	9-picolitre (Q Class)	14-picolitre (R Class) / 27-picolitre (S Class)	40-picolitre (QSR Class) White Only
Configurations	CMYK or CMYK plus up to four from Lc, Lm, W and O		
Apparent Resolution	up to 1000 dpi	Vacuum Table	25-zone operator controlled

Printing

Printing	
Productivity*	Up to 560 m²/hr with ¾ automatic handling
Handling	Manual handling with option of semi, ¾ or full automatic handling
Maximum Substrate Weight	20 kg (44 lb) at full table speed manual operation 80 kg (176 lb) at reduced table speed manual operation 10 kg (22 lb) using automatic handling

*   Based on an approximate 8 second load and unload time for a machine fitted with S class printheads.

Inks and Curing

Inks and Curing			
Ink	FUJIFILM Uvijet™ Inks	Colours	Cyan, yellow, magenta, black, light cyan, light magenta, white and orange
Curing	Dual mercury lamps	Outdoor Durability	Up to 2 years UV with fade and water resistance

RIP (not included with machine)

RIP (not included with machine)	
Software Options	ColorGATE® Production Server, Caldera GrandRIP+ or Wasatch SoftRIP®
Input Formats	Most popular graphic file formats including PostScript, EPS, TIFF, PSD, PDF, and JPG. RIP whilst printing, queuing and double sided

Environment

Environment	Temperature	Humidity
	20-30°C / 68-86°F Ambient	45-80% RH (non-condensing)

Note: Print quality can be affected by relative humidity (RH). When below 45% RH, printing on some plastics may require additional cleaning. In addition, anti-static bars (when fitted) will become less effective below 45% RH.

Power Consumption

Power Consumption	Idle	Shutdown	Printing
	9.1 kW (UV lamps on standby, vacuum pump at 30 Hz, printheads and heaters on)	1.72 kW (controls on, printheads and heaters on)	27 kW (satin mode)

Physical Characteristics (machine only)

Physical Characteristics (machine only)					
Dimensions*	Length	12.5 m (492 in)	Width	4.4 m (173 in)	Height	2.2 m (87 in)
Footprint*	15.0 m x 5.9 m (591 in x 232 in) (including space for exclusion zones, door opening and access)				
Weight	6,500 kg (14,330 lb), 4,000 kg (8,818 lb) max lift weight				

* For detailed machine and automation handling system dimensions/footprints, see Sales Support Information (SR0144)

Services

Services		
Machine Power	Three-phase	Rated voltage 380-480 V ac, 125A, 50/60 Hz, Protective Earth / Ground
Chiller Power	380-480 V ac, Three-phase, 50/60 Hz, supplied via 30 amp circuit breaker	
Chilled Coolant Supply*	25-40°C at max 6 bar, 30 l/min, Min 18 kW capacity (above dew point)	
Compressed Air	Printer - 6 Bar, 0.3 m³/min, ISO8573.1: Class 1.4.1 Automation - 6 Bar, 2 m³/min, ISO8573.1: Class 1.4.1	
Network	Minimum 1000 Base T	

*   To ensure adequate corrosion protection, both internally and externally located chillers must be filled with a concentration of at least 25% Fernox Alphi-11 protector or an equivalent glycol-based protector.

Optional Automatic Handling

Optional Automatic Handling			
Max Sheet Size	3.22 m x 1.6 m (126.8 in x 63 in)	Max Sheet Weight	10 kg (22 lb)
Min Sheet Size	1.0 m x 1.0 m (39.4 in x 39.4 in)		
1, 2 or 3 Sheet Loading	Side registration pins provided to accommodate multiple sheet loading		

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