

X3



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

Capable of printing at a blistering 900m²/hr (equivalent to 180 full-bed sheets/hr), using 14 or 27-picolitre printheads, the Onset X3 sits at the pinnacle of productivity.



Maximum CMYK x3



Max Throughput m²/hr



Drop Sizes (pl)



Printheads Per CMYK Colour



Maximum Channels



Printhead Classes



Maximum Printheads



Vacuum Table Zones



UV Mercury Lamps

One Platform. Infinite Potential - Capable of printing at a blistering 900m²/hr (equivalent to 180 full-bed sheets/hr), the Onset X3 sits at the pinnacle of productivity. With Onset X3, users of analogue screen printing lines can take the digital route, confident they can print long runs of high-quality print with superb consistency and reliability. The 14 channels feature three sets of CMYK plus the choice of white (W) or orange (O).

Fujifilm Dimatix Printheads - Depending on whether applications are focused on quality or speed, one of two printhead classes can be selected, offering the option of 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 3mm 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

Technical Specification

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Product Description

■ Flatbed inkjet printing press

- Maximum print area 3.22m x 1.6m (126.8in x 63in)
- Maximum substrate thickness 50mm¹ (2in) manual mode, 18mm (0.71in) automatic handling
- Maximum substrate weight 20kg (44lb) evenly spread in manual mode at full speed, 80kg (176lb) evenly spread in manual mode at reduced speed, 10kg (22lb) 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

■ Including²

- Installation kit, operator manual and operator training

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

Media	
Max Print Size	3.22 m x 1.6 m (126.8in x 63in)
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 48mm when print-a-shim and table skin are fitted.
- 2 List not exhaustive. Check specification and test performance of media before printing.

Printing Technology			
Printheads	84 per CMYK colour	Technology	Piezoelectric DOD inkjet
Configurations	3 x CMYK or 3 x CMYK plus a choice of W and O		
Apparent Resolution	up to 1000 dpi	Vacuum Table	25-zone operator controlled

Printing	
Productivity*	Up to 900m ² /hr in express mode with ¾ automatic handling
Handling	Manual handling with option of semi, ¾ or full automatic handling
Maximum Substrate Weight	20kg (44lb) at full table speed manual operation 80kg (176lb) at reduced table speed manual operation 10kg (22lb) using automatic handling

* Based on an approximate 8 second load and unload time.

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

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

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	Idle	Shutdown	Printing
	10kW (UV lamps on standby, vacuum pump at 30Hz, printheads and heaters on)	1.72kW (controls on, printheads and heaters on)	36kW (satin mode)

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		
Machine Power	Three-phase	Rated voltage 380-480V ac, 150A ¹ , 50/60Hz, Protective Earth / Ground
Chiller Power	380-480V ac, Three-phase, 50/60Hz, supplied via 30 amp circuit breaker	
Chilled Coolant Supply ²	25-40°C at max 6 bar, 30l/min, Min 18kW capacity (above dew point)	
Compressed Air	Printer - 6 Bar, 0.3m ³ /min, ISO8573.1: Class 1.4.1 Automation - 6 Bar, 2m ³ /min, ISO8573.1: Class 1.4.1	
Network	Minimum 1000 Base T	

- 1 Onset X3 power requirements differ from X1/X2 - ensure the installation facility can meet these specifications.
- 2 To ensure adequate corrosion protection, both internally and externally located chillers must be filled with a concentration of at least 25% Fernox Alpha-11 protector or an equivalent glycol-based protector.

Optional Automatic Handling			
Max Sheet Size	3.22 m x 1.6 m (126.8in x 63in)	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		