





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

Onset X2 provides the capacity to extend the range of jobs companies can handle. The addition of a second set of CMYK delivers even higher productivity - 725 m<sup>2</sup>/hr (equivalent to 145 full-bed sheets/hr) - while an optional six channels can be populated with white, light cyan, light magenta or orange to add versatility and superb quality.



Max Throughput











Printhead









One Platform. Infinite Potential - As the business expands, Onset X2 provides the capacity to extend the range of jobs companies can handle. The addition of a second set of CMYK delivers even higher productivity - 725 m<sup>2</sup>/hr (equivalent to 145 full-bed sheets/hr) - while an optional six channels can be populated with light cyan (Lc), light magenta (Lm), white (W) and orange (O) to add versatility and superb quality. A choice of uni-directional, bi-directional and super high-quality print modes can be selected depending on the specific job requirements.

Fujifilm Dimatix Printheads - Depending on whether 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.



# 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<sup>1</sup> (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<sup>2</sup>

- 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	
Max Print Size	3.22 m x 1.6 m (126.8 in x 63 in)
Max Substrate Thickness	50 mm <sup>1</sup> (2 in) manual mode, 18 mm (0.71in) with automatic handling
Types <sup>2</sup>	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				
Printheads	56 per CMYK colour	Technology	Piezoelectric DOD inkjet	
Configurations	2 x CMYK or 2 x CMYK plus up to six from Lc, Lm, W and O			
Apparent Resolution	up to 1000 dpi	Vacuum Table	25-zone operator controlled	

Printing	
Productivity*	Up to 725 m²/hr 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.

**Environment** 

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)				
ColorGATE® Production Server				
Most popular graphic file formats including PostScript, EPS, TIFF, PSD, PDF, and JPG. RIP whilst printing, queuing and double sided				

Humidity

	20-30°C / 68-86°F Ambient	45-80% RH (non-condensing)
Note: Print quality can be affect	ted by relative humidity (RH). When b	pelow 45% RH, printing on some plastics may

require additional cleaning. In addition, anti-static bars (when fitted) will become less effective below 45% RH.

Temperature

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)						
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	ı (14,330 lb), 4,	000 kg (8	,818 lb) max li	ft weight	

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

Services			
Machine Power	Three-phase	Rated voltage 380-480 V ac, 100 A, 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					
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				

