OnsetX3

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

Capable of printing at up to 922 m²/hr* (equivalent to 180 full-bed sheets/hr) with three sets of CMYK

* Based on an approximate 6 second material handling time

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Features

Up to 922 Throughput (m²/hr)*	**Up to 180** Throughput (beds/hr)*	**C Y M K** Maximum CMYK x 3
392 Maximum Printheads	**14** Maximum Channels	**84** Printheads Per CMYK Colour
14 40 Nominal Drop Sizes (pL)	**25** Vacuum Table Zones	**2** UV Mercury Lamps

One Platform. Infinite Potential - Capable of printing at up to 922 m²/hr* (equivalent to 180 full-bed sheets/hr). 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 light cyan (Lc), light magenta (Lm), white (W) and orange (O).

Automation Options - Utilise robotic technology to offer solutions for different production and material handling requirements and include: Laytable and Unload Robot, Hostert® Loader and Unload Robot, or Dual Robot.

FUJIFILM Dimatix Printheads - Deliver exceptional drop placement accuracy and reliability. Uses the 14-picolitre printhead and the white 40-picolitre recirculating printhead to provide optimum print speed and quality.

FUJIFILM Uvijet Inks - High quality range of inks to suit different applications and materials.

IncaConnect - Compatible with IncaConnect, which offers a powerful suite of tools to allow remote job setup, detailed production monitoring, bespoke automation, and integration into existing MIS and prepress systems.

Channel Configurations

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

Technical Specification

Features

- High quality, high speed flatbed inkjet printing press

- Full-width printhead array and dual UV lamps

- Customisable UV curing to achieve preferred substrate finish and optimize adhesion

- Intuitive yet powerful user interface

- Twenty-five zone vacuum table includes vacuum sequencer to optimize substrate hold down

- Automatic nozzle mapping technology to eliminate effects of defective nozzles by compensating with nearby functional nozzles

- Automated printhead cleaning to protect and/or recover defective nozzles

- Substrate height detection system to monitor for obstructions that exceed the height of the substrate when printing

- Patented Print-a-Shim technology to achieve near-perfect table flatness and best possible print quality*

- Manual side shutters mask along table length to reduce setup time*

- Adjustable top table skin to reduce air flow through vacuum table and the need for masking on some substrates*

* Option

Media

Media	
Max Print Size	3.22 m x 1.6 m (126.8 in x 63 in)
Max Substrate Thickness	48 mm[1] (1.89 in), 18 mm (0.71 in) with 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
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 46 mm if optional adjustable table skin fitted.

[2] Satisfactory adhesion dependent on ink type and cure settings. List not exhaustive - check specification and test performance of media before printing - media handling is automation dependent.

Automation Options[3]

Automation Options[3]	
Laytable + Unload Robot (¾ automation)	Manual load of substrate onto laytable. Substrate transferred to vacuum table with Unload Robot
Hostert® Loader + Unload Robot (full automation)	Loader collects, feeds and aligns substrate. Substrate transferred to vacuum table with Unload Robot
Dual Robot (full automation)	Dedicated robots for load and unload substrate transfers
Dual-Flex (full automation with integrated flexible loading)	Fully integrated laytable for flexible and rigid material loading with robot unload AND full automation with dual robots loading and unloading

[3] Please refer to separate datasheets for further details on available robot substrate handling systems.

Printing

Printing			
Printheads per CMYK Colour	84	Technology	Piezoelectric DOD inkjet
Nominal Printhead Drop Size	14 pL	White Only	40 pL
Configurations	3 x CMYK 3 x CMYK plus a choice of Lc, Lm, W and O		
Finishes	2 x UV lamps with user-defined UV configurations to provide satin and variable gloss finishes		

Productivity[4] (/hr)

Mode	Finish	Beds	m²	ft²
4 pass	Satin	180	922	9,924
5 pass	Gloss	124	635	6,835
6 pass	Satin	120	614	6,609

[4] Productivity up to the quoted values is based on an approximate 6 second material handling time using 14 pL printheads and a Relative Ink Density (RID) of 100%. Image and substrate dependent to achieve satisfactory curing.

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)

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Software Options	ColorGATE® Production Server, Caldera GrandRIP+, PrintFactory™ and ONYX™
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[5]
	20-30°C / 68-86°F Ambient	45-80% RH (non-condensing)

[5] 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
	10 kW (UV lamps on standby, vacuum pump at 30 Hz, printheads and heaters on)	1.72 kW (controls, printheads and heaters on)	36 kW (satin mode)

Physical Characteristics (machine only)

Physical Characteristics (machine only)					
Dimensions	Length	12.48 m (491.5 in)	Width	4.43 m (174.5 in)	Height	2.2 m (86.6 in)
Footprint	15.04 m x 5.93 m (592.1 in x 233.5 in) including space for exclusion zones, door opening and access. Excludes automation.				
Weight	6,850 kg (15,100 lb), 4,800 kg (10,580 lb) max. lift weight				

Services (machine only)

Services (machine only)	
Machine Power	Rated voltage: 400 VAC; 3-phase and Protective Earth/Ground; 125 A per phase
Chiller Power	3-phase; 380-480 VAC, 50/60 Hz, supplied via 30 Amp circuit breaker
Chilled Coolant Supply[6]	28±5°C at max 5 bar, 30 litres/minute, min. 18.5 kW capacity (above dew point)
Compressed Air	Printer only - 6 Bar, 0.3 m³/minute, ISO8573.1: Class 1.4.1
Network	Minimum 1000 Base T

[6] To ensure adequate corrosion protection, all chillers (internal/external) must be filled with a concentration of 25% Havoline® XLC Concentrate (or 50% if XLC 50/50 is used).

Want to increase productivity? **OnsetXHS**