OnsetX1

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

Capable of printing at up to 420 m²/hr* (equivalent to 82 full-bed sheets/hr) with one set of CMYK

* Based on an approximate 6 second material handling time

Features

Up to 420 Throughput (m²/hr)*	**Up to 82** Throughput (beds/hr)*	**C Y M K** Maximum CMYK x 1
224 Maximum Printheads	**8** Maximum Channels	**28** Printheads Per CMYK Colour
9 27 14 40 Nominal Drop Sizes (pL)	**25** Vacuum Table Zones	**2** UV Mercury Lamps

One Platform. Infinite Potential - With a maximum throughput of up to 420 m²/hr* (equivalent to 82 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).

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

FUJIFILM Dimatix Spectra™ Printheads - Deliver exceptional drop placement accuracy and reliability. One of three printhead classes can be selected, offering the option of 9-picolitre, 14-picolitre and 27-picolitre drop sizes. White recirculating printheads have a 40-picolitre drop size.

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	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	

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*

* Non-standard option

Technical Specification

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 46mm 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]

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Laytable + Unload Robot (¾ automation)	Manual load of substrate onto laytable. Substrate transferred to vacuum table with Unload Robot
Hostert® Autoloader + Unload Robot (full automation)	Autoloader 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

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

Printing

Printing					
Printheads per CMYK colour	28		Technology	Piezoelectric DOD inkjet
Nominal Printhead Drop Size	9 pL	14 pL	27 pL	White Only	40 pL
Configurations	1 x CMYK or 1 x CMYK plus up to four from Lc, Lm, W and O				
Finishes	2 x UV lamps with user-defined UV configurations to provide satin and variable gloss finishes				

Productivity[4]

Mode	Finish	Beds/hr	m²/hr
12 pass	Satin	82	420
	Gloss	65	333

[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
	9.1 kW (UV lamps on standby, vacuum pump at 30 Hz, printheads and heaters on)	1.72 kW (controls, printheads and heaters on)	27 kW (satin mode)

Physical Characteristics (machine only)

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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**