Smart-Jet Thermal Inkjet Printers



high-definition - economical

The Smart-Jet range of high-definition inkjet printers uses thermal inkjet (TIJ) technology to print text, detailed graphics, barcodes and 2D codes onto porous and non-porous materials.

Modular design enables systems to be configured to suit a wide range of coding requirements with a choice of three touch-screen controllers and three printhead types.

All systems are practically maintenance-free and simple to set up and operate.

Smart-Jet DUO

R20 PRO

Martek

REACH

Smart-Jet® HEX

Smart-Jet ONE

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Modular Design

The Smart-Jet range includes a choice of 2 touchscreen controllers and 3 different printhead types allowing configuration to meet a fulfill a wide range of applications.

The ONE controller drives a single printhead for simple printing requirements up to 25mm print height. The DUO controller can drive two printheads enabling printing onto opposite sides of products, top and side printing or printing with both heads on the sampe product surface. Using two Max printheads it is possible to print up to 50mm high.

The Smart-Jet Pro printhead has 12.5mm maximum print height with a wide range of inks to choose from including coloured inks and a UV-fluorescing ink for security marking.

Where larger print areas are required, the Smart-Jet Max printhead has 25mm print height with black, red and green inks. For high-volume printing, Max printheads have optional bulk ink feed enabling 400ml ink containers to be used rather than standard 42ml cartridges.

The Smart-Jet Reach printhead uses very fast-drying MEK-based ink with high resistance on most substrates. The Reach technology also provides a long 10mm throw range allowing uneven products and recessed surfaces such as lids and can bases to be clearly printed.



ONE controller



DUO controller





HEX controller



Up to 6 printheads can be driven be a single Smart-Jet Hex controller

Advanced functionality

Smart-Jet systems can print text using any font and point size with character sizes from 1.5 to 150mm high. Variable data including date, time, offset date and sequential numbers can be printed.

Variable data can also be printed from a databse uploaded to the controller of sent via Ethernet from an external system.

All common barcodes and 2D codes are supported including GS1 Datamatrix codes.

Graphics can be easily uploaded and included in print messages with the option to resize within the print message editor.

All Smart-Jet printheads include an integrated product sensor for detecting most products. For products that cannot be detected using the integrated sensor, an external sensor may be connected.

For variable speed production lines and stop-start applications, the shaft-encoder option can be used to synchronise printing speed to the product speed.

The optional status beacon kit can be used to indicate error conditions including ink low and printer offline. Output signals are also available to interface with factory PLC systems.



Benchtop conveyor systems



Up to 150mmprint height by stitching 6 heads





heavy duty build quality

Smart-Jet One and Hex controllers are constructed from high-grade stainless steel and include secure, industrial connectors ensuring reliable performance in harsh environments.

Printhead and controller mounting brackets are constructed from solid cast aluminium alloy with custom bracketry, floor stands and machine integration all offered with free design service.

Smart-Jet Inks

Smart-Jet printers use thermal inkjet (TIJ) technology to print at up to 300 x 600dpi resolution using 12.5 and 25mm high cartridges. The entire ink system is contained in the cartridge so each time the cartridge is replaced, the ink system is renewed making Smart-Jet printers practically maintenance-free.

Due to the low-volume of ink used to print, Smart-Jet cartridges offer extremely low running costs. For example, a single 42ml cartridge can print 100,000 50x25mm EAN13 barcodes.

For high volume printing requirements, black inks are available in 400ml bulk feed packs.

Water-based black ink can be used to print onto porous surfaces including cardboard, paper, timber and textiles.

For non-porous surfaces including plastics, metals, glass and foam, solvent-based inks are available in black, red, blue and white.

Where very fast-drying is required or to print into recesses, the Smart-Jet DUO Reach uses MEK-based black ink with a 10mm range.





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