

SPRINT™ SERIES INKJET PRINTERS

Best-in-class Inkjet for PCB Legend



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Sprint™ 200 and Sprint™ 150 are the newest addition to Orbotech's high performance PCB legend inkjet printers. Powered by Orbotech DotStream Pro Technology™, Sprint™ 200 and Sprint™ 150 systems deliver cost-effective, top quality industrial inkjet printing for a consistently accurate production of even the most advanced legend designs to meet any manufacturing volume need.

Features & Benefits

High Quality Printing with DotStream Pro Technology™

- Customized print heads for high performance and long life
- Advanced LED-based UV for a perfect ink drop pinning on-the-fly
- Optimized visual quality of fine text and filled areas
- Self-maintenance and print quality preservation

High Volume Production with Top Quality and Accuracy

- High production quality even at basic resolution*
- Uniform printing on challenging surfaces and thick copper traces
- Unparalleled fine features sharpness and readability
- Alignment, scaling and table rotation mechanisms for accurate positioning

Cost-effective, Field-proven Industrial Inkjet Printing

- Leading 24/7 proven technology for fast and consistent top quality printing
- Saving more costs and time compared with conventional operational techniques
- Low operating costs with long-life components
- Extensive functions for product traceability and quality control

Easy, Flexible, Eco-friendly Operation

- Intuitive user interface and automated data transfer from CAM
- Prints on Rigid, Rigid-Flex and Flex PCB using approved inks
- Manual or fully automated operation
- Advanced recycling and one-pass* print ensures best efficiency without ink waste

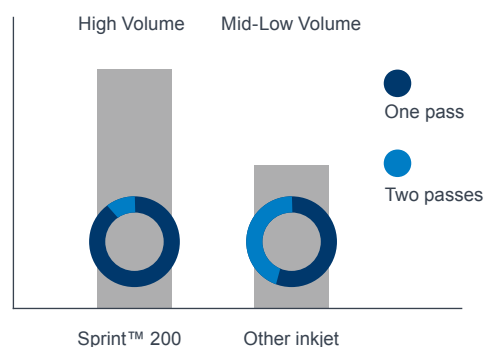


PREVIOUS: 0.7 & 0.6 mm text before DotStream Pro Technology™ One pass, 26 sec*.



NEW: 0.7 & 0.6 mm text with DotStream Pro Technology™ One pass, 15 sec* (Sprint 200)

* Net printing time, 24x18 inches panel.



Sprint 200 delivers superior print quality and output in one pass compared to other inkjet printing solutions popular in the market. While Sprint™ 200 achieves a solid 80% - 90% production in one pass, other inkjet printing systems typically reach between 50% and 60%.

* a 720 dpi (printed with one-pass mode by Sprint 200 and two-pass mode with Sprint 150)



Sprint™ Series systems are powered by Orbotech’s DotStream Pro Technology™ which delivers consistent top print quality at high throughput. Sprint 200 achieves nearly full ink coverage in a single pass with precise drop placement and optimized algorithms for fine text and filled areas. These systems contain LED-based UV curing (Multi-LED in case of Sprint 200) and specially optimized print heads that meet the challenges of the electronics industry substrates and processes. Patented technologies for self-maintenance and ink cycle control reduce costs by significantly extending print head life. The built-in air scrubber ensures a consistently clean printing environment.

Improved Production with High Quality and Accuracy

With Orbotech’s innovative approach to print head and ink cycle control, Sprint™ printers delivers the best combination of print quality, accuracy and speed - even on challenging surfaces. Fine text, even below 0.5mm*, can now be printed with the industry’s fastest ever print head response. An intelligent image analyzer RIP optimizes pixel distribution and identifies the best path for the print head according to legend pattern. High Depth-of-Focus (DOF) of 1.5mm, advanced alignment and scaling features for each panel ensure optimal registration accuracy.

Cost-effective, Field-proven Industrial Inkjet Printing

Sprint 200 and Sprint 150 enrich Orbotech’s field-proven bestselling line of inkjet printers, with hundreds of systems in production. No more compromising between print quality, throughput and operating costs.

Sprint™ series systems deliver all the benefits of digital printing while reducing costs and improving yield. A large set of multiple serialization and barcoding options, combined with intelligent print optimization tools, make these superior solutions suitable for even the most demanding product traceability needs.

* Requires special printing modes and well-controlled Solder Mask surface tension.

Printing Process Flow

Analog Printing Flow

Screen printing: long, limited and not eco-friendly (an old, cumbersome process)



Digital Printing Flow with Sprint™

Sprint™ inkjet printing: faster, accurate and cost-effective



Easy, Flexible and Eco-friendly Operation

Sprint™ series systems are easy to operate with minimal training, thanks to automated data transfer from CAM and its intuitive user interface. Fully integrated hardware, including vacuum table, clamps and panel flattening mechanisms, ensures top quality results on warped panels and a variety of thicknesses. Orbotech's leading cooperation with top inkjet ink producers, combined with a unique system design, ensures high printing performance on Rigid, Rigid-Flex and Flex PCBs. Advanced recycling and superior one-pass printing deliver the best ink usage efficiency without waste for more eco-friendly manufacturing.