



LD-S1000 INKJET PRINTER

Version: 1

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The LD-S1000 split small character inkjet printer is a fully automatic industrial inkjet system equipped with the LINX operating platform, an AM3358 industrial-grade CPU from TI (USA), and a SPARTAN-6 industrial-grade FPGA from XILINX (USA). It uses full industrial-grade hardware to ensure stable, reliable printing in demanding production environments. The system supports traceability and anti-counterfeiting, provides powerful GS1 QR code and barcode capabilities, and meets a wide range of variable-data coding requirements for industrial customers.



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In the CIJ process, the ink stream is broken into precisely timed droplets via vibration and charged electrostatically by a charging electrode as it passes through a high-voltage deflection system. Unprinted droplets are deflected and recirculated back to the ink supply by deflector plates, while selected charged droplets are directed to the substrate based on applied voltages, forming characters or codes at high speeds up to 4 lines. Datasheet1.jpg

Key advantages include non-contact printing, suitability for high-speed production lines, and minimal maintenance due to the closed-loop recirculation that prevents nozzle clogging. The LD-S1000 enhances this with its direct-sealing nozzle and diaphragm-pump system for stable pressure and ink flow, ensuring reliability in industrial environments.

Features:

Display – The 10.1-inch foldable split touch screen allows the display to be adjusted up and down and removed easily for service.

Design – The independent modular design simplifies parts replacement and reduces maintenance costs.

Ink Dispensing – The nozzle solenoid valve and direct-sealing nozzle structure minimize the risk of ink leakage, even during sudden power failures.

Cleaning – The printer automatically flushes the nozzle and ink pipeline during shutdown, effectively reducing printhead blockage.

Electronics– The mainboard adopts solid-state electronic components and SMT manufacturing technology, providing excellent anti-interference performance and resistance to moisture and corrosion.

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System Integration – The industrial embedded control system supports dynamic database printing, 10-millisecond response time, and one-touch start/stop operation.

Interface – The system offers powerful software functions and a comprehensive external interface, supports remote control and multiple languages, and satisfies diverse industrial inkjet application needs.

Coding System – The customized hexadecimal coding system and flexible font library configuration can be adapted to various functional requirements of cable printing and other specialized machinery.

Print Head

	<p>The print head uses a direct-sealing nozzle structure that significantly reduces ink leakage and improves long-term reliability.</p>
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Ink System

	<p>A single print head with a diaphragm-pump recirculation ink system provides stable ink delivery and consistent print quality.</p>
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Main Hardware

		<p>The main control board uses an enhanced layout for improved functionality and stability, while the high-voltage EHT module is dustproof and waterproof to ensure reliable operation in harsh, complex industrial environments.</p>
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External Interface

		<p>With an IP68-rated interface panel, the system not only supports RS232 and network ports but also offers encoder, photoelectric sensor, and other I/O connections for flexible integration with production lines.</p>
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Printing parameters

Printing Parameter	Specification
Nozzle Diameter	50, 60, 75 μm
Print Height	2 - 20 mm
Printing Distance	3 - 30 mm
Printing Lines	1-4 lines (7*5 dot matrix) 1-5 lines (5*5 dot matrix)
Print Speed	384 m/min (64K 5x5 dots), 576 m/min (96K 5*5)
Counter Type	More than 20 independent counters

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Printing Parameter	Specification
Ink Color	Black, Red, Blue, Green, White, Invisible
Ink Type	High Adhesion, migration resistance, high temperature resistance, Special for glass, Permeability, Food Grade, Oil Resistance
Font	5X6L, 7X6L, 7X10L, 9X8L, 9X11L, 11X11L, 16X16L, 24X24L, 11X11B, 16X16B, 24X24B
Printing materials	Carton, Plastic, Metal, Boarding, Pipes, Stone, Cables, Glass, Electronic Components, Auto Parts, Industrial Chemical Packaging, Medical / Food / Gift Box
Print Content	Text, Time, Date, Logo, Shift, SN, Dynamic barcode, QR code, Dynamic serial data, Dynamic Database (additional content can be added if required).

Machine Parameters

Parameter	Specification
Operating System	Embedded LINUX security operating system
Display Screen	10.1-inch colour display, industrial touch screen
Communication Interface	Network Port, USD, RS232
Protection Level	IP55 (Nozzle: IPX3)
Rated Power	150W
Memory	256 MB
Machine Material	304 stainless steel
Machine Specifications	422, 364, 397 mm (without display)
Working Environment	Temperature: 0-45°C; Humidity: 30% / 70% (no condensation)
Certificates	RoHS, CE, BIS

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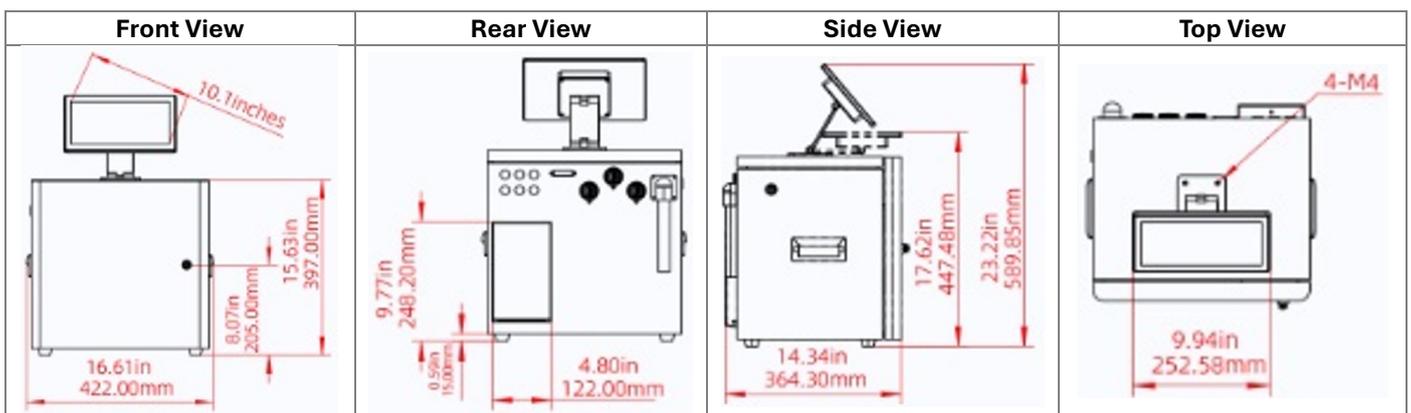


Parameter	Specification
Weight	24 KGs
Main Hardware	American TI AM3358 industrial grade CPU + American XILINX SPARTAN-6 industrial grade FPGA
External Interface	Optical sensor, encoder, Reverse and Upside-down control, Signal Light Alarm output, Serial Number output control, External Printing information Selection
Support Language	Support more than 40 languages (English, Arabic, German, French, Chinese, Korean, Japanese, Spanish, Italian...)

Some of the applications and uses:

- Pet Plastics
- Packing cartons
- Pharmaceuticals
- Food packaging
- Toys
- Wood furniture
- PVC pipes

Machine dimensions



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