



# SOP S1

CONTINUOUS INK JET PRINTER  
GEAR PUMP SERIES



Stay focused  
Stay ahead

Dual high pressure printhead

SCloud cloud service platform

High-speed six-core CPU

Remote assistance · upgrade

Langde Technology Co.,LTD

Sales service hotline  
**400-870-9987**

🔍 | Website [www.langdetech.com](http://www.langdetech.com)

# SOP S1 Gear pump series

## Small Character Inkjet Printer

- Simpler operation, less maintenance, better printing quality, faster printing speed.
- Designed for customers with medium to high frequency of use and medium to high speed production lines, it adopts advanced 32-bit ARM embedded structure, high-speed six-core CPU running Linux professional operating system, and smoother operation. With the unique "SCloud cloud service" as the background platform, it provides end-to-end, face-to-face intimate services, and realizes all-weather full intelligent monitoring, remote monitoring, remote upgrade, private customization, and personalized services with one click.
- It has powerful software editing functions and extremely high stability. In terms of product performance and application, it brings users a more perfect coding & marking experience.











## Overall performance

32-bit embedded ARM structure  
Automatic display of machine status, intelligent alarm  
High-speed six-core CPU  
Intelligent self-check of system software and hardware  
Remote assistance, monitoring, upgrade  
Work log record  
One-button power on and off  
Fully sealed integrated design of printhead  
Automatic cleaning of printhead  
USB data information import  
Automatic ink line detection  
Wired, wireless WIFI, mobile hotspot Internet access

## User interface

10.2 inches color LED touch screen  
Start-up language selection/with screen saver function  
Image and text menu  
Fault detection and automatic display  
Multiple levels of password protection  
WYSIWYG

## External expansion

 USB port	 Ethernet port
 RS232	 RS485
 Photoelectric switch input	 Encoder input
 Alarm output	 Reserved multi-channel control output

## Language

Chinese	Persian
English	Arabic
French	Turkish
German	Spanish
Korean	Portuguese
Vietnamese	

## Specifications & Environmental Requirements

Specifications: 390x306x573.8mm  
Weight: 22kg  
Voltage: 85-265 VAC, 50~60Hz  
Temperature: -10°C~45°C  
Humidity: 10~95% non-condensing  
Protection level: IP55  
Umbilical Length:

Default 3 meters

Customizable 6 meters

## Global Coverage Wide Applications



- Food and beverages
- Building materials
- Daily chemicals
- Wires and cables

## Special harsh industrial environment

Adopt wear-resistant stainless steel chassis, IP55 protection level, unique printhead positive pressure wind function, can resist the invasion of dust and water, suitable for use in various harsh environments.

With multi-channel ink processing system and fault alarm display function, it ensures more stable operation of the machine and convenient maintenance.

Reserved multi-channel controller output port can be used in conjunction with customer on-site equipment as needed.

Scould cloud service

Create a perfect coding & marking experience

## Original Internet cloud service platform

Cloud server SCloud, inkjet printer butler system, "Clairvoyance" system, continuously monitor and track inkjet printer parameters, allowing users to proactively solve potential problems of inkjet printers and ensure uninterrupted operation of the production line.

### Inkjet printer butler system

Powerful AI big data smart monitoring uses the latest Internet of Things perception system and AI big data analysis to support remote viewing of the operating status of multiple devices at the same time, real-time control of equipment abnormalities, and timely processing.

### Clairvoyance System

The meticulous single-machine operation is like being on site, helping customers to easily eliminate potential faults. (The effect is better when used with "Inkjet printer butler system")



### Clairvoyance System



Printer Butler System-Cockpit Main Window  
Support computer WIN terminal

## Advanced ink viscosity automatic control system

The advanced flight time (TOF) is used to control the viscosity of the ink. The ink jetting speed is continuously monitored throughout the process and the automatic closed-loop adjustment is carried out. It is not affected by environmental temperature changes and the length of the booting time, so that the inkjet printer always maintains perfect printing quality and discards. The traditional float ball viscometer is used to detect the viscosity of the ink, and the flight time is relatively accurate, reliable and controllable.



### Particle status



If the ink particles are not in a stable state, the inside of the print head will become dirty and characters will be messed up.

06.20  
Not stable particle state

06.28  
Stable particle state

## Unique triple printhead anti-clogging function

- The unique four-valve structure of the printhead can ensure that the ink in the ink system can be thoroughly cleaned and returned to the ink tank, truly achieving fully automatic nozzle cleaning. Greatly reduce daily maintenance work and improve the stability of equipment operation.
- Equipped with an independent cleaning pump, it automatically sprays diluent to clean the nozzle and recovery pipeline every time the machine is shut down. When the machine is turned on, it automatically sprays solvent to clean the nozzle and recovery pipeline before spraying ink.
- The nozzle sheet can be removed separately and placed in an ultrasonic container to completely solve the blockage problem.



Four-valve integrated structure



Independent cleaning pump



Independently removable nozzle piece

## Powerful printing function

- Other non-working information can be edited while the machine is working, and the printing content can be switched instantly.
- Anti-counterfeiting code printing and variable barcode printing can be realized online. Receive the pattern compiled by the computer and make special characters or patterns directly on the touch screen.
- It has special functions such as encoding synchronization, photoelectric synchronization, synchronizer synchronization and fixed distance, online one-time detection N times printing, N times detection one time printing, reciprocating printing, multi-content selection printing, remote network printing, etc.
- The counter step length can be set at will, increment, decrement, cyclic printing, etc.



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## Small Character Inkjet Printer

### Standard functions

Number of printing lines: 1-5 lines (5x5 dot matrix)

Number of printing dots: 5x5, 5x7, 7x9, 6x12, 8x16, 12x16, 11x24, 16x32,

Self-edited dot matrix information within 34 dots.

Printing speed: 325 m/min(5dot matrix)

315 m/min(7 dot matrix)

245 m/min(9 dot matrix)

138 m/min(12 dot matrix)

93 m/min(16 dot matrix)

37 m/min(24 dot matrix)

18 m/min(34 dot matrix)

Operation interface: 10.1 inch color touch screen, graphic menu.

Storage information: unlimited storage of printing information  
(can be connected to external mobile memory)

Printing content: date, time, automatic date, automatic validity period, class number,  
batch number, serial number, four groups of counters, meter counting,  
self-edited pattern, variable barcode, variable QR code,  
anti-counterfeit code, multiple languages, multiple fonts.

Printing length: 1024 characters as standard (customizable)

Input method: Pinyin input method, area code input method, multi-language input.

Printing ink: black, blue, red, yellow and other colors of ink.

Printing character height: 1~12mm (adjustable).

Printing distance: 1~30mm (adjustable).

Font widening: 1~9 times, can be widened for a single character.

Font direction: normal characters, reverse characters, inverted characters, reversed  
characters, Printing direction can be set independently for a single character.

Font spacing: 1~8 times, can be edited point by point.

Positive pressure air for nozzle: optional

### Bar code

EAN 8 & 13; Code 128 A,B & C;

EAN 128; Code 39; Code 93; Interleaved 2 of 5

### QR code(QR,DM)

10×10, 12×12, 14×14, 16×16, 18×18, 20×20,

24×24, 34×34

### Ink/Make-up Smart Cartridge

Ink Smart Cartridge: (500mL / 750 mL)

Make-up Smart Cartridge: (500mL / 750 mL)

## Best Coding & Marking Solutions Provider

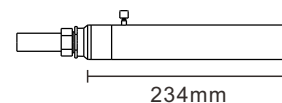


Printhead bottom view



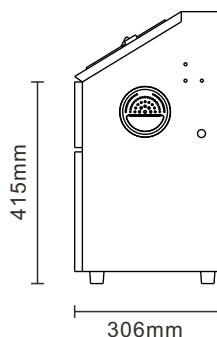
Ø42mm

Printhead side view



234mm

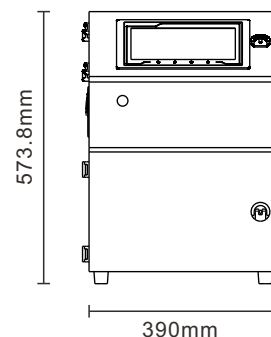
Front view



415mm

306mm

Side view



573.8mm

390mm

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