

**SATO**  
Powered On Site /

Further Beyond  
Expectations



**CL6NX Plus**

A pioneering 6"  
Thermal Industrial Printer

[satoeurope.com](http://satoeurope.com)

# CL6NX Plus

Built to enhance track and trace operations throughout the global supply chain.

Businesses are increasingly harnessing the power of data to underpin traceability, enhance productivity and improve customer satisfaction - and the rise of IoT continues to drive transformation across many industries.

Following years of extensive research and experience, SATO has created the CL6NX Plus to provide customers with the on-site service they need to significantly boost their efficiency. The industry-leading 6-inch thermal printer is designed to meet the requirements of mid-range to high-end label printing environments.

MEET ALL YOUR PRINTING NEEDS WITH ONE COMPLETE SOLUTION.

## Speed & Precision

### High Print Speed & Precision

Offers high print precision ideal for micro label applications and print speed even at high resolution.



2-8 ips at 305 dpi

## Preventative Maintenance Built In

### Maximum Uptime performance

View printer status with one touch and perform preventative maintenance before any errors occur. PureLine™ platen rollers provide visual indication of the degree of wear to enable preventative maintenance. Smart Head to track, trace and monitor print head usage. Longer ribbons mean less downtime as a result of replenishment

## Durable & Functional Design

Metal casing with bi-fold cover makes printer suitable for use in industrial environments with limited space.





## Usability

### Intuitive Operation

Easily detect operational errors with LED indicators and speed up maintenance with video guidance on full colour LCD screen.

### Easy Setup & Maintenance

Field installable parts and tool-less platen replacement simplify setup and maintenance.



## Flexibility & Connectivity

### Multilingual Support

47 print and 31 display languages ensure the printer is optimised for global use.



### Pre-installed Emulation Languages

Auto-detection of all major emulation languages enables seamless conversion from older SATO models or other branded printers to the CL6NX Plus.

### Multiple Interfaces

Connect via multiple interfaces including Bluetooth, serial, parallel, LAN and USB. WLAN optional kit is also available.

### Application Enabled Printing (AEP)



AEP enables the user to directly connect the printer to keyboards, weigh scales, barcode scanners and more, for simplified printing without the need of a PC.

# The CL6NX Plus speaks your language and seamlessly integrates into systems across a wide range of industries

## Key Applications

### Retail

Ideal for high-volume distribution label printing

- CL6NX Plus helps prevent incorrect deliveries of goods from warehouses to stores
- Ensure increased sales and customer satisfaction through efficient in-store and supply chain labelling
- The CL6NX Plus enables more efficient stocktaking & visibility of store inventory by re-labelling products from factories with RFID. A wide range of labels, tags, tickets for various needs from markdown to anti-tampering are available

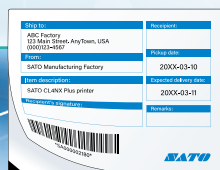


### Transport & Logistics

Enhance visibility and agility labelling across the supply chain

- From goods receiving to inventory management to shipping, the CL6NX Plus can enable users to save various label templates for easy selection and setup
- Choose from a wide selection of labels, including 3-layer labels, to process shipping information and return of goods labels

3-layer shipping/return label





## Automotive

### Efficiently ID tag products to boost productivity

- The CL6NX Plus is ideal for the automotive industry to efficiently boost operations throughout the supply chain
- With AEP and PDF Direct Printing, the printer processes data in PDF format from PC to print, enabling the cutting and sorting of ID tags automatically without worker intervention at high accuracy.
- Users can also print directly from PLC to printer and easily implement the same printing application at any manufacturing location
- RFID support
- Direct PDF printing



Identification tag

SUPPLIER ABC SUPPLIER <b>1234-5</b>	SATO MOTOR MANUFACTURING 12345-00000-98 INNER MIRROR	CONVEYANCE No. <b>98765</b>
ARRIVAL TIME <b>10-03-20XX 10:00</b>		LANE No. <b>3</b>
SUPPLIER DATA 1234567-123	ORDER No. <b>0123</b>	PCS/KANBAN <b>20</b>
		DOCK <b>5S</b>



## Manufacturing

### Accurately label raw materials and products for greater traceability

- Built for tough industrial use, the CL6NX Plus enables manufacturers to gain clear visibility and traceability of products - a useful benefit in the event of product defect
- Electronic manufacturers can also leverage SATO's heat resistant labels with the CL6NX Plus for the high precision printing of micro-PCB labels for electronic products which can be extremely small



# An onboard intelligence that expands the scope of your label printing applications

Video



Application Enabled Printing is a powerful printing system that enables the customisation of printer operations to achieve a simplified labelling process and reduced business costs.

## Custom Applications

With AEP, users can create a unique standalone application that is catered to specific on-site operational needs, which can be run directly on the printer without host software

CL6NX Plus prints labels and displays instructions on LCD screen for operators to sort (left or right) the printed labels for further processing.



## PC-less Printing

Connect CL6NX Plus directly to barcode scanners, indicator lights, weight scales, keyboards, etc. for a wider variety of printing applications, without the needing a PC.

Users can input data directly using a barcode scanner or keypad to simplify the labelling process



## Direct Printing from PLC

With AEP, users can easily integrate CL6NX Plus into other devices, such as a Programmable Logic Controller (PLC), to streamline label printing by eliminating the need for device customisation or special printer firmware





# an IoT solution that enables you to keep your operations visible and running

Video



Monitor your printers 24/7 via the SOS cloud platform and enable proactive preventative maintenance that reduces printer downtime by as much as 86%!

\*based on survey conducted by SATO in Japan

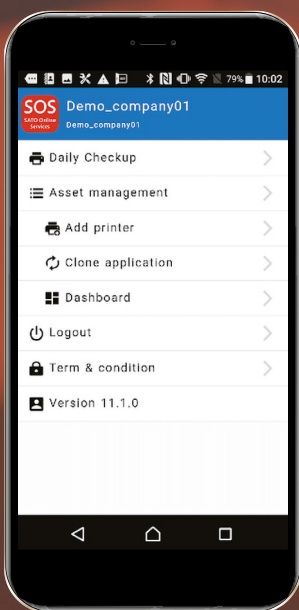


## Proactive Preventative Maintenance

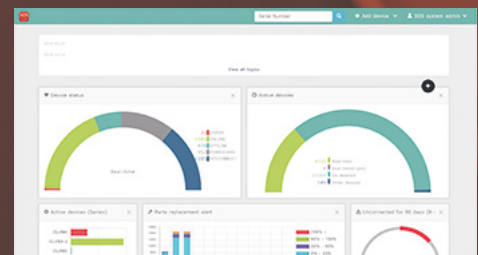
SOS allows users to monitor printers centrally (view operation status, print mileage, expected replacement required for expendable parts, etc.) at a glance and perform preventative maintenance before issues occur.

SOS will send a notification via email to the chosen user outlining the printer situation, enabling you to solve errors immediately.

SOS Smart App



Series	Last connection date	Country	Status	Model name	Life counter (k)	Print head usage rate (%)	Next service timing (Y/M)
CLANX	2018-02-21 13:30:22	Thailand	ONLINE	CLANX 30560	26.9 km	1.4 %	2020-05
CLANX	2018-02-21 13:31:01	China	ONLINE	CLANX 30560	0.3 km	0.7 %	2019-09
CLANX	2018-02-21 13:37:42	China	ONLINE	CLANX 30560	10.3 km	36.4 %	2019-05
CLANX	2018-02-21 13:38:07	Malaysia	ONLINE	CLANX 30560	93.0 km	79.3 %	2018-03
CLANX	2018-02-21 13:31:89	Thailand	ONLINE	CLANX 30560	28.4 km	28.4 %	2020-02
CLANX	2018-02-21 13:40:42	Viet Nam	ONLINE	CLANX 30560	3.2 km	6.8 %	2018-03
CLANX	2018-02-21 13:37:45	Viet Nam	ONLINE	CLANX 30560	32.0 km	36.6 %	2019-11
CLANX	2018-02-21 13:35:48	Malaysia	ONLINE	CLANX 30560	66.4 km	100.0 %	2018-03
CLANX	2018-02-21 13:37:29	Viet Nam	ONLINE	CLANX 30560	1.8 km	3.4 %	2018-04
CLANX	2018-02-21 13:35:44	China	ONLINE	CLANX 30560	20.9 km	0.1 %	2017-03
CLANX	2018-02-21 13:30:31	Indonesia	ONLINE	CLANX 30560	1.3 km	0.7 %	2017-09



## Manage Printers at Multiple Locations

With SOS, you can manage a fleet of printers and change print speed, print darkness, print position and network settings efficiently, from anywhere at any time.

# CL6NX Plus Technical Specifications

PRINTING SPECIFICATION		
Printing Method	Direct Thermal / Thermal Transfer	
Print Mode	Standard: Continuous, Tear-off	
Print Resolution	8 dots/mm (203 dpi)	12 dots/mm (305 dpi)
Max. Print Speed	203 dpi: 2-10 ips, (Default 6 ips)	305 dpi: 2-8 ips, (Default 6 ips)
Max. Print Area	Width	167.5mm (6.5")
	Length	203 dpi: 2500mm (98.42") 305 dpi: 1500mm (59.05")
Processor	Dual CPU & Dual OS: CPU1: 800MHz for Linux OS, CPU2: 800MHz for ITRON OS	
Printer Memory	CPU1: 2GB ROM, 256MB RAM, CPU2: 4MB ROM, 64MB RAM	
CONSUMABLE SPECIFICATION (Recommended to use consumables manufactured or supplied by SATO)		
Sensor Type	I-mark Sensor (reflective), Label Gap Sensor (Transmissive)	
Media Type	Roll or fan-fold die cut labels, Plain paper face stock, Synthetics and Continuous stock	
Media Thickness	to 268 (0.060 to 0.268 mm) (0.002" to 0.01")	
Label Shape	Roll Diameter	Maximum 220mm (8.6") Core diameter: Ø76mm (3.0"), Ø101mm (4.0") Optional 254mm (10") setting
	Wind Direction	Face In / Face Out. No Setting Change Required
Label Size (Without Liner)	Continuous	6 - 2497mm (9 - 2500mm including mount) (203dpi) 0.24" - 98.30" (0.35" - 98.42" including mount)
		6 - 1497mm (9 - 1500mm including mount) (305dpi) 0.24" - 58.94" (0.35" - 59.05" including mount)
	Tear-off/ Cutter	47 - 177mm (50 - 180mm including mount) 1.85" - 6.97" (1.97" - 7.08" including mount)
		47 - 177mm (50 - 180mm including mount) 1.85" - 6.97" (1.97" - 7.97" including mount)
	Dispenser	17 - 2497mm (20 - 2500mm including mount) (203dpi) 0.67" - 98.30" (0.79" - 98.42" including mount)
		17 - 1497mm (20 - 1500mm including mount) (305dpi) 0.67" - 58.94" (0.79" - 59.05" including mount)
Ribbon	Size	Max. Length: 600m (1968.5"). 450m (1476.4") when ribbon width is 39.5mm (1.55") Max. Roll Diameter: 90mm (3.5"), Ribbon width: 39.5mm (1.55") to 177mm (6.97")
	Other	Direction: Front / Back, Wind method: Tubeless
10 - 397mm (13 - 400mm including mount) (203dpi) 0.39" - 15.63" (0.51" - 15.75" including mount)	10 - 397mm (13 - 400mm including mount) (305dpi) 0.39" - 15.63" (0.51" - 15.75" including mount)	10 - 397mm (13 - 400mm including mount) (305dpi) 0.39" - 15.63" (0.51" - 15.75" including mount)
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FONTS / SYMBOLOGIES		
Internal Fonts	Standard Bitmap	U, S, M, WB, WL, XS, XU, XM, XB, XL, X20, X21, X22, X23, X24, OCR-A, OCR-B
	Scalable Fonts	30 SATO TTF Fonts, 2 Outline Fonts
	Encoding	Major Latin and Pan-European Code Pages (WGL4), GB18030 (simplified), KSX1001 (korean), BIG5 (traditional) JIS, SHIFT-JIS. Unicode: UTF-8 and UTF16BE also supported.
Barcode	Linear	UPC-A/UPC-E, JAN/EAN-13/8, CODE39, CODE93, CODE128, GS1-128(UCC/EAN128), CODABAR(NW-7), ITF, Industrial 2 of 5, Matrix 2 of 5, MSI, POSTNET, UPC add-on code, BOOKLAND, USPS code, GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Expanded Stacked
	2D Symbolologies	QR Code, Micro QR Code, PDF417, Micro PDF, Maxi Code, GS1 Data Matrix, Data Matrix (ECC200), Aztec Code, GS1QR Code and Composite Symbolologies.
Print Direction	Character data rotation: 0°, 90°, 180°, 270°	
User Downloadable Fonts, Graphics or Formats	Maximum 100MB	
INTERFACE CHARACTERISTICS AND INTEGRATION		
Standard Interfaces	USB 2.0 (Type A & B), RS232C, IEEE1284, EXT, NFC, Ethernet (IPv4/v6) supporting:TCP/IP, LPR, FTP, SNMPv3, NTP, HTTP, DHCPv4, Stateless Auto Configuration, Stateful Auto Configuration (DHCPv6)	
Optional Interface	Wireless LAN, WiFi Certified, WiFi Direct, IEEE 802.11 a/b/g/n/ac Dual Band (2.4GHz, 5GHz), Security: WEP, WPA, WPA2, Dynamic WEP, DHCP Option 81. Bluetooth Ver. 3.0	
Remote Access	SNMP Ver.3, HTTPs	
Supported printer protocols	Standard: SBPL (SATO Barcode Printer Language) Emulation Language: Auto detect - SZPL, SDPL, SIPL, STCL, SEPL	
OPERATING CHARACTERISTICS		
Power Requirements	AC100V ~ AC240V±10%, 50/60 Hz, Auto-ranging Power Supply	
Environment	Operating	0 - 40°C / 30 - 80% RH (without condensation)
	Storage	-20 - 60°C / 30 - 90% RH (without condensation)
Dimensions	Width 338mm × Depth 457mm × Height 321mm (not including projections) (13.30" x 17.99" x 12.64")	
Weight	20.3kg (44.75 lbs)	
Display Panel	TFT Full Color LCD, 3.5"(320 x 240 RGB)	
MISCELLANEOUS		
Standards & Agency Approvals	Please contact your nearest SATO sales representative regarding agency approvals for your region	
Functions – Useful features	Micro Label Printing, SATO Application Enabled Printing, SATO Online Services, SOTI Connect, Direct PDF printing, 18 User Guidance Videos on LCD, Space for Customized Videos, Multi Language Support LCD Message (31 Languages), Energy Saving, Large Status LED, Multiple Interfaces-Auto-Switching, USB Memory for Data Clone & Copy, Status Return, Alarm Sound	
Functions – Self Diagnosis Checking	Thermal head check, Paper end detection, Ribbon end detection, Test print, Head lift detection	



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