

SATO
Powered On Site /

Further Beyond
Expectations



CL6NX Plus

A pioneering 6"
Thermal Industrial Printer

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



RFID price tag



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



Part label	
Developing Unit	
PART NO: A12ER72733	
	
Quantity: 1	
Date: 18/08/20XX	

Manufacturing

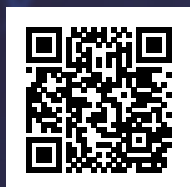
Accurately label raw materials and products for greater traceability

- 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 need of 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





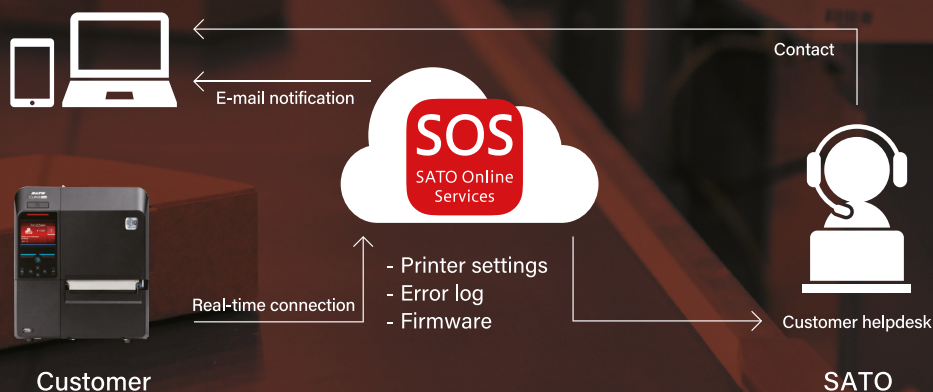
an IoT solution that enables you to keep your operations visible and running

Video



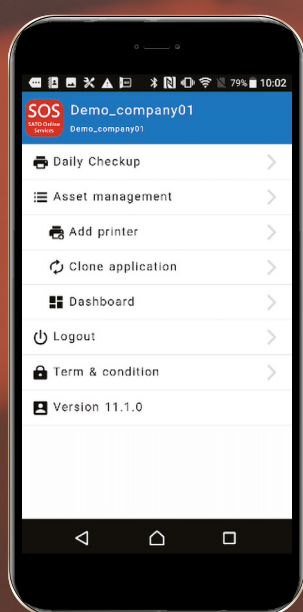
Monitor your printers 24/7 via the SOS cloud platform and enable proactive preventative maintenance that reduces printer downtime by as much as 86%!

*based on survey conducted by SATO in Japan



Proactive Preventative Maintenance

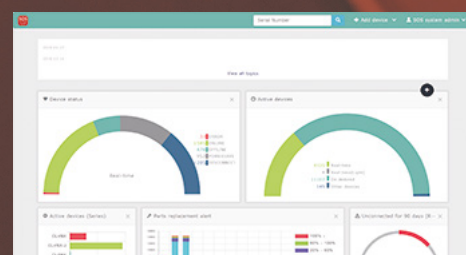
SOS Smart App



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.

Series	Last connection date	Country	Status	Printer name	Life counter (k)	Print head usage rate (%)	Next service timing (LPI)
CLARIX	2019-02-21 13:30:22	Thailand	ONLINE	CLARIX 20500	26.9 km	1.4 %	2022-02
CLARIX	2019-02-21 13:31:01	China	ONLINE	CLARIX 20500	0.3 km	0.7 %	2019-04
CLARIX	2019-02-21 13:37:42	China	ONLINE	CLARIX 30500	10.3 km	30.6 %	2021-05
CLARIX	2019-02-21 13:38:07	Malaysia	ONLINE	CLARIX 30500	83.0 km	76.3 %	2019-03
CLARIX	2019-02-21 13:31:09	Thailand	ONLINE	CLARIX 20500	28.4 km	28.4 %	2022-02
CLARIX	2019-02-21 13:40:10	Viet Nam	ONLINE	CLARIX 30500	3.0 km	6.8 %	2019-03
CLARIX	2019-02-21 13:37:45	Viet Nam	ONLINE	CLARIX 30500	52.0 km	30.6 %	2019-11
CLARIX	2019-02-21 13:35:48	Malaysia	ONLINE	CLARIX 30500	66.4 km	100.0 %	2019-03
CLARIX	2019-02-21 13:37:23	Viet Nam	ONLINE	CLARIX 30500	1.9 km	5.4 %	2019-04
CLARIX	2019-02-21 13:31:44	China	ONLINE	CLARIX 20500	50.3 km	0.1 %	2017-03
CLARIX	2019-02-21 13:30:31	Malaysia	ONLINE	CLARIX 20500	1.3 km	0.2 %	2017-06



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)	
		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)	
	Tear-off/ Cutter	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)	
		47 - 177mm (50 - 180mm including mount) 1.85" - 6.97" (1.97" - 7.08" including mount)	10 - 397mm (13 - 400mm including mount) (305dpi) 0.39" - 15.63" (0.51" - 15.75" including mount)	
	Dispenser	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)	
		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" - 7.08" 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	
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		

