Further Beyond Expectations.

CL4NX Plus

Best-in-class 4"
Thermal Industrial Printer

satoeurope.com

CL4NX Plus

Designed for Track & Trace Operations Globally

The rise of IoT is driving digital transformation across industries. Increasingly, businesses use data to gain traceability, enhance productivity and improve customer satisfaction. With our extensive experience in providing solutions to serve customers' on-site needs, we are proud to introduce CL4NX Plus, the industry's leading 4-inch industrial thermal printer designed to meet the requirements of mid-range to high-end label printing environments.

KEY APPLICATIONS:

Manufacturing

Raw material to product labelling for greater traceability

Built for tough industrial use, CL4NX Plus helps manufacturers gain clear visibility and traceability from raw materials to finished products which is especially helpful in the event of product defect.

Electronic manufacturers can leverage SATO's heat resistant labels and CL4NX Plus for high precision printing of micro PCB labels for their electronic products that are getting ever smaller.

Retail

Backyard to in-store labelling for higher sales and customer satisfaction

Ideal for high-volume distribution label printing, CL4NX Plus helps prevent incorrect deliveries of goods from warehouses to stores.

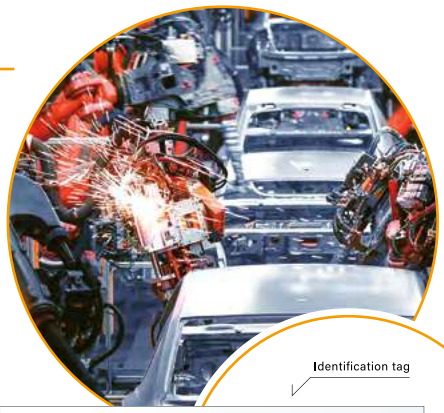
Retailers can also achieve more efficient stocktaking & visibility of store inventory by re-labelling products from factories with RFID. A wide range of labels, tags, tickets for various needs from markdown to anti-tampering are available.

Automotive

Effective identification tagging for productivity boost

CL4NX Plus is ideal for automobiles and parts makers to boost efficiency and productivity.

With AEP and PDF Direct Printing, printer processes data in PDF format from PC to print, cut and sort ID tags automatically without worker intervention at high accuracy. User can also print directly from PLC to printer and easily implement same printing application at any manufacturing plants.



Identification tag

Transport & Logistics

Supply chain labelling for enhanced agility and visibility

Suitable for labelling across the supply chain, from goods receiving, inventory management to shipping, user can save various label templates in CL4NX Plus for easy selection and setup.

Choose from our wide label selection including special types such as 3-layer labels suitable for shipping and return of goods.

3-layer shipping/ return label

We 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 16% faster print speed than other industrial printers even at high resolution.

14 ips at 305 dpi

Continuous Usage

30% More Media

More media per roll and longer ribbon mean lesser downtime for media replenishment.

Minimal Downtime

SOS
SATO Online Services

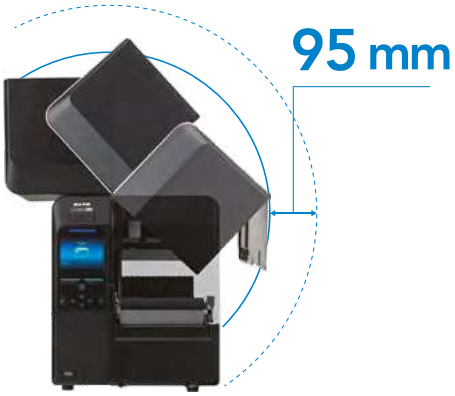
View status of all printers at a glance and perform proactive preventative maintenance before error occurs. PureLine™ platen roller provides visual indication of the degree of wear to enable preventative maintenance.

White line indicator on PureLine™ platen roller before use.

White line starts to fade when platen roller starts to wear out.

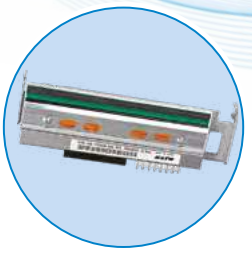
Durable & Functional Design

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



Die-cast aluminium construction for greater stability and durability.

Stainless steel is used for the paper transport route. Printing position does not shift due to resin shaving.



Highly durable thermal head enables long-term high-quality printing.

Usability

Intuitive Operation

Enable prompt response by easily detecting operation errors with red / blue LED indicator lights. Speed up maintenance and error resolution with video guidance on full colour LCD screen.

Easy Setup & Maintenance

Field installable parts, snap-in print head and tool-less platen replacement simplifies setup and maintenance.

We speak your language & integrate seamlessly into your business.

Flexibility & Connectivity

Pre-installed Emulation Languages

Auto detection of major emulation languages enable seamless switching from SATO legacy models or other brands to CL4NX Plus.

SBPL / SZPL / SDPL / SIPL / STCL / SEPL

Multilingual Support

Supports 47 print and 31 display languages making this model suitable for global use.

Direct Connectivity to Peripheral Devices

SATO AEP
Application Enabled Printing

AEP enables user to directly connect printer to keyboards, weight scales, barcode scanners and more for simplified printing without needing a PC.

Multiple Interfaces

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

SATO AEP
Application Enabled Printing

Expand the scope of your label printing applications

Video

Application Enabled Printing is a powerful printing intelligence that enables customisation of printer operations to achieve wider scope of printing applications, simplify labelling processes and reduce business costs.

Custom Applications

With AEP, we can create custom standalone applications to cater to your on-site operational needs. Application can be run directly on the printer, independent of host software.

CL4NX 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 CL4NX Plus directly to barcode scanners, indicator lights, weight scales, keyboards, etc. for a wider variety of printing applications, without the needing a PC.

Input data directly using barcode scanner and numeric keypads to simplify label printing.

Direct Printing from PLC

With AEP, user can easily integrate CL4NX Plus with other devices such as Programmable Logic Controller (PLC) to streamline label printing by eliminating the need for device customisation or special printer firmware.

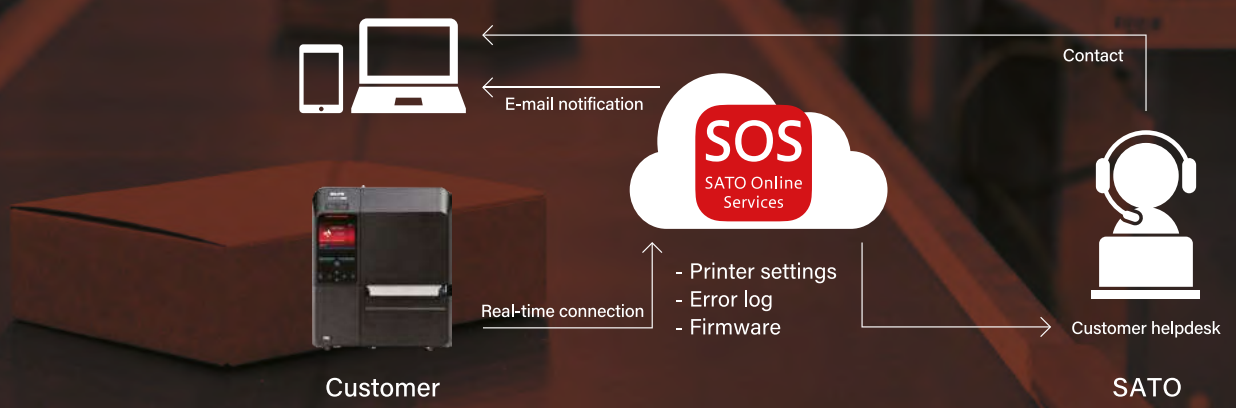
SOS
SATO Online Services

IoT solution to keep your operations running & visible

Video

By monitoring your printers 24/7 via cloud, SATO Online Services enables proactive preventative maintenance and helps you reduce printer downtime by as much as 86%.

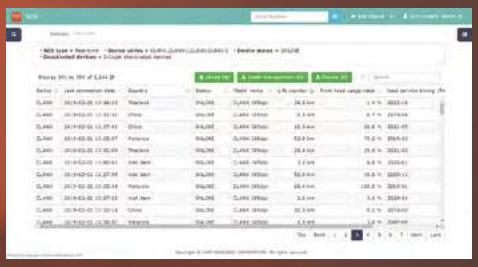
*based on survey conducted by SATO in Japan



Proactive Preventative Maintenance

SOS Smart App

Monitor printers centrally (view operation status, print mileage, expected replacement required for expendable parts, etc.) at a glance and perform preventative maintenance before issues occurs, SOS sends a notification. SOS send notification via email according to the situation of your printer, solving errors immediately.



Manage Printers at Multiple Locations

Manage printer fleet such as view and change print speed, print darkness, print position and network settings efficiently from anywhere at anytime.

CL4NX Plus Technical Specifications

PRINTING SPECIFICATION					
Printing Method			Direct Thermal / Thermal Transfer		
Print Mode			Continuous, Tear-off, Cutter, Dispenser, Linerless		
Print Resolution			8 dots/mm (203 dpi)	12 dots/mm (305 dpi)	24 dots/mm (609 dpi)
Max. Print Speed			14 ips (355 mm/sec)	14 ips (355 mm/sec)	6 ips (152 mm/sec)
Max. Print Area	Width, mm (inch)		104mm (4.09”)		
	Length, mm (inch)		2500mm (98.42”)	1500mm (59.05”)	400mm (15.75”)
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			0.060 - 0.268mm (0.0024” - 0.011”)		
Label Shape	Diameter		Maximum 265mm (10.43”), Core diameter: Ø76mm (3.0”), Ø101mm (4.0”)		
	Wind Direction		Face In / Face Out. No Setting Change Required		
Label Size (Without Liner)	Continuous	Width	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)
		Length	6 - 2497mm (0.24” - 98.30”)	6 - 1497mm (0.24” - 58.94”)	6 - 397mm (0.24” - 15.63”)
	Tear-off/ Cutter	Width	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)
		Length	17 - 2497mm (0.67” - 98.30”)	17 - 1497mm (0.67” - 58.94”)	17 - 397mm (0.67” - 15.63”)
	Dispenser	Width	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)	22 - 128mm (0.87” - 5.04”)
		Length	10 - 397mm (0.39” - 15.63”)*1	10 - 397mm (0.39” - 15.63”)*1	10 - 397mm (0.39” - 15.63”)*1
	Linerless	Width	60 - 118mm (2.36” - 4.65”)	60 - 118mm (2.36” - 4.65”)	60 - 118mm (2.36” - 4.65”)
		Length	30 - 120mm (1.18” - 4.72”)	30 - 120mm (1.18” - 4.72”)	30 - 120mm (1.18” - 4.72”)
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 128mm (5.04”)		
	Other		Core diameter: Ø25.4mm (1”), Wind direction : Face In/ Face Out, No Setting Change Required		
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 Fonts, 2 Outline Fonts		
	Encoding		Majour Latin and Pan-European Code Pages (WGL4), GB18030 (simplified), KSX1001 (Korean), BIG5 (traditional), JIS, SHIFT-JIS, UTF-8 and UTF-16BE 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 Symbologies		QR Code, Micro QR Code, PDF417, Micro PDF, Maxi Code, GS1 Data Matrix, Data Matrix (ECC200), Aztec Code, GS1QR Code and Composite Symbologies		
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), Ethernet (IPv4/v6), RS232C, IEEE1284, EXT, Bluetooth Ver. 3.0*2, NFC		
Optional Interface			Wireless LAN, WiFi Certified, WiFi Direct, IEEE 802.11 a/b/g/n Dual Band (2.4GHz, 5GHz)		
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)		
	Operating Linerless		5 - 35°C / 30 - 75% RH (without condensation)		
	Storage		-20 - 60°C / 30 - 90% RH (without condensation)		
Dimensions			271mm (10.67”) × 457mm (18.00”) × 321mm (12.64”)		
Weight			15.1kg (33.28 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, 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 Copy, Status Return, Alarm Sound		
Functions – Self Diagnosis Checking			Thermal head check, Paper end detection, Ribbon end detection, Test print, Head lift detection		
OPTIONS					
Accessories			Cutter, Linerless Cutter, Dispenser with Internal Liner Rewinder, Real-Time Clock, Wireless LAN, Barcode Checker Stand, External Rewinder, External Cover, RFID (coming soon), Rotary Cutter (coming soon)		

*1 Length of 10 to 27mm is only available for Thermal Transfer mode
*2 Please contact your nearest SATO sales representative for availability

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