

SATO
Powered On Site /

Empower your success



CLNX **Plus** Series

Next Generation 4" & 6" printers



satoeurope.com

CLNX Plus Series

Run All-in-One functions anywhere at anytime

The CLNX Plus Series are SATO's next generation of thermal printers with advanced support for barcode symbologies, character sets and RFID encoding.

A product of SATO's global R&D network the CLNX Plus Series incorporates value-added features in a world-class design to deliver a printing solution that goes beyond expectations.

Optimise asset management, increase supply visibility & expand operational ability with SATO's next generation printing solution.



Key Features

New

- Simple-to-Operate
- Plug-and-Play
- Higher precision
- Smart Head
- All-in-One
- Application Enabled Printing
- Fast speed
- RFID support



✓ APPLICATION ENABLED PRINTING

- AEP is a powerful on-board intelligence which enables customisation of the printer operation to significantly simplify labelling processes and reduce business costs
- It also allows the direct connection of common peripherals such as numeric keypads, qwerty keyboards, scanners & weighscales. Plus automatic fetch of network or cloud data. Reduces up-front costs as a PC is not essential for printing
- AEP solutions are highly flexible and are easily implemented





Intuitive Operation & On-screen Video Guidance

- LED indicator and colour displays alert operator to the printer status.
- Pre-installed guidance videos assist in error resolution and printer maintenance
- Capability to upload customised start-up screen and videos
- Advanced user interface for full operational control of print, application, I/F, and system settings via the front panel display
- Customisable GUI content and security enabled menu access allows administrators to personalise the operator experience
- Best in class 60° print head opening, tension damper, and coreless ribbon system facilitate easy media setup
- Coloured operator touch points ensure safe operation and interactions with movable parts

Dynamic Integration

- Serial, parallel, LAN, USB and Bluetooth combo interface covers all legacy and modern systems requirements. WLAN and Bluetooth optional kits are also available
- SZPL, SIPL, SDPL, STCL SEPL command emulations enable direct replacement of printers in legacy applications
- Auto-switching interface setting and media auto-calibration to adjust sensor levels for faster setup time between print jobs
- 30 + display languages, 40+ print character sets, and 15 SATO resident fonts, additional user downloadable space provide universal format coverage
- All major agency approvals permit global deployment for large enterprises or future expansion potential for growing startups
- NFC chip enables fast configuration and printer status checking

SBPL / SZPL / SDPL / SIPL / STCL / SEPL



High Performance & Sustainable Innovations

- Head check function to ensure barcode printing accuracy
- Label and Ribbon Near-End & End sensors
- UHF and HF RFID options support a wide variety of tags and include adjustable antenna system for optimal inlay encoding
- Optional linerless media kit* eliminates the waste associated with conventional label production
- High speed data processing equals faster first label out and print job throughput
- Coreless ribbon take up with One-touch release
- 10 preset darkness levels with finite adjustment between presets for optimal print performance setting
- Energy Star power efficiency certification

*only available for CL4NX Plus

Model Lineup



Standard

- Tear-off bar for manual media separation
- Label holder adjustable to support up to 10" OD media rolls
- External media slots for rear or bottom feed applications

Cutter

- Front mount guillotine cutter unit
- Rotary Cutter available for CL4NX Plus
- Single item or batch print job cut settings
- Long lasting blade life



Dispenser

- Dispenser unit including peel bar for liner separation
- Additional internal liner take-up for active peel applications

Industrial Durability

- Metal casing including front panel and side covers protects against any industrial environment
- Die-cast Aluminium frame, print and ribbon mechanism provide solid stability to ensure print quality and printer durability
- 1 year global warranty for printer including installed options. Long lasting 30 kilometre guaranteed print head and platen roller.

Functional Benefits

- Bi-fold cover allows compact design and reduces workspace requirement
- Supports internal, external, clockwise and counter-clockwise rotational media types.
- Adjustable label holder for increased internal roll capacity
- Field installable options, snap in print head, and tool-less platen replacement minimise downtime
- External media inlets, mounting fixtures, and cable hook



Options



Linerless

- Puretech™ Linerless modified cutter unit with on demand sensor
- Anti-adhesive Puretech™ platen roller, media path and sensor cover
- Pureline™ visible wear indicator



Barcode Checker

- Simple and inexpensive option
- Confirms that the barcode content is correct.
- Void marks and reprints the label if necessary



Real Time Clock

- Time and date tracking RTC
- Enable timestamp labelling



Wireless LAN

- 802.11 a/b/g/n
- 2.4/5GHz dual-band switching
- Wi-Fi Direct and CCX Cisco certified



RFID Encoder

- UHF ISO/IEC 18000-6 or HF ISO/IEC 15693 & 14443
- PJM 100% accuracy & close stack tagging
- Short pitch encoding support

CLNX Plus Technical Specifications

PRINTING SPECIFICATION		CL4NX PLUS			CL6NX PLUS		
Printing Method		Direct Thermal / Thermal Transfer			Direct Thermal / Thermal Transfer		
Print Mode		Continuous, Tear-off, Cutter, Rotary Cutter, Dispenser, Linerless, Continuous, Tear-off, Cutter, Dispenser.					
Print Resolution		8 dots/mm (203 dpi)	12 dots/mm (305 dpi)	24 dots/mm (609 dpi)	8 dots/mm (203 dpi)	12 dots/mm (305 dpi)	
Max. Print Speed		14 ips (355 mm/sec)	14 ips (355 mm/sec)	6 ips (152 mm/sec)	2-10 ips, (default 6 ips)	2-8 ips, (default 6 ips)	
Max. Print Area	Width	104mm (4.09")			167.5 mm (6.5")		
	Length	2500mm (98.42")	1500mm (59.05")	400mm (15.75")	203 dpi: 2500mm	305 dpi: 1500mm	
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		CL4NX PLUS			CL6NX PLUS		
(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")			Maximum 220mm (8.6"), 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")	47-177mm (1.85" - 6.97")	47-177mm (1.85" - 6.97")
		Length	6 - 2497mm (0.24" - 98.30")	6 - 1497mm (0.24" - 58.94")	6 - 397mm (0.24" - 15.63")	6 - 2497mm (0.24" - 98.3")	6 - 1497mm (0.24" - 58.94")
	Tear-off/Cutter	Width	22 - 128mm (0.87" - 5.04")	22 - 128mm (0.87" - 5.04")	22 - 128mm (0.87" - 5.04")	47-177mm (1.85" - 6.97")	47-177mm (1.85" - 6.97")
		Length	17 - 2497mm (0.67" - 98.30")	17 - 1497mm (0.67" - 58.94")	17 - 397mm (0.67" - 15.63")	17 - 2497mm (0.67" - 98.3")	17 - 1497mm (0.67" - 58.94")
	Dispenser	Width	22 - 128mm (0.87" - 5.04")	22 - 128mm (0.87" - 5.04")	22 - 128mm (0.87" - 5.04")	47-177mm (1.85" - 6.97")	47-177mm (1.85" - 6.97")
		Length	10 - 397mm (0.39" - 15.63") ¹⁾	10 - 397mm (0.39" - 15.63") ¹⁾	10 - 397mm (0.39" - 15.63") ¹⁾	10 - 397mm (0.39" - 15.63")	10 - 397mm (0.39" - 15.63")
	Linerless	Width	60 - 118mm (2.36" - 4.65")	60 - 118mm (2.36" - 4.65")	60 - 118mm (2.36" - 4.65")	Not available	Not available
		Length	30 - 120mm (1.18" - 4.72")	30 - 120mm (1.18" - 4.72")	30 - 120mm (1.18" - 4.72")	Not available	Not available
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")			Max. Length: 600m (1968.5"). 450m (1476.4") when ribbon width is 39.5mm (1.55") Max. Roll Diameter: 90mm (3.5") when ribbon width: 39.5mm (1.55") to 177mm (7.0")		
	Other	Core diameter: Ø25.4mm (1"), Wind direction : Face In/ Face Out, No Setting Change Required, Tubeless wind method.					
FONTS / SYMBOLOGIES		CL4NX PLUS			CL6NX PLUS		
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	Major Latin and Pan-European Code Pages (WGL4), GB18030 (simplified), KSX1001 (Korean), BIG5 (traditional), JIS, SHIFT-JIS 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		CL4NX PLUS			CL6NX PLUS		
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, SATO Alerte					
Supported printer protocols		Standard: SBPL (SATO Barcode Printer Language) Emulation Language: Auto detect - SZPL, SDPL, SIPL, STCL, SEPL					
OPERATING CHARACTERISTICS		CL4NX PLUS			CL6NX PLUS		
Power Requirements		AC100V ~ AC240V±10%, 50/60 Hz, Auto-ranging Power Supply			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)			20Kg (42 lbs)		
Display Panel		TFT Full Color LCD, 3.5"(320 x 240 RGB)					
MISCELLANEOUS		CL4NX PLUS			CL6NX PLUS		
UHF and HF options standard		UHF:a ISO 18000-6 Type C HF: ISO 1569593 & ISO 14443 Type A. Phase Jitter Modulation: 100% reading accuracy even when tags are stacked.			UHF: ISO 18000-6 Type C		
RFID Features		Fully integrated UHF RFID Reader / Encoder Module. Void marking of damaged or unreadable transponders, RFID data verification after programming. Multiple RFID power settings allow users to use individual transponder sizes, DIP (Direct Inlay Printing) allows use of short pitch labels. PWP allows flexible inlay positions, TID reading and printing as text and barcode.					
Functions – Useful features		Micro Label Printing, SATO Application Enabled Printing, SATO Online Services, 18 User Guidance Videos on Color 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					

* CL6NX with RFID only supports UHF standard.

Version: Jan 2022. Specification subject to change without notice.

For more information, please contact
your local SATO office, or visit:

satoeurope.com