## Technical Information

| PRINTING SPECIFICATION | | CL4NX Plus | | | CL6NX Plus | |
|---|---|---|---|---|---|---|
| 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) | 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) | 10 ips (254 mm/sec) | 8 ips (203 mm/sec) |
| Max. Print Area | Width, mm (inch) | 104mm (4.09") | | | Standard 152mm (5.98")/ Extension 167.5mm(6.60") | Standard 165.33mm(6.51")/ Extension 167.5mm(6.60") |
| | Length, mm (inch) | 2500mm (98.42") | 1500mm (59.05") | 400mm (15.75") | 2500mm (98.42") | 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 | | 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") | 47 - 177mm (1.85" - 6.97") | 47 - 177mm (1.85" - 6.97") |
| | Continuous — Length | 6 - 2497mm (0.24" - 98.30") | 6 - 1497mm (0.24" - 58.94") | 6 - 397mm (0.24" - 15.63") | 6 - 2497mm (0.24" - 98.30") | 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") |
| | Tear-Off / Cutter — Length | 17 - 2497mm (0.67" - 98.30") | 17 - 1497mm (0.67" - 58.94") | 17 - 397mm (0.67" - 15.63") | 17 - 2497mm (0.67" - 98.30") | 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") |
| | Dispenser — 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")[*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") | | – |
| | Linerless — 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") | | | Max. Length: 600m (1968.5'), Max. Roll Diameter: 90mm (3.5"), Ribbon width: 59mm (2.32") to 177mm (6.97") | |
| | 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 | Major 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: 0º, 90º, 180º, 270º | |
| 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 - 40ºC / 30 - 80% RH (without condensation) | |
| | Operating Linerless | 5 - 35ºC / 30 - 75% RH (without condensation) | – |
| | Storage | -20 - 60ºC / 30 - 90% RH (without condensation) | |
| Dimensions | | 271mm (10.67") × 457mm (18.00") × 321mm (12.64") | 338mm (13.30") × 478mm (18.00") × 321mm (12.64") |
| Weight | | 15.1kg (33.28 lbs) | 21.4kg (47.18 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 | CL4NX Plus | Cutter, Linerless Cutter, Dispenser with Internal Liner Rewinder, Real-Time Clock, Wireless LAN, Barcode Checker Stand, External Rewinder, External Cover, UHF RFID kit, HF RFID kit, Rotary Cutter |
| | CL6NX Plus | Cutter, Dispenser with Internal Liner Rewinder, Real-Time Clock, Wireless LAN, Barcode Checker Stand, External Rewinder, External Cover, UHF RFID kit |

| RFID SPECIFICATION (Optional) | | |
|---|---|---|
| UHF and HF options available* | Standard | UHF: ISO/IEC 18000-6 Type C HF: ISO/IEC 15693 & ISO/IEC 14443 Type A Phase Jitter Modulation: 100% accuracy stack tags |
| | Frequency | 868 - 960MHz and 13.56MHz |
| | Protocols | EPC Gen 2 Class 1, NXP, Impinj, Alien & others |
| | RFID Features | Fully integrated UHF RFID Reader / Encoder Module. SRA(SATO RF Analyze) installed. 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 |
| | Gen2 Memory | Expanded EPC, User Memory, TID (96bit), Access password, Kill password, Lock |

WiFi CERTIFIED   Bluetooth   N

only available for Thermal Transfer mode
...est SATO sales representative for availability

Barcodes.com.au

Phone: 1300 800 999
Email: sales@barcodes.com.au
Website: www.barcodes.com.au

For more information, please visit us on https://www.barcodes.com.au/sato-cl4nx-label-printer/ or call us on 1300 800 999

SATO
Powered On Site/

# Further Beyond Expectations

# CL4NX Plus
# CL6NX Plus

Best-in-class Thermal Industrial Printer

RAIN RFID

# Designed for track and trace operations globally

With our extensive experience in providing solutions to serve customers' on-site needs, we are proud to introduce CL4/6NX Plus.
The industry's leading 4-inch and 6-inch industrial thermal printer designed to meet the requirements of mid-range to high-end label printing environments.

## The printer model to optimise your RFID applications

Businesses can save labor, speed up their operations, and enjoy many advantages from using the RFID technology. RFID tags/labels can be read in bulk, without making contact, and their data be rewritten as often as needed. They can be used widely, for apparel tagging or asset tracking, and at factories or hospitals to manage products and work processes or medical devices and pharmaceuticals.

CL4/6NX Plus is an RFID model that can print text and barcodes on UHF, HF and NFC tags/labels, and at the same time, encode data in their embedded chips. Besides being equipped with on-screen menus that save users the trouble of adjusting antenna position manually, the printer is also capable of checking RFID chips prior to encoding to verify their readiness for use and prevent subsequent failures.

### *Rich in RFID capabilities and features*

### SATO RF Analyze (SRA) function `UHF`

Optimize antenna and inlay settings automatically for fast and stable encoding. Users can find the best settings to encode RFID tags/labels when their attributes vary randomly due to lot differences or adjust write/read conditions as needed when encoding errors occur.

### Function for registering commonly used settings `UHF` `HF` `NFC`

Save write/read conditions for up to ten RFID tag/label types. Users can easily select and load these profiles to encode multiple media with the same printer.

### Compatibility with specialty RFID tags/labels `UHF`

Support the encoding of various RFID tag/label types including tags used with metals or for other special applications, with a special encoder antenna that provides output power up to 30dBm.

*Some media types may require prior testing; please contact your nearest SATO office to find out more.*

## Key Applications

### *Manufacturing*
### Raw material to product labelling for greater traceability

Built for tough industrial use, CL4/6NX Plus helps manufacturers achieve traceability from raw materials to finished products, which is important when recalls become necessary. The printer also serves as a key component in RFID systems for managing returnable transport items (RTIs) and other factory assets.

Electronic manufacturers can leverage SATO's heat resistant labels and CL4/6NX Plus for high precision printing of micro PCB labels for their electronic products that are getting ever smaller.

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

SATO0310
PCB component label

### *Automotive*
### Effective identification tagging for productivity boost

CL4/6NX 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.

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

Identification tag

### *Retail / Apparel*
### Back room to in-store visibility for higher sales and customer satisfaction

Ideal for high-volume distribution label printing, CL4/6NX 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.

Size: S
Color: Blue
Code: 123456
Category: Top/T-shirt
$ 79.90
RFID price tag

### *Transport & Logistics*
### Supply chain labelling for enhanced agility and visibility

Suitable for labelling across the supply chain, from goods receiving to inventory management and shipping, user can save various label templates in CL4/6NX Plus for easy selection and setup.

Printer is compatible with a wide range of labels (including special types such as 3-layer labels) used for the shipping and return of goods. It also supports high speed and volume printing to meet the demands of rising e-commerce orders.

3-layer shipping/ return label

CL4NX Plus
CL6NX Plus
Powered On Site /

0310031003100310

# 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.

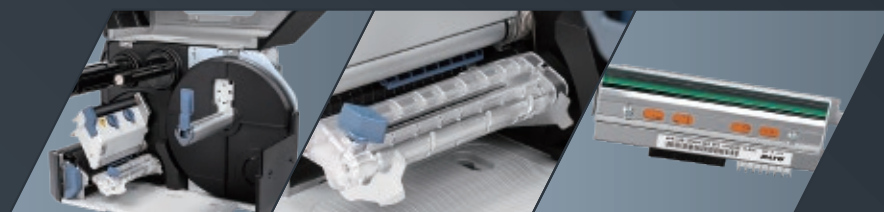White line indicator on PureLine™ platen roller before use.

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.
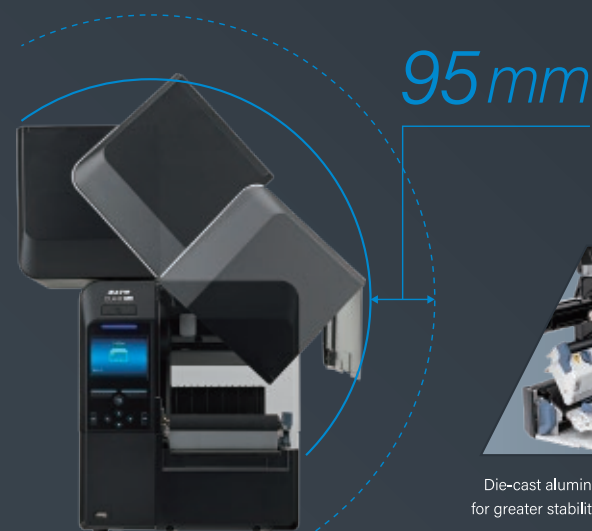
**95 mm**

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.
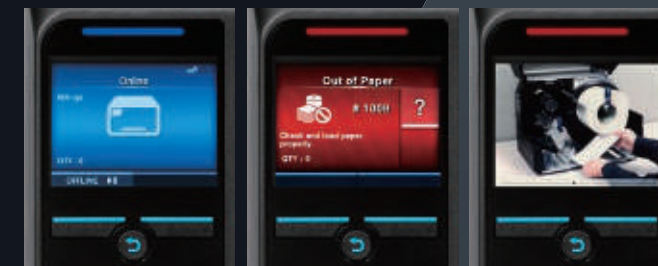
### Easy setup and maintenance

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

## Flexibility & Connectivity

### Pre-installed emulation languages

Auto detection of major emulation languages enable seamless switching from SATO legacy models or other brands to CL4/6NX 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 need for a PC.

### Multiple interfaces

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

# We speak your language and integrate seamlessly into your business

# Expand the scope of your label printing applications

## AEP
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.

CL4/6NX 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 CL4/6NX Plus directly to barcode scanners, indicator lights, weight scales, keyboards, etc. for a wider variety of printing applications, without the need for a PC.
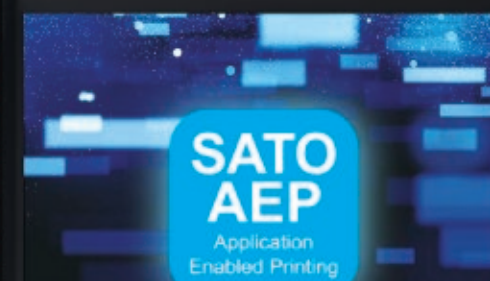
Input data directly using barcode scanner and numeric keypads to simplify label printing.

### Direct printing from PLC

With AEP, user can easily integrate CL4/6NX 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.

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# IoT solution to keep your operations running & visible
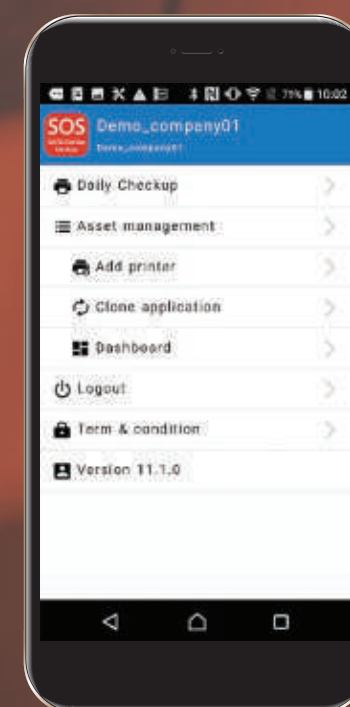
## SOS
Video

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

*SOS Smart App*

### Proactive preventative maintenance

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 send notification via email according to the situation of your printer and resolve errors immediately.
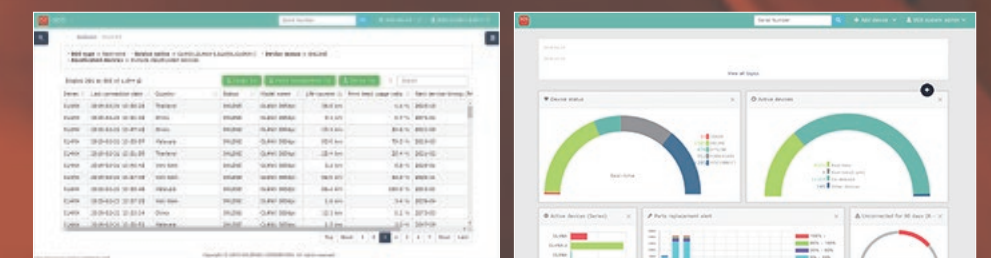
### Manage printers at multiple locations

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

Barcodes.com.au

Phone: 1300 800 999
Email: sales@barcodes.com.au
Website: www.barcodes.com.au

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