SATO
Powered On Site /

LR4NX

SATO AEP
Application Enabled Printing

SOS
SATO Online Services

satoeurope.com

Robust Design and IoT-enabled to Minimise Downtime!

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Downtime Chart

DOWNTIME	CURRENT OPERATION	WITH LR4NX
Unplanned	Breakdowns & repair delays — **5** hours/year	
Planned	Maintenance — E.g. Part replacement, sensor adjustment — **5** hours/year	
Daily	Consumables (labels & ribbons) replacement — **21.5** hours/year	

Yearly production downtime **REDUCED BY 3 DAYS!**

Now approx.*
25 HOURS SHORTER!

*Calculated based on following assumptions:
- 8-hour workday
- 30km per annum print distance

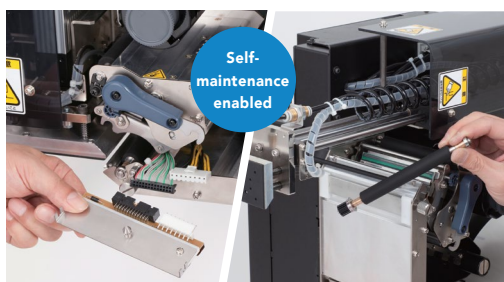| With self-maintenance | **15** mins/year |
| With IoT-based preventative maintenance | **Zero** downtime |
| With easy media loading & superior robustness | **5** hours/year |

STREAMLINE DAILY OPERATIONS

Robust design for industrial printing

- ☑ Thermal head and platen roller - 1.6 times* more durable than previous models.
- ☑ Large ribbon roll capacity - 50% reduction in change frequency.
- ☑ Easy, tool-free replacement of service parts
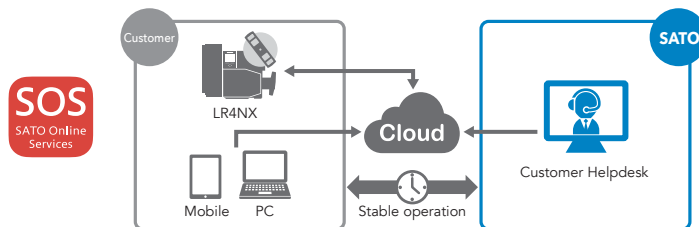
*Based on internal testing

Self-maintenance enabled

Thermal head   Platen roller

PREVENT BREAKDOWNS BEFORE THEY OCCUR

IoT-based preventative maintenance for stable operations
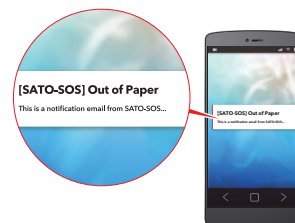
Monitor printer operations 24/7 & notify when part needs to be replaced, while keeping operations running.

Customer

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LR4NX
Cloud
Mobile   PC   Stable operation

SATO
Customer Helpdesk

TROUBLESHOOTING

On-the-spot fixes for problems

Send operators email notifications and video tutorials/instruction manuals to fix errors promptly

[SATO-SOS] Out of Paper
This is a notification email from SATO-SOS...

User-friendly features for greater operational efficiency!

EASY AND INTUITIVE TO USE

3.5-inch large LCD screen.
Guidance videos to help users
e.g. load labels, ribbons or replace
service parts easily.

Different display colors to showprinter
status at a glance.

Online
203 dpi
QTY : 0
OFFLINE ▶‖

Out of Paper
1008
Reset Key
Check and load paper properly.
QTY : 0
OFFLINE ▶‖

3-color stack light
Quickly alert users to high
priority conditions from a
distance.

PACKED WITH USEFUL FUNCTIONS

Accurate and stable operation for peace of mind
- Head cleaning notification
- Command error indication
- Password lock
- Printer settings backup / clone

Please clean print head

Multi-Language Capability
- Support 31 display and 47 print languages.
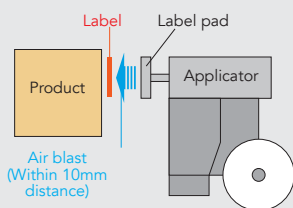- Also contains built-in Unicoded scalable fonts

Next-Generation Smart Printing
- Support Application-Enabled Printing (AEP) - Connect printer directly to peripheral devices for standalone printing or PLCs for integrated printing without costly computers

- Auto detection of emulation languagues (SZPL, SIPL, SDPL)

Available in a **wide range of variations** to meet different **customer needs**

Customise your system by choosing from a variety of application methods, mounting points and machine configurations.
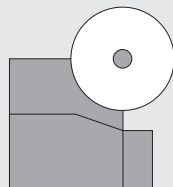
AVAILABLE MODELS

CYLINDER JET (CJ-TYPE)

Label
Label pad
Product
Applicator
Air blast
(Within 10mm
distance)

Extends cylinder arm and uses air
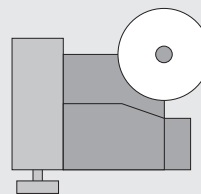to blow label onto the surface of
moving products

ONE TYPE AVAILABLE WITHOUT CYLINDER

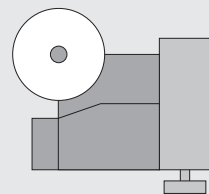This shows left hand without
cylinder.

MACHINE CONFIGURATIONS

LEFT-HAND

Label feed direction

RIGHT-HAND

Label feed direction

SATO AEP
Application Enabled Printing

SATO LR4NX is based on **SATO** unique
AEP Technology.

SATO AEP allows for tailor-made labelling
applications including PC-less printing,
direct connection of peripherals such as
keyboards, scanners and scales for data
input.

Technical Information

PRINTING SPECIFICATION

Model Name		LR4NX L (Left Hand); LR4NX R (Right Hand)
Printing Method		Direct Thermal / Thermal Transfer
Print Resolution		8 dots/mm (203 dpi); 12 dots/mm (305dpi)
Max. Print Speed		10ips
Max. Print Area	Width	104mm (4")
	Length	2500mm (98.4") (203dpi); 1500mm (59") (305dpi)
Internal Memory / Receive Buffer		User Area: Max. 619MB Receive Buffer: Max. 2.95MB (Buffer near full at 2MB, released at 1MB)
Application Method		CJ (Cylinder Jet) Type: Cylinder stroke standard 200mm (valid stroke is within 182mm) Blowing distance up to 10mm, conveyor speed up to 21m/min

CONSUMABLE SPECIFICATION

Label Type		Roll paper
Label Thickness		140 ~ 240µm (Including Liner)
Label Shape	Diameter	Core inner diameter: φ76.2 mm (φ3") Outer diameter: φ280mm (φ11")
	Wind Direction	Face-in / Face-out
Label Size (Without Liner)	Width	30 ~ 117mm (1.1" ~ 4.6") (Depends on application method)
	Length	30 ~ 120mm (1.1" ~ 4.7") (Depends on application method)
Ribbon	Size	Max. Length: 600m (236") Width: 39.5 ~ 111mm (1.5 ~ 4.3")
	Other	Wind Direction: Face-in / Face-out Core Diameter: φ25.4 mm (φ1")

FONTS & SYMBOLOGIES

Internal Fonts	Standard Bitmap	U, S, M, WB, WL, XS, XU, XM, XB, XL, OCR-A, OCR-B, Kanji, Chinese (GB18030, Big 5), Korean (KSX1001)
	Scalable Fonts	15 SATO Fonts Single and Double Byte Fonts (Korean, Chinese, Japanese)
Barcode	Linear	UPC-A, UPC-E, JAN/EAN, CODE39, CODE93, CODE128, GS1-128(UCC128/EAN128), CODABAR(NW-7), ITF, Industrial 2of5, Matrix 2of5, MSI, Customer Barcode, 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	PDF 417, Micro PDF, Maxi Code, GS1 DataMatrix, QR Code, Micro QR, Data Matrix (ECC200), Aztec
Composite Symbols		GS1 DataBar Composite, GS1 DataBar Truncated Composite, GS1 DataBar Stacked Composite, GS1 DataBar Stacked Omnidirectional Composite, GS1 DataBar Limited Composite, GS1 DataBar Expanded Composite, GS1 DataBar Expanded Stacked Composite

INTERFACE CHARACTERISTICS

Interface	Data Interface: LAN 10BASE-T/100BASE-TX (IPv4/IPv6, SNMPv1~v3 MIB-II, FTP, NTP, LPR, DHCP, Http/Https), RS-232C, IEEE1284 For configuration: USB 2.0 High-speed TypeA
External Signal Interface	Connector: 20 Pin (Terminal block: M3) and EXT (14 Pin)
Emulation	SZPL, SIPL, SDPL

OPERATING CHARACTERISTICS

Air (Under supply of oil-free, moisture-free clean air)	Pressure	0.45 ~ 0.5 MPa (4.5 - 5.0 Kgf/cm2)
	Consumption	Approximately 80 litres/min (Depends on application method, label size, application process capacity, and other conditions)
Environment	Operating	5~35℃/25~85%RH (without condensation)
	Storage	-5~60℃/25~90%RH (without condensation)
Electrical		Universal Auto-ranging Power Supply, 100-240 VAC +/-10%, 50/60 Hz
Power Consumption		Peak: 190W/190VA, Standby: 20W/30VA
Dimensions		W612mm×D325mm×H546mm (W24,09"×D12.79"×H21.49")
Weight		Approximately 29.5kg (65.03lbs) (CJ Type)

MISCELLANEOUS

Agency Approvals	RoHS, KC, IEC60950-1, EN60950-1, EN55032 Class A, EN55024
Features	Guidance Videos, 31 Language Display on LCD, Notification of Cleaning Timing, Head Check, Real Time Clock(Option), Password Lock, External Logo and Font Download, Turn-off LCD, Stand-by, Status Reply and more

OPTIONS

Accessories	Object Detection Sensor, I/O Relay Box, Pressure Roller and more

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