

GENERAL SPECIFICATIONS | S84NX/S86NX

PRINT SPECIFICATIONS		
Print Method	1) Direct thermal/Thermal transfer, 2) Direct thermal only	
Print Mode	Dispense, Continuous, Dispense & Print	
Resolution	S84NX	203 dpi (8 dots/mm), 305 dpi (12 dots/mm), 609 dpi (24 dots/mm)
	S86NX	203 dpi (8 dots/mm), 305 dpi (12 dots/mm)
Speed	S84NX	16 ips (406.4 mm/sec), 14 ips (355.6 mm/sec), 6 ips (152.4 mm/sec)
	S86NX	14 ips (355.6 mm/sec), 12 ips (304.8 mm/sec)
Print Area 1) Maximum Width	S84NX	4.1" (104.0 mm)
	S86NX	6.6" (167.5 mm)
Print Area 2) Maximum Length	S84NX	98.43" (2500.0 mm), 59.06" (1500.0 mm), 15.75" (400.0 mm)
	S86NX	98.43" (2500.0 mm), 59.06" (1500.0 mm)

MEDIA SPECIFICATIONS		
Sensor Type	Adjustable transmissive sensor for gap, Adjustable reflective sensor black mark, Paper end, Ribbon near-end/end	
Media Type	Roll (Die-cut, Continuous)	
Media	Width	S84NX 0.51" (13 mm) to 5.16" (131 mm)
		S86NX 2.13" (54 mm) to 7.09" (180 mm)
	Minimum length	Continuous mode 0.36" (9 mm)
		Dispense mode 0.51" (13 mm)
Thickness	0.002" (0.05 mm) to 0.012" (0.31 mm)	

RIBBON		
Width	S84NX	0.98" (25 mm) to 5.04" (128 mm)
	S86NX	2.32" (59 mm) to 6.99" (177 mm)
Length	1968.5 ft (600 m) on 1" (25.4 mm) ID core	
Wind	Face-in/Face-out, no setting change required	
SATO Genuine Consumables	For maximum print quality and optimum use, SATO recommends the use of SATO genuine consumables.	

MEMORY & PROCESSING SPECIFICATIONS	
Receive Buffer	2.95 MB
Memory	Flash memory: (CPU1) 2 GB+ (CPU2) 4 MB SDRAM: (CPU1) 256 MB+(CPU2) 64 MB

USER FRIENDLY SUPPORT TOOLS	
Large Status LED	Blue/Red
Display Panel	3.5" full-color LCD
Alarm Sound	Beep (4 volume settings)
Self Diagnosis	Head check, Auto sensor calibration
Simple Stand-alone Mode	Via USB; the number of printable label formats depends on USB memory size
Emulations	LCD selectable: SZPL, SDPL, SIPL
Remote Setting	Web browser, SATO All-in-One printer utilities
Remote Maintenance	SOS (SATO Online Services), SNMPv3

COMMUNICATION INTERFACES	
Standard	USB 2.0 (Type B), RS232C, Ethernet (Protocol TCP/IP: LPR, FTP, SNMPv3, NTP, HTTP, DHCPv4), External signal (EXT) interface
Optional	Wireless LAN interface
External Memory	N/A

OPTIONS	
Accessories	W-LAN kit, UHF RFID kit ISO18000-6, Type C (S84NX only)

FONTS	
Internal Fonts	17 bitmap SATO fonts, 30 scalable SATO fonts, Multi-national language support (47 languages/Unicode), Single and double byte fonts (Korean, Chinese, Japanese)

BARCODE SYMBOLOGIES SPECIFICATIONS	
Barcodes	Linear Code 39, Code 93, Code 128, Codabar (NW7), EAN8/13, GS1-Databar™, GS1-128 (UCC/EAN128), Interleaved 2/5, Industrial 2/5, JAN 8/13, Matrix 2/5, MSI, Bookland, Postnet™, UPC-A/E
	2D Symbolologies PDF417, MicroPDF, MaxiCode, GS1 DataMatrix, QR Code, Micro QR Code, Composite symbolologies, Aztec

OPERATING & ENVIRONMENT CHARACTERISTICS	
Electrical Requirements	Universal auto-ranging power supply, 100-240 VAC+/-10%, 50/60 Hz
Standards & Agency Approvals	Please contact SATO regarding agency approvals in your region.
Environment	Operating -5 to 40°C, 15-85% RH, Non-condensing
	Storage -20 to 60°C, 15-90% RH, Non-condensing

PHYSICAL CHARACTERISTICS	
S84NX	Dimensions Width: 9.65" (245 mm) Depth: 16.06" (408 mm) Height: 11.81" (300 mm)
	Weight DT/TT: 31 lbs (14.1 kg) DT only: 28 lbs (12.7 kg)
S86NX	Dimensions Width: 9.65" (245 mm) Depth: 18.22" (463 mm) Height: 11.81" (300 mm)
	Weight DT/TT: 34.1 lbs (15.5 kg) DT only: 30.8 lbs (14.0 kg)



Versatile print engines,
designed for demanding environments

S84NX S86NX

Print Engine Series



S84NX For high volume, S86NX 24/7 mission critical Print Engine Series print and apply labeling operations.



/ Feature overview

3.5-inch color LCD and dual-color LED indicators

Large color display for ease of operation. LED indicators help users quickly assess printing status and identify errors even from a distance.



Standard user interface

Users familiar with SATO's CLNX printers can operate the print engine in the same way. This allows for faster troubleshooting and less downtime when errors occur.

Built-in video tutorials

Instructional videos guide users to perform basic operations such as media loading, parts replacement and error resolution without wasting any time.

Smart print head

Usage of each print head can be tracked and monitored by its serial number via SOS (SATO Online Services) to enable timely replacement.

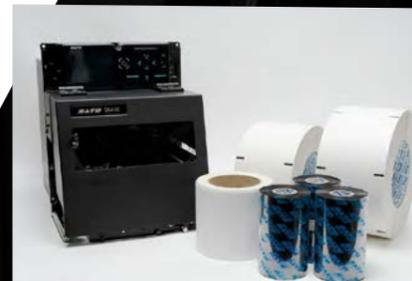
Versatile specifications to meet diverse needs

Left- or right-hand orientation; 4- or 6-inch print width; Direct thermal or thermal transfer printing; 203 dpi, 305 dpi or 609 dpi print resolution (for S84NX only)

RFID option (for S84NX only)

Users can use the print engine for printing and encoding UHF RFID labels/tags, configuring the necessary settings easily with SATO's All-In-One Tool (AIOT)*. RFID is gaining popularity as it promises increased productivity among other benefits.

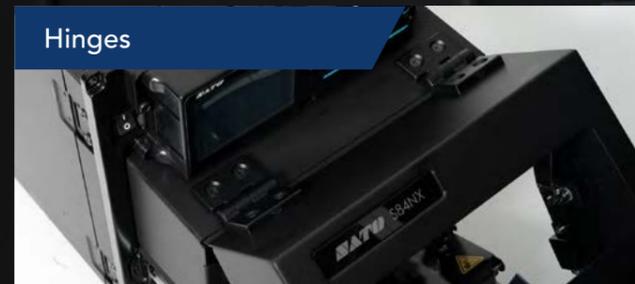
*A printer management utility that allows users to seamlessly configure SATO printers across system-wide infrastructure.



Robustness

Robust construction to lower damage risks and prevent downtime

Hinges



Larger hinges (when compared with legacy model) to provide extra strength for securing cover.

Pressure roller



New, durable roller assembly.

I-mark/gap sensor



Sensor assembly enhanced to stay firmly in place even under heavy-duty use. Stronger, deformation-resistant sensor cover.

Print head



Print mechanism framed with aluminum extrusions (instead of welded plates) for added ruggedness.

Improved dust and splash protection

Print engine can withstand use in dusty environments or where water may be splashed. (Note that product is not IP rated for dust or water resistance.)



/Ease of maintenance

User-replaceable parts with easy-to-access layout for ultimate serviceability

Toolless print head replacement

No tools needed. When replacing print head, users can open side panel to tuck away cables smoothly.



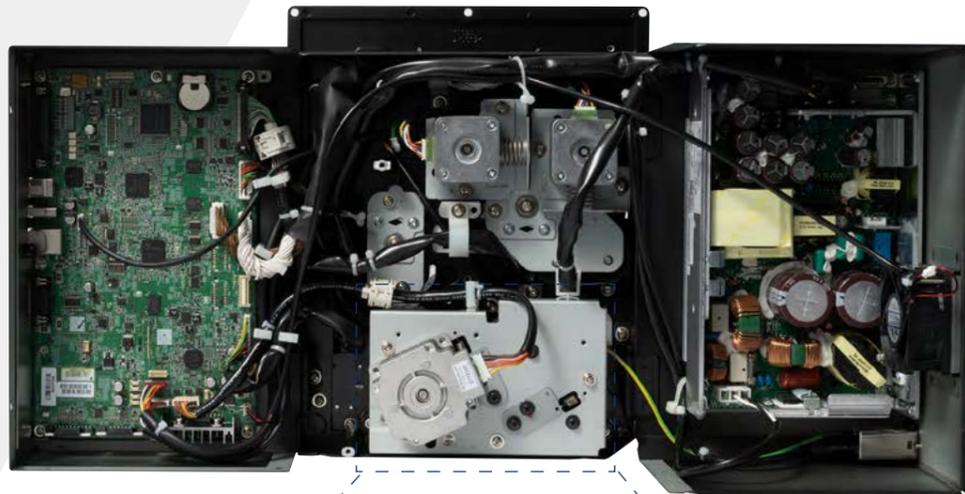
Easy roller replacement

Simply loosen one screw to remove roller. No need to unscrew all the way with the longer screws used. To allow easy identification, a different line marking is used for each type of roller shaft.



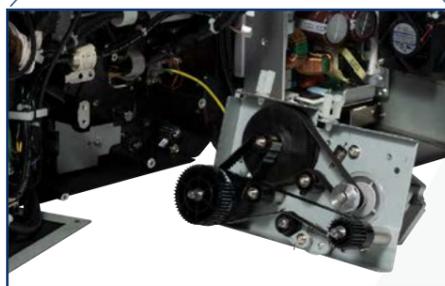
Convenient access to rear components

Rear cage opens outward on both sides so that internal components such as mainboard, gearbox and power supply can be accessed in one go.



Improved gearbox design

Gearbox elements are integrated into an assembly unit to facilitate removal. The new design also makes it easier to assemble, disassemble and repair gearbox.



/Usability

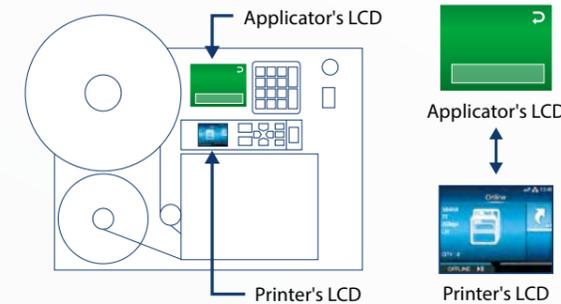
Intuitive operation and ease of use to maximize productivity

Standard emulations onboard

Support SZPL and other major printer languages, for seamless fit into existing systems.

One display concept

Enable centralized control of print engine operations from the applicator's display with a new command.



Multiple interfaces

Connect easily to different external devices. USB port added to the side for greater ease of connectivity.



New settings to minimize interruptions during printing

Enabling page clipping mode

Use this to clip off any remaining print data at label edge and continue printing without triggering errors.



Disabling cover open sensor

Use this to keep the cover open during printing, without triggering errors.



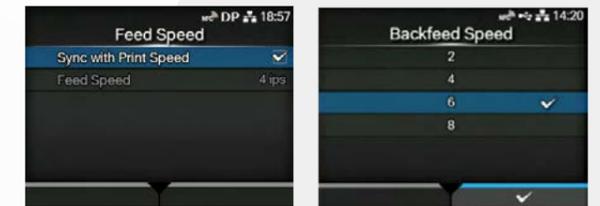
Multi-national language support

Support 31 display and 47 print languages, to meet the needs of global workforces and businesses.



Adjustable backfeed speed

Let users choose from multiple backfeed speed options, an enhancement from legacy model.



Customizable shortcut menu

Let users create custom shortcuts for quick access to operations they perform frequently.



New value-add with SATO's game-changing technologies

AEP

Intelligence inside the printer for standalone printing



SATO AEP (Application Enabled Printing) is a powerful onboard intelligence that enables customization of printer operations to simplify labeling processes and reduce business costs.

Achieve PC-less printing

Print independently without costly computers or network connections by using data input from on-screen keyboard or via peripherals such as scanners and scales.



Customize printer screen

Customize screen with company logo, helpdesk phone number, IP address, asset ID or other information based on user needs.



Print directly from PLC

Use SATO AEP to easily integrate printer with devices such as programmable logic controller (PLC) for direct and more efficient printing. No need for special printer firmware or device customization. SATO AEP also supports customization of the external signal (EXT) interface.

Streamline RFID printing and encoding

Upload log files automatically to user systems for traceability after printing and encoding RFID labels/tags.



SOS

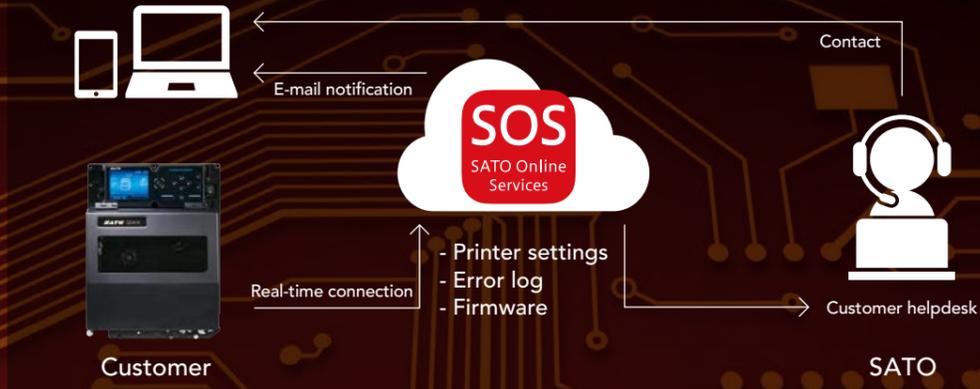
Virtual customer engineer, right on site



SOS (SATO Online Services) is a cloud-based maintenance solution that keeps printer operations running and visible.

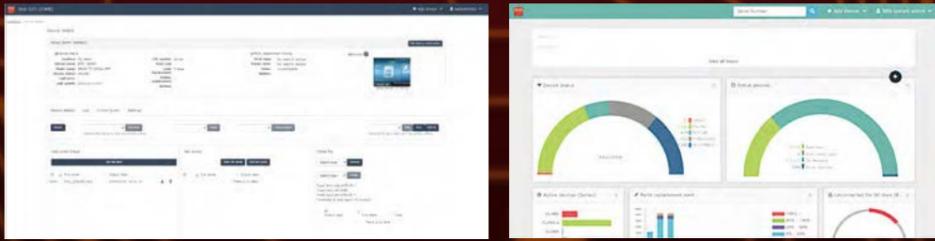


Video



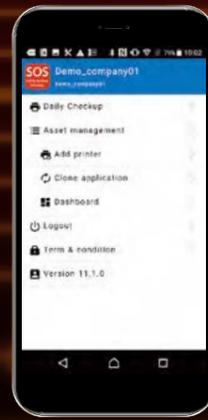
Enjoy preventative maintenance and quick troubleshooting

Use SOS to monitor cloud-connected printers 24/7 using their operating data. SOS sends notifications when expendable parts need replacement, and offers prompt and effective resolution to printer errors when they occur. This helps reduce unplanned downtime by as much as 86%*.
*Based on survey conducted by SATO in Japan.



Manage printers across multiple locations efficiently

View the status of all printers at a glance using the dashboard and easily adjust print speed, print darkness, print position or network settings remotely as needed. The dashboard can be accessed via SOS Web or on the go via SOS Smart App.



Video



Video



Video