

GENERAL SPECIFICATIONS | S84-ex/S86-ex

PRINT SPECIFICATIONS		
Printer Models		
Direct Thermal or Thermal Transfer Direct Thermal Only Ribbon Saver (S84-ex Only)		
Print Mode		
Dispense, Continuous		
S84-ex		
Print Resolution		
203 dpi (8 dots/mm)	305 dpi (12 dots/mm)	609 dpi (24 dots/mm)
Print Speed		
16 ips (406.4 mm/sec)	14 ips (355.6 mm/sec)	6 ips (152.4 mm/sec)
Print Area		
Maximum Print Width		
4.1" (104.0 mm)		
Maximum Length		
98.43" (2500.0 mm)	59.06" (1500.0 mm)	15.75" (400.0 mm)
S86-ex		
Print Resolution		
203 dpi (8 dots/mm) 305 dpi (12 dots/mm)		
Print Speed		
14 ips (355.6 mm/sec) 12 ips (304.8 mm/sec)		
Print Area		
Maximum Print Width		
6.6" (167.5mm)		
Maximum Print Length		
49.2" (1249.0mm)		
MEDIA SPECIFICATIONS		
Sensor Type		
Adjustable Transmissive Sensor for Gap, Adjustable Reflective Sensor for Black Mark, Paper End, Ribbon Near-end/End		
Media Type		
Die-cut Labels, Continuous Labels, Roll, 0.125" gap		
Media		
Width		
S84-ex 0.51" (13mm)–5.16" (131mm) S86-ex 2.13" (54mm)–7.09" (180mm)		
Minimum Length		
Continuous Mode 0.36" (9mm) Dispense Mode 0.51" (13mm)		
Thickness		
0.002" (0.05mm) – 0.012" (0.31mm)		
Ribbon		
Width		
S84-ex 0.98" (25mm) – 5.04" (128mm) S86-ex 2.32" (59mm) – 6.99" (177mm)		
Length		
1968.5 ft (600m) on 1" (25.4mm) 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	
2.95MB	
Memory	
48MB ROM, 64MB RAM	
USER FRIENDLY SUPPORT TOOLS	
Large Status LED	
Blue/Red	
Status LCD	
Normal/Orange	
Alarm Sound	
Beep (3 volume settings)	
Self Diagnosis	
Head Check Auto Sensor Calibration	
Simple Standalone Mode	
9 Formats	
Emulations	
LCD Selectable-SZPL, SDPL	
Remote Setting	
Web Browser SATO All-In-One Printer Utilities	
Drivers	
Windows, Linux, SAP Smart Forms, Mac OS X	
COMMUNICATION INTERFACES SPECIFICATIONS	
Standard	
USB2.0 (Type B) RS232C IEEE1284 Ethernet Protocol TCP/IP: LPR, FTP, TELNET, SNTP, SNMP Ver. 3, IPv4, IPv6 D-SUB 25pin EXT (14pin conversion cable included)	
Optional Interface	
Wireless LAN IEEE 802.11b/g/n Protocol TCP/IP: LPR, FTP, TELNET Security: WEP, WPA, WPA2, Dynamic WEP Bluetooth 2.0+EDR Class2 SPP	
External Memory	
USB Type A SD /SDHC Card	
OPTIONS	
W-LAN Kit Bluetooth Kit UHF RFID Kit ISO18000-6 Type C (S84-ex Only)	
FONT SPECIFICATIONS	
Internal Fonts	
Bitmap	
U, S, M, WB, WL, XS, XU, XM, XB, XL, OCR-A, OCR-B, Chinese (GB18030, Big5), Korean (KSX1001)	
Scalable	
CG Times, CG Triumvirate™, SATO GAMMA, SATO VICA, Thai, Arabic	
Downloadable fonts support	
Bitmap, True Type (1byte/2byte), Maximum 11.7MB	

BARCODE SYMBOLOGIES SPECIFICATIONS	
Barcodes	
Linear	
Code 39, Code 93, Code 128, CODABAR (NW-7),EAN8/13, GS1 DataBar™, GS1-128 (UCC/EAN128),Interleaved 2/5, Industrial 2/5, JAN8/13, Matrix 2/5,MSI, Bookland, POSTNET™, UPC-A/E Intelligent Mail Barcode	
2D Symbolologies	
PDF417, Micro PDF, Maxi Code, GS1 Data Matrix, QR Code, Micro QR Code, Security QR, Composite Symbolologies	
OPERATING & ENVIRONMENT CHARACTERISTICS	
Electrical Requirements	
Universal Auto-ranging Power Supply, 100-240VAC +/-10%, 50/60Hz	
Standards & Agency Approvals	
IEC 60950, CE Marking ,EN 60950-1, EN 55022 Class A, EN 55024, R&TTE, NEMKO-GS ,cMETus, UL60950-1/CSA C22.2 No. 60950-1, FCC, ICES-003, NMB-003,RCM,CCC,SRRC, KC,	
Environment	
Operating	
-5 to 40°C, 15-85% RH, Non Condensing	
Storage	
-20 to 60°C, 15-90% RH, Non Condensing	

PHYSICAL CHARACTERISTICS	
S84-ex	
Dimensions	
Width: 9.65" (245mm) Depth: 16.06" (408mm) Height: 11.81" (300mm)	
Weight	
Direct Thermal or Thermal Transfer Model: 30.2lbs (13.7kg) Direct Thermal Only Model: 27.1lbs (12.3kg)	
S86-ex	
Dimensions	
Width: 9.65" (245mm) Depth: 18.23" (463mm) Height: 11.81" (300mm)	
Weight	
Direct Thermal or Thermal Transfer Model: 30.2lbs (15.1kg) Direct Thermal Only Model: 27.1lbs (13.6kg)	

For more information, please visit
www.satoasiapacific.com or
scan QR code below



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Maximize productivity for 24/7 mission critical applications

SATO, Beyond Expectations

As a pioneer, SATO's flagship print engine pursues automatic print and apply machine's needs to expand its use in the world.



Easy to Use
Enhanced Connectivity
Quick Maintenance

Print Engine Family

- S84-ex and S86-ex cover the needs of 4 inch or 6 inch printing applications. Direct Thermal Only Model and Ribbon Saver model (S84-ex O nly) also available..

Ease of Operation

- 2 Color LCD and LED
 - The 2 color LCD and LED help operators easily understand the status of printers even though he works far from print and apply machines
- Face-in /Face-out Ribbon support
 - No setting change required to use both face-in and face-out ribbons
- Auto Sensor Calibration Function
 - No sensor level setting required.



Ease of Setting, Download and Upload

- Downloadable/Uploadable printer setting, font and firmware via SD / USB
 - Allows customers to set up printers easily without software tools.
- Uploadable printer buffer data and operation log via SD / USB
 - Helps analyze print operations and trouble shooting.
- Remote Printer Setting
 - Web Browser
 - SATO All-In-One Utilities

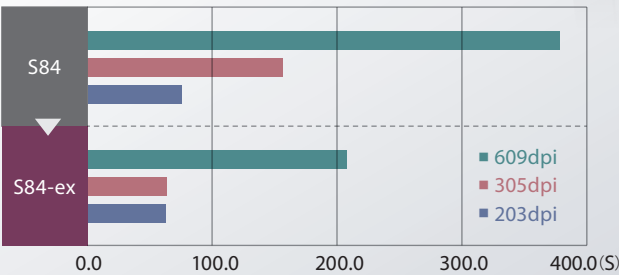


S84^{ex} / S86^{ex}

Fast Throughput and Print Speed

- S84/86-ex has best in class print speed (16 ips) .
- New PCB increases first label print speed and overall throughput.

Graphic 50 items printing



	S84		S84-ex
609dpi	375.6	-167.4	208.2
305dpi	156.7	-94.4	62.3
203dpi	75.6	-14.2	61.4

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Simple Standalone Mode

- Upgraded simple standalone mode provides independent operation via LCD.

Environment Friendly

- Ribbon Saver Model
 - The ribbon saver function reduces the use of thermal transfer ribbon.

Connectivity

Increased connectivity supports both legacy and future host environment

- Standard Multiple Interfaces
 - RS232C, IEEE1284, USB and LAN
- Optional Interfaces
 - Wireless LAN IEEE 802.11 b/g/n • Bluetooth
- D-SUB 25 pin External Signal Interface
 - 14pin Conversion Cable included
 - NPN/PNP Connection
- Network and Management (LAN)
 - SNMP Ver. 3, IPv6 Support



Standard Emulations Onboard

- Support SZPL and SDPL
- LCD Selectable

Multiple Languages Support

- Unicode
 - UTF8, UTF16 • WGL4
- Built-in Asian Font Support
 - Simplified Chinese • Traditional Chinese • Korean • Thai • Arabic
- TTF Download Function
 - 1byte and 2 byte • Max 11.7MB Capacity
- Multi Language LCD Menu
 - 9 languages

Ease of Maintenance

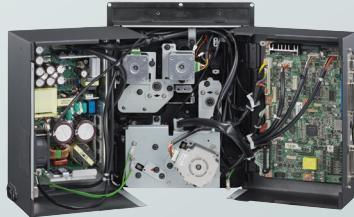
- Print Head Replacement
 - No tools required for print head replacement. Opening cable cover helps to change from both front or side.



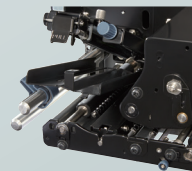
- Roller Replacement
 - Locking slide cover allows for fast and easy replacement of rollers.



- Back Side Structure
 - Convenient access to PCB, gears and power supply. The revised layout provides more room for easier maintenance to the backside.



- Sensor Cover
 - Non stick surface, prevents label jams and toolless design makes cover removal and clean easy.



- Gear Box Design
 - Universal gearbox supports all print resolution and reducing inventory and simplify the process.

Stable Operation

- Strong against vibration and static
 - Anti vibration and static design protect power supply and main boards.
 - Allowing the print engine to tolerate harsh environment.
- Reinforced belt design
 - The new belt and gear design reduce the belt wear and increase durability.