



S84-ex



S86-ex

S84 **ex**

S86 **ex**

Maximize productivity for 24/7 mission critical applications
SATO, Beyond Expectation

SATO's flagship print engines are used by the world's best print and apply systems.

Easy to Use

- Two Color Status LED and LCD
- Best-in-class Print Speed and Throughput
- Simple Standalone Mode Support
- Downloadable/ Uploadable Printer Settings, Log, Data, Firmware, via SD and USB



Quick Maintenance

- Easy Tool-less Printhead and Roller Replacement
- Convenient Access to Rear Cabinet
- Tool-less Sensor Cover Replacement



Enhanced Connectivity

- Multiple Interfaces On-board
- D-SUB 25 pin EXT Interface - NPN/PNP Connection
- Standard Emulations On-board
- Multi-national Language Support



PRINT SPECIFICATIONS
Method

Direct Thermal or Thermal Transfer,
Direct Thermal Only, Ribbon Saver (S84-ex Only)

Mode

Continuous, Dispense

S84-ex
Resolution

203 dpi (8 dots/mm)	305 dpi (12 dots/mm)	609 dpi (24 dots/mm)
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Speed

16 ips (406.4 mm/sec)	14 ips (355.6 mm/sec)	6 ips (152.4 mm/sec)
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Print Area
Maximum Width

4.1" (104.0 mm)

Maximum Length

98.43" (2500.0 mm)	59.06" (1500.0 mm)	15.75" (400.0 mm)
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S86-ex
Resolution

203 dpi (8 dots/mm)	305 dpi (12 dots/mm)
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Speed

14 ips (355.6 mm/sec)	12 ips (304.8 mm/sec)
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Print Area
Maximum Width

6.6" (167.5 mm)

Maximum Length

49.2" (1,249.0 mm)

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 0.125" Gap,
Continuous Labels, Roll

Media
Width

S84-ex 0.51" (13 mm) to 5.16" (131 mm)
S86-ex 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

S84-ex 0.98" (25 mm) to 5.04" (128 mm)
S86-ex 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

48 MB Flash, 64 MB RAM

USER FRIENDLY SUPPORT TOOLS
Large Status LCD

Blue/Red

Status LCD

White/Orange

Audible Alerts

Adjustable Volume Setting

Self Diagnosis

Head Check,
Auto Sensor Calibration

Simple Standalone Mode

Store Up to 9 Formats

Multi-national Language Support

Internal Scalable Fonts for Print,
Selectable LCD Languages

Emulations

LCD Selectable-SZPL, SDPL (Pre-installed)

Remote Setting

Web Browser,
SATO All-In-One Printer Utilities

Drivers

Windows, Linux, SAP Smart Forms, OSX

COMMUNICATION INTERFACES SPECIFICATIONS
Standard

USB 2.0 (Type B), RS232C, IEEE1284, Ethernet
(Protocol TCP/IP: LPR, FTP, TELNET, SNTP),
D-SUB 25 pin EXT (14 pin conversion cable
included)

Optional Interfaces

Wireless LAN, IEEE 802.11 b/g/n
(Protocol TCP/IP: LPR, FTP, TELNET
Security: WEP, WPA, WPA2, Dynamic WEP),
Bluetooth 2.0+ EDR Class 2 SPP

External Memory

USB Type A, SD/SDHC Card

OPTIONS

W-LAN Kit, Bluetooth Kit

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 (1 byte/2 byte),
Maximum 11.7 MB

BARCODE SYMBOLOGIES SPECIFICATIONS
Barcodes
Linear

Code 39, Code 93, Code 128, CODABAR (NW-
7), EAN 8/13, GS1 DataBar™, GS1-128 (UCC/
EAN 128), Interleaved 2/5, Industrial 2/5, JAN
8/13, Matrix 2/5, MSI, Bookland, POSTNET™,
UPC-A/E Intelligent Mail Barcode

2D Symbologies

PDF417, Micro PDF, Maxi Code, GS1 Data
Matrix, QR Code, Micro QR Code, Security
QR, Composite Symbologies

OPERATING & ENVIRONMENT CHARACTERISTICS
Electrical Requirements

Universal Auto-ranging Power Supply,
100-240 VAC +/- 10%, 50/60 Hz

Standard & 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

23 to 104°F (-5 to 40°C), 15-85% RH,
Non-condensing

Storage

-4 to 140°F (-20 to 60°C), 15-90% RH,
Non-condensing

PHYSICAL CHARACTERISTICS
S84-ex
Dimensions

Width: 9.65" (245 mm)
Depth: 16.06" (408 mm)
Height: 11.81" (300 mm)

Weight

Direct Thermal or Thermal Transfer Model:
30.2 lbs (13.7 kg)
Direct Thermal Only Model:
27.1 lbs (12.3 kg)

S86-ex
Dimensions

Width: 9.65" (245 mm)
Depth: 18.23" (463 mm)
Height: 11.81" (300 mm)

Weight

Direct Thermal or Thermal Transfer Model:
33.3 lbs (15.1 kg)
Direct Thermal Only Model:
30.0 lbs (13.6 kg)