GENERAL SPECIFICATIONS | S84-ex/S86-ex

SATO

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

Print Speed
16 ips	14 ips	6 ips
(406.4 mm/sec)	(355.6 mm/sec)	(152.4 mm/sec)

Print Area

Maximum Print Width
4.1" (104.0 mm)

Maximum Length
98.43"	59.06"	15.75"
(2500.0 mm)	(1500.0 mm)	(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
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*

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 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,
100-240VAC +/-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)

*Please contact your local SATO office for availability.

S84-ex

S86-ex

Industrial Print Engine

S84 ex / S86 ex

www.satothailand.co.th

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.

S84 ex / S86 ex

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 Only) also available.
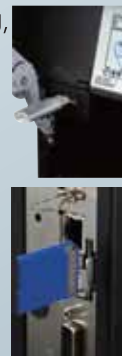
Ease of Operation

▸ 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.
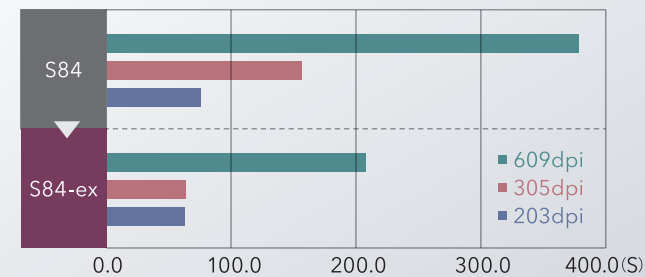
Ease of Setting, Download and Upload

▸ Downloadable and 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 troubleshooting.

▸ Remote Printer Setting
- Web Browser
- SATO All-In-One Utilities

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

			609dpi
			305dpi
			203dpi

(axis) 0.0 100.0 200.0 300.0 400.0 (S)

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

(S)

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

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
- 7 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 protects power supply and main boards.
- Allows the print engine to tolerate harsh environment.

▸ Reinforced belt design
- The new belt and gear design reduce the belt wear and increase durability.