

Beyond  
expectations.



S84-ex S86-ex



Industrial Print Engine

PRINTING SPECIFICATION		S84-ex			S86-ex	
Printing Method		Thermal and Direct Transfer or Direct Thermal Only Model				
Print Resolution		8 dots / mm (203 dpi)	12 dots / mm (305 dpi)	24 dots / mm (609 dpi)	8 dots / mm (203 dpi)	12 dots / mm (305 dpi)
Max. Print Speed		16 ips (406.4 mm/sec)	14 ips (355.6 mm/sec)	6 ips (152.4 mm/sec)	14 ips (355.6 mm/sec)	12 ips (304.8 mm/sec)
Max. Print Area	Width mm (inch)	104 mm (4.1")			167.5 mm (6.59")	
	Length mm (inch)	2500 mm (98.43")	1500 mm (59.06")	400 mm (15.75")	2500 mm (98.43")	1249 mm (49.17")
Processor		32-bit RISC-CPU 500MHz				
<b>CONSUMABLES SPECIFICATION (Recommended to use printer supplies manufactured or certified by SATO)</b>						
Sensor Type		I-Mark Sensor (Reflective), Label Gap Sensor (Transmissive). Paper-end. Ribbon near-end/end.				
Media Type		Roll or fan-fold die cut labels, Plain paper face stock, Synthetics and Continuous stock				
Media Thickness		0.05 ~ 0.31 mm (0.002" to 0.012")				
Label Size	Continuous	Width	13 to 131mm (0.51" to 5.16")			54 to 180 mm (2.13" to 7.09")
		Length	9 to 2503 mm (0.35" to 98.54")	9 to 1503 mm (0.35" to 59.17")	9 to 403 mm (0.35" to 15.87")	9 to 2503 mm (0.24" to 98.54") 9 to 1252 mm (0.35" to 49.29")
	Dispense	Width	13 to 131 mm (0.51" to 5.16")			54 to 180 mm (2.13" to 7.09")
		Length	Thermal Transfer Model: 13 to 359 mm (0.51" to 14.13") Direct Thermal Model: 18 to 359 mm (0.71" to 14.13")			
Ribbon	Width	Thermal Transfer Model: 13 to 359 mm (0.51" to 14.13") Direct Thermal Model: 18 to 359 mm (0.71" to 14.13")				
	Length	450 m (1476.4 ft.) when width is less than 39.5 mm (1.56") 600 m (1968.5 ft.) when width is equal or more than 39.5 mm (1.55")			600 m (1968.5 ft.)	
	Roll diameter	108 mm (4.25")				
	Core	Core diameter: Ø 25.4 mm (1")				
	Wind direction	Face-in/out, No Setting Change Required				
Ribbon Saving		Factory option (S84-ex only)				
RFID		RFID only available on the thermal transfer model				Minimum size of RFID label
<b>FONTS / SYMBOLOGIES</b>						
Internal Fonts	Standard Bitmap	U, S, M, WB, WL, XU, XS, XM, XB, XL, OCR-A, OCR-B, Chinese (GB18030, BIG5), Korean (KSX1001)				
	TTF Fonts	CG Times, CG Triumvirate, SATOGAMMA, SATOVICA				
	Encoding	Major Latin and Pan-European Code Pages (WGL4), GB18030 (simplified Chinese), BIG5 (traditional Chinese), KSX1001 (Korean), Thai (CP874), Arabic, UTF-8 and UTF-16BE (downloaded fonts)				
Downloadable fonts support		Bitmap, True Type (1byte/2byte), Maximum 11.7 MB				
Barcode	Linear	Code 39, Code 93, Code 128, CODABAR (NW7), EAN8/13, GS1-DatabarTM, GS1-128(UCC/EAN128), Interleaved 2/5, Industrial 2/5, JAN8/13, Matrix 2/5, MSI, Bookland, POSTNETTM, Bookland, UPC-A/E Intelligent Mail Barcode				
	2D Symbolologies	PDF417, Micro PDF, Maxi Code, GS1 Data Matrix, QR Code, Micro QR Code, Security QR code, Aztec Code and Composite Symbolologies				
Print Direction		Character data rotation: 0°, 90°, 180°, 270° / Barcode rotation: 0°, 90°, 180°, 270°				
<b>INTERFACE CHARACTERISTICS AND INTEGRATION</b>						
Standard Interfaces	USB	USB 2.0 type-B				
	LAN	Ethernet 10/100 Mbps / DHCP / Protocol: TCP/IP, LPR, FTP, TELNET, SNMP				
	RS232C	RS232C Standard (XON/XOFF, RTS/CTS)				
	IEEE1284	IEEE1284				
	EXT (I/O)	DSUB 25 pin (female) / Amphenol 14 pin (female) conversion cable is attached				
Optional Interfaces	Wireless LAN	IEEE 802.11/b/g/n autoswitching / Security: WEP, WPA, WPA2, Dynamic WEP				
	Bluetooth	Ver.2.0+EDR Class 2 (10 m) / Profile: SPP				
External Memory	USB	USB type-A (USB Host)				
	SD card slot	SD/SDHC				
Supported printer protocols		Standard: SBPL (SATO Barcode Printer Language) / Emulation Language: SZPL, SDPL				
Remote Setting		Web Browser, SATO All-in-One Printer Utilities				
Drivers		Windows, Linux, SAP, MAC OS				
<b>OPERATING CHARACTERISTICS</b>						
Power Requirements		Universal Auto-ranging Power Supply, AC100V±AC240V±10±, 50/60Hz				
Dimensions		W245mm (9.65") x D408mm (16.06") x H300mm (11.81")			W245 mm (9.65") x D417 mm (16.42") x H300 mm(11.81")	
Weight		Thermal Transfer Model: 13.7 kg Direct Thermal Model: 12.3 kg			Thermal Transfer Model 15.1 kg Direct Thermal Model: 13.6 kg	
Environment	Operating	-5° – 40 °C / 15 – 80 % RH (without condensation)				
	Storage	-20 – 60 °C / 15 – 90 % RH (without condensation)				
Display Panel		Graphic LCD (Horizontal 128 dots x Vertical 64 dots) with backlight (White/Orange switchable)				
<b>MISCELLANEOUS</b>						
Standards & Agency Approvals		IEC 60950, CE Marking, NEMKO-GS, cMETus, UL60950-1, CSA C22.2, EN 60950-1, FCC, ICES-003, NMB-003, RCM, CCC, SRRC, KC, ROHS compliant				
Functions – Useful features		Simple Standalone Mode, Multi Language support LCD message (7 Languages), USB Memory or SD card for data copy, Status return				
Functions – Self Diagnosis Checking		Thermal head check, Ribbon end detection, Test print, Head Lift detection, Auto Sensor Calibration				
RFID		For more information about qualified RFID labels / inlay combinations please contact SATO				
<b>OPTIONS (EUROPE ONLY)</b>						
Accessories		WLAN Kit, Bluetooth Kit, Ribbon Saver (factory option, S84-ex only ), UHF RFID S84-ex and S86-ex; Standard: ISO 18000-6 Type C, Frequency: 868 – 960Mhz, Protocols: EPC Gen 2 Class 1				