FP-2000 series specification

FUNCTIONAL SPECIFICATIONS

	FP-2200	FP-2100	FP-2000
Printing Technology	Direct Line Thermal Method		
Print Resolution	8 dot/mm (0.125mm/dot) 203dpi		
Printing Speed (Monochrome only)	Maximum 400mm/s	Maximum 300mm/s	Maximum 230mm/s
Paper Feed-out Direction	Top feed out		
Cutter Method	Partial cut / Full cut	Partial cut	
Paper Curl Ejection	Available	-	-
180dpi font mode	Available(Default)	Available(Default)	Available(Default)
16 Gray Scale printing	Available	Available	-
Black Mark Sensor or Paper Exit Sensor	Available (Factory Option) (BM sensor position: Left in front of Top cover) (PE sensor position: Left in front of paper exit)	-	-
Installation Direction	Two ways (Horizontal / Vertical)		
Paper	Roll Paper, Paper width: 80mm, 58mm, 50mm Outer Diameter of Roll Paper: less than φ83mm Paper Thickness: **53μm** - 85μm * 53μm thickness paper which width is 50mm and 58mm are not supported.		
Interface	USB	USB(2.0 Full-speed)		
	USB + RS232C(*1)	USB(2.0 Full-speed) + RS232C Serial(25pins)		
	USB + LAN(*1)	USB(2.0 Full-speed) + Wired, 10BASE-T/100BASE-TX		
	USB + Powered USB(*1)	USB(2.0 Full-speed) + Powered USB (2.0 Full-speed)		-
	USB + RS232C + LAN(*1)	USB(2.0 Full-speed) + RS232C Serial(9pins) + Wired, 10BASE-T/100BASE-TX		
Fonts (Body Face)	Font A (12x24dots), Font B (10x24dots or 9x24dots), Font C (8x16dots)		
Character Sets	ANK(95 char.), International Character(48 char.), Enlarged Graphics(128 char. x 20 pages), Download Character(95 char.),		
Barcode	Barcode Type: UPC-A, UPC-E, JAN13(EAN), JAN8(EAN), CODE39, ITF, CODABAR(NW-7), CODE93, CODE128		
	Two dimensional code: QR code, PDF417, DataMatrix		QR code
Receive Buffer	Max. 4KB		
Logo Store Memory	Max. 1088KB	Max. 1088KB	Max. 576KB
Acoustic Noise	Less than 55 dB(A)		
Paper Near End	Available		
Paper End	Available		
Internal Buzzer	Available to notice errors and printer status		
Software Interface	ESC/POS emulation		
Drawer Interface	2 Drawers Controllable		

SOFTWARE INFORMATION

Printer Driver	Windows (*1)	Windows driver
		OPOS driver (Ver.1.13)
		JavaPOS driver (Ver.1.10)
	Linux	JavaPOS driver (Ver.1.10) (*2)
		CUPS driver (*3)
Printer Utility	Software to set the printer's setup items(only Windows OS)	
SDK	Android: LAN: 2.3.3 or more USB: 3.1 or more iOS : LAN: 6.1.3 or more	

(*1)Support OS
    Windows® 10, Windows Server® 2016,Windows Server®, 2012 R2, Windows® 8.1 Windows Server® 2008 R2, Windows® 7, Windows Server® 2008, Windows Vista®
(*2)Support OS
    Linux SuSE11.4/13.2, Cent OS 6.4.
(*3)Support OS
    Ubuntu 14.04

SOFTWARE NEW FEATURE

		FP-2200	FP-2100	FP-2000
Firmware	Optimum power printing	Printer calculates the density of print data before printing. Depending on the print density, printer controls power and speed to print clearly. If other powers are used, this function can be selected by CE mode.		
	VT Compression setting	Print data is compressed vertically by Setup setting. Driver setting is not necessary, and it can save the paper.		
	Retry print	Approx. 200 cm	Approx. 40 cm	-
		When printer fails to print, the print data remaining in printer is reprinted.		-
	Cutter cleaning mode	Enter into Maintenance mode, open the cover, and Cutter automatically appears. After cleaning, just close the cover.		
	Log function	Printer internal data process can be logged by using Log tool. It judges whether the problem is occurred in Printer or other causes.		
	Mute mode	For application programmers, Buzzer sound can be set "no sound" during testing.		
Drivers and Utilities	Compatible with FP-1000 drivers and utilities	FP-2000 series printer can be used without replacement of driver from FP-1000 series if the user does not want to change settings including Android / iOS SDK		
	Multi font printing via OPOS driver	Same as Windows Driver, any fonts in Windows (True type font) printing is available.		

RELIABILITY

		FP-2200	FP-2100	FP-2000
MCBF (Mean-cycle-between-failure)		70million Lines		60million Lines
MTBF		Main Board : 360,000H		
Printer Mechanism Life		20 million line-feed		
Consumable Life	Print Head	150km 150million pulse		100km 100million pulse
	Cutter (*)	3 million times of cut	2 million times of cut	1.5 million times of cut
Average transaction		500 transactions/day (One transaction: 25LF + 1cut)		

* : Recommended Normal paper use(75um)

PHYSICAL SPECIFICATIONS

		FP-2200	FP-2100	FP-2000
Power Requirements		24V±10% (AC Adapter) 100 - 240V, 50/60Hz, Single Phase		
Power Consumption	during standby	0.98W or less		
Ambient Temperature		Operation guarantee: 0 °C to 40°C Print quality guarantee: 5 °C to 35°C		
Relative Humidity		Operation guarantee: 10 % RH to 95% RH Print quality guarantee: 10 % RH to 85% RH		
Dimensions		- Normal Model: 5.0(W)x6.8(D)x4.9(H) inch		
Weight (without the packing box)		Under 1.0kg		
Cover Color		Ocean Black & Royal White		
Others				

Note:
<Features>
- 3 models are available (Premium / Standard / Value).
- Maximum printing speed : **400 mm/sec with Premium model,** One of No.1 speed printers in the market!
- High endurance cutter: 3million times of cut
- Versatile printer installation available (Horizontally & Vertically setting, Wall amount is easy with only two screws)
- Small Footprint
- Simple-to-Use Utilities, All compatible software with FP-1000 series
- Easy-to-Use Drop-in paper loading