

FUJITSU 1STATION THERMAL PRINTER FP-2000 series



FP-2000 – Value model



FP-2100 – Standard model



FP-2200 – Premium model

Fujitsu Single Thermal Printer, **FP-2000 series**, achieves high reliability and good cost-efficiency for Receipt printing with POS system or other scenes such as Order bill printing in the commercial kitchen, in the Kiosk system, and Queuing system.

- Compact & Stylish Body – fit into the fabulous shop interior
- Small footprint – Easy to set in Kiosk system
- All accessories in a Box
- One of the Highest speed printer in the market - 350mm/s + a
- High reliable mechanism – Maximum 3 million cuts
- Horizontal & Vertical Use
- Paper Curl Adjust Function – Standard function with Premium Model

Mechanical Features



Highest Speed achieved – 350mm/s + α

Printing speed of FP-2200 is the highest in its price range. This is achieved through our advanced mechanical design technology.

FP-2000	230mm/s
FP-2100	300mm/s
FP-2200	350mm/s+α (Target)

Throughput Enhancement

Optimum driver/firmware technology and High speed paper feed mechanism enhances the throughput. This enables customers not to waste time. (These values are target.)

Comparison of throughput with other companies.

(Time from the start of data transfer to the completion of print)



Print condition: Windows 7, USB Interface,
250mm Receipt length with our test pattern

High Reliability Mechanism

Auto Cutter Life	FP-2000 1.5 million cuts
	FP-2100 2.0 million cuts
	FP-2200 3.0 million cuts (Target)
Thermal Head Life	150km
Printer (MCBF)	60million lines

Energy Saving (Target)

FP-2000 complies with the New Energy Star Program. Also, the power consumption is 0.5 W at the waiting mode. (at using USB interface only)

Wall-hanging feature

All you need is two screws. Just fasten these screws on the wall, and hook the two holes of printer on them.



With two screws

(Image)



No Hazardous Substances containing

In addition to RoHS directives in Europe, FP-2000 complies Fujitsu strict standard of Prohibited substance standard.

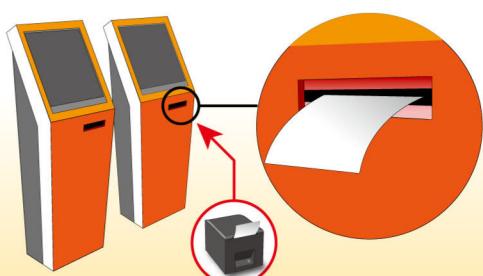


Horizontal/Vertical Use

Depending on using environment, FP-2000 can be set horizontally or vertically. When using it vertically, printing direction can be rotated 180 Degrees. Paper near end can be detected for both horizontal and vertical settings.



To set the printer inside the Kiosk system, the simple design of outer case fits into the system. Whichever setting in both vertical or horizontal, Paper can be fed out smoothly because any wasting space is not existed between the paper exit of printer and the surface of Paper exit of Kiosk machine



Interface

USB is a standard interface with Drawer Kick connector and AC Connector on the Main Board. Also, various optional interface cards are available for your using environments.(Dealer Option)(Image)



LAN I/F



LAN+RS232C(9pin) I/F



RS232C(25pin) I/F



Powered USB I/F
(FP-2100&2200)



Bluetooth I/F

Various paper – Thin paper available

FP-2000 series enable you to choose various kinds of paper;
Print Width 58mm/80mm, Maximum outside diameter φ83mm, Paper thickness 53μm～85μm.

Paper Curl Adjustment Function (FP-2200 only)

When the end of paper roll is close, the paper curl becomes strong, and it is hard to show the printing surface. This function loosens the curl of paper to pass the receipt to the customer easily.



※This effect differs depending on humidity, temperature and your using environment.

※Receipt length 10cm

Software Features



180dpi font printing algorithm

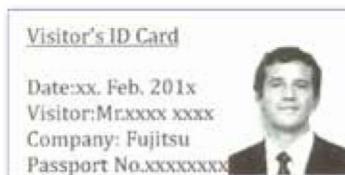
3 types of Font size such as Font A, B, and C are available.
Also, you can flexibly set the font like Extended Mode with approximately 180dpi size. If you are using 180dpi printer, you don't need to change your application when you change it to FP-2000series.
Setup or Setup utility can set "180dpi font"



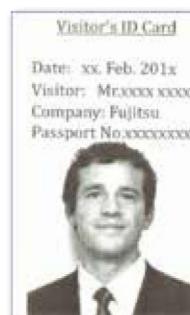
16 Gray Scale image printing (FP-2200,FP-2100 only)

16 Gray scale function outputs vibrant and clear images even with monochrome printing. This is useful for printing coupons, Logo on the receipt for advertisement, and ID card printing.

Available via Windows Driver and OPOS Driver.(FP-2100,FP-2200 available)



Horizontal printing



Vertical printing

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 the black density is high, printer automatically calculates the optimum speed to have the optimum temperature on the thermal head, and it effects clear printing without any white line or white band on the printing.

Enhanced Drivers - compatible with FP-1000 series

Various Drivers and Software are available with an easy Software installer. All of FP-1000 drivers and utilities are compatible. If you don't change the settings of FP-1000 series when you replace printer to FP-2000 series, you don't need to change them.

Printer Driver	Windows	Windows driver (Plug & Play Available) OPOS driver (Ver.1.13) JavaPOS driver (Ver.1.10)	Windows® 10, Windows Server® 2016, Windows Server® 2012 R2, Windows® 8.1, Windows Server® 2008 R2, Windows® 7, Windows Server® 2008, Windows Vista®
	Linux	JavaPOS driver (Ver.1.10) CUPS driver	Linux SuSE11.4/13.2, Cent OS 6.4. Ubuntu 14.04
Printer Utility		Software to set the printer's setup items(only Windows OS)	
SDK		Android : LAN/ Bluetooth : 2.3.3 or more. USB : 3.1 or more iOS : LAN/Bluetooth : 6.1.3 or more	

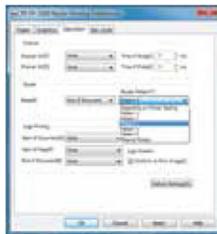
compatible with FP-1000

Kitchen Printer Functions

FP-2000 has various functions for Commercial Kitchens. Order receipts can be printed for Ordering systems.

Buzzer beeps when receipt printed.

Buzzer is a standard equipment for the notice of order receipt printed. Various functions like Buzzer On/Off and 5 patterns of beep sound suite versatile restaurant environment.
Ex. You can select different sound patterns for Foods and beverages.



Barcode / 2-Dimension code

FP-2000 supports Barcodes and 2-Dimension codes (QR code).



12345678



12345678

Ex.) Code128

Ex.) QR code



Ex.) PDF417
(FP-2100&2200)

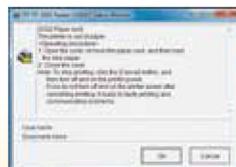


Ex.) Datamatrix
(FP-2100&2200)

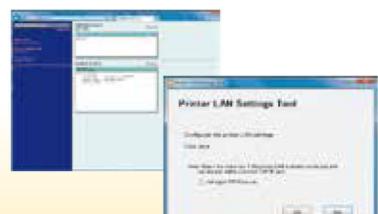
Versatile Utility

Status Monitor to notice errors

Any errors like paper out can be notified at once by pop-up notice.



LAN Utility – IP address setting is Easy.



Android™ SDK and iOS SDK Available

Not only Windows Driver, SDKs(Software Development Kit) for Android and iOS are provided.
(See the chart below for the available interfaces.)

USB, LAN, Bluetooth	PC	Tablet Devices
Available interface of Android SDK		Available interface of iOS SDK
USB	LAN	Bluetooth

Available interface of Android SDK

USB LAN Bluetooth

✓ ✓ ✓

Available interface of iOS SDK

USB LAN Bluetooth

— ✓ ✓

Full Cut / Partial Cut is Switchable by Windows Driver (FP-2200)



Large Logo Store Memory – 1088KB

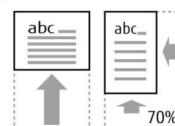
Image data can be stored up to 1088KB. You can store several Logo data.
(FP-2100/FP-2200)

Running cost can be saved

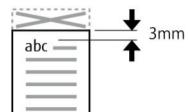
Reduced print function of Windows Driver and Top Margin reduced function save your paper.
Running cost and environmental load can be reduced.

Reduced printing

- 1/4 reduced vertically
- 1/2 reduced vertically
- 80mm width paper
→convert to 58mm



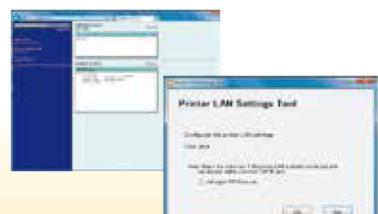
Top Margin 3mm



** Take off each receipt every time after printing in case of 3mm setting.

Utility for LAN Interface

The original tools for network environment are well-supported with using Quick Setup to set IP. Also, setup from Web Browser is available.



Usage

FP-2000 series are designed not only for receipt printing with POS system including mobile POS system, but also for mounting inside Kiosk machines. Also, printing order entry tickets at the commercial kitchen is available. This printer can be used in Retail, Hospitality, and all other industries.

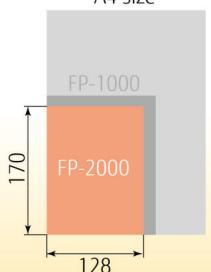


Appearance

Simple & Compact design

FP-2000 achieves the compact outline W128xD170xH125mm. This contributes the small shop which has a limited space for installation. (-13% compared to our previous model.) Black or White cover is available.

A4 size



"All-in-One" in a Box

All accessories to use this printer are prepared in one box. When you open the box, setup connecting power cable and interface cable, and run the printer.

FP-2000



Quick Start Guide



Interface cable(USB)



Paper roll for test



FUJITSU FP-2000 Specifications

Model	FP-2200(Premium Model)	FP-2100(Standard Model)	FP-2000(Value Model)
Printing Technology	Direct Line Thermal Method		
Print Resolution	8 dot/mm (0.125mm/dot), 203dpi		
Printing Speed (Monochrome Only)	Max. 350mm/s + α	Maximum 300mm/s	Maximum 230mm/s
Paper Feed-out Direction	Top feed out		
Cutter Method	Full/Partial cut	Partial cut	
Installation Direction	Two ways (Horizontal / Vertical)		
Paper	Paper width Outer Diameter of Roll Paper Paper Thickness	80mm, 58mm, 50mm less than φ 83mm 53μm - 85μm	
Maximum Print Width	50mm with paper 58mm with paper 80mm with paper	45mm (360dots) 48mm (384dots) or 52.5mm (420dots) 64mm (512dots) or 72mm (576dots)	
Font size and Column *1		203dpi(Normal Mode) Font A (Column) Font B (Column) Font C (Column)	Extended Mode Font A (Column) Font B (Column)
Paper width 50mm	Body Face	12x24 (30) 9x24 (40)	8x16 (45) 12x24 (30) 10x24 (36) 9x24 (40)
	Letter Face	11x22 (30) 9x22(40)	8x13 (45) 11x22 (30) 9x17 (36) 9x22(40)
	Body Face	12x24 (32 or 35) 12x24 (30) 9x24 (42 or 46) 9x24 (40)	10x24 (38 or 42) 8x16 (48 or 52) 8x16 (45) 12x24 (32) 12x24 (30) 10x24 (38 or 42) 9x24 (42 or 46)
	Letter Face	11x22 (32 or 35) 11x22 (30) 9x22 (42 or 46) 9x22 (40)	9x17 (38 or 42) 8x13 (48 or 52) 8x13 (45) 12x24 (32) 12x24 (30) 9x22 (38 or 42) 9x17 (42 or 46) 9x22 (36) 9x17 (40)
	Body Face	12x24 (42 or 48) 12x24(42) 9x24 (56 or 64) 10x24 (51) 9x24 (56)	10x24 (51 or 57) 8x16 (64 or 72) 8x16 (64) 12x24 (42 or 48) 12x24 (42) 10x24 (51 or 57) 9x24 (56 or 64) 10x24 (51) 9x24 (56)
	Letter Face	11x22 (42 or 48) 11x22(42) 9x22 (56 or 64) 9x17 (51) 9x22 (56)	9x17 (51 or 57) 8x13 (64 or 72) 8x13 (64) 12x24 (42 or 48) 12x24 (42) 9x22 (51) 9x17 (56) 9x22 (51) 9x17 (56)
Character Sets	ANK(95 char.), International Character(48 char.), Enlarged Graphics(128 char. x 20 pages), Download Character(95 char.),		
Barcode	Barcode Two dimensional code	UPC-A, UPC-E, JAN13 (EAN13), JAN8(EAN8), CODE39, ITF, CODABAR(NW-7), CODE93, CODE128 QR code(Common to all models), PDF417 & DataMatrix(FP-2200&FP-2100)	
Receive Buffer	Max. 64KB		
Logo Store Memory	Max. 1088KB(FP-2200/2100)		Max.576KB
Paper Near End	Available		
Paper End	Available		
Internal Buzzer	Available to notice errors and printer status		
Interface *2	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 + Bluetooth(*1)	USB(2.0 Full-speed) + Bluetooth	
	USB + Powered USB(*1)	USB(2.0 Full-speed) + Powered USB (2.0 Full-speed)	Not Available
	USB + RS232C + LAN(*1)	USB(2.0 Full-speed) + RS232C Serial (9pins) + Wired, 10BASE-T/100BASE-TX	
Software Interface	ESC/POS emulation		
Drawer Interface	2 Drawers Controllable		
Software	Printer Driver	Windows	Windows driver OPOS driver (Ver.1.13) JavaPOS driver (Ver.1.10) *3
		Linux	JavaPOS driver (Ver.1.10) *3 CUPS driver Ubuntu 14.04
			Software to set the printer's setup items(only Windows OS)
	Printer Utility		Android : LAN/ Bluetooth : 2.3.3 or more. USB : 3.1 or more iOS : LAN/Bluetooth : 6.1.3 or more
RELIABILITY *4	SDK		Made for iPod iPhone iPad Android™ Bluetooth
MCBF (Mean-cycle-between-failure)	60million Lines		
	Print Head	150km	
	Cutter Life(times of cut)	3 million	2million
Power Requirements	DC Input: +24VDC±10% AC Input: 100 - 240V, 50/60Hz, Single Phase		
Power Consumption	During standby 0.5W or less(Target) Average during operating 38W or less, Maximum 150W 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	Standard Model: 128(W)x170(D)x125(H)mm, 5.0(W)x6.8(D)x4.9(H) inch		
Weight (without the packing box)	Standard Model: 1.2kg		
Cover Color	Black & White		

*1 Bolded Font Size and Column shows 180dpi fonts

*2 Standard Interface is USB, and Interface card can be selectable as an option for other interfaces.

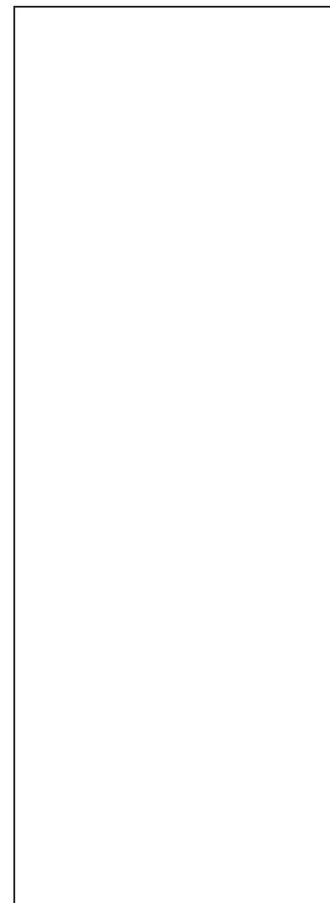
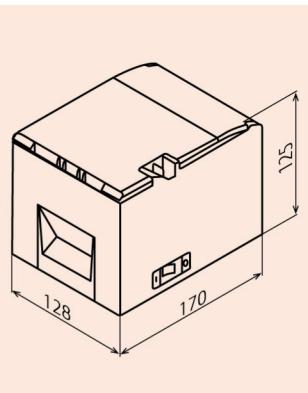
*3 JavaPOS Driver supports RS232C Interface and USB Interface.

*4 Operation condition is under 500 transactions/day(1transaction=25LF + 1cut), 340days/year, print duty less than 9%, and the life of Head or Cutter with using specified paper by our company. If unspecified paper is used, the life of printer might be shortened than expected.

Also, it might be a cause of the trouble of the printer.

- All specifications are subject to change without notices.

Dimensions



Super green product is the product which complies with Fujitsu group original severe environmental standard



FUJITSU ISOTEC LIMITED

Business Promotion Division

Global Sales and Marketing Department

135, Higashinozaki, Hobara-machi,
Date-shi, Fukushima,
960-0695, Japan.

Phone: +81-24-574-2236 Fax: +81-24-574-2382

URL: <http://www.fujitsu.com/jp/fit/en/>

Email: fit-gsm@cs.jp.fujitsu.com