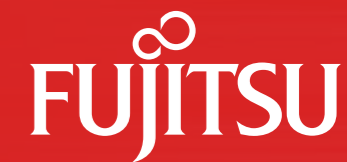


* Mechanical specification is in the previous page.



Software & Driver for FP-2200, FP-2100, FP-2000

| | | | | |
|--------------------|----------------|---|---|--|
| Software | Printer Driver | Windows | Windows driver | Windows Server® 2019, Windows Server® 2016, Windows® 10, Windows Server® 2012 R2, Windows® 8.1, Windows Server® 2012, Windows® 8, Windows Server® 2008 R2, Windows® 7, Windows Server® 2008, Windows Vista®, Windows Embedded for Point of Service (WEPOS), WEPOS Ready 2009, WEPOS Ready 7 *3 |
| | | | OPOS driver (Ver.1.13) | |
| | | Linux | JavaPOS driver (Ver.1.10) *3 | |
| | | | CUPS driver | Linux SuSE11.4/13.2/42.3, Cent OS 6.4/7.4, Ubuntu 12.04/14.04/17.4 |
| Printer Utility | | Software to set the printer's setup items(only Windows OS) | | |
| SDK | | Android : 6.0 or more iOS : LAN: 6.1.3 or more, Bluetooth: 8.0 or more | | |
| Language selection | | English, Simplified Chinese, Traditional Chinese, Korean, Thai, Arabic | | |
| Language *7 | Character Sets | 1 byte | Alphanumeric character(95), International character(16 sets: Gothic), International character(14 sets: Mincho), Enlarged graphics(128 x 21pages: Gothic), Enlarged graphics(128 x 9pages: Mincho (It contain a Thai page)), Downloaded registration(95) | |
| | | 2 bytes | Hangul character(8227), Big5-2003 character(13501), GB18030-2000character(28427), Use-defined Kanji(94), HKSCS(5032) | |
| | Code page | PC437, Katakana, PC850, PC860, PC863, PC865, WPC1252, PC866, PC852, PC858, Thai code page, MIK, PC857, Thai code 18, PC864, PC851, PC869, ISO8859-2, ISO8859-7, PC866 Type 2, TCVN 5712:1993 VN1) JIS (1st, 2nd, 3rd level.), KS code, GB18030-2000, PC864, PC864EXT, WPC1251, WPC1256, ISO8859_6, MAC10004, Big 5 (Including HKSCS font) | | |

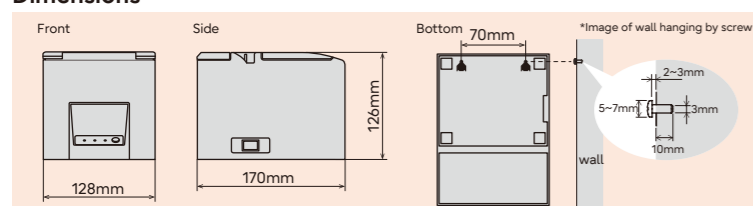
Reliability

| Model | FP-2200 | FP-2100 | FP-2000 |
|-----------------------------------|-------------------------------|----------|---------------------------|
| RELIABILITY *4 | | | |
| MCBF (Mean-cycle-between-failure) | 70million Lines | | 60million Lines |
| MTBF (Mean-Time-between-failure) | Main Board : 360,000H | | |
| Printer Mechanism life | 25 million line-feed | | 20 million line-feed |
| Print Head | 150km 150million pulse | | 100km 100million pulse |
| Cutter Life(times of cut) | 3million (Full cut: 2million) | 2million | 1.5million |

Physical

| Model | FP-2200 | FP-2100 | FP-2000 |
|---|---|--|---------------|
| Power Requirements | DC Input: +24VDC±10% AC Input: 100 - 240V, 50/60Hz, Single Phase | | |
| Power Consumption | Standby | During standby 1W or less (40mA) (USB interface use) | |
| | Operation (Average) | 30W or less (1A) (USB interface use) | |
| Protecting from Inrush current | Available | Available | Not Available |
| Countermeasure for ESD (IEC61000-4-2)*6 | Direct discharge | Contact discharge: 0~8kV, Air discharge: 0~15kV | |
| | Indirect discharge | 0~15kV | |
| Temperature | Operation guarantee: 0 °C to 40°C Print quality guarantee: 5 °C to 35°C | | |
| Humidity | Operation guarantee: 10 % RH to 95% RH Print quality guarantee: 10 % RH to 85% RH | | |
| Dimensions | 128(W)x170(D)x126(H)mm, 5.0(W)x6.8(D)x4.9(H) inch | | |
| Weight (without the packing box) | 1.0kg | | |
| Cover Color | Ocean Black & Royal White | | |
| Standard / Regulations | Safety | UL/CSA, TUV-mark, BIS, CCC, CB Test certificate, RCM, KC | |
| | EMC*5 | FCC Class A, EN 55022 Class A, RCM (AS/ NZA CISRR Class A) | |
| | Other | CE Mark, FUJITSU Super Green Product | |

Dimensions



*1 Italic character for Font Size and Column shows 180dpi fonts mode
 *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 FUJITSU. 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.
 *5 EMS for Wireless interface (Bluetooth model and Wireless LAN) is different depending on each country. Please contact to confirm it.
 *6 The values of Interface for LAN and LAN+RS232C (9pin) are TBA.
 *7 Language is different depending on products.
 All specifications are subject to change without notices.



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Rev.06 202209

FUJITSU FP-2000 series

1 Station Thermal POS Printer

Ultra high speed, 400mm/sec

Multi-function & Compact Design

FUJITSU Super Green Product

FUJITSU advanced printing algorithm

Dual printing mode, 180dpi & 203dpi

New compression printing mode

FP-2200 400mm/sec.

FP-2100 300mm/sec.

FP-2000 230mm/sec.



Watch movie

FP-2000 Introduction Video



Rev.06

Good effect for running cost

■ Helping paper consumption

- Helping paper consumption 30% OFF by printing thin (53μm) paper.
(*Comparing with 75μm)
- Reduced printing by printer driver

■ Non-synchronous thermal head control technology

- Compression printing with high grade quality by printer

Stress free operation

■ Non-waiting ultra high speed printing & Throughput

■ User friendly functions

- Removing Paper curl function
- Retry printing
- Alarming for Paper Near End (PNE), Paper End(PE), Cover Open

High quality printing by the new FUJITSU algorithm

■ Automatic optimum power printing mode

■ 16 gray scale printing

For End users

Advanced connectivity for hardware

■ Protecting inrush current

■ Countermeasure for ESD (Level 4 of IEC61000-4-2)

High quality printing by new FUJITSU algorithm

■ Automatic optimum printing mode

(For POS system which only provides low power)

■ Simulated 180 dpi printing mode

Supporting customization for your POS system

■ Printer's design

■ Software, commands.

*All technical manuals are completed

For POS system
&
KIOSK

Why FUJITSU FP-2000 series?

Salable printer for your business

■ All accessories in one printer box

■ Selectable interface cards

Contribute to the replace business

■ New FUJITSU advanced printing algorithm

- Support 180dpi & 203dpi with 1 thermal head
- Automatic optimum printing mode

■ Low field failure rate

Appropriate printer for international business

■ Multi language equipment

■ Covering safety standard for each region

For Distributor
&
Dealers

For System
Integrators

Completed supports for your integration

■ Completed drivers & software

- Windows, OPOS, Java, CUPS, Utility, SDK(Android, iOS)

Customization support for hardware / software

- Fiscal printer supports
(providing module, without board)
- Customization for software, commands

Advanced connectivity & integration to your system

■ No need to uninstall drivers & utilities

(FP-1000 series)

■ Versatile Utility

- LAN utility, Status Monitor

Certain Serviceability for the trouble

■ Log functions

- Receiving host data & printer's status information

■ Completed technical documents

- Maintenance manual, Command specifications, and so on

User friendly printer by FUJITSU mechanical design

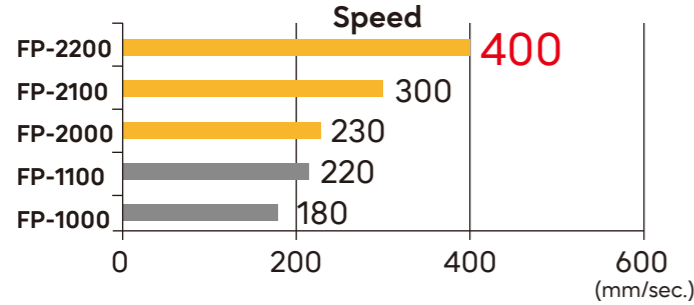


ECO platform design printer for users and environment

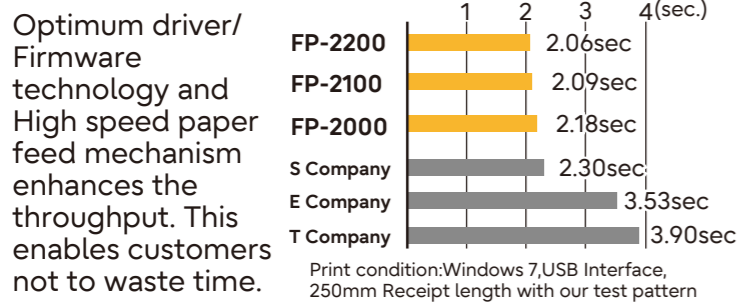
FP-2000 series is adapted simple cover design (top & middle cover) by clean and recyclable material for environment. Moreover, FP-2000 series are composed by few parts quantities including screws not only for eco friendly but also for making maintenance easy for users. FP-2000 series are well considered printer for users and environment.

Ultra high speed printing in the class

~ Achievement of "Non-waiting" printing ~



400mm/s is the Max. printing speed of FP-2200 with excellent printing quality in POS thermal printers in the world. FP-2100 and FP-2000 are also more enhanced printing speed than previous models. (360mm/sec: At 50mm, 58mm use of width)

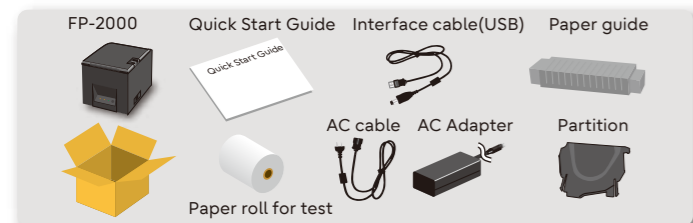


*Throughput: The speed from pressing enter to finish of printing 1 receipt

All in one box design

~ FP-2000 series have everything you need ~

All accessories to use this printer are prepared in one box. FP-2000 series can cover the procurement cost and time for preparing accessories. Accessories are different depending on model



Seeking usability design for user's operations

FP-2000 series has 2 types of paper feed, Top-feed type and Front feed type (vertical usage) depending on user's operations.

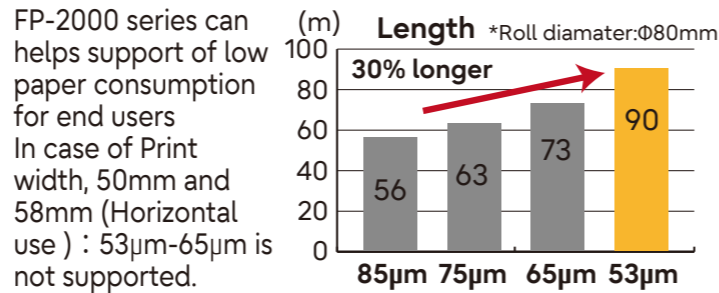


Besides this, the Paper Guide Cover is added as an accessory to all models (FP-2200, FP-2100, FP-2000) as the updated function. This Paper Guide Cover helps paper feed angles depending on user's usage.

Printing for thin paper (53µm)

~ Helping paper consumption 30% OFF ~

FP-2000 series support printing for thin paper thickness(53µm). Comparing with 75µm thickness, there is 30% difference of receipt consumption.



Paper curl adjustment function

~ Stress free operation ~

When the end of paper roll is closed, the paper curl becomes strong, and it is hard to pass the receipt straightly to show the receipt's surface.



This function loosens the strong curl of paper, and it helps for users to pass the receipt to the customers easily. (FP-2200 only)



Cutter mechanism for paper jam

~ Consideration design for trouble ~

When paper jam happened, cutter position need to be adjusted to take out jammed paper. However, even if paper jam is happened accidentally by FP-2000 series, users just power off, cover open, take out jammed paper, cover close and power on. Users don't have to operate cutter position because when printer power on, the cutter is set to initial position.



FUJITSU advanced algorithm software

Retry printing

~ Trouble free function when printer stops suddenly ~

Printing is stopped in the middle of data because of paper out, and so on. Sometimes, end users have to operate to print the data again.



If the printing is stopped in the middle of data, the printing is started over by this function. "Retry printing" can be setup by Printer Utility (Default is disenable.)

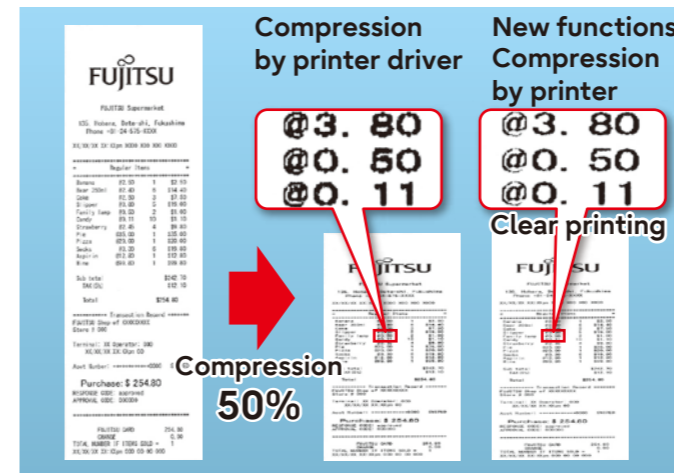


Compression & Reduced printing functions

~ Helping paper consumption with great printing ~

Compression printing by printer

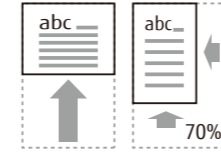
Print data is compressed vertically by 7 patterns setup (from 95% to 50%). The current function is only enable to compress print date, however, this function achieves the excellent printing quality with non-synchronous thermal head control technology. Also, driver setting is not necessary, and it can save the paper.



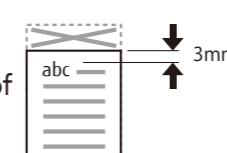
Reduced printing by printer driver

FP-2000 series have function of "Reduced printing" & "Reducing Top margin 3mm printing". These functions helps to reduce wasted margin for printing and contribute to low paper consumption.

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



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



High quality printing by FUJITSU technology

~ Achievement high quality printing in any environment ~

Simulated 180 dpi printing mode

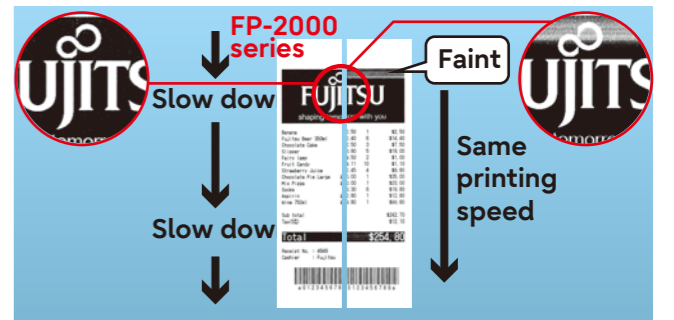
Print head for 203dpi is adapted for FP-2000 series because fine character or barcode are printed with high resolution, and it is flexible to print a large amount of information for the limited receipt's space. However, If customers require to print 180dpi printing result which is bigger character than 203dpi. This mode enable to print 180dpi printing result (not only character but also all print data which are barcode or image and so on) without layout adjustment from the replacement of 180dpi printer.



(This function can be selected by printer setup)

Automatic optimum printing mode

Printer calculates the density of print data before printing. Depending on the print density, printer controls power and speed to print clearly for high duty printing.



16 gray scale printing

16 gray scale printing in receipts like a logo printing or coupon printing have advertise effects to attract customers. FP-2000 series support this function. (FP-2200, FP-2100 only)



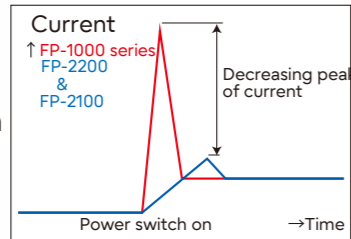
FUJITSU professional hardware

Protecting from inrush current

~ Certain connectivity ~

FP-2200 and FP-2100 are supported by Down inrush current circuit to decrease the peak of sudden current's start up.

This support helps to prevent the printer from system down in the environment even though using powered USB, for example, situations of connecting POS system or KIOSK machine.



Countermeasure for ESD

~ Proper operation in any environment ~

FP-2000 series are passed the strict FUJITSU standard which is adequate Level 4 of IEC61000-4-2 in categories of ESD. This technology has been adapted FUJITSU thermal printer which is high-end model, however, FUJITSU developed the technology to adapt low-end models, FP-2000 series.

| Details | |
|-------------------|-------------------|
| Air discharge | Level 4 (± 8 KV) |
| Contact discharge | Level 4 (± 15 KV) |

Covering safety standard for each region

~ Appropriate printer for international business ~

FUJITSU products covers safety standard for each region. (*Safety standard is different depending on product)



*CB Test is certificated.

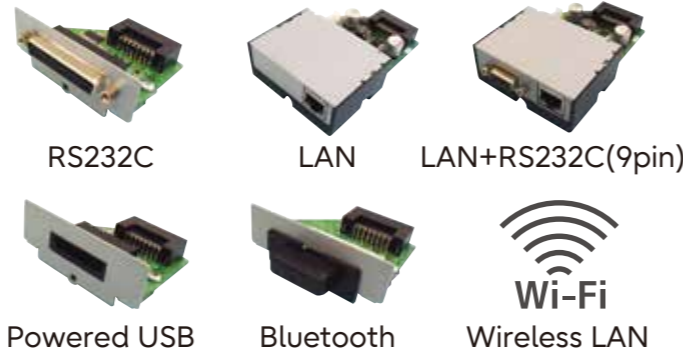
Moreover, FP-2000 series obtain the standards which are advantage for your business.

(*Other standard)
Energy Star, CE mark, FUJITSU Super Green Products
RoHS

Selectable interface cards

~ Selectable interface cards to accommodate end users needs ~

USB is a standard interface card with Drawer kick connector and AC connector on the main board. Also, various optional interface cards are available depending on end user's usage environments.

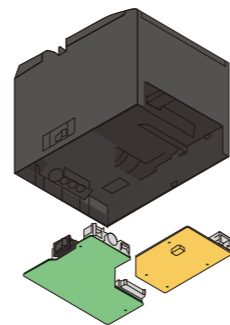


*Interface board can be changed by removing screw.
* Acquisition of countries on WiFi standards

Fiscal Printer Support

~ Completed support for your integration ~

Controller board of FP-2000 series is considered design for adding fiscal board (fiscal printer project).



Moreover, printer which is without control board also can be provided for fiscal project.

Energy saving

~ ECO & Saving printer's cost ~

FP-2000 series comply with the New Energy Star Program. Also, the power consumption is 1W or less at the waiting mode and 30W or less at the operation (average). (at using USB interface only)

| Power consumption | | | |
|---------------------|-------------|---------|---------|
| | FP-2200 | FP-2100 | FP-2000 |
| Standby | 1W or less | | |
| Operation (Average) | 30W or less | | |

Technical specifications

Mechanical & Functions

| Model | FP-2200 | FP-2100 | FP-2000 | | | |
|---|---|---|--|------------------------------|--------------------------|--|
| | | | | | | |
| Printing Technology | Direct Line Thermal Method | | | | | |
| Print Resolution | 8 dot/mm (0.125mm/dot), 203dpi | | | | | |
| Print Speed (Monochrome only) | Max. 400mm/s 360mm/sec: 50mm, 58mm width paper | 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) (LAN or RS232C+LAN card is inserted, Horizontal setting may not be available depending on the connector) | | | | | |
| Paper | Paper width | 80mm, 58mm, 50mm | | | | |
| | Outer Diameter of Roll Paper | less than φ 83mm | | | | |
| | Paper Thickness | 53μm - 85μm (53μm-65μm thickness paper with 50mm and 58mm width are not supported, but it is possible to print these thickness with paper guide) | | | | |
| Maximum Print Width | 50mm with paper | 45mm (360dots) | | | | |
| | 58mm with paper | 48mm (384dots) or 52.5mm (420dots) | | | | |
| | 80mm with paper | 64mm (512dots) or 72mm (576dots) | | | | |
| Font size and Column *1 | 203dpi(Normal Mode) | | | Extended Mode | | |
| | Font A (Column) | Font B (Column) | Font C (Column) | Font A (Column) | Font B (Column) | |
| Paper width 50mm | Body Face | 12x24 (30) | 10x24 (36) 9x24 (40) | 8x16 (45) | - | - |
| | Letter Face | 11x22 (30) | 9x17 (36) 9x22(40) | 8x13 (45) | - | - |
| Paper width 58mm | Body Face | 12x24 (32 or 35) 12x24 (30) | 10x24 (38 or 42) 9x24(42 or 46) 10x24 (36) 9x24 (40) | 8x16 (48 or 52) 8x16 (45) | 12x24 (32) 12x24 (42) | 10x24 (38 or 42) 9x24 (42 or 46) 10x24 (51) 9x24 (56) |
| | Letter Face | 11x22 (32 or 35) 11x22 (30) | 9x17 (38 or 42) 9x22 (42 or 46) 9x17 (36) 9x22 (40) | 8x13 (48 or 52) 8x13 (45) | 12x24 (32) 12x24 (42) | 9x22 (38 or 42) 9x17 (42 or 46) 9x22 (51) 9x17 (56) |
| Paper width 80mm | Body Face | 12x24 (42 or 48) 12x24(42) | 10x24 (51 or 57) 9x24 (56 or 64) 10x24 (51) 9x24 (56) | 8x16 (64 or 72) 8x16 (64) | 12x24 (42) 12x24 (42) | 10x24 (51) 9x24 (56) 10x24 (51) 9x24 (56) |
| | Letter Face | 11x22 (42 or 48) 11x22(42) | 9x17 (51 or 57) 9x22 (56 or 64) 9x17 (51) 9x22 (56) | 8x13 (64 or 72) 8x13 (64) | 12x24 (42) 12x24 (42) | 9x22 (51) 9x17 (56) 9x22 (51) 9x17 (56) |
| Barcode | Barcode | UPC-A, UPC-E, JAN13 (EAN13), JAN8(EAN8), CODE39, ITF, CODABAR(NW-7), CODE93, CODE128 | | | | |
| | Two dimensional code | QR code(Common to all models), PDF417 & DataMatrix(FP-2200&FP-2100) | | | | |
| Receive Buffer | Max. 64 KB | | | | | |
| Logo Store Memory | 1088KB | | | 576KB | | |
| Removing paper curl adjustment function | Available | | Not Available | | Not Available | |
| Paper Near End Sensor | Available | | | | | |
| Paper End Sensor | Available | | | | | |
| Black Mark Sensor or Paper Exit Sensor | Available (Factory Option) | | Not Available | | Not Available | |
| Internal Buzzer | Available to notice errors and printer status | | | | | |
| Retry printing | Available (Approx.200cm reprinting) | | Available (Approx.40cm reprinting) | | Not Available | |
| Simulated 180 dpi printing mode | Available (Default) | | | | | |
| 16 gray scale printing | Available | | Available | | Not Available | |
| Acoustic Noise | Less than 55 dB(A) | | | | | |
| Software Interface | ESC/POS emulation | | | | | |
| Drawer Interface | 2 Drawers Controllable | | | | | |
| Interface *2 | USB | USB(2.0 Full-speed) | | | | |
| | USB + RS232C | USB(2.0 Full-speed) + RS232C Serial (25pins) | | | | |
| | USB + LAN | USB(2.0 Full-speed) + Wired, 10BASE-T/100BASE-TX | | | | |
| | USB + Bluetooth | USB(2.0 Full-speed) + Bluetooth | | | | |
| | USB + Powered USB | USB(2.0 Full-speed) + Powered USB (2.0 Full-speed) | | | Not Available | |
| | USB + RS232C + LAN | USB(2.0 Full-speed) + RS232C Serial (9pins) + Wired, 10BASE-T/100BASE-TX | | | | |
| | USB+Wireless LAN | USB(2.0 Full-speed)+Wireless LAN (WiFi802.11a/b/g/n) | | | | Not Available |