

FUJITSU Component Thermal Printer FTP-63GUSL001-R series (High Speed)

Fujitsu 3" high speed (150mm/s) thermal printer unit with cutter option

Overview

The FTP-63GUSL series thermal printer (driven by 24VDC provides high speed printing (150mm/s) for 3-inch wide paper.

The series is suitable for a variety of applications, such as POS/ECR, kiosk terminals, ticket machines, banking machines, measuring devices, medical equipment, etc.



FTP-63GUSL001

Features

- **High-speed printing**
It can print at 150mm/s (1200 dotlines/s) maximum by using Fujitsu Components' unique head drive control
- **Rear paper insertion mechanism with lock type**
Fujitsu Components' unique platen release mechanism allows straight paper path and easy head maintenance
- **Auto Cutter**
Printer with auto cutter (full cut/partial cut) is available. It can be mounted on top of the mechanism
- **Compact size**
Depth: 90mm, width: 111mm, height: 116mm
- **High resolution**
8 dots/mm head provides clear print out
- **RoHS compliant**

■ Part numbers

Item		Part Number
Printer unit		FTP-63GUSL001#01 (Japanese font types)
		FTP-63GUSL001#02 (Traditional Chinese font types)
Interface cable	USB	FTP-62GY301
	RS-232C	FTP-62GY302
Power supply cable	Logic, head, motor	FTP-62GY601

■ Specifications

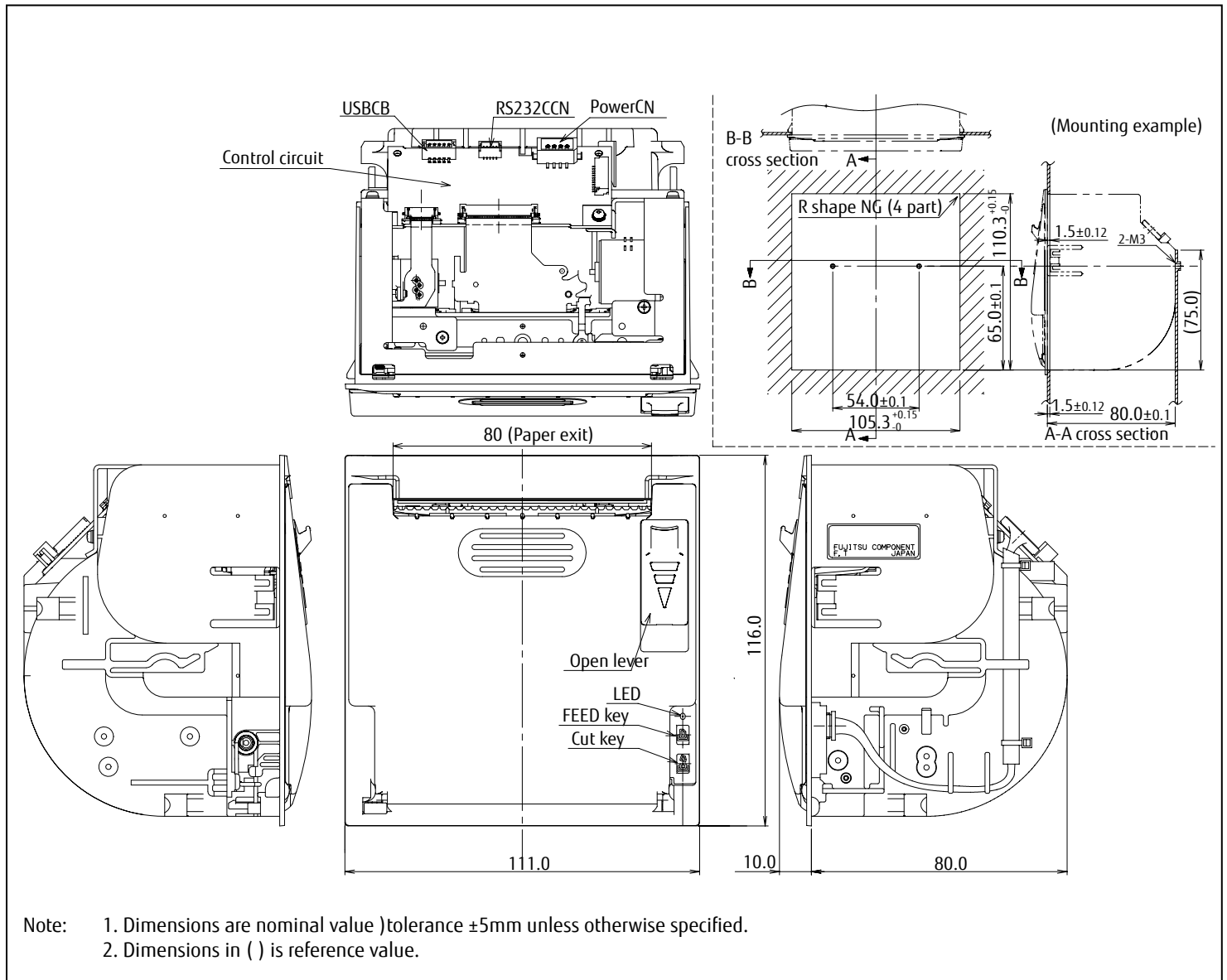
Item		Specifications	
Part number		FTP-63GUSL001#01	FTP-63GUSL001#02
Printing method		Thermal sensitive line dot method	
Dot structure		576 dots/lines	
Dot pitch (horizontal)		0.125mm (8 dots/mm) - Dot density	
Dot pitch (vertical)		0.125mm (8 dots/mm) - Line feed pitch	
Effective printing area		72mm	
Number of columns		ANK 48 columns/line (12 x 24 x dot font)	
Paper width		80mm +0/-1	
Paper thickness		60-100µm* ¹	
Cutting type		Full or partial	
Printing speed		FTP-62GDSL 150mm/s (1200 dot lines/s) page mode	
Character types	Alphanumeric KANA	159 types	
	International and special	195 types	
	OCRI	103 types	
	OCRIII	23 types	
	OCRIV	103 types	
	Extended numeric	12 types	
	Thai code 18	128 types	
	JIS KANJI level 1, 2, non-Kanji	JIS KANJI: approx. 6800	
Traditional Chinese			13, 503
Character dimensions (W x H), number of characters (applicable for FTP-63GUSL001#01 & #02)		8 x 16 dots, 72 columns, ANK 12 x 24 dots, 48 columns, ANK 16 x 16 dots, 36 columns, ANK 24 x 24 dots, 24 columns, ANK	24 x 40 dots, 24 columns, OCRI 24 x 48 dots, 24 columns, OCRII 36 x 60 dots, 16 columns, OCRIV 24 x 48 dots, 24 columns, extended numeric
Interface standard		RS-232C, USB	

*¹: there may be exceptions

Item		Specifications
Part number		FTP-63GUSL001#01 FTP-63GUSL001#02
Power		24VDC $\pm 10\%$ 4.9A (24V, concurrent applied dot numners: 192 dots)
Dimensions (WxDxH)	Printer mechanism w/ cutter	111 x 90 x 116mm (external), 105 x 80 x 110mm (internal)
Weight	Printer unit	315g
Expected life	Head	Pulse durability: 100 million pulse/dot (using Fujitsu Components' standard driving method) Wear resistance: 100km (at 12.5% print ratio)
	Cutter	500,000 cuts min.
Environmental conditions	Operating temperature	0°C to +50°C (guaranteed)
	Operating humidity	30 to 85% RH (no condensation)
	Storage temperature	-20°C to +60°C (excluding paper)
	Storage humidity	5 to 95% RH (no condensation)
Detection functions	Head temperature	By thermistor
	Paper out/Mark detect	By photointerrupter
	Head release	By slide switch
Recommended thermal sensitive paper	High sensitive paper	TF50KS-E4 (Nippon paper)
	Standard paper	TF-60KS-E (Nippon paper) PD150R (Oji paper)
	Medium term paper	TF-60KS-F1 (Nippon paper) P220VBB-1 (Mitsubishi paper)
	Long term paper	PD160R-N (Oji paper) AFP-235 (Mitsubishi paper) TR50KJ-R (Nippon paper) HA220AA (Nippon paper)

■ Dimensions

- Printer mechanism/cutter: 3-inch



■ Connector for power supply

- Connector for Logic, Head, Motor Power supply (CN1)

Board side: DF3-4S-2C (Hirose)

Other side: XHP-6 or equivalent

No.	Signal	I/O	Content	No.	Signal	I/O	Content
1	Vp	I	+24V power	2	Vp	I	+24V power
3	GND	-	Ground	4	GND	-	Ground

■ RS-232C standard

Connector (CN2)

Connector part number: SHR-05V-S (J.S.T.) or equivalent

Mating connector part number: (J.S.T.). or equivalent

No.	Signal	I/O	Content	No.	Signal	I/O	Content
1	RXD	I	Receive data	2	TXD	O	Transmission data
3	RTS (DTR)	O	Data terminal ready	4	GND	-	Signal ground
5	CTS (DSR)	I	Data set ready				

Note: Symbol "-" means a negative logic signal.
"I" or "O" means a signal direction from the interface board side.

■ USB standard

- (1) Connector (CN4)

Connector part number: ZHR-5 (J.S.T.) or equivalent

Mating connector part number: (Molex). or equivalent

No.	Signal	I/O	Content	No.	Signal	I/O	Content
1	Vbus	I	Bus power supply	2	D-	I/O	Differential data I/O D- terminal
3	D+	I/O	Differential data I/O D+ terminal	4	GND	-	Signal ground
5	FG	-	Frame ground				

Note: Symbol "-" means a negative logic signal.
"I" or "O" means a signal direction from the interface board side.

■ Commands

Command	Content
HT	Moves print position
LH	Line feed
FF	Feeds forms (new page)
ESC EM+n	Setting the amount of feeding at automatic paper feed
ESC RS	Sets reverse printing
ESC SP+n	Right side character spacing
ESC US	Resets reverse printing
ESC !+n	Sets print mode
ESC %+n	External registration character specification/cancellation
ESC &+y+c1+c2+x+d1 to dn	External registration character definition
ESC *+m+n1+n2+d1+dk	Set bit image mode
ESC -+n	Undeline setting
ESC 2	Sets 1/6 inch line feed length
ESC 3+n	Sets the line feed length
ESC ?+n	External registration character deletion
ESC @	Printer initialization
ESC A+n	Set the space between the line
ESC C+n	Sets the page length by character line
ESC D+n1+nk+NUL	Set the tab position
ESC J+n	Feeds paper in forward direction and prints
ESC K+n	Reverse paper feed
ESC R+n	Selects international character
ESC V+n	Right rotation 90° specification/cancellation
ESC X+n+m	Setting the turning time of the motor excitation
ESC c+1+n	Sets internal processing
ESC c+5+n	Panel switch valid/invalid setting
ESC d+n	Printing and n-line feeding
ESC e+n	Prints and reverses feeds n-line
ESC j	Full cut
ESC m	Partial cut
ESC s+n	Sets printing speed
ESC t+n	Character code table selection
ESC {+n	Sets/resets upside down printing
ESC DEL +n	Flash memory erase
FS !+n	Kanji printing mode collective specification
FS &	Kanji printing mode specification
FS *+m+n1+n2+d1 to dk	High speed collective image printing specified
FS -+n	Kanji underline specification/cancellation
FS .	Kanji printing mode cancellation
FS 2+c1+c2+d1 to dn	External character definition
FS 9+n	Sets the detection functions

■ Commands

Command	Content
FS C+n	Kanji code system selection
FS E+n	Correction of impressed energy
FS S+n1+n2	Kanji spacing setting
FS W+n	Kanji double height and width printing specification/cancellation
FS r+n	Parameter transmission (serial mode)
GS !+n	Character size setting
GS &+m+x+y1+y2+d1 to dn	Registered bit image definition
GS '+m+n	Registered bit image printing
GS (+E+L1+L2+fn+d1 to d9	RS-232C communication setting
GS <	Line feeds to the next mark
GS A+m+n	Sets the line feed length after mark detection
GS E+n	Sets print quality
GS L+n1+n2	Left margin setting
GS V+m+n	Paper cutting (this command is only available for chip)
GS W+n1+n2	Setting and cancellation of auto status transmission (serial mode)
GS a+n	HRI character font selection
GS e+m+n	Sets bar code height
GS h+n	Barcode height setting
GS k+m+n+d1~dn	Selects bar code type and prints
GS k+m+k1+k2+k3+k4+{[p1][d(1, 1)] to [d(1, j)]} to {[pi][d(i, 1)] to [d(i, j)]}[00]	2D code (QR code) print
GS k+m+n+k+pL+pH+d1 to dp	Bar code (GS1 DataBar) print
GS k+m+n+k1+k2+k3+k4	Bar code (GS1 DataBar) setting
GS w+n	Sets bar code width magnification

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