FCL Components Thermal Printer FTP-62GDSL221 Interface Board

FCL Components interface board for 12V FTP-6xGMCL series

Features

- USB Ver. 2.0 (full speed) and RS-232C (max. 230.4kbps) serial interface
- Supports alphanumeric, Kanji, Kana, Thai, Traditional Chinese, registration of image patterns, various barcode printing
- Drivers Windows Vista® Windows® 7, 8, 10
- RoHS compliant

Part numbers

Part number	Supply voltage	Interface type	Mechanism part number
FTP-62GDSL221	24V	USB Ver. 2.0 RS-232C	FTP-62GMCL173 FTP-62GMCL173#01 FTP-62GMCL473 FTP-62GMCL473#01 FTP-63GMCL173 FTP-63GMCL473

Interface specification at host side

Item	Specifications	
USB V2.0	Transmission rate: Data Input/Output method:	Full speed 12Mbps max. Differential
RS-232C	Data speed: Synchronous method: Handshake: Output level:	9,600 / 230,400 / 115,200 / 38,400 / 19,200 bps* Asynchronous, full-duplex communication RTS (DTR) / CTS (DSR) control, XON/XOFF control* RS-232C level

Note: *Changeable settings to (***) by command

Accessories (optional)

Item		Part number	Connector	Length
Interface cable*	USB	FTP-62GY311#01	USB-A plug and GHR-05V (J.S.T.)	1m
	RS-232C	FTP-62GY302	SHR-05V-S (-B) (J.S.T.) Connector equipped at one side	0.5m
Power supply cable*		FTP-629Y603	VHR-2 (J.S.T.) Connector equipped at one side	0.5m

Note: *Cables are RoHS compliant

■ Specifications

1.1 Base specifications

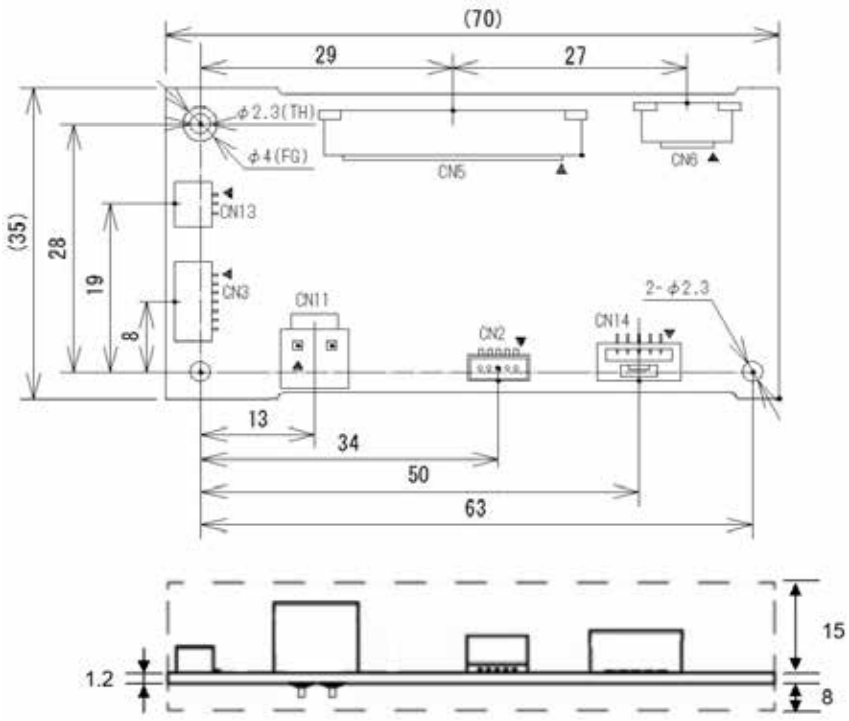
Item	Specifications
Dimensions	70 x 35 x 24.2mm
Weight	Approx. 15g
Communication interface *1	RS-232C USB full speed (max. 12Mbps)

1.2 Print/paper feed specifications

Item			Specifications
Part number			FTP-62GDSL221
Communication interface			USB Ver.2.0 (full speed), RS-232C
Power supply			12VDC ±10%
Printing speed			Max. 120mm/sec.
Printing specifications	Printing mode		Line mode
	Character types		Kanji, non-kanji:6,879 Traditional Chinese: 13,503 Alphanumeric and katakana: 159 International and special characters: 195, OCR: 229 Enlarged characters: 12 External characters: 94 Thai code18: 128
	Character structure *1		8×16 dots, 12×24 dots, 16×16 dots, 24×24 dots, 24×40 dots, 24×48 dots, 36×60 dots
	Barcode	1D	UPC-A, UPC-E, JAN(EAN)13, JAN(EAN)8, CODE39 ITF, CODABAR, CODE128, GS1 DataBar-14, GS1 DataBar-14 Truncated, GS1 DataBar Limited
		2D	QR code, GS1DataBar-14 stacked, GS1 DataBar-14 Omnidirectional, GS1 DataBar-14 Trancated, GS1 Databar Limited
	Bit image	Size	Horizontal: 8 to 432 dots (2-inch), 8 to 576 dots (3-inch), vertical: 1 to 1023 dots
		Modification	Black-white reversed
	Download image	Size	Horizontal: 8 to 432 dots (2-inch), 8 to 576 dots (3-inch), Vertical: 1 to 512 dots (Registration memory capacity : 192k bytes)
		Modification	Black-white reversed, double width size, double height size, quadruple size, upside down
Detection function			Mark, paper, near end, thermal head irregularity, power supply irregularity, platen open, cutter irregularity, transmission data irregularity, hardware irregularity, MCU operation ir-regularity, fuse blow, thermal head's thermal runaway, thermal head's cable disconnection, non-volatile memory irregularity, RAM irregularity, motor temperature irregularity
Dimensions			70 x 35 x 24.2mm
Weight			Approx. 15g
Environment	Operating temperature/ humidity		0 to 50°C (guarantee: +5 to +40°C, with FCL Components recommended thermal paper) 20 to 85%RH (0 to +40°C, In the range of +40 to +50°C, gradual decrease up to 52%RH at 5°C, gradual decrease down to 12%RH at 50°C)(No condensation)
	Storage temperature/ humidity		-20 to +60°C (excluding paper), 5 to 90%RH (No condensation)
Mean time between failure (MTBF)			500,000 hours

*1: Depending on embedded characters

■ Dimensions



Tolerance: ±0.2mm
Unit: mm

■ Control circuit board and connector types

Symbol	Name	Function	Note
CN11	Power supply connector	To connect +24V power supply	-
CN2	RS-232C I/F connector	To connect RS-232C interface	-
CN3	External I/F connector	I/O	-
CN14	USB I/F connector	To connect USB	-
CN5	Head / motor connector	FPC connection	-
CN6	Motor / auto cutter connector	FPC connection	-
CN13	Near end connector	I/O connection	-

■ Connector Pin Assignment of interface board

Note: Symbol “-” means a negative logic signal.
“I” or “O” means a signal direction from the interface board side.(|: input, O: output)
Equipped connectors may be changed. Please check carefully when using equivalent connectors.

- Power supply connector (CN11)
  Mating connector part number: VHR-2N (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	Vp	I	Power input	2	GND	I	Ground

- RS-232C connector (CN2)
  Mating connector part number: SHR-05V-S (-B) (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	RXD	I	Receive data signal	2	TXD	O	Transmission data signal
3	RTS (DTR)	O	Request to send signal	4	GND	-	Signal ground
5	CTS (DSR)	I	Clear to send signal				

- External I/O connector (CN3)
  Mating connector part number: SHR-07V-S (J.S.T.) or equivalent

No.	Name	I/O	Description	No.	Name	I/O	Description
1	/RST	I	Initialization request signal	2	/ATF	I	Paper feed signal
3	/SIN	I	Detection function setting signal	4	LED1	O	POWER LED signal
5	LED2	O	ERROR LED signal	6	/CUT	|	Paper cut signal
7	GND	-	Signal ground				

- USB connector (CN14)
  Mating connector part number:GHR05V-S (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	Vbus	I	Vbus signal	2	D-	I/O	D- signal
3	D+	I/O	D+ signal	4	GND	-	Signal ground
5	FG	-	Frame ground				

- Near end connector (CN13)
  Mating connector part number:SHR-03V-S (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	NVCC	O	Near end sensor power	2	/NES	I	Near end signal input
3	GND	-	Near end signal ground				

- Connector pin assignement of interface board

(CN5) Head motor connector
Insert flexible printed circuit (FPC) of printer mechanism
(CN6) Head/auto cutter connector
Insert flexible printed circuit (FPC) of printer mechanism

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