



24V DRIVEN, RECEIPT PRINTER MINI UNIT

2" HIGH SPEED THERMAL PRINTER UNIT

FTP-627USL525/526

OVERVIEW

The FTP-627 USL Series are 24V driven high-speed printers with a ultra low profile auto cutter and long life. The FTP-627 USL Series can be used for a variety of applications, such as POS terminals, mini Kiosks, banking terminals, and measurement and medical equipment.

FEATURES

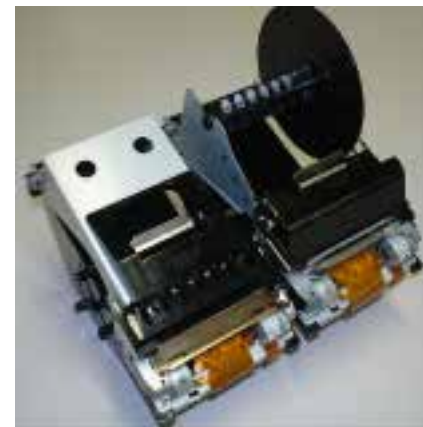
- **Ultra low profile**
Height 110 mm, width 81/86 mm, depth 150 mm
- **Windows®2000/XP, Linux, and OPOS drivers**
- **High speed printing**
It can print at 100 mm/s maximum by using Fujitsu's unique head drive control.
- **Auto Cutter**
Long life and high reliable guillotine with dedicated motor.
- **Easy paper loading and jam-free**
Our lever platen release mechanism allows a wide paper route, so 83mm diameter paper can be easily inserted.
- **Multifunctional die-cast frame**
Wide operating temperature range, long continuous printing, high ESD absorption and discharge of static electricity vibration and shock resistant.
- **Barcodes**
Prints standard, extended and 2-D types
- **RoHS compliant**



FTP-627USL525



FTP-627USL526



Paired units

■ PART NUMBERS

Item	Part Number	Power	
Printer mechanism with cutter & paper roll bucket	FTP-627USL525		
Printer mechanism with rewinder & paper roll bucket	FTP-627USL526*		
Interface board options	FTP-627DSL351R (Serial /USB)	5V / 24V	
	FTP-627DSL392R* (Serial /USB)	5V / 24V	
	FTP-627DSL395R (Serial /USB)	24V	
Item	Part Number	Length	
Interface cables	Serial (RS-232C)	FTP-628Y302	500mm
	USB (V1.1)	FTP-629Y301	1,000mm
Power cables	Logic	FTP-629Y401	300mm
	Head, Motor	FTP-629Y601	300mm

*: Journal printer and interface board

■ SPECIFICATIONS

Item	Specifications	
Part number	FTP-627USL525	FTP-627USL526
Printing method	Thermal-line dot method	
Dot structure	432 dots/line	
Dot pitch (Horizontal)	0.125 mm (8 dots/mm)—Dot density	
Dot pitch (Vertical)	0.125 mm (8 dots/mm)—Line feed pitch	
Effective printing area	54 mm	
Number of columns	ANK 36 columns/line (maximum 12 x 24 dot font)	
Paper width	58 mm	
Paper diameter	83 mm	
Paper thickness	60 to 85 μ m (some paper in this range may not be used because of paper characteristics)	
Printing Speed	Maximum 100mm/sec. (800 dot line/sec.) at 24V, 25°C	
Character types	Alphanumeric, kana: International characters: JIS Kanji (Kanji CG loaded board):	159 types 195 types about 6800 types
Character, dimensions (W×H), number of columns	12 × 24 dots, (1.5 × 3.0 mm), 36 columns: ANK 24 × 24 dots, (3.0 × 3.0 mm), 18 columns: ANK 8 × 16 dots, (1.0 × 2.0 mm), 54 columns: ANK 16 × 16 dots, (2.0 × 2.0 mm), 27 columns: ANK	
Barcodes	Standard	UPC-A, UPC-E, JAN (EAN) 13, JAN (EAN) 8, Code 39, 1TF CODABAR
	Extended	CODE128
	2-D	QR, Maxi , PDF417
Printing mode	Page mode, line mode	

■ SPECIFICATIONS

Item		Specification	
Part Number		FTP-627USL525	FTP627USL526
Interface		Conforms to USB / Serial	
Power supply	For print head	24 VDC average current, 0.5A (0.9A peak) (print ratio: 12.5%, print speed: 100mm/sec.)	
	For motor	24 VDC $\pm 5\%$, 1.0 A maximum	
	For cutter	24 VDC $\pm 5\%$, 1.2 A maximum	-
	For rewinder	-	24 VDC $\pm 5\%$, 1.0 A maximum
	For logic	5 VDC $\pm 5\%$, 0.1 A maximum	
Dimensions	Mechnism and board	82 x 150 x 110mm (WxDxH)	86 x 150 x 157mm (WxDxH)
Weight	Mechnism and board	Approximately 310g	Approximately 350g
Life	Head	Pulse resistance: 50 million pulses/dot (under out standard conditions); Abrasion resistance: paper traveling distance	
		50km (print ratio: 12.5% or less)	
	Cutter	500,000 cuts (20 cuts/minute)	-
	Platen	5,000 (open/close)	
MTBF	Mechanism	3,000 hours	
	Circuit board	500, 000 hours	
Operating environment	Operating temperature*	0°C to 50°C	
	Operating humidity	20 to 85% RH (no condensation)	
	Storage temperature*	-20°C TO +60°C (paper not included)	
	Storage humidity	5 to 90% RH (no condensation)	
Detection function	Head temperature detection	Detected by thermistor	
	Paper out /mark detection	Detected by photo-interruptor	
	Platen release	Detected by sliding switch	
Recommended thermal sensitive paper	High Sensitive Paper	TF50KS-E4 (Nippon paper)	
	Standard Paper	TF60KS (Nippon paper), FTP-020PU001 (58mm), PD105R (Oji paper), FTP-020P0701 (58mm)	
	Medium Life Paper	TF60KS-F1, FTP-020P0102 (58mm), PD170R (Oji paper), P220VBB-1 (Mitsubishi paper)	
	Long Life Paper	PD160R-N (Oji paper), AFB-235 (Mitsubishi paper), TP50KJ- R (Nippon paper), HA220AA (Nippon paper)	

*+5°C to +40°C printing density assurance rance.

■ CONNECTOR PIN ASSIGNMENTS (FPC)

1. Thermal head and paper path motor (see FPC No.1 on figure 1)

Recommended connector for control circuit side: 52610-2471 (Molex)

No.	Signal	I/O	Contents	No.	Signal	I/O	Contents
1	PHK	-	Photointerruptor (cathode)	2	VSEN		Power supply for paper sensor
3	PHE	O	Photointerruptor (emitter)	4	VH		Head power supply
5	DI		Head data enter signal	6	STB2		Printer enable signal 2
7	STB3		Printer enable signal 3	8	VDD		Logic power supply
9	GND	-	Head ground	10	GND	-	Head ground
11	GND	-	Head ground	12	TH	O	Thermistor
13	STB1		Printer enable signal 1	14	LAT		Data latch
15	CLK		Clock	16	VH		Power supply for thermal head
17	VH		Power supply for thermal head	18	SW	-	Platen open switch
19	SW	-	Platen open switch	20	MT/A		Motor excitation signal A
21	MT/A		Motor excitation signal A	22	MT/B		Motor excitation signal B
23	MT/B		Motor excitation signal B	24	N.C.	-	Not connected

2. For cutter motor FTP-627USL525 (see FPC No.2 on figure 1)

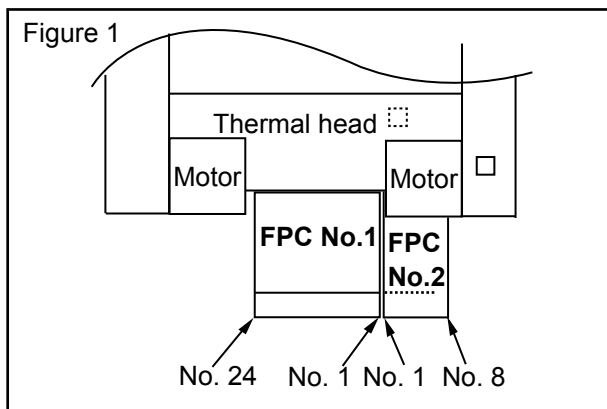
Recommended connector for control circuit side: 52610-0871 (Molex)

No.	Signal	I/O	Contents	No.	Signal	I/O	Contents
1	VSEN		Power supply for paper sensor	2	PHE	O	Photointerruptor (emitter)
3	PHK	O	Photointerruptor (cathode)	4	MT/A		Motor excitation signal A
5	MT/A		Motor excitation signal A	6	MT/B		Motor excitation signal B
7	MT/B		Motor excitation signal B	8	N.C.	-	Not connected

3. For paper roll-up motor FTP-627USL526 (see FPC No.2 on figure 1)

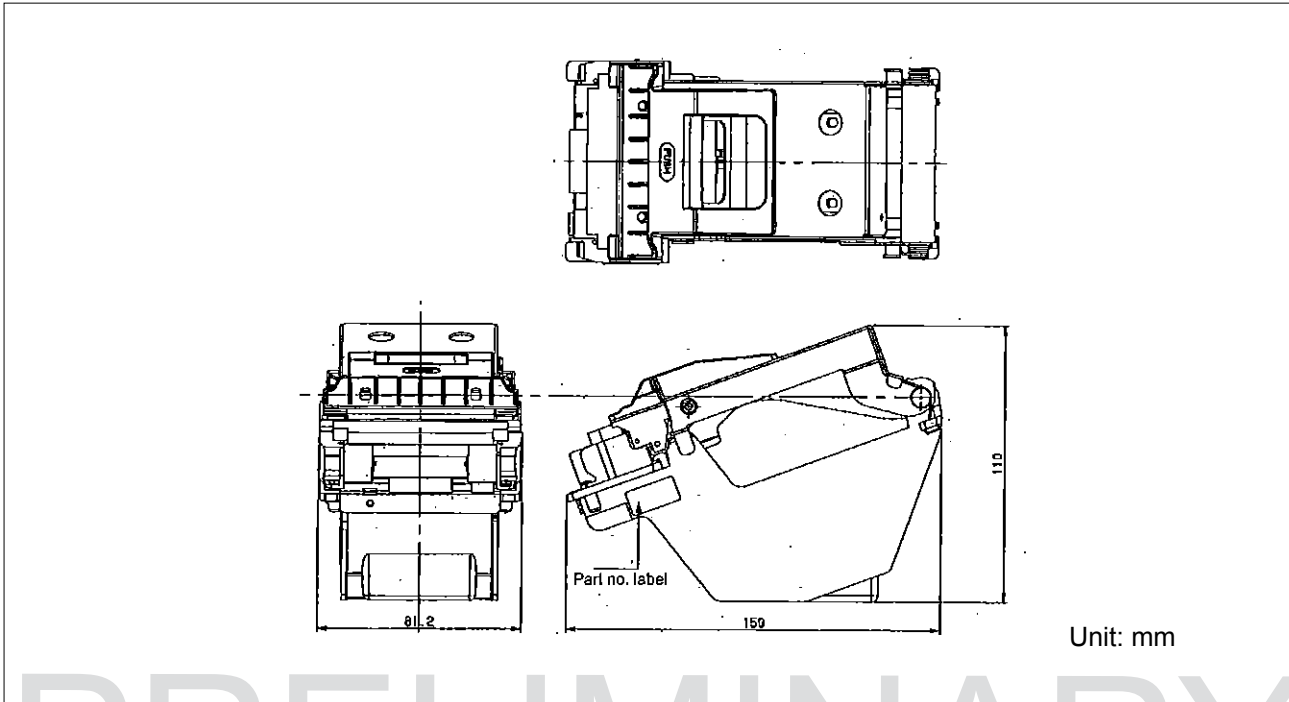
Recommended connector for control circuit side: 52610-0871 (Molex)

No.	Signal	I/O	Contents	No.	Signal	I/O	Contents
1	N.C.	-	Not connected	2	N.C.	-	Not connected
3	N.C.	-	Not connected	4	MT/A		Motor excitation signal A
5	MT/A		Motor excitation signal A	6	MT/B		Motor excitation signal B
7	MT/B		Motor excitation signal B	8	N.C.	-	Not connected

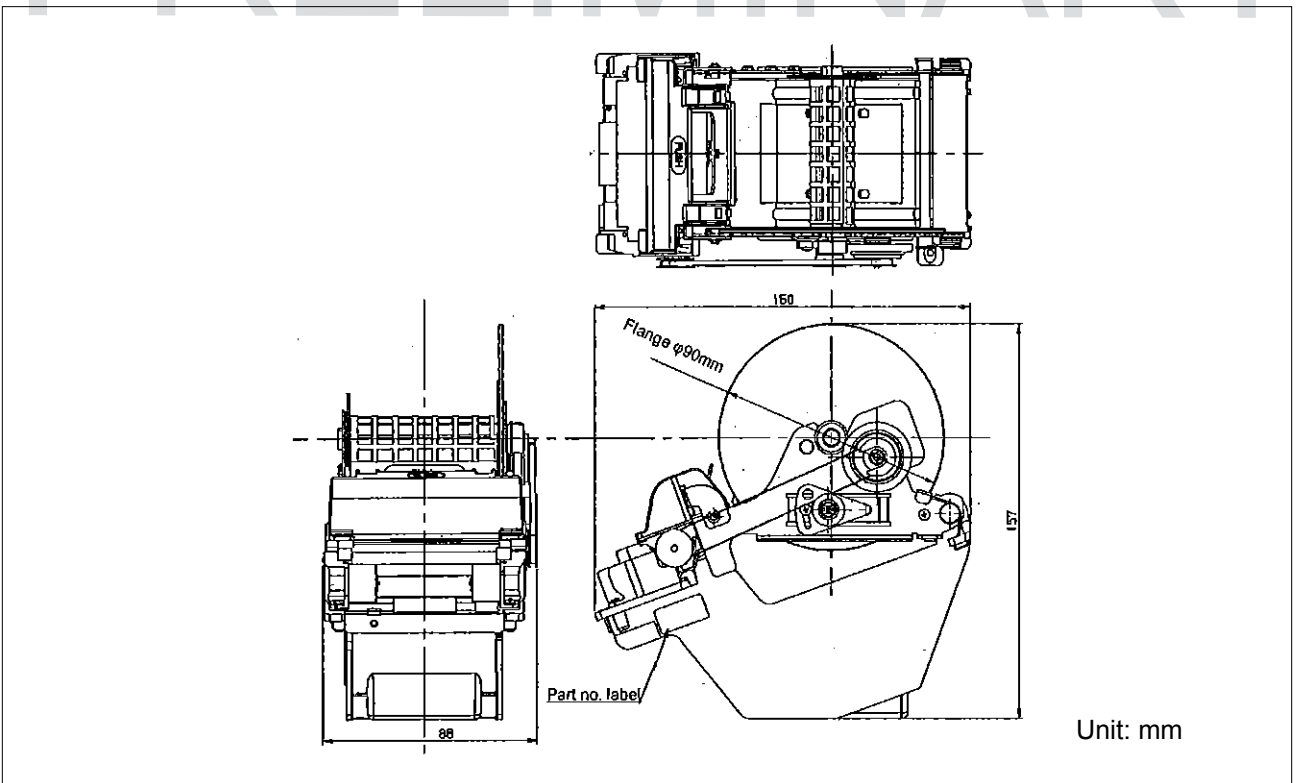


■ DIMENSIONS

1. FTP-627USL525



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