

24 V DRIVE, FTP-607 SERIES HIGH SPEED THERMAL PRINTER 3-INCH TYPE MECHANISM

FTP-637MCL103

■ OVERVIEW

The FTP-607MCL Series thermal printer (driven by 24VDC) provides ultra-high speed printing (80mm/s) for 2-inch and 3-inch wide paper. Our original platen removal mechanism allows easy paper loading and maintenance.

The FTP-607 MCL series can be used for a variety of applications, such as POS/ECR, Kiosk terminals, ticket issuing terminals, label printers, banking terminals, and measurement and medical equipment.

■ HIGHLIGHTS

- **Compact size**
Height 15.5 mm, width 70.4 mm, depth 33.0 mm for the 2 inch model. The 3-inch product has a width of 92.4mm.
- **High speed printing**
It can print at 100 mm/s (800 dotlines/s) maximum by using Fujitsu's unique head drive control.
- **Easy loading mechanism (ELM) type**
Our unique platen removal mechanism improved paper loading and maintenance.
- **Multi-featuring diecast fame**
By application of multi-featuring diecast frame, continous print by function of heat-sink, high ESD stand by function of earth frame and shock/vibration stand by function of solid frame are valid.
- **High resolution printing**
8 dots/mm of resolution printing is possible.



■ PART NUMBERS

Name		Part Number
Printer Mechanism	3 inch	FTP-637MCL103
LSI		FTP-627CU201
Interface Board	parallel	FTP-637DCL218
	serial	FTP-637DSL238
Interface Cable	Parallel (Centronics)	FTP-628Y202
	Serial (RS-232C)	FTP-628Y302
Power Cable	Logic	FTP-629Y401
	Head motor	FTP-629Y601

■ SPECIFICATIONS

Item	Specifications
Part number	FTP-637MCL103
Printing method	Thermal-sensitive line dot method
Dot structure	576 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	72 mm
Number of columns	ANK 48 columns/line (max.12x 24 dot font)
Paper width	80 mm ^{±0.1}
Paper thickness	60 to 100 μ m (some paper in this range may not be used because of paper characteristics)
Printing Speed	Maximum 100mm/sec. (800 dot line/sec.)
Character types	Alphanumeric, katakana: 159 types International and special characters: 195 types JIS Kanji (supported when Kanji CG is mounted): about 6800 types
Character, dimensions (H×W), number of columns	(1.5 × 3.0mm) (3.0 × 3.0mm) (1.0 × 2.0 mm) (2.0 × 2.0 mm) 48 columns: ANK 28 columns: ANK, Kanji 72 columns: ANK 36 columns: ANK, Kanji

■ SPECIFICATIONS

Item		Specification
		FTP-637MCL103
Interface		Conforms to RS232C / Centronics
Operating Voltage	For print head	24 VDC \pm 5%, 1.5 A average, 2.2 A peak (print ratio: 25%)
	For motor	24 VDC \pm 5%, 1 A maximum
	For logic	5 VDC \pm 5%, 0.5 A maximum
External dimensions	Printer mechanism	92.4 x 33.0 x 15.5 mm (WxDxH)
	Interface board	70 x 60 x 24 mm (WxDxH)
Weight		Approximately 52g
Life	Head	Pulse resistance: 5×10^8 pulses/dot (under our standard conditions). Abrasion resistance: paper traveling distance 50km (print ratio: 25% or less)
Operating environment	Operating temperature	0° C to +50° C*1
	Operating humidity	20 to 85% RH (no condensation)
	Storage temperature	-20° C to +60° C (paper not included)
	Storage humidity	5 to 95% RH (no condensation)
Detection function	Head temperature detection	Detected by thermistor
	Paper out/mark detection	Detected by photo-interrupter
	Platen release detection	Detected by slide switch
Recommended thermal sensitive paper		FTP-030PU001(80mm)

*1: printing density assurance range, operation is possible at -0°C to +40°C

■ CONNECTOR PIN ASSIGNMENT OF MECHANISM (FPC)

1. Thermal Head

Part number : 52610-3090 Molex or equivalent

FTP-637MCL103 PIN ASSIGNMENT

No	Signal	I/O	Contents
1	PHK	—	Photointerruptor (Cathode)
2	VSEN	I	Ground power supply for paper sensor
3	PHE	O	Photointerruptor (Emitter)
4	SW	—	Platen open switch
5	SW	—	Platen open switch
6	VH	I	Power supply for thermal head
7	VH	I	
8	VH	I	
9	DI	I	Print data in
10	$\overline{\text{STB3}}$	I	Print enable 3
11	$\overline{\text{STB4}}$	I	Print enable 4
12	VDD	I	Power for logic
13	GND	—	Ground power supply for thermal head
14	GND	—	
15	GND	—	
16	GND	—	
17	GND	—	
18	GND	—	
19	TM	O	Thermistor
20	$\overline{\text{STB1}}$	I	Print enable 1
21	$\overline{\text{STB2}}$	I	Print enable 2
22	$\overline{\text{LAT}}$		Print data latch
23	CLK	I	Clock
24	VH	I	Power supply for thermal head
25	VH	I	
26	VH	I	
27	MT/A	I	Stepping motor excitation signal
28	$\overline{\text{MT/A}}$	I	
29	MT/B	I	
30	$\overline{\text{MT/B}}$	I	

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