

FCL Components Thermal Printer FTP-64HMCL153 series

FCL Components 4" high speed (100mm/s) thermal printer mechanism

Overview

The compact, low voltage FTP-64HMCL series provides an ultra low profile design and high speed printing (100mm/s).

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



FTP-64HMCL153

Features

- High-speed printing
It can print 100mm/s (800 dotlines/s) maximum by using FCL Components' unique head drive control
- Rear paper insertion mechanism with locking platen
FCL Components' unique platen release mechanism allows for a straight paper path and easy head maintenance
- Multi-feature diecast frame
The rugged die-cast frame provides excellent ESD performance, is shock/vibration resistant and the heat-sink allows for continuous printing.
- Compact size
Depth: 29.1mm, width: 144.6mm, height: 42.5mm
- High resolution
8 dots/mm head provides clear print out
- RoHS compliant
- UL recognized. File number E171434

■ Part numbers

Item		Part Number
Printer mechanism	Back insertion	FTP-64HMCL153
Interface board		FTP-62HDSL201-R (ANK, Thai, JIS Kanji, Traditional Chinese)
Interface cable	USB	FTP-62GY311#01
	RS-232C	FTP-62GY302
Power supply cable		FTP-629Y603

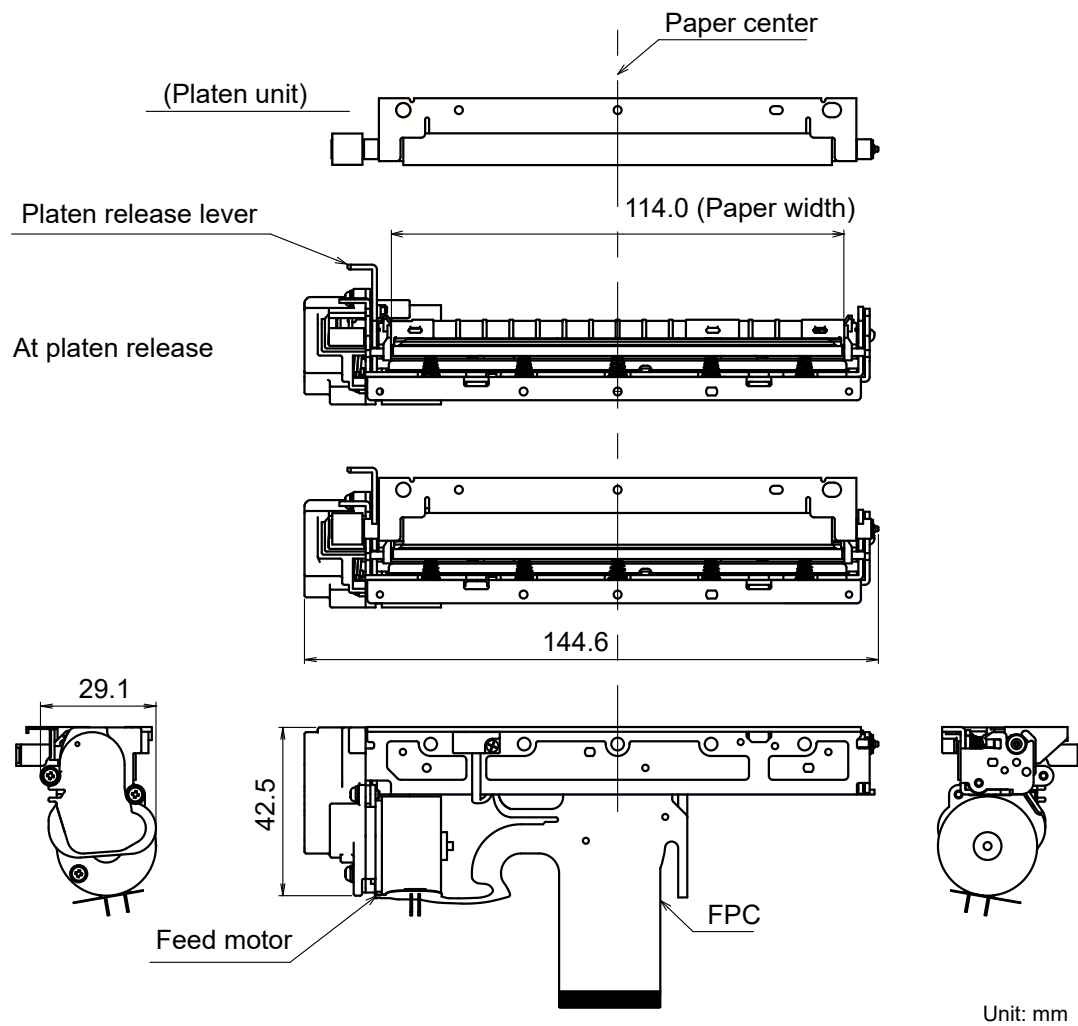
■ Specifications

Item		Specifications
Part number		FTP-64HMCL153
Printing method		Thermal sensitive line dot method
Dot structure		832 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		104mm
Paper width		114mm +0/-1
Paper thickness		60-150μm (there may be exceptions)
Cutting type		---
Printing speed		100mm/s (800 dot lines/s) *1
Character types		Alphanumeric KANA: 159 types International and special: 195 types OCRI: 103 types CCRIII: 23 types OCRIV: 103 types Extended numeric: 12 types JIS KANJI level 1,2, non-Kanji: JIS KANJI: approx. 6,800 Traditional Chinese: 13,503
Character dimensions (W x H), number of characters		8 x 16 dots, 104 columns, ANK, 24 x 40 dots, 34 columns, OCRI 12 x 24 dots, 69 columns, ANK 24 x 48 dots, 34 columns, OCRII 16 x 16 dots, 52 columns, ANK 36 x 60 dots, 23 columns, OCRIV 24 x 24 dots, 34 columns, ANK 24 x 48 dots, 34 columns, extended numeric
Power	For head	4.2 to 9.5VDC, 2.4A (7.2V, 176 Ω, +25°C, concurrent applied dot number: 64 dots)
	For printer motor	4.2 to 9.5VDC, 1.5A maximum (using FCL Components' standard constant current circuit drive)
	For logic	3.3 or 5 VDC ±10%, 0.1A maximum
Dimensions (WxDxH)	Printer mechanism	144.6 x 29.1 x 42.5mm
Weight	Printer mechanism	170g
Expected life	Head	Pulse durability: 100 million pulse/dot (using FCL Components' standard driving method) Wear resistance: 100km (at 12.5% print ratio)
Environmental conditions	Operating temperature	-20°C to +60°C (no condensation), +5°C to +40°C (guarantee)
	Operating humidity	20 to 85% RH (no condensation)
	Storage temperature	-40°C to +70°C (excluding paper)
	Storage humidity	5 to 95% RH (no condensation)
Detection functions	Head temperature	By thermistor
	Motor temperature	Thermistor
	Paper out/Mark detect	By photointerrupter
	Head release	By slide switch
Recommended thermal sensitive paper		PD150R (Oji paper)

*1: Conditions when using PD150R motor current 600mA/phase voltage 7.6V print ratio 12.5% max., operating temperature 25°C/ humidity 60±15%RH.

- Dimensions
 - Printer mechanism 4-inch

FTP-64HMCL153



Note: 1. Dimensions are nominal value)tolerance $\pm 0.5\text{mm}$ unless otherwise specified.
2. Dimensions in () is reference value.

■ Connector pin assignments of cutter (FPC) 52559-4052 (Molex)

No	Signal	Content	I/O
1	VSEN	Paper sensor power	IN
2	PHK	Cathode for photo interrupter	OUT
3	PHE	Emitter for photo interrupter	OUT
4	N.C.	Not connected	-
5	N.C.	Not connected	-
6	VH	Head drive power	IN
7	VH	Head drive power	IN
8	VH	Head drive power	IN
9	VH	Head drive power	IN
10	DI	Data in	IN
11	CLK	Clock	IN
12	GND	Head ground	-
13	GND	Head ground	-
14	GND	Head ground	-
15	GND	Head ground	-
16	STB7	Strobe7	IN
17	STB6	Strobe6	IN
18	STB5	Strobe5	IN
19	VDD	Logic power	IN
20	TM	Thermistor	OUT
21	STB4	Strobe4	IN
22	STB3	Strobe3	IN
23	STB2	Strobe2	IN
24	STB1	Strobe1	IN
25	GND	Head ground	-
26	GND	Head ground	-
27	GND	Head ground	-
28	GND	Head ground	-
29	/LAT	/Data latch	IN
30	DO	Data out	OUT
31	VH	Head drive power	IN
32	VH	Head drive power	IN
33	VH	Head drive power	IN
34	VH	Head drive power	IN
35	N.C.	Not connected	-
36	N.C.	Not connected	-
37	SW	Platen switch release	OUT
38	SW	Platen switch release	OUT
39	FG	Flame grand	-
40	MTM	Motor thermistor	OUT
41	MTM	Motor thermistor	OUT

■ Connector pin assignments of cutter (FPC) 52559-4052 (Molex)

No	Signal	Content	I/O
42	N.C.	Not connected	-
43	MT_/A	Excitation signal /A	SINK/SOURCE
44	MT_/A	Excitation signal /A	SINK/SOURCE
45	MT_A	Excitation signal A	SINK/SOURCE
46	MT_A	Excitation signal A	SINK/SOURCE
47	MT_/B	Excitation signal /B	SINK/SOURCE
48	MT_/B	Excitation signal /B	SINK/SOURCE
49	MT_B	Excitation signal B	SINK/SOURCE
50	MT_B	Excitation signal B	SINK/SOURCE

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