

# Thermal Printer

## FTP-68EMCL Series (8-inch thermal printer)

24V, 8" high or low speed, easy loading thermal printer

### Overview

The FTP-68EMCL Series is an 8", ultra compact 24V thermal printer . Our unique platen removal design allows easy access for both loading paper and maintenance. Both high speed and low speed versions are available.

The FTP-68EMCL Series can be used for a variety of applications such as test & measurement equipment, informational kiosks, ticket issuing terminals, label printers and medical equipment.



FTP-68EMCL162-R (lever cap is optional)

### Features

- Platen open structure  
Paper jam-free / easy maintenance
- Multi-feature metal frame  
The rugged metal frame provides excellent ESD performance, is shock/vibration resistant and the heat-sink allows for continuous printing
- 8-inch (A4) wide paper width
- Label paper available  
Straight paper pass
- Printing speed  
HIGH SPEED: FTP-68EMCL112-R: it can print at 80mm/s  
LOW SPEED: FTP-68EMCL161-R/162-R: it can print at 10mm/minute (max. 50mm/s)
- UL File No. E171434
- RoHS compliant

Item	Part Number
Printer mechanism	FTP-68EMCL161-R (with adaptor board, without lever cap, with blackmark detection)
	FTP-68EMCL112-R/162-R (with adaptor board, with lever cap, with blackmark detection)
Lever cap (optional)	FTP-68EMP0495-R
LSI for driving	FTP-62ECU201-R, FTP-62ECU202-R
Interface board	FTP-62EDSL201-R (For high speed mechanism)
	FTP-62EDSL202-R (For low speed mechanism)
Cables	USB FTP-62GY301-R
	Head FTP-62EY001-R
	Power FTP-629Y603-R

Item	Specifications	
Part number	FTP-68EMCL112-R/161-R/162-R	
Printing method	Thermal-line dot method	
Dot structure	1728 dots/lines (effective printing dot number 1696 dot/lines)	
Dot pitch (horizontal)	0.125mm (dot density 8 dots/mm)	
Dot pitch (vertical)	0.125mm (dot density 8 dots/mm)	
Effective printing area	212 mm	
Paper	Width 216mm	
	Thickness 60-100µm	
Operating voltage	For print head 24V ±10% (480 dots, current peak 8.0A )	
	For motor	MCL112-R 24V ±10% current: 1 phase 0.6A, 2 phase: 1.2A
		MCL161-R/162-R 24V ±10% current: 1 phase 0.4A, 2 phase: 0.8A
	For logic 3.3V or 5V ±5%, 0.2A maximum	
Printing speed	MCL112-R (high speed) Max. 80mm/sec. (640 dotlines/sec.)*	
	MCL161-R/162-R (low speed) 10mm/min - 50mm/sec. **	
Dimensions	MCL112-R 262.0 x 55.2 x 26.0mm (WxDxH, except lever)	
	MCL161-R/162-R 273.8 x 57.9 x 30.0mm (WxDxH, except lever)	
Weight (Printer mech)	MCL112-R Approximately: 570g	
	MCL161-R/162-R Approximately: 575g	
Head life	Pulse resistance: 100 million pulse/dot	
	Abrasion resistance: paper traveling distance 100km (print ratio: 12.5% or less)	
Operating environment	Operating temperature*** 0°C to 50°C	
	Operating humidity**** 20 to 85% RH	
	Storage temperature -10°C to +60°C	
	Storage humidity 5 to 95% RH	
Detection function	Head temperature detection Thermistor	
	Paper out / mark detection Photo sensor	
Recommended thermal sensitive paper	High sensitive paper TF50KS-E	
	Standard paper PD150R, TF60KS-E	
	Medium life storage paper PD170R, TP60KS-F1, P220VBB-1	
	Long life storage paper PD160R	

\*: At 25°C high speed mode, using specified thermal paper

\*\*: At 25°C batch printing mode, using specified thermal paper

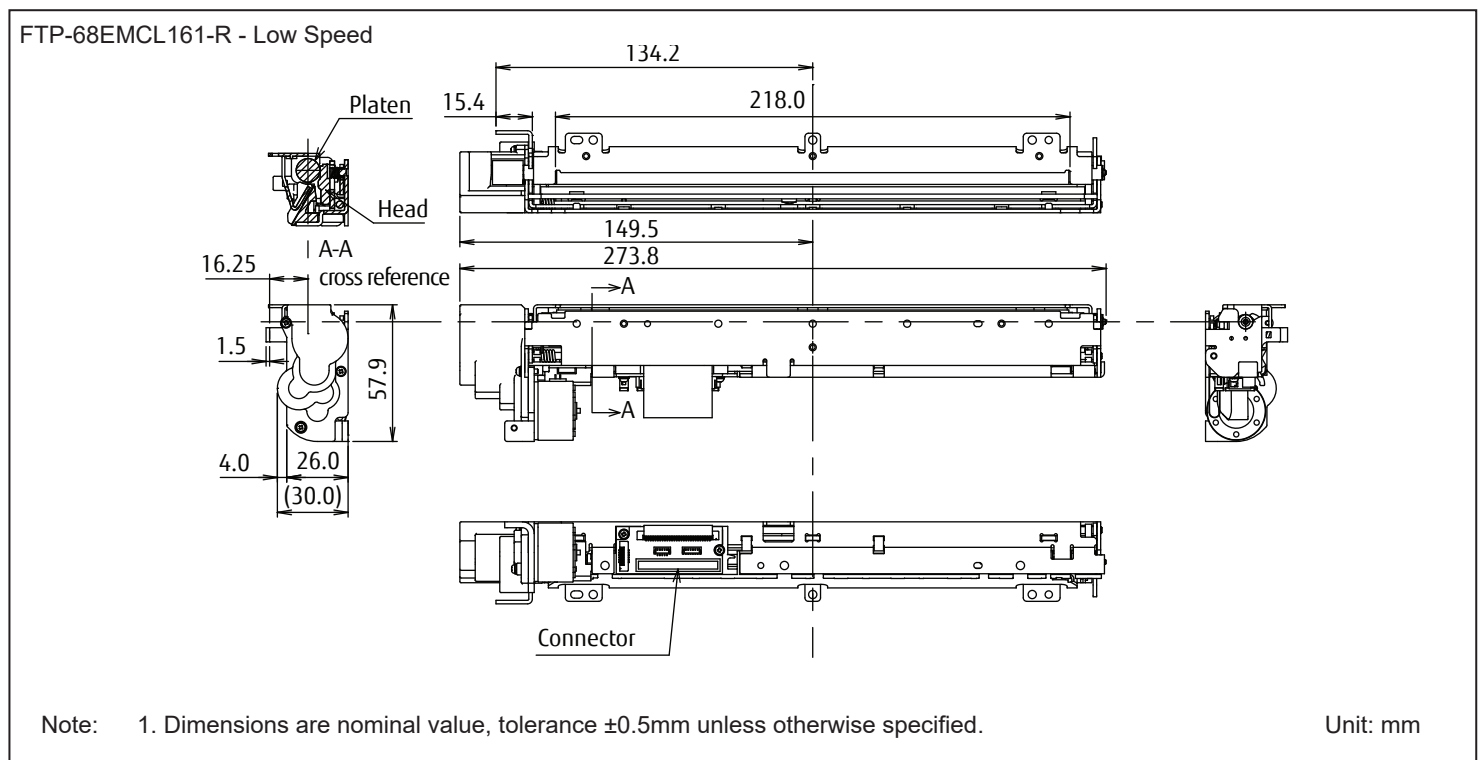
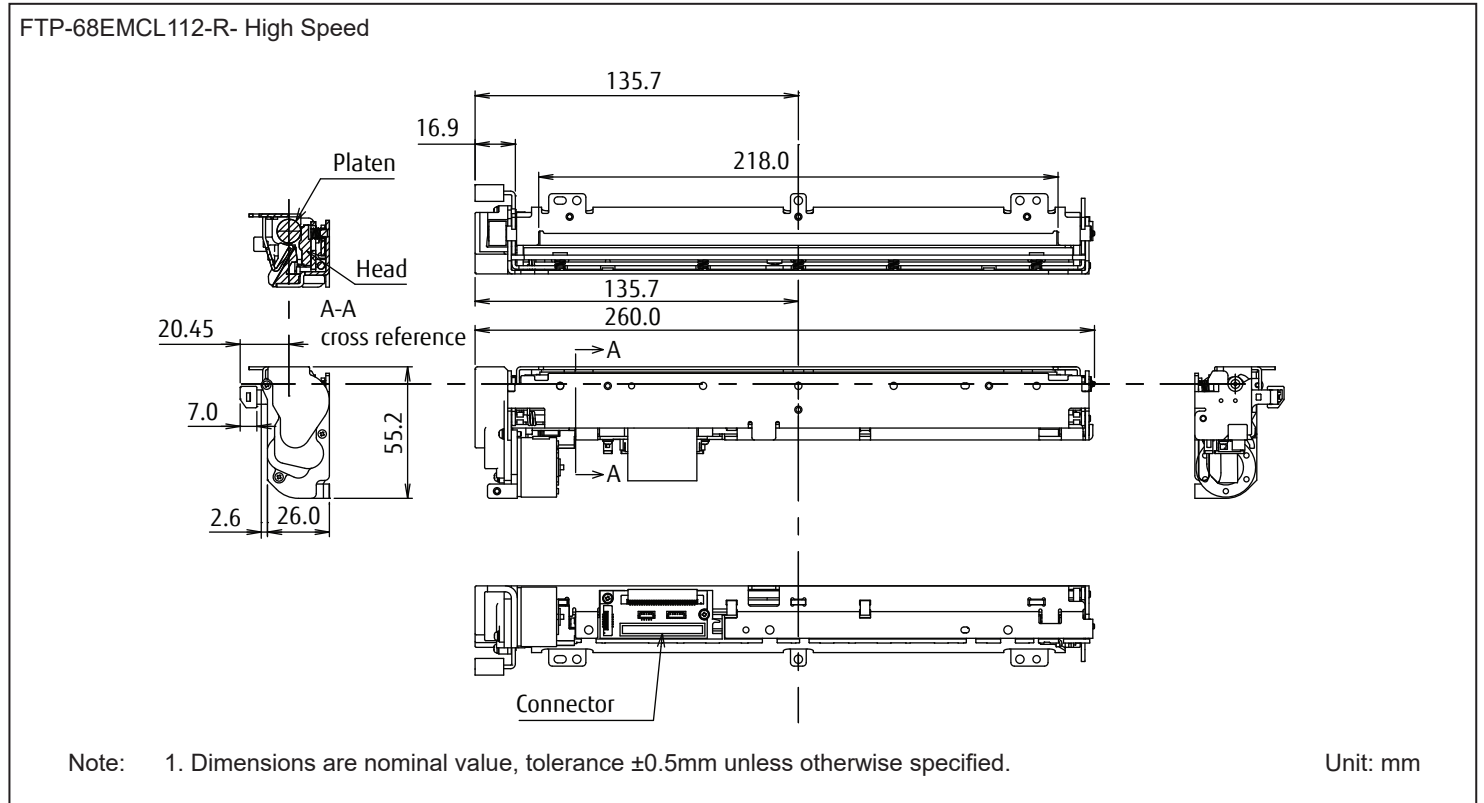
\*\*\*: +5° to +40°C printing density assurance range

\*\*\*\*: Gradual decrease 12 to 52%RH in the range of +40°C to +50°C

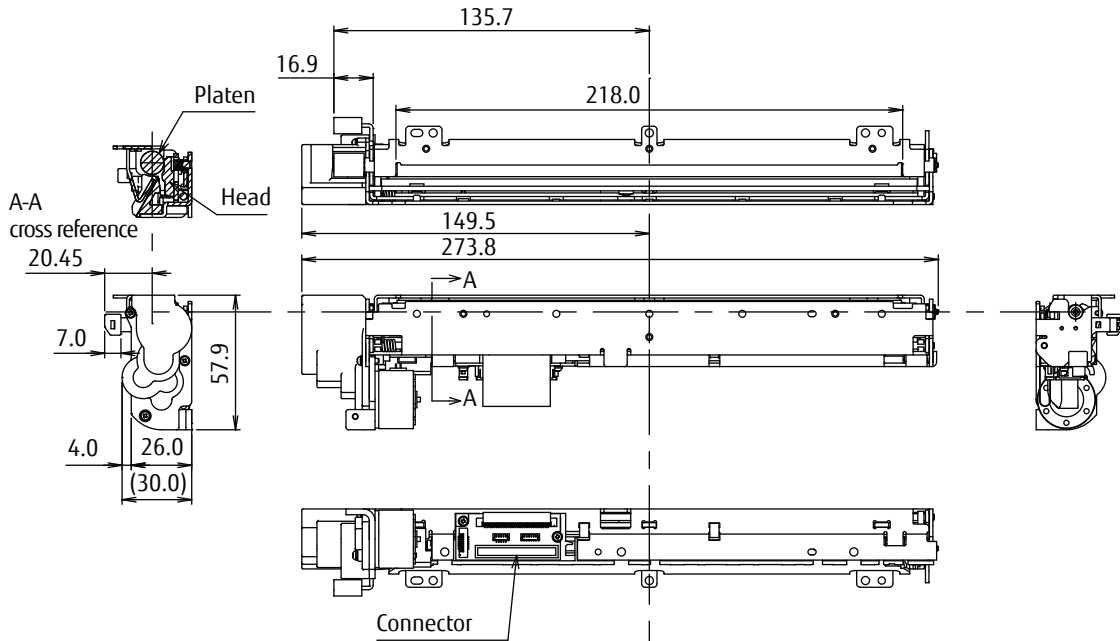
■ Part Number Specifications

Print Speed	Part Number	Paper Thickness (recommended paper)	Sensor		FPC Adaptor	Lever Cap	Dimension Specifications
			Paper Detection	Mark (hole) Detection			
High	FTP-68EMCL112-R	60 to 100µm	With	With	With	With	Please see page 4
Low	FTP-68EMCL161-R		With	With	With	None	Please see page 4
	FTP-68EMCL162-R		With	With	With	With	Please see page 6

■ Dimensions



FTP-68EMCL162-R - Low Speed



Note: 1. Dimensions are nominal value, tolerance  $\pm 0.5\text{mm}$  unless otherwise specified.

Unit: mm

FTP-68EMCL112-R/161-R/162-R

■ Printer connector (head extension connector board) PIN arrays

- Adaptor board side: B34B-PHDSS (LF) (SN) (JST)  
Remote side: PHDR-34VS (JST)

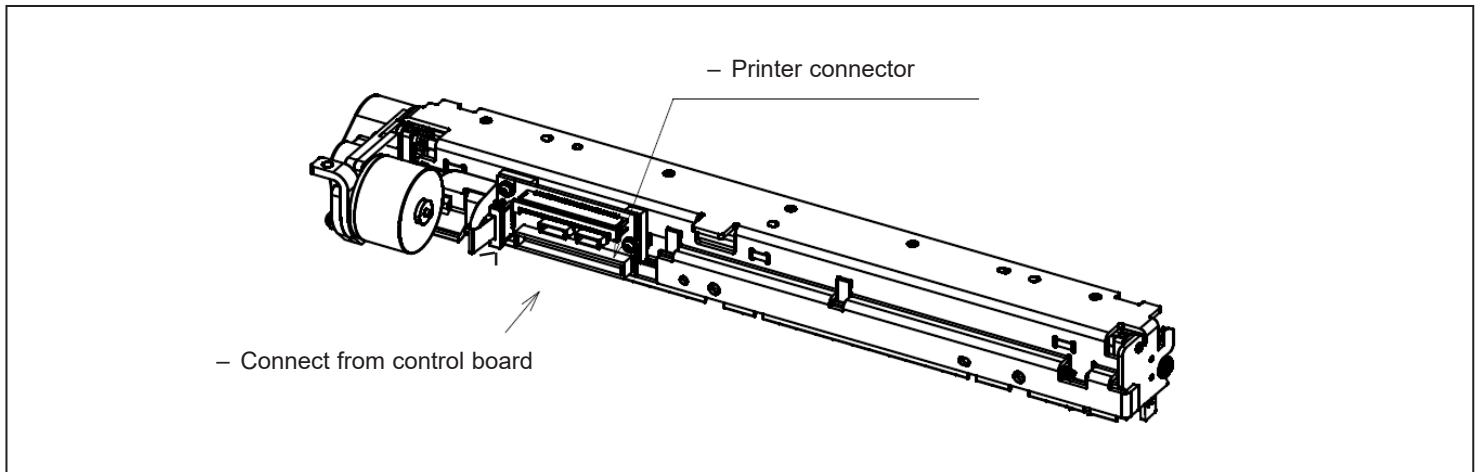
No	Signal	I/O	Contents
1	MTMP	I	Motor temperature detection
2	GND	-	Motor temperature detection ground
3	MT_/A	I	Transporter motor /A excitation signal
4	MT_A	I	Transporter motor A excitation signal
5	MT_B	I	Transporter motor B excitation signal
6	MT_/B	I	Transporter motor /B excitation signal
7	VSEN	I	Paper sensor power
8	PHE	O	Paper sensor out
9	PHK	O	Paper sensor cathode
10	VSEN	I	Mark (hole) sensor power terminal*
11	PHE	O	Mark (hole) sensor output terminal*
12	PHK	O	Mark (hole) sensor cathode terminal*
13	HUP	O	Platen open detection
14	GND	-	3.3V ground for the platen open sensor
15	VH	I	Thermal head power supply
16	VH	I	
17	DO	O	Thermal head data output

No	Signal	I/O	Contents
18	/LAT	I	Thermal head latch input
19	CLK	I	Thermal head clock
20	VDD	I	Thermal head logic power supply
21	/STB1	I	Head strobe 1 signal
22	/STB2	I	Head strobe 2 signal
23	/STB3	I	Head strobe 3 signal
24	GND	-	Power ground
25	GND	-	
26	GND	-	
27	GND	-	
28	HTMP	O	Thermal head temperature detection
29	/STB4	I	Head strobe 4 signal
30	/STB5	I	Head strobe 5 signal
31	/STB6	I	Head strobe 6 signal
32	DI	I	Thermal head data input
33	VH	I	Thermal head power supply
34	VH	I	

Do not plug or unplug the FPC when power is on.

## FTP-68EMCL112-R/161-R/162-R

- Adaptor board type (connector specification)
  - Connector pin array (viewed from relay board side)
    - Adaptor board side: B34B-PHDSS (LF) (SN) (JST)
    - Remote side: PHDR-34VS (JST)



---

### Contact

#### MEIKO ELECTRONIC COMPONENTS CO., LTD.

935, Nosakada, Oaza, Iiyama-shi,  
Nagano, 389-2233, Japan  
Tel: (81-3) 0269-62-1155

---

### Copyright

All trademarks or registered trademarks are the property of their respective owners. Meiko Electronic Components Co., Ltd. does not warrant that the content of datasheet is error free. In a continuing effort to improve our products Meiko Electronic Components Co., Ltd. reserves the right to change specifications/datasheets without prior notice.

Copyright ©2026 Meiko Electronic Components Co.,Ltd. All rights reserved. Revised June 1, 2026.

---