

FUJITSU Component Thermal Printer FTP-62HMCL163/463 series

Fujitsu 2" high speed thermal printer mechanism for 58mm paper width with cutter option

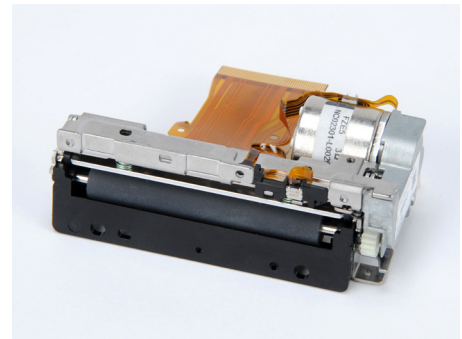
Overview

The compact, low voltage FTP-62HMCL series provides an ultra low profile design and high speed printing (120mm/s).

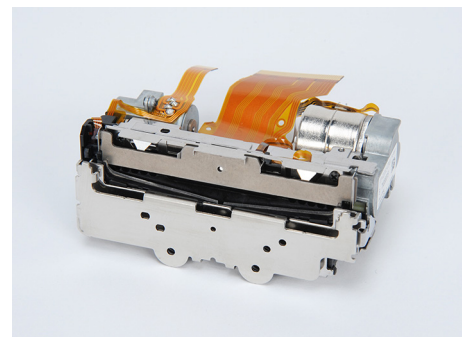
The series is suitable for a variety of applications, such as POS/ECR, kiosk terminals, ticket machines, label printers, banking machines, measuring devices, medical equipment, etc.

Features

- **High-speed printing**
It can print at 120mm/s (960 dotlines/s) maximum by using Fujitsu Components' unique head drive control
- Label printing available
- **Rear paper insertion mechanism with lock type**
Fujitsu Components' unique platen release mechanism allows for a straight paper path and easy head 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
- **Compact size**
FTP-62HMCL163: Width: 76.2mm, depth: 20.4mm, height: 36.3mm
FTP-62HMCL463: Width: 80.5mm, depth: 34.8mm, height: 45.6mm
- **High resolution**
8 dots/mm head provides clear print out
- **Cutter**
FTP-62HMCL463: Full or partial cut
- UL recognized, file # E171434
- RoHS compliant



FTP-62HMCL163



FTP-62HMCL463

■ Part numbers

Item		Part Number
Printer mechanism	Back insertion	FTP-62HMCL163 (58mm paper width, without cutter) FTP-62HMCL463 (58mm paper width, with cutter)
Interface board		FTP-62HDSL101#01 (ANK, Thai, JIS Kanji) *1 FTP-62HDSL101#02 (ANK, Thai, Traditional Chinese) *1
LSI for driving		FTP-62HCU101-R
Interface cable	USB	FTP-629Y301#01*2
	RS-232C	FTP-628Y302
Power supply cable		FTP-629Y601

*1: Please see page 3 for basic interface board information. More detailed information can be obtained from your local Fujitsu sales representative.

*2: USB mini-B type cable can be used.

■ Specifications

Item	Specifications		
Part number	FTP-62HMCL163	FTP-62HMCL463	
Printing method	Thermal sensitive line dot method		
Dot structure	384 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	48mm		
Paper width	58mm +0/-1		
Paper thickness	60-150 μ m*1	60-80 μ m*1	
Cutting type	---	Full or partial	
Printing speed	120mm/s (960 dot lines/s)*2		
Power	Head	4.2 to 9.5VDC 2.4A (Head voltage 7.2VDC, 176 Ω , +25°C, concurrent applied dot number: 64 dots)	
	Printer motor	4.2 to 9.5VDC 1.5A (using Fujitsu Components' standard constant current circuit drive)	
	Cutter motor	4.75 to 9.5VDC 1.5A max.	
	Logic	3.3VDC \pm 10% or 5VDC \pm 10% 0.1A maximum	
Dimensions (WxDxH)	Printer mechanism	76.2 x 20.4 x 36.3mm	80.5 x 34.8 x 45.6mm
	Weight	Printer mechanism	70g
Expected life	Head	Pulse durability: 100 million pulse/dot (using Fujitsu Components' standard driving method) Wear resistance: 100km (at 12.5% print ratio)	
	Cutter	---	1 million cuts
Environmental conditions	Operating temperature	-10°C to +50°C (no condensation), +5°C to +40°C print density guarantee	
	Operating humidity	20 to 85% RH (no condensation)	
	Storage temperature	-20°C to +60°C (excluding paper)	
	Storage humidity	5 to 95% RH (no condensation)	
Detection functions	Head temperature	By thermistor	
	Paper out/Mark detect	By photointerrupter	
	Platen open	By slide switch	
Recommended thermal sensitive paper	High sensitive paper	TF50KS-E45 (Nippon paper)	
	Standard paper	PD150R (Oji paper)	
	Long term paper	PD160R (Oji paper), TF50KJ-R (Nippon paper), HA220AA (Mitsubishi paper) *3	

*1: there may be exceptions

*2: Head voltage 7.6V, ambient temperature 25°C, concurrent applied dots 128 dots maximum, high speed mode, motor drive current 600mA/phase, use standard paper.

*3: Maximum printing speed is 50mm/s when using HA220AA.

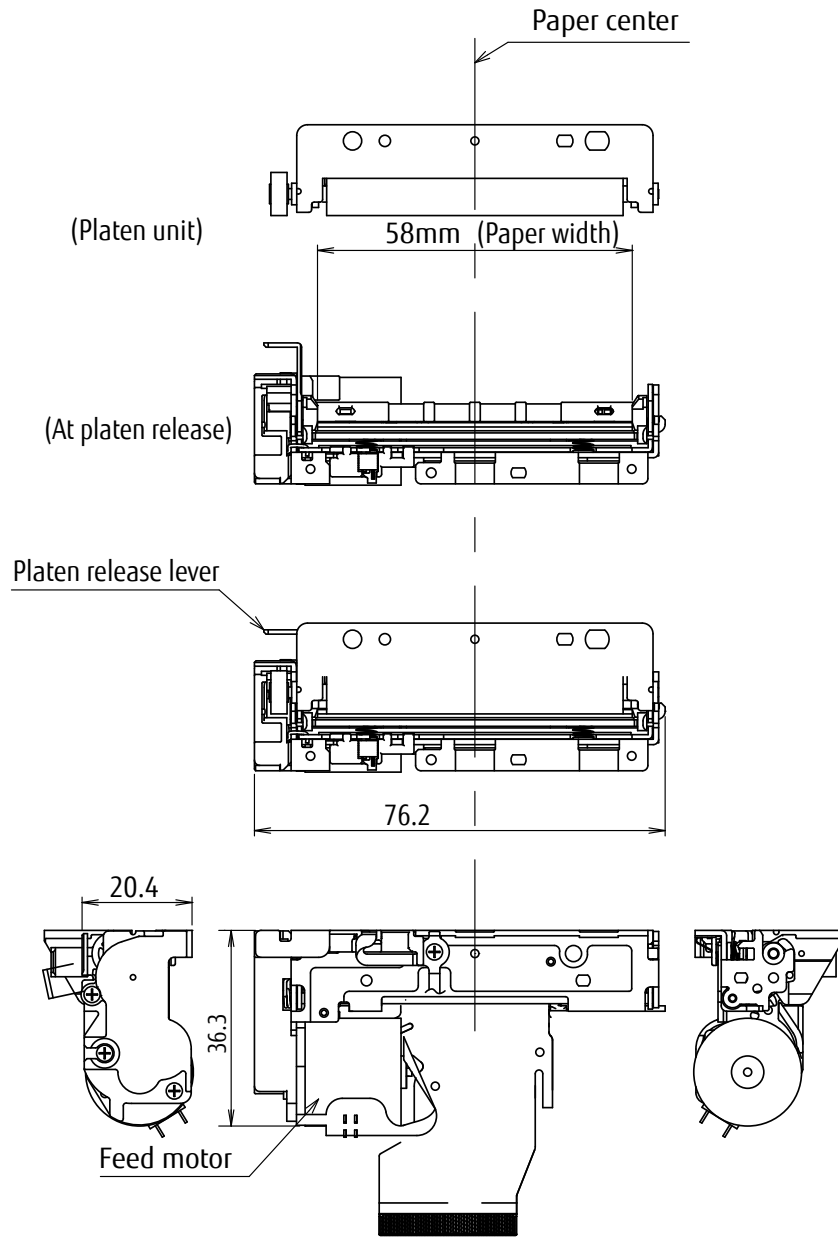
■ Interface boards

Item	Specifications	
Part number	FTP-62HDSL101#01	FTP-62HDSL101#02
Power	6.0 to 9.5V	
Character type	Alphanumeric, Kana, International & special OCR, enlarged characters, downloaded characters, external characters	
	Extended Kaji (#01)	Traditional Chinese(#02)
Characteristic dimensions (W x H)	8 x 16 dots, 12 x 24 dots, 16 x 16 dots, 24 x 24 dots, 24 x 40 dots, 24 x 48 dots, 36 x 60 dots	
Interface	USB, RS232C	
Dimensions (W x D)	75 x 70 mm	

■ Dimensions

- Printer mechanism: 2-inch

FTP-62HMCL163

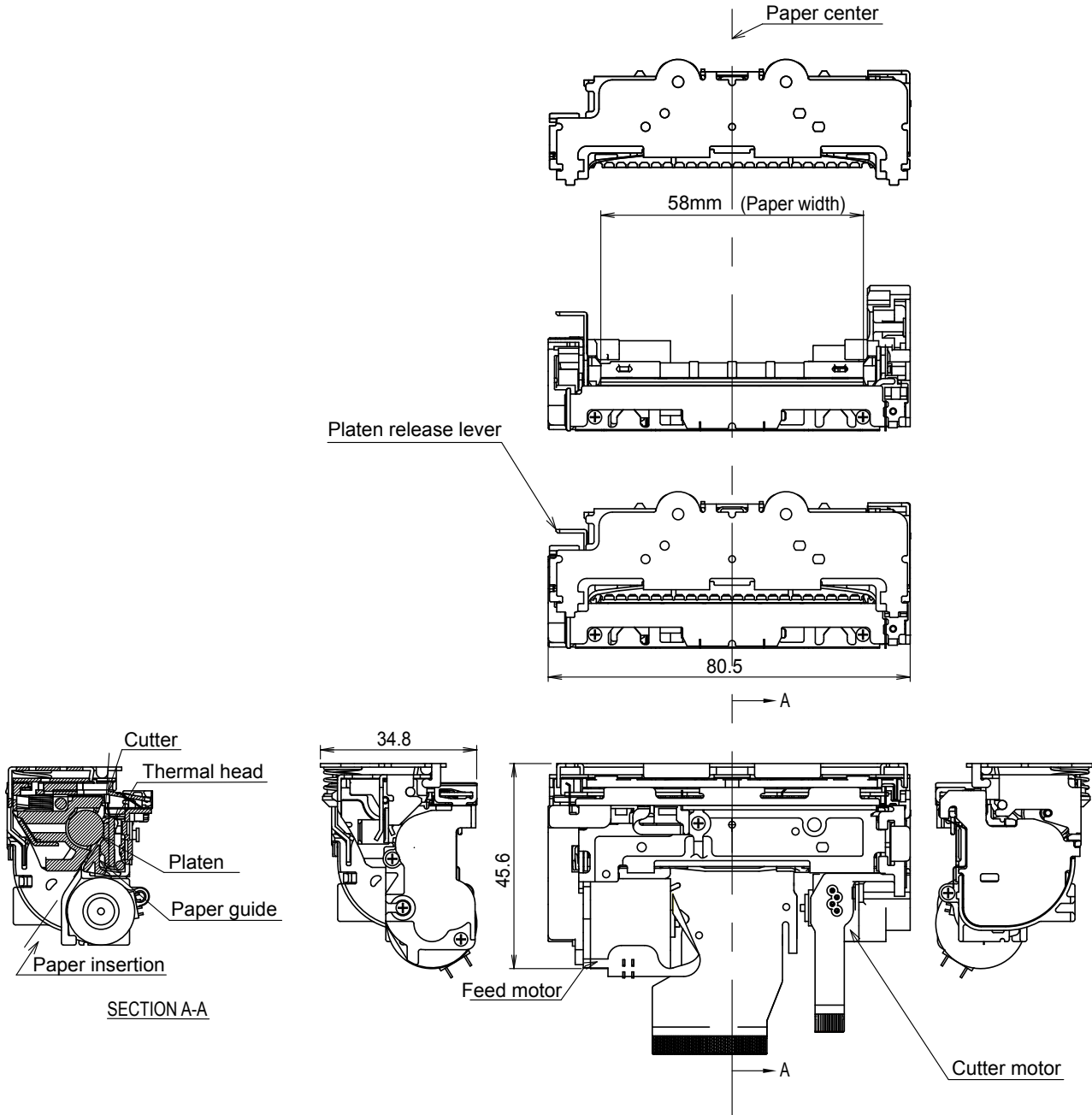


Note: 1. Dimensions are nominal value) tolerance $\pm 0.5\text{mm}$ unless otherwise specified.
2. Dimensions in () is reference value.

■ Dimensions

- Printer mechanism: 2-inch

FTP-62HMCL463



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 printer mechanism (FPC)

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	STB6	Strobe6	IN
17	STB5	Strobe5	IN
18	STB4	Strobe4	IN
19	VDD	Logic power	IN
20	TM	Thermistor	OUT
21	TM	Thermistor	OUT
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 release switch	OUT
38	SW	Platen release switch	OUT
39	FG	Flame ground	-
40	MTM	Motor thermistor	OUT

No	Signal	Content	I/O
41	MTM	Motor thermistor	OUT
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

■ Connector pin assignments of cutter (FPC)

No	Signal	Content	I/O
1	MT_B	Excitation signal B	SINK/SOURCE
2	MT_B	Excitation signal B	SINK/SOURCE
3	MT_/B	Excitation signal /B	SINK/SOURCE
4	MT_/B	Excitation signal /B	SINK/SOURCE
5	MT_A	Excitation signal A	SINK/SOURCE
6	MT_A	Excitation signal A	SINK/SOURCE
7	MT_/A	Excitation signal /A	SINK/SOURCE
8	MT_/A	Excitation signal /A	SINK/SOURCE
9	N.C.	Not connected	-
10	VSEN	Paper sensor power	IN
11	PHE	Emitter for photo interrupter	OUT
12	PHK	Cathode for photo interrupter	OUT

Contact

Japan

FUJITSU COMPONENT LIMITED
Shinagawa Seaside Park Tower
12-4, Higashi-shinagawa 4-chome,
Tokyo 140 0002, Japan
Tel: (81-3) 3450-1682
Fax: (81-3) 3474-2385
Email: fcl-contact@cs.jp.fujitsu.com
Web: www.fujitsu.com/jp/group/fcl/en/

North and South America

FUJITSU COMPONENTS AMERICA, INC.
1230 E. Arques Ave., MS 160
Sunnyvale, CA 94085 U.S.A.
Tel: (1-408) 745-4900
Fax: (1-408) 745-4970
Email: components@us.fujitsu.com
Web: http://us.fujitsu.com/components/

Europe

FUJITSU COMPONENTS EUROPE B.V.
Diamantlaan 25
2132 WV Hoofddorp
Netherlands
Tel: (31-23) 5560910
Fax: (31-23) 5560950
Email: info@fceu.fujitsu.com
Web: emea.fujitsu.com/components/

Asia Pacific

FUJITSU COMPONENTS ASIA, Ltd.
102E Pasir Panjang Road
#01-01 Citilink Warehouse Complex,
Singapore 118529
Tel: (65) 6375-8560 / Fax: (65) 6273-3021
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/devices/
components/

China

FUJITSU ELECTRONIC COMPONENTS
(SHANGHAI) CO., LTD.
Unit 4306, InterContinental Center
100 Yu Tong Road, Shanghai 200070, China
Tel: (86 21) 3253 0998 /Fax: (86 21) 3253 0997
Email: fcsh@cn.fujitsu.com
www.fujitsu.com/cn/products/devices/
components/

Hong Kong

FUJITSU COMPONENTS HONG KONG Co., Ltd.
Room 06, 28/F, Greenfield Tower, Concordia
Plaza, No.1 Science Museum Road,
Tsim Sha Tsui East, Kowloon, Hong Kong
Tel: (852) 2881 8495 Fax: (852) 2894 9512
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/devices/
components/

Korea

FUJITSU COMPONENTS KOREA, LTD.
Alpha Tower #403,
645 Sampyeong-dong,
Bundang-gu, Seongnam-si,
Gyeonggi-do, 13524 Korea
Tel: (82 31) 708-7108
Fax: (82 31) 709-7108
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/
devices/components/

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