

DISCONTINUED

BATTERY DRIVE, FTP-60D Series 2" HIGH SPEED THERMAL PRINTER

FTP-62DMCL101/111, Easy Loading Method

■ OVERVIEW

The easy loading FTP-60D MCL Series is ultra compact high speed, battery driven thermal printer, printing on 2-inch wide paper (58mm) where platens are removable. Our original platen removal mechanism improved paper loading and maintenance.

The FTP-60D MCL series can be used for a variety of applications, such as portable terminals, POS, banking terminals, and measurement and medical equipment.



FTP-62D series

■ HIGHLIGHTS

- **Easy loading type**
Our unique platen removal mechanism improved paper loading and maintenance
- **Ultra compact**
Height 19 mm, width 69.5 mm, depth 46 mm for the 2 inch model
- **High speed printing**
Print at 100mm/s (at 9.5VDC) maximum (FTP-62DMCL101)
Print at 75mm/s (at 7.2 VDC) maximum (FTP-62DMCL111)
- **High resolution printing**
8 dots/mm of resolution printing is possible
- **RoHS compliant**

FTP-62DMCL101/111

■ PART NUMBERS

Item		Part number
Printers		FTP-62DMCL101 (FPC length 38mm) without platen open detect switch FTP-62DMCL111 (FPC length 65mm) without platen switch
LSI for driving		FTP-62DCUxxx
Interface boards	Serial	FTP-62DDSLxxx (RS 232C)
	USB	FTP-62DDSLxxx (V2.0)
	USB/RS-232C	FTP-62DDS001-R
Interface cables	Parallel	FTP-628Y202
	Serial	FTP-628Y302
	USB	FTP-628Y301
Power cable (head, motor, logic)		FTP-628Y402
Platen replacement		FTP-62DMP0221

■ SPECIFICATIONS

Item		Specifications
Part number		FTP-62DMCL101/111
Printing method		Thermal-line dot method
Dot structure		384 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		48 mm
Number of columns		ANK 32 columns/line (maximum 12x 24 dot font)
Paper width		58 mm ⁺⁰ ₋₁
Paper thickness		60 to 85 μm (some paper in this range may not be used because of paper characteristics)
Printing Speed	MCL101	Maximum 100mm/sec. (800 dot line/sec.) at 9.5V
	MCL111	Maximum 75mm/sec. (600 dot line/sec.) at 7.2V
Character types		Alphanumeric, katakana: 159 types International and special characters: 195 types JIS Kanji level 1, level 2, non-Kanji (supported only when Kanji CG is mounted): about 6800 types
Character, dimensions (H×W), number of columns		12 × 24 dots, (1.5 × 3.0mm), 32 columns: ANK 24 × 24 dots, (3.0 × 3.0mm), 16 columns: ANK, Kanji 8 × 16 dots, (1.0 × 2.0 mm), 48 columns: ANK 16 × 16 dots, (2.0 × 2.0 mm), 24 columns: ANK, Kanji

FTP-62DMCL101/111

■ SPECIFICATIONS

Item		Specification	
		FTP-62DMCL101/111	
Interface		Conforms to RS232C / USB	
Operating Voltage	For print head	MCL101/111	4.2 VDC to 9.5 V, average current 0.87A (0.93), peak value Printing ratio: 12.5%, printing speed 75mm/sec. at 7.2 V
	For motor	MCL101/111	4.2 to 9.5VDC, 1A maximum
	For logic	MCL101/111	3.0 to 5.25VDC, 0.1 A maximum
Dimensions	Printer mechanism	69.5 x 46 x 19mm (WxDxH)	
	Interface board	40 x 41mm	
Weight	Printer mechanism	Approximately 29g	
	Interface board	TBA	
Head life		Pulse resistance: 100 million 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	
	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	
Recommended thermal sensitive paper		High sensitive paper:	TF60KS-E4 (Nippon Paper)
		Standard paper:	TK50KS-E (Nippon Paper) PD150R (Oji Paper) FTP-020P0701 (58mm)
		Medium life storage paper:	TK60KS-F1 (Nippon Paper) FTP-020P0704 (58mm) PD170R (Oji Paper) P220VBB-1 (Mitsubishi Paper)
		Long life storage paper:	PD160R-N (Oji Paper) AFP-235 (Mitsubishi Paper) TP50KJ-R (Nippon Paper) HA220AA (Nippon Paper)

*+5°C to +40°C printing density assurance range (-25 to 70°C capability)

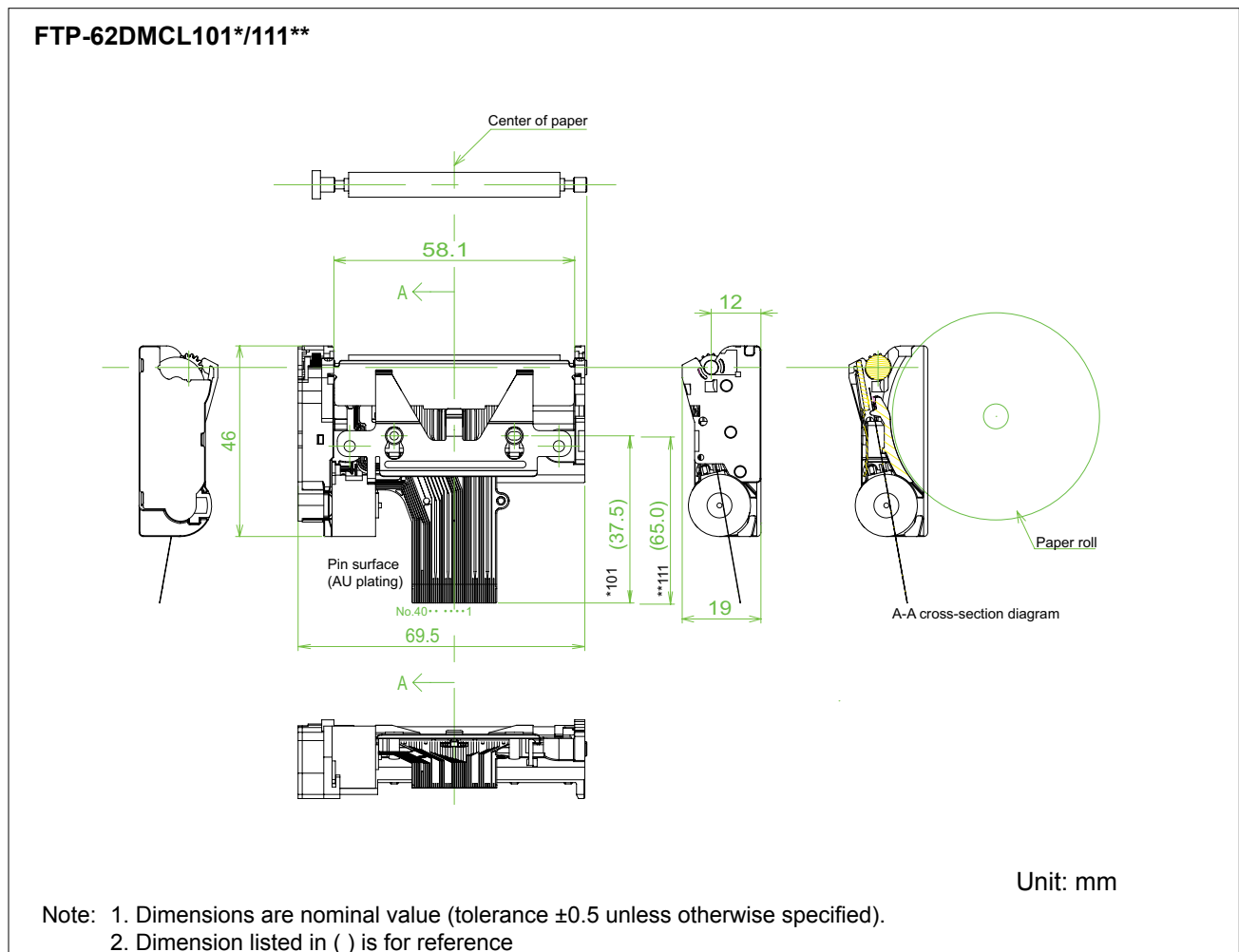
FTP-62DMCL101/111

FUNCTION

Item	Item
1. Test print function	8. Mark detection function
2. Paper out detection	9. MCU operation abnormality detection
3. Paper near end detection	10. Power ON/OFF sequence protection
4. Thermal head temperature abnormality detection	11. Motor over-current protection
5. Blow-out fuse detection	12. Hardware timer
6. Head voltage abnormality detection	
7. Motor power saving function	

DIMENSIONS

1. Printer mechanism: 2- inch



■ PRINTER CONNECTOR (FLEXIBLE PT BOARD) PIN ARRAYS

FTP-62DMCL101/111

Thermal head, control circuit side connector: 54104-4031 Molex or equivalent product

No.	Symbol	I/O	Signal Name
1	N.C.	-	No connection
2	N.C	-	
3	VH	I	Head drive power
4	VH	I	
5	VH	I	
6	VH	I	
7	DI	I	Data in
8	CLK	I	Clock
9	GND	-	Head ground
10	GND	-	
11	GND	-	
12	GND	-	
13	STB6	I	Strobe 6
14	STB5	I	Strobe 5
15	STB4	I	Strobe 4
16	Vdd	I	Logic power
17	TM	O	Thermistor
18	TM	O	
19	STB3	I	Strobe 3
20	STB2	I	Strobe 2
21	STB1	I	Strobe 1
23	GND	-	Head ground
24	GND	-	
25	GND	-	
26	/LAT	I	/ Data latch
27	DO	O	Data out
28	VH	I	Head drive power
29	VH	I	
30	VH	I	
31	VH	I	
32	N.C.	-	No connection
33	PHK	-	Cathode for photo interrupter
34	VSEN	I	Paper sensor power
35	PHE	O	Emittor for photo interruptor
36	N.C.	-	No connection
37	MT /A	I	Excitation signal A
38	MT / \bar{A}	I	Excitation signal \bar{A}
39	MT /B	I	Excitation signal B
40	MT / \bar{B}	I	Excitation signal \bar{B}

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

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.
2290 North First Street, Suite 212
San Jose, CA 95131 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: fcal@sg.fujitsu.com
www.fujitsu.com/sg/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/

Copyright

All trademarks or registered trademarks are the property of their respective owners. Fujitsu Components America or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products Fujitsu Components America, Inc. or its affiliates reserve the right to change specifications/datasheets without prior notice. Copyright ©2018 Fujitsu Components America, Inc. All rights reserved. Revised March 28, 2018.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru