

# FCL Components

## Print Solutions

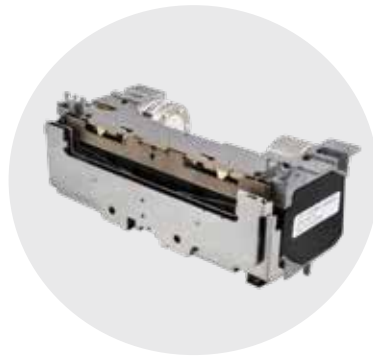


## About us

With over 100 years of experience in design and development, customers are centric to FCL Components activities.

Collaboration is the cornerstone of our success, working with like-minded customers helping them to achieve their goals.

Our extensive product portfolio, covering relays, thermal printers, touch panels, wireless modules and IoT solutions, serves the needs of a wide variety of markets with proven results.



# Print Mechanisms

## Always the right mechanism

FCL Components' 40 years of expertise designing and producing high quality print mechanisms has resulted in a complete line-up of mechanisms.

The line-up covers 2-inch to 8-inch, battery powered, 12V and 24V thermal printers.

The design center in Japan uses the latest technology to develop high quality printers such as the modular design of the FTP-63G/83G series printers which allow the customer to choose paper sizes ranging from 2-inches to 3-inches.

### Benefits

- High Quality
- Sturdy Metal Frame
- Easy Loading
- ESD discharge through the frame

## Low Voltage Printers

FCL Components versatile low voltage print mechanisms are manufactured using materials that allow a compact design while achieving outstanding mechanical strength and ESD performance.

The operating range for the low voltage printer mechanisms is 3.3Vdc, up to 9.5Vdc.

FCL Components low voltage print mechanisms are available as horizontal as well vertical versions, allowing a wide variety of use.

## FTP-6x8 series



Description	FCL Components battery driven high-speed ultra-compact printers
Size	2-inch: 70.2 x 33.0 x 15.5 mm (101/103) 81.2 x 42.2 x 21.8 mm (401) 3-inch: 15.5 x 92.2 x 33.0 mm (103) 4-inch: 20.5 x 139.5 x 40.5 mm (103)
Dot structure	2-inch: 384 dots/line 3-inch: 576 dots/line 4-inch: 832 dots/line
Paper width	2-inch: 58 mm 3-inch: 80mm 4-inch: 114mm
Paper thickness	60-85µm (cutter)
Printing speed	2-inch: 100mm/s 3-inch: 60mm/s 4-inch: 50mm/s
2-inch	FTP-628MCL101#72 paper path: curl, detachable platen, no cutter, no platen switch  FTP-628MCL103#72 paper path: straight, detachable platen, no cutter  FTP-628MCL401#01 paper path: curl, detachable platen (lever/ lock), cutter
3-inch	FTP-638MCL103 paper path: curl, detachable platen, no cutter
4-inch	FTP-648MCL103 paper path: curl, detachable platen, no cutter, 114mm paper width



## FTP-6xH series



Description	FCL Components low voltage, ultra low profile high speed printer
Size	2-inch: 76.2 x 20.4 x 36.3mm (163) 80.5 x 34.8 x 45.6 mm (463) 3-inch: 96.2 x 20.4 x 36.3mm (163) 100.5 x 32.6 x 45.6 mm (463) 4-inch: 144.6 x 35.2 x 42.5mm
Dot structure	2-inch: 384 dots/lines 3-inch: 576 dots/lines 4-inch: 832 dots/lines
Paper width	2-inch: 58mm 3-inch: 80mm 4-inch: 114mm
Paper thickness	60-100µm
Printing speed	2-inch: 120mm/s 3-inch: 100 mm/s 4-inch: 100 mm/s
2-inch	FTP-62HMCL163 paper path: straight, detachable platen (lever/ lock), no cutter  FTP-62HMCL463 paper path: straight, detachable platen (lever/ lock), cutter
3-inch	FTP-63HMCL163 paper path: straight, detachable platen (lever/ lock), no cutter  FTP-63HMCL463 paper path: straight, detachable platen (lever/ lock), cutter
4-inch	FTP-64HMCL153 paper path: straight, detachable platen (lever/ lock), no cutter

## FTP-62D series



Description	FCL Components low voltage, ultra compact, thermal printer with removable platen
Size	69.5 x 46.0 x 19.0mm
Dot structure	384 dots/line
Paper width	2-inch: 58 mm
Paper thickness	60-85µm
Printing speed	100mm/s (101#02 / 111#02)
2-inch	FTP-62DMCL101#02 detachable platen, no cutter FPC length: 38mm  FTP-62DMCL111#02 detachable platen, no cutter FPC length: 65mm

## 12 and 24 Volt Printers

FCL Components has engineered its print mechanisms to include the best features per product series.

The FTP-6x7 family is based on the proven design of the 6x8 series, making it compact, rugged and reliable.

The FTP-6x9 series is designed to meet the more stringent requirements needed in some applications.

FCL Components newest addition, the FTP-63G/83G series, combines flexibility and performance in the smallest possible footprint.

FCL Components printer line-up covers 2" up to 8" printers as well as cutter and non-cutter versions.

## FTP-6x7 series



Description	FCL Components 24V high speed thermal printer
Size	2-inch: 82.5 x 42.2 x 21.8 mm 3-inch: 103.2 x 42.2 x 21.8 mm (421) 104.5 x 42.2 x 21.8 mm (411)
Dot structure	2-inch: 432 dots/line 3-inch: 576 dots/line
Paper width	2-inch: 58 mm 3-inch: 80mm
Paper thickness	60-85µm
Printing speed	2-inch: 200mm/s 3-inch: 150 mm/s (411) 100 mm/s (421)
2-inch	FTP-627MCL411 paper path: curl, detachable platen (lever/ lock), cutter
3-inch	FTP-637MCL411 paper path: curl, detachable platen (lever/ lock), cutter  FTP-637MCL421 paper path: curl, detachable platen (lever/ lock), cutter (2 point partial cut)



## FTP-6x9 series



Description	FCL Components 24V, ultra high speed printer
Size	2-inch: 82.3 x 40.5 x 20.5 mm (054/103) 90.6 x 62.5 x 37.7 mm (354 /374) 3-inch: 104.4 x 40.5 x 20.5 mm (054/103) 110.4 x 62.5 x 39.4 mm (354/374)
Dot structure	2-inch: 432 dots/line 3-inch: 576 dots/lines
Paper width	2-inch: 54mm 3-inch: 82.5mm
Paper thickness	60 -100µm
Printing speed	200mm/s
2-inch	<p>FTP-629MCL054 paper path: straight, fixed platen, no cutter</p> <p>FTP-629MCL103 paper path: curl, detachable platen, no cutter</p> <p>FTP-629MCL354 paper path: straight, fixed platen, cutter</p> <p>FTP-629MCL374 paper path: straight, fixed platen, cutter</p>
3-inchble	<p>FTP-639MCL054 paper path: straight, fixed platen, no cutter</p> <p>FTP-639MCL103 paper path: curl, detachable platen (lever/ lock), no cutter</p> <p>FTP-639MCL354#70 paper path: straight, fixed platen, cutter</p> <p>FTP-639MCL374#70 paper path: straight, fixed platen, cutter</p>

## FTP-6xG series

203dpi



Description	FCL Components 24/12V, high performance printer
Size	2-inch: 76.2 x 20.4 x 36.3mm (163/173) 80.5 x 34.8 x 45.6mm (463/473) 3-inch: 96.2 x 20.4 x 36.3mm (163) 100.5 x 32.6 x 45.6mm (463, 473) 4-inch: 144.6 x 29.1 x 42.5mm
Dot structure	2-inch: 432 dots/line 3-inch: 576 dots/lines 4-inch: 832 dots/lines
Paper width	2-inch: 58mm (163/463/463#10/473/173) 60mm (163#01/173#01/463#11/473) 3-inch: 80mm 4-inch: 114mm
Paper thickness	60 -150µm
Printing speed	2-inch: 200mm/s (163/163#01/463) 120mm/s at 12VDC, 200mm/s at 24VDC (173/473) 250mm/s (463#10 / 463#11) 3-inch: 200mm/s (163/463) 120mm/s at 12VDC, 200mm/s at 24VDC (473) 4-inch: 200mm/s
2-inch	<p>FTP-62GMCL163 paper path: straight, detachable platen, (lever/ lock) no cutter</p> <p>FTP-62GMCL163#01 paper path: straight, detachable platen, (lever/ lock) no cutter</p> <p>FTP-62GMCL173#01 12V paper path: straight, detachable platen, (lever/ lock), no cutter (60mm paper)</p> <p>FTP-62GMCL463 paper path: straight, detachable platen, (lever/ lock), cutter</p> <p>FTP-62GMCL463#10 paper path: straight, detachable platen, (lever/ lock), cutter</p> <p>FTP-62GMCL463#11 paper path: straight, detachable platen, (lever/ lock), cutter</p> <p>FTP-62GMCL473 12V paper path: straight, detachable platen, (lever/ lock), cutter</p> <p>FTP-62GMCL473#01 12V paper path: straight, detachable platen, (lever/ lock), cutter (60mm paper)</p>

## FTP-6xG series

203dpi



	<p>FTP-63GMCL163 paper path: straight, detachable platen, (level/ lock), no cutter</p> <p>FTP-63GMCL463 paper path: straight, detachable platen, (lever/ lock), cutter</p> <p>FTP-63GMCL473 12V paper path: straight, detachable platen, (lever/ lock), cutter</p>
3-inch	
4-inch	<p>FTP-64GMCL153 paper path: straight, detachable platen, (level/ lock), no cutter</p>



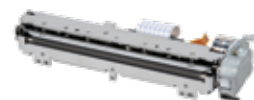
## FTP-63G/83G series

High Performance



Description	FCL Components 24V, high performance
Size	123.7 x 40.0 x 61.0mm
Dot structure	640 dots/lines 960 dots/lines (300dpi)
Paper width	58-86mm
Paper thickness	60 -150µm
Printing Speed	350mm/s 200mm/s (300dpi)
3-inch	FTP-63GMCL483 paper path: straight, detachable platen, (lever/ lock), cutter
	FTP-63GMCL483#03 paper path: straight, detachable platen, (lever/ lock), cutter (3 sensors)
	FTP-83GMCL483 300dpi straight, detachable platen, (lever/ lock), cutter
	FTP-83GMCL483#03 300dpi straight, detachable platen, (lever/ lock), cutter (3 sensors)

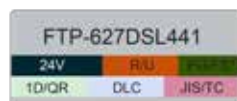
## FTP-6xEMCL series



Description	FCL Components 24V, 6" and 8" printer
Size	6-inch: 194.6 x 55.2 x 26.0 mm (101/112) 206.4 x 57.9 x 30.0 mm (151/162)
	8-inch: 262.0 x 55.2 x 26.0 mm (101/112) 273.0 x 57.9 x 30.0 mm (151/161/162)
Dot structure	6-inch: 1152 dots/lines 8-inch: 1728 dots/lines
Paper width	6-inch: 156mm 8-inch: 216mm
Paper thickness	100µm
Printing speed	6-inch: 100mm/s (101/112) 10mm/min. to 50mm/sec.(151/162)
	8-inch: 80mm/s (101/112) 25mm/s (151/161/162)
6-inch	FTP-66EMCL101 paper path: straight, high speed 100mm/s 1 sensor, no lever cap
	FTP-66EMCL112 paper path: straight, high speed 100mm/s 2 sensors, lever cap
	FTP-66EMCL151 paper path: straight, low speed 50mm/s 1 sensor, no lever cap
	FTP-66EMCL162 paper path: straight, low speed 50mm/s 2 sensors, lever cap
8-inch	FTP-68EMCL101 paper path: straight, high speed 80mm/s 1 sensor, no lever cap
	FTP-68EMCL112 paper path: straight, high speed 80mm/s 2 sensors, lever cap
	FTP-68EMCL151 paper path: straight, low speed 50mm/s 1 sensor, no lever cap
	FTP-68EMCL161 paper path: straight, low speed 50mm/s 2 sensors, no lever cap
	FTP-68EMCL162 paper path: straight, low speed 50mm/s 2 sensors, lever cap

# Control Boards

## Easy to integrate



Product number

7-12V

Power, 7.2 nominal or 12V

R/U

Communication RS-232C/USB

Main functionalities

1D/QR

Page mode and high speed batch image print registration

1D/QR

1D barcode and QR code

DLC/DLI

Download image/ character

JIS/TC

JIS Kanji and Chinese

Series	Type	Model	Control Board
FTP-6x7MCL	Cutter/24V/2"	FTP-627MCL410	
	Cutter/24V/3"	FTP-637MCL410	
FTP-6x8MCL	Cutter less 2", 3"	FTP-6x8MCL000 FTP-6x8MCL100	
	Cutter less 4"	FTP-648MCL100	
	Cutter	FTP-628MCL400	
FTP-6x9MCL	Standard 2", 3"	FTP-6x9MCL000 FTP-6x9MCL100 FTP-6x9MCL300	
	300dpi, 200mm/s	FTP-839MCL100	
FTP-62DMCL	Standard	FTP-62DMCL100	
FTP-6xEMCL	Standard	FTP-66EMCL110 FTP-68EMCL110	
	Low speed	FTP-66EMCL160 FTP-68EMCL160	
FTP-6xGMCL	Standard 2", 3"	FTP-6xGMCL160 FTP-6xGMCL460	
	Standard 4"	FTP-64GMCL150	
	12V	FTP-6xGMCL170 FTP-6xGMCL470	
	Hi-speed 250mm/s	FTP-6xGMCL160#10 FTP-6xGMCL460#10	
	Hi-speed 350mm/s	FTP-63GMCL480	
	300dpi, 200mm/s	FTP-83GMCL480	
FTP-6xHMCL	Standard, 2", 3"	FTP-6xHMCL160 FTP-6xHMCL460	
	Standard 4"	FTP-64HMCL150	

Note \*: includes FTP-628DSL411 series



# Panel Mount and Kiosk Printers

When speed, easy integration, and continuity are important

## Panel Mount Printers

The compact and modular design of FCL Components panel mount printers facilitate easy integration of the unit into the final product.

In addition, these printer feature high reliability, easy maintenance and long life design.

## Kiosk Printers

FCL Components puts the customer at the heart of the printer design. Features such as bracket mount and selectable paper arm position allow for design flexibility.

The large paper roll holder is an option that meets the requirements of today's demanding market.

## Benefits

- High Speed
- Ultra Low Profile
- Easy Paper Loading
- Auto Cutter



## FTP-6xGUSL series

### Panel Mount Printers

Description	FCL Components 24V Receipt Printer Bracket Mount Unit
Size	2-inch: 95.9 x 92 x 115.4mm (FTP-62GUSL001) 97.2 x 96.3 x 119mm (FTP-62GUSL101)  3-inch: 90x 11x 116mm (FTP-63GUSL001)
Printing method	Thermal-line dot method
Dot structure	2-inch: 432 dots/line 3-inch: 576 dots/line
Paper width	2-inch: 58mm 3-inch: 80mm
Paper roll diameter	83mm
Paper thickness	60 to 100 µm
Printing speed	2-inch: max. 170mm/s 3-inch: max. 150mm/s
2-inch  3-inch	FTP-62GUSL001: Plastic housing FTP-62GUSL101: Metal housing  FP-63GUSL001: Plastic housing
Highlights	<ul style="list-style-type: none"><li>• High Printing Speed 170mm/s</li><li>• Auto Cutter Full or partial cut commands available, features FCL Components' unique jam free mechanism</li><li>• Unique platen release mechanism</li><li>• Easy integration</li></ul>



## FTP-639USL series

### Kiosk Printers

Description	FCL Components 3" 24V Receipt Printer Kiosk Unit
Size	Vertical arm: 112.6 x 119.8 x 75.1mm (FTP-638USL104)
	Horizontal arm: 112.6 x 215.7 x 99.6mm (FTP-638USL104)
	No arm: 112.6 x 94.5 x 75.1mm* (FTP-638USL114)
Printing method	Thermal-line dot method
Dot structure	576 dots/line
Paper width	80mm
Paper diameter	150mm
Paper thickness	60 to 100 µm
Printing speed	Max 200mm/sec.
3-inch	FTP-639USL104: Full or partial cut, with arm
	FTP-639USL114: Full or partial cut, without arm
Highlights	<ul style="list-style-type: none"><li>• Ultra high speed 200mm/s</li><li>• Auto Cutter</li><li>• Paper near-end detection</li><li>• 2D bar code printing</li></ul>

\*Excludes protrusions (screws, dumper, etc.) and cables









# Mobile Printers

Small design, maximum performance

FCL Components' mobile printers are durable and are able to function in environments where a regular mobile printer just doesn't cut it.

The mobile printers are designed to be exceptionally rugged and shock-resistance, making the printers suitable for use in a variety of workplaces.

At FCL Components we take the integrator and user in account. The printer is easy to integrate with full support available.

A compact, light design, easy paper load, long battery life, various charging and carrying options make this printer highly user friendly.

## Benefits

- High robustness
- Wide temperature range
- Easy to load
- Accessories available

# Design advantages that make the difference



IP 54 waterproof



2.1mtr dropping height  
(3" mobile printer)



LCD for easy operation  
(3" mobile printer)

## 2-inch Mobile Printer

Part number	FTP-62HWSL001
Description	FCL Components battery driven 2-inch high speed, standalone thermal printer Compatible with iOS
Size	86 x 103.5 x 44 mm
Resolution	203dpi
Printing speed	120 mm/s
Paper width	58 mm
Paper thickness	60-115µm
Power supply	7.4VDC lithium, 2,130mAh battery
Interface	Bluetooth®, USB, NFC
Characteristics	High-speed, compact, light weight, rugged: 1.5 meters dropping height, temperature -10° to 50°C
2-inch	FTP-62HWSL001#11 - Kanji, sensor location to support black mark on the front side of the paper FTP-62HWSL001#12 - Traditional Chinese, sensor location to support black mark on the front side of the paper FTP-62HWSL001#1D - Kanji, sensor location to support black mark on the back side of the paper
Content	1x Printer 1x Battery 1x AC adapter 1x Manual



## 3-inch Mobile Printer

Part number	FTP-638WSL201
Description	FCL Components battery driven, 3-inch, high performance mobile printer Compatible with iOS
Size	118 x 158 x 80mm
Resolution	203dpi
Printing speed	130 mm/s
Paper width	50-80 mm
Paper thickness	60-160µm
Power supply	7.2VDC lithium, 2,500mAh (optional 5,000mAh) battery
Interface	USB, Bluetooth®, WLAN, NFC
Characteristics	High performance, easy operation, rugged: 2.1 meters dropping height and IP54 rated, temperature -20° to 55°C
Content	1x Printer 1x Battery 1x AC adapter 1x Belt strap 1x USB cable 1x Manual





# Printer Integration Support

FCL Components' global network which includes the headoffice, innovation center and local offices around the world are available for support.

Driver software can be downloaded from the FCL Components website: <https://www.fcl-components.com/en/support/thermal-printers/>

Samples for evaluation purposes are available and can be requested at the local sales offices.



## Mobile Printer support

- **Providing drivers and SDK for various OS**  
Windows, Linux, Mac, OPOS, JavaPOS, Android, iOS
- **Support software**  
Configuration tool, font/ logo creator
- **Various interfaces**  
Bluetooth®, WLAN, USB, NFC
- **Various emulations**  
ESCPOS, CPCL, ZPL

FCL Components offers samples of the 3-inch printer on loan for test and evaluation purposes.

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