PRELIMINARY

FCL Components Thermal Printer
FTP-63KMCL300 series

FCL Components 3” Top Open Printer Mechanism with Cutter

Overview

The FTP-63KMCL series is a 3-inch, 24V driven kiosk printer with cutter supports multiple paper widths, offers high maintainability.

The kiosk printer unit is most suitable for applications such as kiosks, self-service terminals, medical kiosks and for various other equipment.

FTP-63KMCL304

Features

- High speed printing
- Top open structure for easy paper loading
- Small size, compact design
- Sensors can detect multiple statuses: paper end, black mark, cover open, and thermal head temperature
- Paper auto loading
- Auto cutter (full/partial)
  Optional full-cut model helps eliminate paper cut notches
- RoHS compliant

■ Part Number

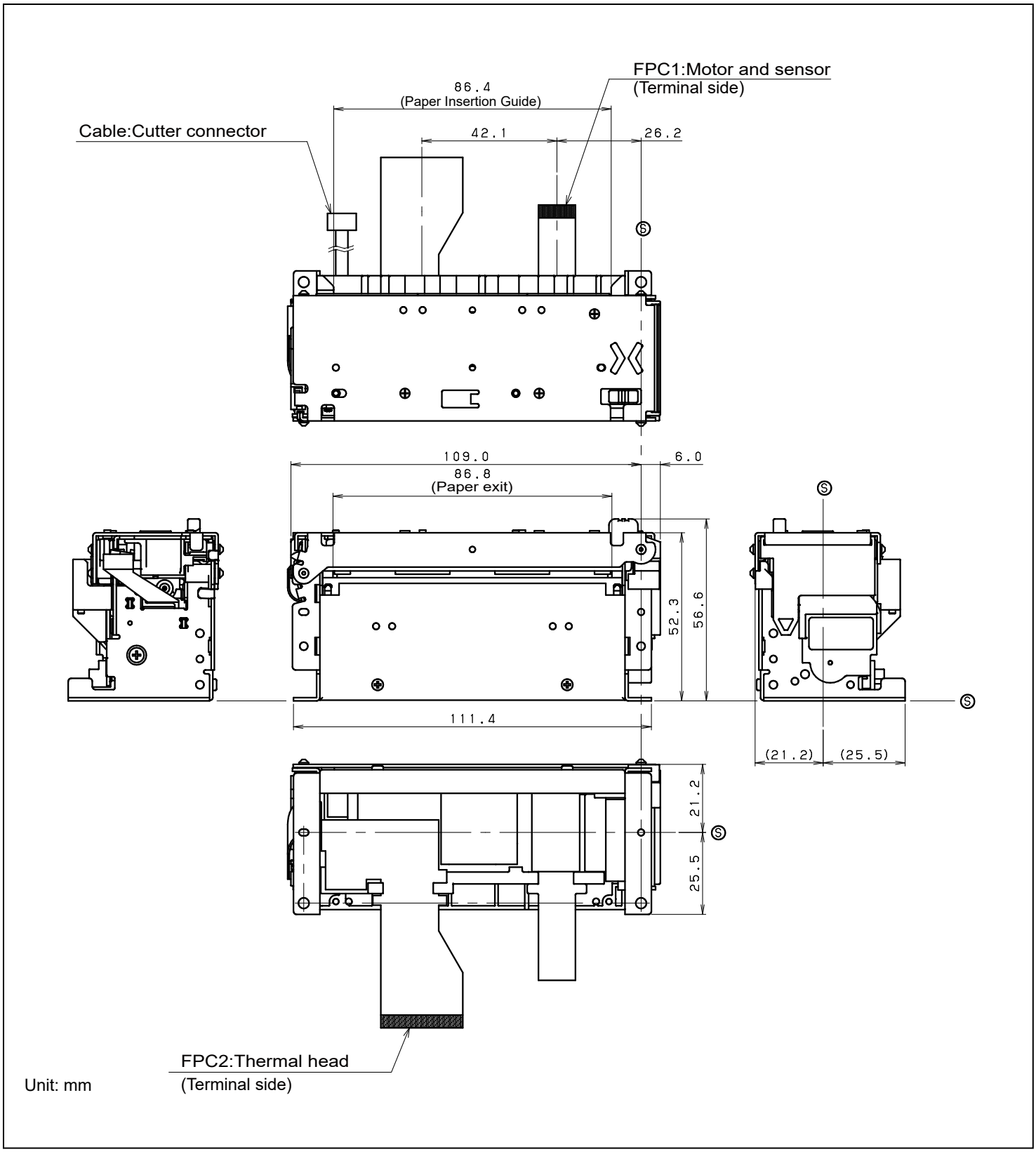
Part Number	Product type	Key Features
FTP-63KMCL304	Printer mechanism	203 dpi, 3-inch, with cutter, 3 sensors

■ Specifications

Item		Specifications
Part number		FTP-63KMCL304
Printing method		Direct thermal
Dot structure		640 dots/line
Resolution		203 dpi (8 x 8 dots/mm)
Effective printing area		80 mm
Max. paper width*1		86 mm *0/-1
Paper thickness		60 to 150 µm
Printing speed*2		Max. 250 mm/s at 24V operating voltage with 60 to 150 µm paper
Power supply	For print head	24VDC±10%, 5.1A (at concurrent dots 128 dots)
	For motor	24 VDC±10%, max. 1.5 A (Auto loading: max. 1.9A)
	For cutter	24 VDC±10%, max. T.B.D A
	For logic	3.3 VDC±5% or 5.0 VDC±5%, max. 0.12 A
Dimensions (WxDxH)		115.0 x 46.7 x 52.3 mm (excluding knob)
Weight		Approx. 500g
Expected life	Head	100 milion pulse/dot, 200km abrasion resistance (At 25°C, print ratio max 12.5%, standard paper)
	Cutter	2 million target spec. (60 to 100µm paper thickness) 1 million (100 to 150µm paper thickness)

*1: There may be exceptions
*2: At 24.0V operating voltage, +25°C, printing rate 25% max., back tension 1N max with the standard paper.

■ Dimensions


FPC1:Motor and sensor
(Terminal side)
86.4
(Paper Insertion Guide)
Cable:Cutter connector
42.1
26.2
109.0
6.0
86.8
(Paper exit)
52.3
56.6
111.4
(21.2)
(25.5)
21.2
25.5
FPC2:Thermal head
(Terminal side)
Unit: mm

■ Connector pin assignments

- FPC1: Thermal Head
  Recommended connector: IMSA-9639S-50Y801 (IRISO) or equivalent

No	Signal	Content	I/O
1	N.C	Not connected	
2	VH	Power for head drive	-
3	VH	Power for head drive	-
4	VH	Power for head drive	-
5	VH	Power for head drive	-
6	VH	Power for head drive	-
7	VH	Power for head drive	-
8	VH	Power for head drive	-
9	VH	Power for head drive	-
10	N.C.	Not connected	
11	SI	Head data in	IN
12	STB3	Head strobe 3	IN
13	STB4	Head strobe 4	IN
14	N.C	Not connected	
15	VDD	Power for head logic	
16	GND	Ground	
17	GND	Ground	-
18	GND	Ground	-
19	GND	Ground	-
20	GND	Ground	-
21	GND	Ground	-
22	GND	Ground	-
23	GND	Ground	-
24	GND	Ground	-
25	GND	Ground	-
26	GND	Ground	-
27	GND	Ground	-
28	GND	Ground	-
29	GND	Ground	-
30	GND	Ground	-
31	GND	Ground	-
32	GND	Ground	-
33	N.C	Not connected	
34	TM	Head thermistor	OUT
35	STB1	Head strobe 1	IN
36	STB2	Head strobe 2	IN
37	LATCH	Head data latch	IN
38	CLOCK	Head clock	IN
39	N.C	Not connected	
40	VH	Power for head drive	-

No	Signal	Content	I/O
41	VH	Power for head drive	-
42	VH	Power for head drive	-
43	VH	Power for head drive	-
44	VH	Power for head drive	-
45	VH	Power for head drive	-
46	VH	Power for head drive	-
47	VH	Power for head drive	-
48	N.C	Not connected	
49	N.C	Not connected	
50	N.C	Not connected	

■ Connector pin assignments

- FPC2: Motor / Sensor
  Recommended connector: IMSA-9639S-22Y801 (IRISO) or equivalent

No	Signal	Content	I/O
1	SW	Cover open detection switch	OUT (IN)
2	SW	Cover open detection switch	IN (OUT)
3	MT_/A	Paper motor /A phase	SINK / SOURCE
4	MT_/A	Paper motor /A phase	SINK / SOURCE
5	MT_A	Paper motor A phase	SINK / SOURCE
6	MT_A	Paper motor A phase	SINK / SOURCE
7	MT_/B	Paper motor /B phase	SINK / SOURCE
8	MT_/B	Paper motor /B phase	SINK / SOURCE
9	MT_B	Paper motor B phase	SINK / SOURCE
10	MT_B	Paper motor B phase	SINK / SOURCE
11	N.C	Not connected	
12	N.C	Not connected	
13	VSEN	Power for paper detection sensor	-
14	PHK3*1	Cathode of paper detection sensor 3	OUT
15	PHE3*1	Emitter of paper detection sensor 3	OUT
16	PHC3*1	Collector of paper detection sensor 3	IN
17	PHK2*1	Cathode of paper detection sensor 2	OUT
18	PHE2*1	Emitter of paper detection sensor 3	OUT
19	PHC2*1	Collector of paper detection sensor 3	IN
20	PHK1	Cathode of paper detection sensor 1	OUT
21	PHE1	Emitter of paper detection sensor 1	OUT
22	PHC1	Collector of paper detection sensor 1	IN

■ Connector pin assignments

- Cable cutter connector
  Recommended connector: B4B-XH-A (JST) or equivalent

No	Signal	Content	I/O
1	SW	Cutter position detection signal	OUT (IN)
2	SW	Cutter position dection signal	IN (OUT)
3	MT	Cutter motor (-)	SINK / SOURCE
4	/MT	Cutter motor (+)	SINK / SOURCE

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