

LTPD/CAPD Series Low Voltage **Printer** Mechanisms



Designing mobile devices is increasingly challenging. Customers expect each new product generation to be smaller and faster, with long battery life. To be competitive, device manufacturers must reduce product size and increase speed. Time to market is crucial and reliability is non-negotiable.

New low voltage LTPD/CAPD series printer mechanisms tackle these challenges with dramatic advances in design flexibility, reliability, and printing performance.

Small

LTPD/CAPD series mechanisms free up critical design real estate. The new mechanisms provide a smaller overall form factor, innovative angled paper guide requiring less depth, and a smaller pitch flexible print circuit (FPC) cable.

Fast

LTPD/CAPD series mechanisms are fast, rated for up to 100 mm/second print speeds. This gives mobile devices a much needed performance boost.

Reliable

LTPD/CAPD series mechanisms offer a minimum of 50 km of total printing and 100 million pulses. CAPD models offer a new built-in auto-cutter design, improving cutter reliability. The result: reliable media output, every time.

Flexible

LTPD/CAPD series mechanisms offer a wide array of form factor choices to provide versatility and flexibility for smoother integration. Options include EZ-OP clamshell-style and auto-loading models, ASIC and interface board solutions, and both horizontal and vertical mechanical orientation designs.

- **2" and 3" print width models**
- **High speed printing (up to 100 mm/second)**
- **Choice of horizontal and vertical orientations**
- **EZ-OP clamshell and auto-loading paper replacement options**
- **Platen latch for better shock absorption**
- **Built-in auto-cutter (CAPD models)**



2" LTPD model and 2" CAPD model.



Product Specifications

Model	LTPD245	LTPD345	CAPD245	CAPD345
Method	Thermal line dot printing			
Number of dots/line	384	576	384	576
Resolution(dots/mm)	8			
Paper width (mm)	58 ⁺⁰⁻¹	80 ⁺⁰⁻¹	58 ⁺⁰⁻¹	80 ⁺⁰⁻¹
Printing width (mm)	48	72	48	72
Speed (max mm/sec)	100	80	100	80
Paper path	Curved			
Head temperature	By thermistor			
Platen position detection	By mechanical switch			
Out of paper detection	By photo interrupter			
Cutter home position detection	-	-	By photo interrupter	
Operating Voltage (Vdd)	2.7 to 3.6/4.75 to 5.25			
Operating Voltage (Vp)	-	4.75 to 9.5	-	6.5 to 9.5
Head	3.66 (9.5V/64dots)	3.60 (9.5V/64dots)	3.66 (9.5V/64dots)	3.60 (9.5V/64dots)
Motor	5.49 (9.5V/96dots)	5.40 (9.5V/96dots)	5.49 (9.5V/96dots)	5.40 (9.5V/96dots)
Motor	0.6	0.6	0.6	0.6
Cutter motor	-	-	0.7	0.7
Pulse activation (pulses)	100 million		100 million	
Abrasion resistance (km)*	50 *		50 *	
Operating temperature (°C)	-10 to 50		-10 to 50	
Horizontal	69.0 x 30.0 x 15.0 **	91.0 x 30.0 x 15.0 **	83.1 x 35.4 x 26.9 **	105.1x35.4x27.2***
Vertical	69.0 x 15.0 x 30.0 **	91.0 x 15.0 x 30.0 **		
Approx. 40	Approx. 58	Approx. 125	Approx. 148	
Method	Slide cutting			
Paper thickness (um)	-	-	54 to 90*	54 to 78*
Cutting type	-	-	Full cut and partial cut (1.5±0.5mm tab left at the center)	
Operating time (sec/cycle)	-	-	Approx 1.0	
Minimum paper cutting length (mm)	-	-	10	
Cutting frequency (max cuts/min)	-	-	30	
Paper cutting (cuts)	-	-	500,000 *	

*Use recommended thermal paper. **Excluding convex section.

***Excluding mounting part. Specifications are subject to change without notice.

IF Board Specifications

	IFD501-01UK-E	IFD501-01SK-E
CPU	PTD50P01-E	
Corresponding Model	LTPD245, LTPD345 Series CAPD245, CAPD345 Series	
Operating Voltage (V)	Vp:4.75 to 9.5	
Character matrix (H x W dots)	16 dots character: 16 x 8, 16 x 16 24 dots character: 24 x 12, 24 x 24	
Optional font	Yes	Yes
Downloaded character	Yes	Yes
User-defined character	Yes	Yes
Extend graphics character set	Yes	Yes
Katakana character set	Yes	Yes
Codepage 1252	Yes	Yes
JIS 1&2 level kanji	Yes	Yes
Communication interface	USB(2.0)	Serial (RS-232C)
Dimensions (W x D x H mm)	69.0 x 50.0 x 14.0	

Optional Cables

Accessory	Product
Power Cable	DC-04100A-E
Switch Cable	OC-D1430A-E
Serial Cable	OC-D0730A-E
USB Cable	IFC-U01-1-E

ASIC Specifications:

	PTD50P01-E
Corresponding model	LTPD245, LTPD345 series CAPD245, CAPD345 series
Package form	120pin QFP
Operating voltage (V)	Vp:4.75 to 9.5,Vcc:3.0 to 3.6
Operating frequency (MHz)	12MHz±0.01%
Configuration	C-MOS LSI
Communication interface	Parallel, Serial, USB
Character type	Extended graphics character set Other characters available With CGs or external memory
Character matrix (H x W dots)	16 dot character: 16 x 8, 16 x 16 24 dot character: 24 x 12, 24 x 24
Dimensions (W x D x H mm)	16.0 x 16.0 x 1.7