

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.

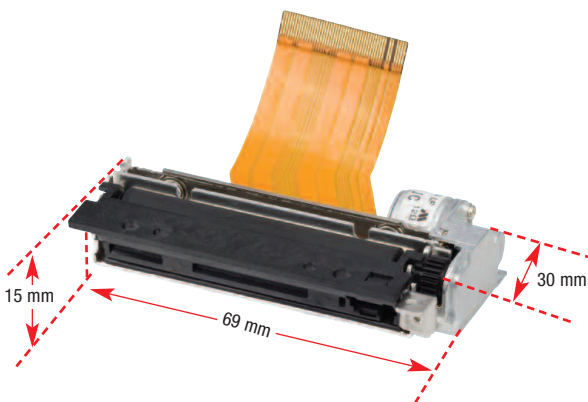
Reliable

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.

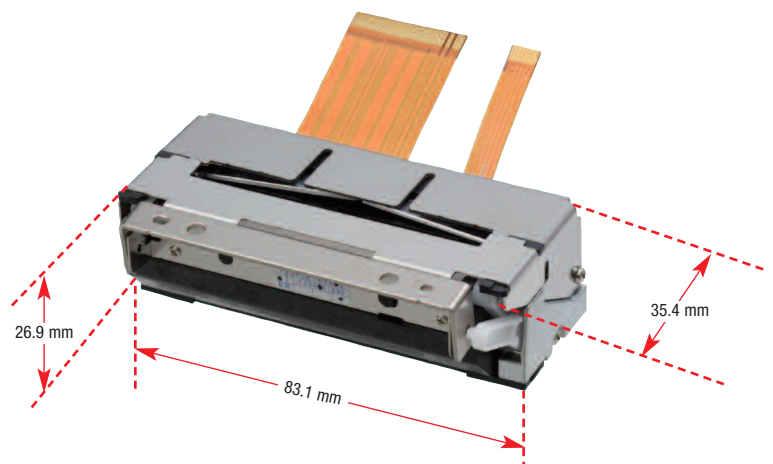
Flexible

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	
Printing	Method Thermal line dot printing				
	Number of dots/line	384	576	384	
	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					
Sensors	Head temperature By thermistor				
	Platen position detection By mechanical switch				
	Out of paper detection By photo interrupter				
	Cutter home position detection By photo interrupter				
Power supply (V)	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				
Peak current (A)	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)				
Service life	Cutter motor - 0.6 0.6 0.6 0.6				
	Pulse activation (pulses) 100 million 100 million				
Abrasion resistance (km)* 50 * 50 *					
Operating temperature (°C) -10 to 50 -10 to 50					
Dimensions (WxDxHmm)*	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 **				
Mass(g)	Approx. 40		Approx. 58		
	Approx. 125		Approx. 148		
Auto-cutter	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				
Life span	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	
Character Type	Optional font	Yes
	Downloaded character	Yes
	User-defined character	Yes
	Extend graphics character set	Yes
	Katakana character set	Yes
	Codepage 1252	Yes
	JIS 1&2 level kanji	Yes
	Communication interface	USB(2.0)
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