

## **Seiko Instruments**

Thermal Printer Division

# LTPD/CAPD Series 24 V **Printer** Mechanisms



In today's market product designers are asked to deliver smaller devices with more robust functionality, greater longevity, and enhanced reliability. To succeed products must be priced competitively and time to market is key. Point-of-sale (POS) systems, medical devices, and other products with embedded thermal printers are no exception. Each new generation must do more, cost less, and last longer.

New 24 V LTPD and CAPD series thermal printer mechanisms help engineers meet these challenges. These mechanisms are smaller and more robust, offering industry leading value, backed by critical advancements in design flexibility and reliability.

#### **Small Form Factor**

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

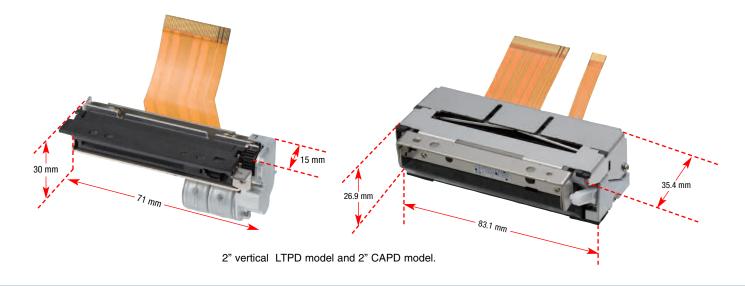
## **Proven Reliability**

LTPD and CAPD models are rated for a minimum of 100 km total printing and 100 million pulses for long life reliability. CAPD models offer a new built-in auto-cutter design, improving cutter reliability. The result: reliable media output, every time.

## **Design Flexibility**

An array of form factor choices provides more flexibility for a smoother integration process. Options include, ASIC and interface board solutions, and both horizontal and vertical mechanical orientation designs.

- 2" and 3" print width models
- Choice of horizontal and vertical orientations
- **EZ-OP** clamshell paper replacement
- Platen latch for better shock absorption
- Available built-in auto-cutter (CAPD models)





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## **Product Specifications**

Model		LTPD247	LTPD347	CAPD247	CAPD347	
Printing	Method	Thermal line dot printing				
	Number of dots/line	432	576	432	576	
	Resolution(dots/mm)	8				
	Paper width (mm)	58+0-1	80+0-1	58+0-1	80+0-1	
	Printing width (mm)	54	72	54	72	
	Speed (max mm/sec)	200	170	200	170	
	Paper path	Curved				
_	Head temperature	By thermistor				
Sensors	Platen position detection	By mechanical switch				
	Out of paper detection	By photo interrupter				
	Cutter home position detec	tion -	-	By photo	interrupter	
Power supply (V)	Operating Voltage (Vdd)	2.7 to 3.6 / 4.75 to 5.25				
	Operating Voltage (Vp)	21.6 to 26.4				
Peak current (A)	Head	2.61 (26.4 V/144 dots)	2.61 (26.4 V/144 dots)	2.61 (26.4V/144dots)	2.61 (26.4V/144dots)	
		5.23 (26.4 V/288 dots)	5.23 (26.4 V/288 dots)	5.23 (26.4V/288dots)	5.23 (26.4V/288dots)	
	Motor	0.44	0.4	0.44	0.44	
	Cutter	-	-	0.55	0.55	
Service life	Pulse activation (pulses)	100 million		100 million		
Jei vice ille	Abrasion resistance (km)*	100 *		100 *		
Operating temperature (°C)		-10 to 50		-10 to 50		
Dimensions		71.0 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***	
(W x D x H mm)*	Vertical	71.0 x 15.0 x 30.0 **	91.0 x 15.0 x 30.0 **			
Mass(g)		Approx. 56	Approx. 64	Approx. 131	Approx. 154	
	Method	-	-	Slide cutting		
	Paper thickness (um)	-	-	54 to 90	54 to 78	
Auto-cutter	Cutting type	-	-	Full cut and partial cut (1.5±0.5mm tab left at the center		
	Operating time (sec/cycle)	-	-	0.5		
	Minimum paper cutting					
	length (mm)	-	_	10		
	Cutting frequency	-	_	30		
	(max cuts/min)					
Life span	Paper cutting (cuts)	-	-	700,000 *		
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<sup>\*</sup>Use recommended thermal paper. \*\*Excluding convex section.

\*\*\*Excluding Mounting Part. Specifications are subject to change without notice.

## **IF Board Specifications**

		IEDOO1 O1LIK E	IEDOO1 O1CK E	
		IFD001-01UK-E	IFD001-01SK-E	
CPU		PTD00P01-E		
Corresponding Model		LTPD247,LTPD347 Series		
		CAPD247,CAPD347 Series		
Operating Voltage (V)		Vp:21.6 to 26.4		
Character matrix (H x W dots)		16 dot characters: 16 x 8, 16 x 16		
		24 dot characters: 24 x 12, 24 x 24		
	Optional font	Yes	Yes	
	Downloaded character	Yes	Yes	
Character	User-defined character	Yes	Yes	
Туре	Extend graphics character set	Yes	Yes	
турс	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**

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

## **ASIC Specifications:**

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	PTD00P01-E	
Corresponding model	LTPD247, LTPD347 series	
	CAPD247, CAPD347 series	
Package form	120 pin QFP	
Operating voltage (V)	Vp:21.6 to 26.4,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	16 dot characters: 16 x 8, 16 x 16	
(H x W dots)	24 dot characters: 24 x 12, 24 x 24	
Dimensions	16.0 x 16.0 x 1.7	
(W x D x H mm)		



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LTPD/CAPD-24V-710