

Thermal Printer

Mechanism Catalog [English]



A mechanism
that meets the world's
printing needs.

Low Voltage

24V

LTPD Series

- High performance in compact design
- Max. printing speed (24V): 200mm/sec
- Platen latch function
- Label printing *Under specific conditions only.



POS/ECR



EFT-POS



Measuring Instrument



Barcode



Mobile Printer



PDA/Smart Device



Medical Equipment

LTPD347
(Vertical)LTPD345
(Horizontal)

Model	Low Voltage		24V	
	LTPD245	LTPD345	LTPD247	LTPD347
Printing	Method		Thermal line dot printing	
	Number of dots/line	384	576	432
	Resolution (dots/mm)	8		8
	Paper width (mm)	58 ^{±0} ₋₁	80 ^{±0} ₋₁	58 ^{±0} ₋₁
	Printing width (mm)	48	72	54
	Speed (mm/sec) max	100	80	200
	Paper path	Curved		Curved
Detection	Head temperature	By thermistor		By thermistor
	Platen position	By mechanical switch		By mechanical switch
	Out of paper	By photo interrupter		By photo interrupter
Power supply (V)	Operation voltage (Vdd)	2.7 to 3.6 / 4.75 to 5.25		2.7 to 3.6 / 4.75 to 5.25
	Operation voltage (Vp)	4.75 to 9.5		21.6 to 26.4
Peak current (A)	Head	3.66 (9.5V / 64dots) 5.49 (9.5V / 96dots)	3.60 (9.5V / 64dots) 5.40 (9.5V / 96dots)	2.61 (26.4V / 144dots) 5.23 (26.4V / 288dots)
	Motor	0.6		0.44 0.52
Service Life	Pulse activation (pulse)	100 million		100 million
	Abrasion resistance (km)	50 ^{±1}		100 ^{±1}
Operating temperature (°C)		-10 to 50 ^{±1} ^{±3}		-10 to 50 ^{±1}
Dimensions (W×D×H mm)	Horizontal	69.0 × 30.0 × 15.0 ^{±2}	91.0 × 30.0 × 15.0 ^{±2}	71.0 × 30.0 × 15.0 ^{±2}
	Vertical	69.0 × 15.0 × 30.0 ^{±2}	91.0 × 15.0 × 30.0 ^{±2}	71.0 × 15.0 × 30.0 ^{±2}
Mass (g)	Approx. 40		Approx. 58	Approx. 56
			Approx. 64	

*1 Use recommended thermal papers. *2 Excluding protrusion. *3 -30°C to 70°C: Supported by designated conditions only.

Interface

Model	IFD501-01UK	IFD501-01SK	IFD001-01UK	IFD001-01SK
CPU	PTD50P01		PTD00P01	
Thermal printer	LTPD245, LTPD345, CAPD245, CAPD345		LTPD247, LTPD347, CAPD247, CAPD347	
Operating voltage (V)	Vp: 4.75 to 9.5		Vp:21.6 to 26.4	
Character matrix (H×W dots)	16 dots characters: 16 × 8, 16 × 16 / 24 dots characters: 24 × 12, 24 × 24			
Character type	Extended graphics character set, Katakana character set 1, Katakana character set 2, Codepage 1252, User page, Downloaded character, Optional font, JIS 1st and 2nd level kanji, User-defined character			
Communication interface	USB(2.0)	Serial(RS-232C)	USB(2.0)	Serial(RS-232C)
Dimensions (W×D×H mm)	69.0 × 50.0 × 14.0		69.0 × 50.0 × 14.0	
Software ⁴	Printer Driver/SDK, Linux® CUPS Filter/SDK		Printer Driver/SDK, OPOS Driver, POS for .NET Driver, Linux® CUPS Filter/SDK	

*4 Please see official homepage "www.sii-ps.com" for details.

CPU

Model	PTD50P01	PTD00P01
Thermal printer	LTPD245, LTPD345, CAPD245, CAPD345	LTPD247, LTPD347, CAPD247, CAPD347
Package form	120pin QFP	120pin QFP
Operating voltage (V)	Vp: 4.75 to 9.5, Vcc: 3.0 to 3.6	Vp: 21.6 to 26.4, Vcc: 3.0 to 3.6
Input frequency (MHz)	12 ± 0.01%	
Configuration	C-MOS LSI	
Communication interface	Parallel, Serial, USB	
Character type	Extended graphics character set, Other characters are available with CGs ⁵ or external ROM	
Character matrix (H×W dots)	16 dots characters: 16 × 8, 16 × 16 / 24 dots characters: 24 × 12, 24 × 24	
Dimensions (W×D×H mm)	16.0 × 16.0 × 1.7	16.0 × 16.0 × 1.7
Software ⁶	Printer Driver/SDK, Linux® CUPS Filter/SDK	Printer Driver/SDK, OPOS Driver, POS for .NET Driver, Linux® CUPS Filter/SDK

*5 CG ROM: Japanese *6 Please see official homepage "www.sii-ps.com" for details.

Low Voltage

LTP02 Series

LTP02-245

- Max. printing speed : 100mm/sec
- Extremely compact design for mobile terminal
- Light weight only 28g

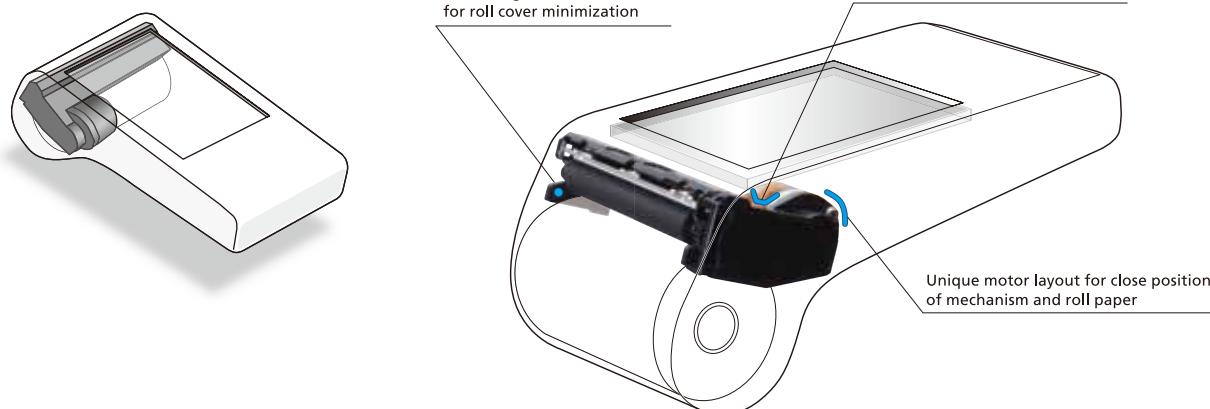


Model	LTP02-245		
	Standard model (LTP02-245-13x)	High speed model (LTP02-245-A3)	Low energy model (LTP02-245-C1)
Printing	Method		
	Thermal line dot printing		
	Number of dots/line		
	384		
	Resolution (dots/mm)		
	8		
	Paper width (mm)		
Detection	58 ^{±1}		
	Printing width (mm)		
	48		
	Speed (mm/sec) max	100	120(9.0V)
			165(12.0V)
Power supply (V)	Paper path		
	Curved		
	Head temperature		
Peak current (A)	By thermistor		
	Out of paper		
Service Life	By photo interrupter		
	Operation voltage (Vdd)		
Motor	3.0 to 3.6		
	Operation voltage (Vp)		
Dimensions (W×D×H mm)	5.5 to 9.5	5.5 to 9.5, 10.8 to 12.6	3.0 to 4.2
	2.64(9.5V/45dots)		
Mass (g)	3.02(12.6V/48dots)	50 million	5.99(4.2V/129dots)
	0.6		
Control CPU (Option)	100 million	1.0	100 million
	Abrasion resistance (km)		
*1 Use recommended thermal papers. *2 Excluding protrusion.			

CPU

Model	PT02-5SU	PT02-3U
Thermal printer	LTP02-245-13x	LTP02-245-C1
Package form	48pin LQFP	
Operating voltage (V)	Vp: 5.5 to 9.5 Vcc: 3.0 to 3.6	Vp: 3.0 to 4.2 Vcc: 3.0 to 3.6
Input frequency (MHz)	16 ± 0.01%	
Configuration	C-MOS LSI	
Communication interface	USB input / output (Device / Printer class / Full speed)	
Character type	ASCII Code	
Dimensions (W×D×H mm)	9.0 × 9.0 × 1.5	

Smart design to contribute reducing terminal size!



Low Voltage

24V

CAP06 Series

■ Build in auto paper cutter

■ Easy paper operation

■ Max. printing speed: 250mm/sec

■ Resolution: 8 dots/mm



POS/ECR



EFT-POS



Measuring Instrument



Barcode



Medical Equipment

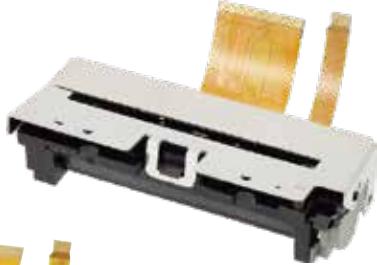


KIOSK System



Gas POS

CAP06-347



CAP06-245

Model	Low Voltage		24V			
	CAP06-245	CAP06-247	CAP06-347			
Printing	Method	Thermal line dot printing				
	Number of dots/line	384	432	576		
	Resolution (dots/mm)	8				
	Paper width (mm)	58 ⁺⁰ ₋₁	58 ⁺⁰ ₋₁	58 ⁺⁰ ₋₁ / 80 ⁺⁰ ₋₁		
	Printing width (mm)	48	54	72		
	Speed (mm/sec) max	100	250			
	Paper path	Curved				
Detection	Head temperature	By thermistor				
	Platen position	By mechanical switch				
	Out of paper	By photo interrupter				
	Cutter home position	By photo interrupter				
Power supply (V)	Operation voltage(Vdd)	3.0 to 3.6				
	Operation voltage(Vp)	4.75 to 9.5	21.6 to 26.4			
Peak current (A)	Head	5.4(9.5V/96dots)	10.3(26.4V/288dots)	10.2(26.4V/288dots)		
	Motor	0.6	1.0			
	Cutter	0.7	0.64			
Auto Cutter	Method	Slide type				
	Paper thickness (μm)	48 to 80 ¹				
	Cutting type	Full cut / Partial cut (Leave center point)				
	Operating time(sec/cycle)max	0.5				
	Cutting pitch(mm)min	10				
Service Life	Cut frequency(cut/min)max	30				
	Pulse activation(pulse)	100 million	150 million			
	Abrasion resistance(km)	50 ¹	150 ¹			
Operating temperature (°C)	Paper cutting(cut)	500,000 ¹	1,500,000 ¹			
	Dimensions (W×D×H mm)	-10 to 50 ¹				
	Mass (g)	87.5 × 43.9 × 27.2 ²	87.5 × 43.9 × 27.2 ²	106.5 × 43.9 × 27.2 ²		

*1 Use recommended thermal papers. *2 Excluding protrusion.

Interface

Model	IF06-5U	IF06-5S	IF06-7U	IF06-7S
CPU			PT06-57SU	
Thermal printer		CAP06-245		CAP06-247, CAP06-347
Operating voltage (V)	Vp: 4.75 to 9.5		Vp: 21.6 to 26.4	
Character matrix (H×W dots)	16 dots characters:16 × 8, 16 × 16 / 24 dots characters:24 × 12, 24 × 24			
Character type		Codepage (13 types), Katakana character set, User-defined character, Downloaded character, Optional font, JIS 1st and 2nd level Kanji, Special characters		
Communication interface	USB(2.0)	Serial(RS-232C)	USB(2.0)	Serial(RS-232C)
Dimensions (W×D×H mm)	69.0 × 50.0 × 14.0			
Software ³	Printer Driver/SDK, Linux® CUPS Filter/SDK	Printer Driver/SDK, OPOS Driver, POS for .NET Driver, Linux® CUPS Filter/SDK		

*3 Please see official homepage "www.sii-ps.com" for detail.

CPU

Model	PT06-57SU	
Thermal printer	CAP06-245	CAP06-247, CAP06-347
Package form	144pin UFBGA	
Operating voltage (V)	Vp: 4.75 to 9.5, Vcc: 3.0 to 3.6	Vp: 21.6 to 26.4, Vcc: 3.0 to 3.6
Input frequency (MHz)	12 ± 0.01%	
Configuration	C-MOS / TTL LSI	
Communication interface	Serial , USB	
Built-in characters	Codepage (13 types), Katakana character set	
Additional characters	CG ROM ⁴	
Character matrix (H×W dots)	16 dots characters:16 × 8, 16 × 16 / 24 dots characters:24 × 12, 24 × 24	
Dimensions (W×D×H mm)	10.0 × 10.0 × 0.53	
Software ⁵	Printer Driver/SDK, Linux® CUPS Filter/SDK	Printer Driver/SDK, OPOS Driver, POS for .NET Driver, Linux® CUPS Filter/SDK

*4 CG ROM: Japanese *5 Please see official homepage "www.sii-ps.com" for detail.

CAPM Series

- Max. printing speed: 300mm/sec
- Build in auto paper cutter
- Head open design for easy paper operation
- Heavy-duty: 200km, 2mil. cuts
- Wide operating temperature: -20° C to 60°



POS/ECR



Measuring Instrument



Barcode



KIOSK System



Ticket Printer



Gaming



CAPM347

Model	CAPM347		
	Easy paper operation model		Loading model
	Regular thermal paper	Regular thermal paper	Thick thermal paper
Printing	Method		
	Number of dots/line	640	
	Resolution (dots/mm)	8	
	Paper width (mm)	58 ⁺⁰ ₋₁ / 60 ⁺⁰ ₋₁ / 80 ⁺⁰ ₋₁ / 83 ⁺⁰ ₋₁	
	Printing width (mm)	54 / 56 / 72 / 80	
	Speed (mm/sec) max	300 ^{*1}	300 ^{*1} 280 ^{*1}
Detection	Head temperature	By thermistor	
	Head position	By mechanical switch	
	Out of paper	By photo interrupter	
	Mark position	By photo interrupter ^{*1}	
	Cutter home position	By photo interrupter	
Power supply (V)	Operation voltage (Vdd)	2.7 to 3.6 / 4.75 to 5.25	
	Operation voltage (Vp)	21.6 to 26.4	
Peak current (A)	Head / Motor / Cutter	5.6 (26.4V/144dots) / 1.2 / 1.1	
Auto Cutter	Method	Slide type	
	Paper thickness (μm) ^{*1}	54 to 90 ^{*2}	54 to 90 ^{*2} 100 to 150 ^{*2}
	Cutting type	Full cut / Partial cut (Leave center point)	
Service Life	Pulse activation (pulse)	200 million	200 million 100 million
	Abrasion resistance (km)	200 ^{*2}	200 ^{*2} 100 ^{*2}
	Paper cutting (cut)	2,000,000 ^{*2}	2,000,000 ^{*2} 1,000,000 ^{*2}
Operating temperature (°C)		-20 to 60 ^{*1}	-20 to 60 ^{*1} 0 to 50 ^{*1}
Dimensions (W×D×H mm)		110.0 × 61.0 × 53.4	110.0 × 61.0 × 55.9
Mass (g)		Approx.500	

*1 Under specified condition. *2 Use recommended thermal papers.

Interface

Model	IFM201-01UK
CPU	PTM20P01
Thermal printer	CAPM347
Operating voltage (V)	Vp: 21.6 to 26.4
Character matrix (H×W dots)	16 dots characters: 16 × 8, 16 × 16 24 dots characters: 24 × 12, 24 × 24
Character type	Extended graphics character set, Katakana character set, Codepage (437, 850, 852, 858 and 1252), User-defined character, Downloaded character, Optional font, JIS 1st and 2nd level Kanji, Special characters
Communication interface	USB (2.0)
Dimensions (W×D×H mm)	60.0 × 80.0 × 14.0
Software ^{*3}	Printer Driver/SDK, OPOS Driver, POS for .NET Driver

*3 Please see official homepage "www.sii-ps.com" for details.

CPU

Model	PTM20P01
Thermal printer	CAPM347
Package form	144ピン QFP
Operating voltage (V)	Vp: 21.6 to 26.4, Vdd: 3.0 to 3.6
Input frequency (MHz)	12 ± 0.01%
Configuration	C-MOS LSI
Communication interface	Parallel, Serial, USB
Character type	Extended graphics character set, Other characters is available with CGs ^{*4} or external ROM
Character matrix (H×W dots)	16 dots characters: 16 × 8, 16 × 16 24 dots characters: 24 × 12, 24 × 24
Dimensions (W×D×H mm)	22.0 × 22.0 × 1.7
Software ^{*5}	Printer Driver/SDK, OPOS Driver, POS for .NET Driver



Loading Model



Easy Paper Operation Model

*4 CG ROM: Japanese *5 Please see official homepage "www.sii-ps.com" for details.

24V

LTP04

- Max. printing speed: 250mm/sec
- Heavy-duty: 150km, 2mil. cuts
- Easy maintenance
 - : Major parts are replaceable without tools

LTP04/ACU04
(Platen released)LTP04/
ACU04

Model		LTP04-347
Printing	Method	Thermal line dot printing
	Number of dots/line	576
	Resolution (dots/mm)	8
	Paper width (mm)	80 ⁰ ₁
	Printing width (mm)	72
	Speed (mm/sec) max	250
Detection	Head temperature	By thermistor
	Head position	By mechanical switch
	Out of paper	By photo interrupter
Power supply (V)	Operation voltage(Vdd)	3.0 to 3.6
	Operation voltage(Vp)	21.6 to 26.4
Peak current (A)	Head	16.7(26.4V/384dots)
	Motor	1.0
Service Life	Pulse activation(pulse)	150 million
	Abrasion resistance(km)	150 ¹
Operating temperature (°C)		0 to 50
Dimensions (W×D×H mm)		127.6 × 83.0 × 44.1 (55.95 with auto cutter) ^{*2}
Mass (g)		Approx.400

*1 Use recommended thermal papers. *2 Excluding protrusion

Auto cutter

Model		ACU04-37
Thermal printer		LTP04-347
Cutting	Method	Slide type
	Paper width (mm)	80 ⁰ ₁
	Paper thickness (μm)	60 to 80 ¹³
	Cutting type	Partial cut (Leave center point)
	Operating time (sec/cycle) max	0.4 (24V)
	Cutting pitch (mm) min	10
Operating voltage (V)	Cut frequency (cut/min) max	30
	Motor	21.6 to 26.4
Peak current (A)	Detector (control switch)	3.0 to 5.0
		1.3
Life (Cut)		2,000,00 ^{*4}
Dimensions (W×D×H mm)		95.6 × 39.0 × 16.2
Mass (g)		Approx.100

*3 Use recommended thermal papers *4 Depending upon specified conditions.

Other Models Lineup

Thermal Printer Mechanism

LTPZ Series

Low Voltage

- Max. printing speed: 75mm/sec
- Compact and light-weight
- Operating temperature: -20°C to 50°C

Thermal Printer Mechanism

LTPV Series

Low Voltage

- Max. printing speed: 85mm/sec
- Platen latch function
- Label printing
- Support thick paper: up to 135 µm

Thermal Printer Mechanism

LTPH245

Low Voltage

- Max. printing speed: 62.5mm/sec
- Easy paper operation
- Platen latch function
- Operating temperature: -30°C to 70°C

Thermal Printer Mechanism

CAPD245/345

Low Voltage

- Built-in auto-cutter
- Jam-free cutter design
- Max. printing speed (CAPD245): 100mm/sec
- Platen latch function

Thermal Printer Mechanism

LTP1245

Low Voltage

- Max. printing speed: 62.5mm/sec
- Compact and light-weight
- Paper feed knob model available
- Straight and curved path models available
- Operating temperature: -30°C to 70°C

Thermal Printer Mechanism

LTP2000 Series

24V

- Max. printing speed (LTP2242): 90mm/sec
- Straight and curved path models available
- Label printing
- Support thick paper: up to 135 µm
(Straight path model only)

Thermal Printer Mechanism

LTPF Series

24V

- Max. printing speed: 220mm/sec
- Platen latch function
- Auto cutter option (Slide type) available

Thermal Printer Mechanism

CAPD247/347

24V

- Built-in auto-cutter
- Jam-free cutter design
- Max. printing speed: 200mm/sec
- Platen latch function

Panel-Mount Printer Unit

DPU-D Series

Low Voltage

- Max. printing speed: 100mm/sec (DPU-D2)
80mm/sec (DPU-D3)
- Small and compact design
- Panel-mount type
- Easy paper operation



Anytime, Anywhere!!

SII Thermal Printer



SAFETY PRECAUTIONS

1. This catalog provides a summary of product specifications. Before using each product, please thoroughly read the technical manual, user's manual, and other manuals which have been prepared by us.
2. The products listed in this catalog are not allowed to be used as part of any life-support system or any other equipment or system which requires extremely high reliability, without our permission in writing.
3. When using each product, thoroughly understand the specifications of the product, observe the descriptions and markings for prevention and avoidance of danger, on your products and in the documents such as the manual, and advise and guide your customers (users).

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⚠ We have completed making all of our printers compliant with the RoHS directive.



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