

Seiko Instruments Inc.



Thermal
Printers

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PRODUCT LINEUP (Standard Products)

Seiko Instruments Inc. provides customers four series of thermal printers - namely LTP, STP, MTP and DPU (unit-type) in response to individual customer needs.

The **LTP2000** is a series of high-performance thermal line printers with a printing speed of as fast as 90mm/sec (LTP2242) and 75mm/sec (LTP2342, 2442) and the head life of as long as one hundred million pulses or 50km minimum. A full line of options including a drive interface, CPU, and auto cutter are also available to meet various needs.

Paper width	60mm	80mm	112mm
LTP2000 series	LTP2242	LTP2342	LTP2442
Compatible interface	IF2201-01B		
Compatible CPU	PT221P01		
Compatible auto cutter	ACU2224	ACU2324	ACU2424

The **LTP1245** is a super compact, lightweight thermal line printer powered by lithium-ion batteries. Capable of printing at a max. speed of as fast as 62.5mm/sec and easy-to-use as well, it is especially suited for use with various kinds of portable compact devices.

Paper width	58mm
Model	LTP1245
Compatible interface	IF1001-01B
Compatible CPU	PT100P01

The **LTP Series** is a series of thermal line printers featuring high-speed and superb durability as POS/ECR printers. Options including an auto cutter and a winder unit are also available in response to the diversified market needs.

Paper width	58mm		
LTP series	LTP256 CAP256	LTP4242	LTP7242
Compatible interface	IF2001-01B	IF4001-01B	—
Compatible CPU	PT201P01	PT400P02	—
Compatible auto cutter	ACU5224A	ACU1224A/D	ACU1224B/E
Compatible winder unit	—	WU280	WU280

The **LTP3000** is a series of compact, lightweight and battery-powered thermal line printers. It can print high-resolution (8 dots/mm) kanji characters.

Paper width	58mm		80mm	112mm
LTP3000 series	LTP3245A/B	LTP3245F/G	LTP3345	LTP3445
Compatible interface	IF3001-01B	—	IF3002-01B	—
Compatible CPU	PT300P01	PT303P01	PT301P01 PT303P01	PT304P02

The **LTP5000** is an enhanced series of high-speed (50mm/sec) and high-density (8 dots/mm) thermal line printers. Each and every LTP5000 is equipped with an auto cutter.

Paper width	60mm	80mm	112mm
LTP5000 series	LTP5242 LTP5246	LTP5347	LTP5437 LTP5442 LTP5446
Compatible interface	IF5003-02B		
Compatible CPU	PT502P02		
Compatible auto cutter	ACU5224A ACU5212A	ACU5324A	ACU5424A ACU5412A

The **STP Series** is an upper version of the MTP series. The use of the stepping motor allows noise to be drastically reduced and ensures high print quality. Bidirectional character print and logical seek print are available by data input via interface.

Paper width	58mm	80mm	112mm
STP series	STP211-144 STP211-192	STP312-256	STP411-256 STP411-320
Compatible interface	IF0121-GCB	IF0121-GCB	IF0121-GCB IF4112-GCB*
Compatible CPU	M50747-753SP	M50747-753SP	M50747-753SP M50747-500SP*

* The IF4112-GCB is a specified interface board used only for the STP411-320 that can print international characters.

* The M50747-500SP is a specified CPU used only for the STP411-320.

The **MTP** is a series of very compact thermal serial printers developed in response to small-size and low-price requirements. It is available in the following types according to the paper width to be used.

Paper width		38mm	58mm	80mm
MTP series	Character printer	MTP102-13B MTP102-16B	MTP201-20B MTP201-24B	MTP401-40B
	Graphics printer	—	MTP201-G128 MTP201-G166	MTP401-G256 MTP401-G280
Compatible interface		IFM001-01B IFM001-01BM		
Compatible CPU		HD6433238R42P/43F		

The **DPU** is a series of thermal printers incorporating a printer mechanism and an interface board. It is suited for printing data transmitted from a host system such as measuring instruments.

Paper width	38mm	58mm	80mm	112mm
DPU series printer unit (Panel-mount type)	DPU-10-13CF DPU-10-16CF DPU-10-20CF	DPU-20-20CF DPU-20-24CF	—	—
DPU series printer unit (Stand-alone printer type)	—	DPU-201G DPU-201GS DPU-3245	DPU-3372* DPU-5300*	DPU-414 DPU-5400*

* Some models of the DPU-5300/5400 and the DPU-3372 are equipped with an auto cutter.

* The DPU3372 is available in two colors, gray and ivory.

LTP2000 Series Printers

The LTP2000 is a series of high-performance thermal line printers boasting high-speed print of a maximum of 90mm/sec (LTP2242) and 75mm/sec (LTP2342, 2442) and durability of the head life of one hundred million pulses or 50km. It meets three types of paper width together with a full line of options including a drive CPU, interface board and auto cutter to meet various needs.

FEATURES

- High speed print of 90mm/sec max. (LTP2242) and 75mm/sec max. (LTP2342, 2442).
- Superbly durable head life of 100 million pulses or 50km.
- Two ways to insert the paper, straight and curl (also prints on thick paper).
- Also prints on two-ply thermal and label paper.
- Automatically loads paper via the paper sensor.
- The measure to counter static electricity minimizes the secondary discharge.
- The head open mechanism allows for easy maintenance.

APPLICATIONS



Measuring instrument



Medical equipment



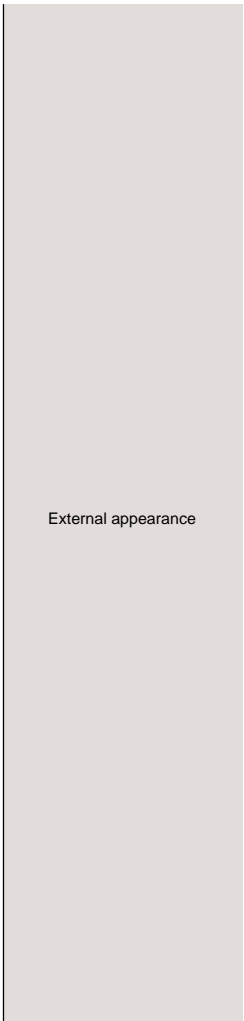
Bar code



Label paper



Ticket printer



LTP2242



LTP2442



LTP2342

Model	LTP2242	LTP2342	LTP2442
Print system	Thermal line dot system		
Head up/down detection	Detection by mechanical switch		
Paper detection	Detection by photo interrupter		
Dot resolution (dots/mm)	8		
Dot configuration (dots/line)	432	576	832
Printing speed (mm/sec.) (max.)	90	75	75
Printing width/Paper width (mm)	54 / 60	72 / 80	104 / 112
Thermal head service life	Anti-pulse characteristic	10 ⁸ pulses	
	Abrasive resistance	50 km	
Operating voltage range(V)	Logic	5 ± 0.25	
	Head	24 ± 2.4	
Dimensions (W x D x H)(mm)	85.2 x 61.4 x 27	106.4 x 61.4 x 27	138.2 x 61.4 x 27
Weight (g)	Approx. 115	Approx. 135	Approx. 160

ACU2000 Series Auto Cutters

The ACU2000 Series Auto Cutter is a cutter developed for the LTP2000 Series thermal line printer mechanism. Full or partial paper cut is available by command input. It can cut thick paper with a thickness of up to 125µm. Designed to be slim (16.5 to 17.5mm high), this cutter can be easily mounted on the LTP2000 Series using a specified attachment, allowing for easy maintenance.

FEATURES

- Full or partial paper cut is available by command input.
- Can cut up to 125µm thick paper.
- Designed to be as slim as 16.5 to 17.5mm high.
- Can be easily mounted using a specified attachment.
- After having been mounted, the cutter can be easily opened, allowing for easy maintenance.
- A wide variety of models in response to each and every mechanism of the LTP2000 Series.

External appearance



ACU2224A



ACU2424A



ACU2324A

Model		ACU2224A	ACU2324A	ACU2424A
Cut method		Guillotine type		
Cut width (mm)		63	85	116
Paper thickness (µm)		65 to 125		
Cut condition		Full or partial cut (leaving one-point, 2mm wide)		
Drive Voltage (V)	Motor	24 ± 2.4		
	Detector(Control switch)	5 ± 0.25		
Starting current (A)		1.2 max.		
Operation time (msec. / cycle) (max.)		500		
Cut frequency (cuts / minute) (max.)		30		
Life (cuts)		300,000		
Dimensions (W x D x H) (mm)		79 x 66.5 x 16.5	100 x 66.5 x 17	126 x 69.3 x 17.5
Weight (g)		Approx. 120	Approx. 200	Approx. 260

LTP1245 Printer

The LTP1245 is a super compact, lightweight thermal line printer especially suited for use with small portable devices such as PDA (Personal Digital Assistant) and hand-held terminal. It prints as fast as 62.5mm/sec. max., and is powered by lithium-ion batteries. It is also equipped with functions allowing for various operating situations and can be easily handled.

FEATURES

- Super compact (72 W x 39.5 D x 16 H mm) and super lightweight (45g).
- Very long head life of 100 million pulses or 50km.
- Max. printing speed:
500 dot lines/sec (62.5mm/sec) during 8.0V drive.
450 dot lines/sec (56.25mm/sec) during 7.2V drive.
- Also powered by lithium-ion batteries.
- Prints on two-ply thermal, label, and thick paper.
- Two ways to insert the paper, straight pass and curl pass.
- Can automatically load paper via the paper sensor.
- Opening/closing the head open lever allows the head to be easily cleaned.

APPLICATIONS



External appearance



Model	LTP1245	
Print system	Thermal line dot system	
Head up/down detection	Detection by photo interrupter	
Paper detection	Detection by photo interrupter	
Dot resolution (dots / mm)	8	
Dot configuration (dots / line)	384	
Printing speed (mm / sec) (max.)	62.5 (during 8.0V drive)	
Printing width/Paper width (mm)	48 / 58	
Thermal head service life	Anti-pulse characteristic	10 ⁸ pulses
	Abrasion resistance	50 km
Operating voltage range(V)	Logic	4.5 to 5.5
	Head	4.2 to 8.5
Dimensions (W x D x H) (mm)	72 x 39.5 x 16	
Weight (g)	Approx. 45	

Interface Boards & CPUs

IF2201-01B

The **IF2201-01B** is a drive interface board used specifically for the LTP2000 series printers. It is equipped with serial and parallel data input terminals. The IF2201-01B brings its printing functions into full play including bar codes using a wide variety of characters and function commands. Also supporting control of the ACU2000 series auto cutter, it can easily use the functions of the LTP2000 series.



Model	IF2201-01B	
CPU	PT221P01	
Operating voltage range (V)	Vp : 24 ± 2.4	Vcc : 5 ± 0.25
Character matrix (H x W) (dots)	16-dot characters 16 x 8	24-dot characters 24 x 12
Character type	Extended graphic character set	
Input method	Simplified Centronics, RS-232C (TTL level)	
Dimensions (W x D x H) (mm)	100 x 90 x 22	

PT221P01

The **PT221P01** is a CPU used to drive the LTP2000 series printers. By using it with a gate array (PT301GA1) as a pair, a drive board with the same full functions as the IF2201 can be created as desired.

FEATURES

- Prints with less current using division control in accordance with the number of dots to be activated.
- Supports both serial and parallel input.
- Ensures high-quality print by measuring the temperature and voltage, and automatically adjusting the print density.
- The bar code print function allows bar codes to be easily printed. (CODE39, UPC, JAN, ITF, CODABAR)
- Provides a wide variety of character functions including double-width/double-height, reverse print, inverse print, underlining, rotation character, and character spacing control.
- Prints on two-ply thermal and label paper.
- Controls the ACU2000 series auto cutter.

Model number	PT221P01
Package form	80-pin flat package
Dimensions (W x D x H) (mm)	22.8 x 16.8 x 3.05
Configuration	C-MOS LSI
Input method	8-bit parallel (Centronics), asynchronous serial
Applied mechanism	LTP2242, 2342, 2442
Character type	Extended graphics character set
Line spacing	16-dot line space (can be changed via a command)
Character spacing	4-dot space (Half-size) (can be changed via a command) 8-dot space (Full-size) (can be changed via a command)
Operating voltage (Vcc) (V)	5.0 ± 0.5
Operating frequency (MHz)	25 ± 0.125
Remark	Use together with a gate array (PT301GA1) as a pair.

IF1001-01B

The **IF1001-01B** is an interface board used to drive the LTP1245 series printer mechanism. It is equipped with serial and parallel data input terminals. The IF1001-01B brings its printing functions into full play using a wide variety of characters and function commands. It easily implements high-quality print by measuring the head resistive value, temperature, and voltage for automatic adjustment of the print density.



Model	IF1001-01B	
CPU	PT100P01	
Operating voltage range (V)	Vp : 4.2 to 8.5	Vcc : 4.5 to 5.5
Character matrix (H x W) (dots)	16-dot characters 16 x 8	24-dot characters 24 x 12
Character type	Extended graphics character set	
Input method	Simplified Centronics, RS-232-C (TTL level)	
Dimensions (W x D x H) (mm)	70.0 x 100.0 x 12.0	

PT100P01

The **PT100P01** is a CPU used specifically for the LTP1245. By using it with a gate array (PT500GA1) as a pair, a drive board with the same full functions as an interface board can be created as desired.

FEATURES

- Prints with less current using division control in accordance with the number of dots to be activated.
- Supports both serial and parallel input.
- Ensures high-quality print by measuring the temperature and voltage, and automatically adjusting the print density.
- Provides a wide variety of character functions including double-width/double-height, reverse print, inverse print, rotation character, and character spacing control.
- Superimposes characters and bit image data.
- Provides a ruler line function which enables ruler lines and characters to be easily superimposed.
- Prints on two-ply thermal and label paper.

Model number	PT100P01
Package form	80-pin flat package
Dimensions (W x D x H) (mm)	22.8 x 16.8 x 3.05
Configuration	C-MOS LSI
Input method	8-bit parallel (Centronics) Asynchronous serial
Applied mechanism	LTP1245
Character type	Extended graphics character set.
Line spacing	16-dot line space (can be changed via a command)
Character spacing	4-dot space (Half-size) (can be changed via a command) 8-dot space (Full-size) (can be changed via a command)
Operating voltage (V)	5.0 ± 0.5
Operating frequency (MHz)	16 ± 0.08
Remark	Use together with a gate array (PT500GA1) as a pair.

LTP Series Printers

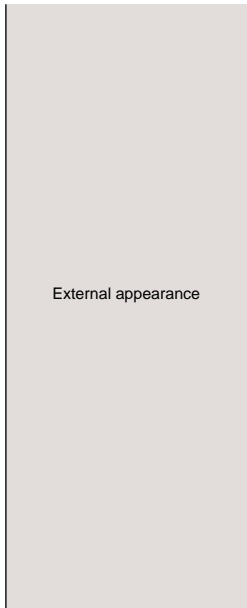
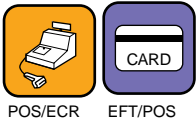
LTP4242

The LTP4242 is a new, compact, high-speed, and high-cost performance thermal line printer. Its application ranges from POS/ECR systems to measuring instruments, analyzers, communications systems and data terminals. It features high operationability for POS systems such as easy paper insertion, quick head cleaning and replacement. A new static electricity protection system is installed.

FEATURES

- Maximum printing speed (70 mm/sec)
- The head attach/detachment mechanism ensures easy head cleaning and replacement.
- Connecting the printer fixture to the frame ground allows for all metallic parts to be connected to the frame ground, preventing damage occurring due to static electricity.
- Compact (86.5 W x 52.0 D x 22.0 H mm) and lightweight (150 g)
- High-resolution print (8 dots/mm)
- Loads paper via the paper sensor.

APPLICATIONS



LTP4242



LTP7242

Model	LTP4242	LTP7242
Print system	Thermal line dot system	Thermal line dot system
Head up/down detection	Detection by mechanical switch	Detection by mechanical switch
Paper detection	Detection by photo interrupter	Detection by photo interrupter
Dot resolution (dots / mm)	8	8
Dot configuration (dots / line)	432	432
Printing speed (mm / sec.) (max.)	70 (560 dotlines / sec.)	100 (800 dotlines / sec.)
Printing width/Paper width (mm)	54 / 58	54 / 58
Thermal head service life	Anti-pulse characteristic	5 x 10 ⁷ pulses
	Abrasion resistance	30 km
Operating voltage range (V)	Logic	5 ± 0.5
	Head	24 ± 2.4
Dimensions (W x D x H) (mm)	86.5 x 52.0 x 22.0	88.0 x 73.0 x 36.3
Weight (g)	Approx. 150	Approx. 210

* Drive interface board and CPU are also available (LTP 4242 only)

Auto Cutter & Winder Unit

ACU1224 Auto Cutter

The ACU1224 is an auto cutter used specifically for the LTP4242 and LTP7242 printer mechanisms. It can select 1-point or 3-point remaining cut as a POS/ECR receipt printer cutter, and performs high-speed continuous cut of 30 cuts/minute max. It can be easily mounted on the printer mechanism using a specified attachment.

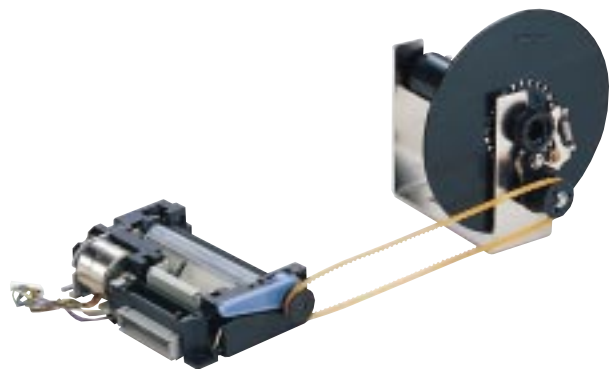
Model		ACU1224
Cut method		Guillotine type
Cut width (mm)		60
Paper thickness (μm)		65 to 95
Cut condition		Leaving one-point or three-point
Drive voltage(V)	Motor	24 ± 2.4
	Detector(Control switch)	5 ± 0.25
Starting current (A)		1.2 max.
Operating time (msec. / cycle)		500 max.
Cut frequency (cuts / min.)		30 max.
Life (cuts)		300,000
Dimensions (W x D x H) (mm)		70.0 x 55.0 x 22.0
Weight (g)		Approx. 150



WU280 Winder Unit

The WU280 is a roll paper winder unit used specifically for the LTP4242 and LTP7242 printer mechanisms. Powered by the printer mechanism, it requires no drive motor and control circuit enabling design of its compact body.

Model	WU280
Paper width (mm)	58
Paper thickness (μm)	70 to 80
Outside dia. of paper roll (mm)	Max. ø 83
Inside dia. of paper roll (mm)	Min. ø 20
Life (km)	100
Dimensions (W x D x H) (mm)	91 x 92 x 97.6
Weight (g)	Approx. 111



LTP Series Printers

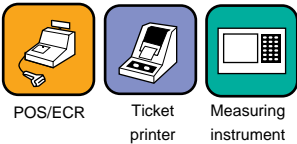
LTP256

The **LTP256** is a high-cost performance, high-speed thermal line printer. It can print on 58-mm paper. The LTP256 features 4 dots/mm resolution, sufficient enough to print ANK characters and a maximum printing speed of 70 mm/sec. The LTP256 employs a new mechanism, allowing the thermal head unit to be easily attached/detached for easy maintenance. The LTP 256 is equipped with a photo interrupter for paper detection. A mechanical switch for head-up detection is optionally offered. Only curl-pass paper insertion is available.

FEATURES

- Maximum printing speed for 280 dot lines/sec (70 mm/sec.)
- Compact (80.0 W x 62.0 D x 41.0 H mm)
- Easy thermal head unit attach/detachment and easy maintenance

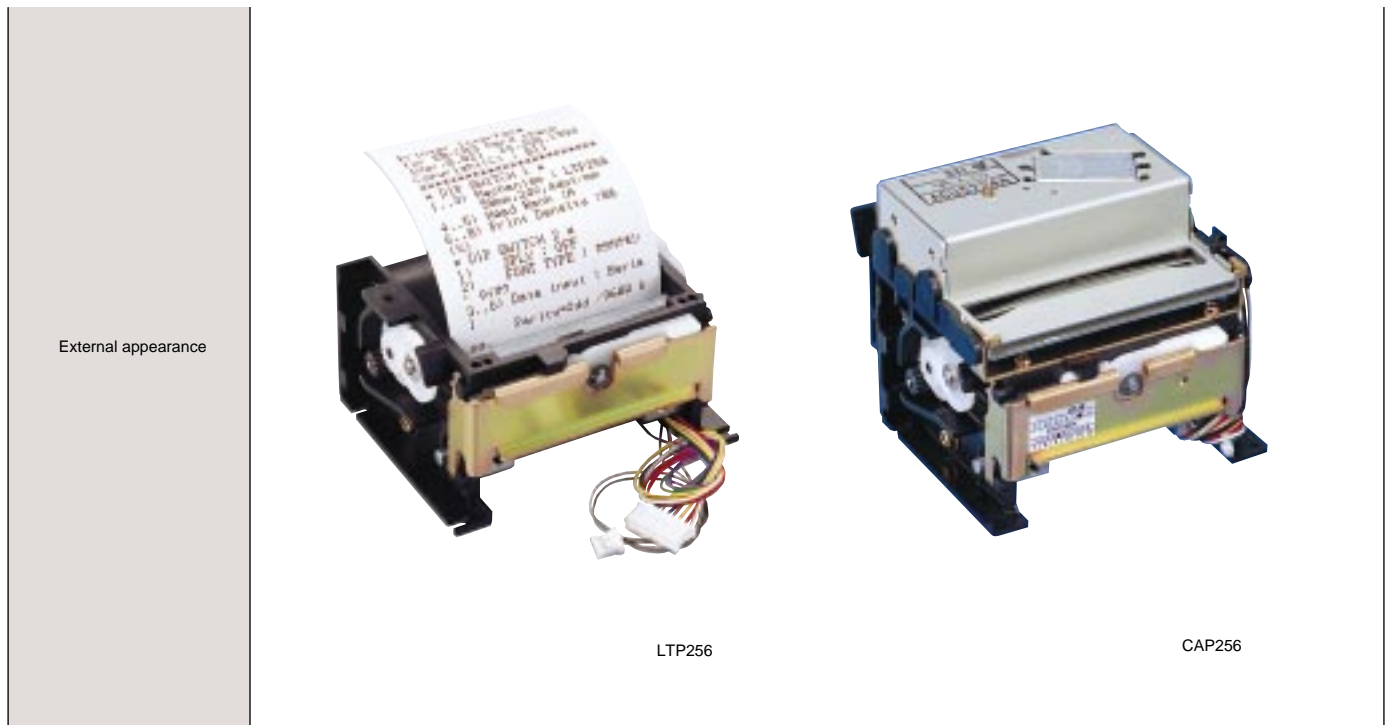
APPLICATIONS



POS/ECR

Ticket printer

Measuring instrument



LTP256

CAP256

Model	LTP256	CAP256
Print system	Thermal line dot system	Thermal line dot system
Head up/down detection	Detection by mechanical switch(Optional)	Detection by mechanical switch
Paper detection	Detection by photo interrupter	Detection by photo interrupter
Dot resolution (dots / mm)	4	4
Dot configuration (dots / line)	192	192
Printing speed (mm / sec.) (Max.)	70 (280 dotlines / sec.), 55 (220 dotlines / sec.)	70(280 dotlines/sec.), 55(220 dotlines/sec.)
Printing width/Paper width (mm)	48 / 58	48/58
Thermal head service life	Anti-pulse characteristic	5 x 10 ⁷ pulses
	Abration resistance	30 km
Operating voltage range(V)	Logic	4.75 to 5.25
	Head	23.0 to 25.0
Dimensions (W x D x H) (mm)	80.0 x 62.0 x 41.0	84.0 x 73.0 x 70.0
Weight (g)	Approx. 170	Approx. 330

Interface Boards & CPUs

IF4001-01B

The **IF4001-01B** is a drive interface board used specifically for the LTP4242 printer. It is equipped with serial and parallel data input terminals. The IF4001-01B brings its printing functions into full play using a wide variety of characters and function commands. Also supporting an auto loading function and control of the auto cutter (ACU1000), it can easily use the functions of the LTP4242 printer.



Model	IF4001-01B	
CPU	PT400P02	
Operating voltage range (V)	Vp : 24 ± 2.4	Vcc : 5 ± 0.5
Character matrix (H x W) (dots)	16-dot characters	24-dot characters
Half-size character	16 x 8	24 x 12
Full-size character		
Character type	Extended graphics character set Downloaded characters, external characters, option fonts	
Input method	Simplified Centronics, RS-232C (TTL level)	
Dimensions (W x D x H) (mm)	90.0 x 100.0 x 22.0	

PT400P02

The **PT400P02** is a CPU used to drive the LTP4242 printer. By using it with a gate array (PT500GA1) as a pair, a drive board with the same full functions as the IF4001 can be created as desired. Capable of driving two printer mechanisms, this one-chip CPU allows the size of the board to be reduced.

FEATURES

- Capable of driving two printer mechanisms.
- Supports both serial and parallel input.

- Prints with less current using division control in accordance with the number of dots to be activated.
- Ensures high-quality print by measuring the temperature and voltage, and automatically adjusting the print density.
- Provides a wide variety of character functions including double-width/double-height, reverse print, inverse print, underlining, and character spacing control.
- An option font function allows a font of a desired size under 127 x 127 to be stored and printed.
- An auto loading function allows the paper to be easily inserted.

Model number	PT400P02
Package form	80-pin flat package
Dimensions (W x D x H) (mm)	22.8 x 16.8 x 3.05
Configuration	C-MOS LSI
Input method	8-bit parallel (Centronics) asynchronous serial
Applied mechanism	LTP4242
Character type	Extended graphics character set
Line spacing	16-dot line space (can be changed via a command)
Character spacing	4-dot space (Half-size) (can be changed via a command) 8-dot space (Full-size) (can be changed via a command)
Operating voltage (V)	4.5 to 5.5
Operating frequency (MHz)	20 ± 0.5%
Remark	Use together with a gate array (PT500GA1) as a pair.

IF2001-01B

The **IF2001-01B** is an interface board used to drive the LTP256 and CAP256 printers.

It responds to 8-bit parallel and serial input (TTL level). It is also equipped with a paper auto loading function and a special auto cutter control function.



Model	IF2001-01B	
CPU	PT201P01	
Operating voltage range (V)	Vp : 24 ± 1.0	Vcc : 5 ± 0.25
Character matrix (H x W) (dots)	9 x 8	
Character type	Alphanumeric Extended graphic character set	
Input method	Simplified Centronics, RS-232C (TTL level)	
Dimensions (W x D x H) (mm)	80.0 x 110.0 x 20.0	

PT201P01

The **PT201P01** is a CPU used specifically for the LTP256 and CAP256. Using this CPU, a drive board with the same full functions as an interface board can be created as desired.

FEATURES

- Prints with less current using division control in accordance with the number of dots to be activated.
- Supports both parallel and serial input.
- Ensures high-quality print by automatically adjusting the print density according to the temperature and voltage.
- Provides error detection functions for voltage, temperature, paper empty, and head up.
- Provides character functions including double-width/double-height, reverse print, and inverse print.
- An auto loading function allows the paper to be easily inserted.

Model number	PT201P01
Package form	64-pin flat package
Dimensions (W x D x H) (mm)	18.7 x 24.7 x 3.35
Configuration	C-MOS LSI
Input method	8-bit parallel (Centronics) Asynchronous serial
Applied mechanism	LTP256, CAP256
Character type	Alphanumeric Extended graphics character set
Line spacing	3-dot line space
Character spacing	0-dot space
Operating voltage (V)	5.0 ± 0.25
Operating frequency (MHz)	10 ± 0.5%

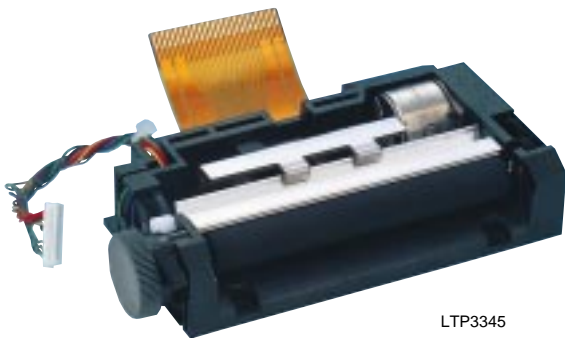
LTP3000 Series Printers

The LTP3000 is a series of compact and lightweight thermal line printer mechanisms. It is available in three types of paper width, 2 inches (58mm), 3 inches (80mm), and 4 inches (112mm). It is especially suited for use with various kinds of portable compact devices.

LTP3345

FEATURES

- Paper width of 80mm.
- Also powered by nickel hydrogen batteries.
- Maximum printing speed (360 dot lines/sec = 45mm/sec) when operating on 7V.
- Prints on two-ply thermal and label paper.
- Automatically loads paper via the paper sensor.

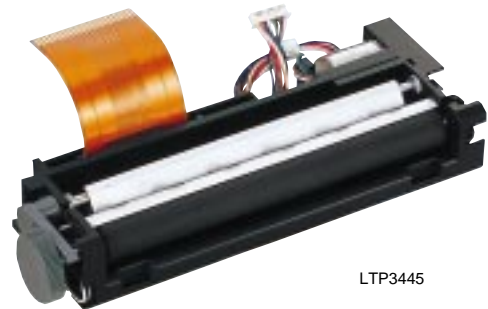


LTP3345

LTP3445

FEATURES

- Paper width of 112mm.
- Also powered by lithium-ion batteries.
- Maximum printing speed (450 dot lines/sec = 56.25mm/sec) when operating on 8.5V.
- Prints on two-ply thermal and label paper.
- Automatically loads paper via the paper sensor.



LTP3445

LTP3245A/B

FEATURES

- Paper width of 58mm.
- Powered by a 5V single power supply or a battery.
- Maximum printing speed (180 dot lines/sec = 22.5mm/sec).
- Prints on two-ply thermal and label paper.
- Automatically loads paper via the paper sensor.

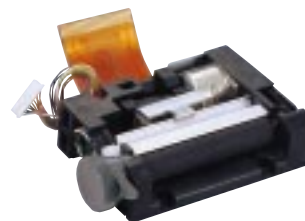


LTP3245A/B

LTP3245F/G

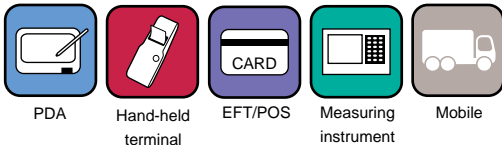
FEATURES

- Paper width of 58mm.
- Powered by a 5V single power supply or batteries.
- Maximum printing speed (437 dot lines/sec = 54.5mm/sec) when operating on 7V.
- Prints on two-ply thermal and label paper.
- Automatically loads paper via the paper sensor.



LTP3245F/G

APPLICATIONS



Model	LTP3245A / B	LTP3245F / G	LTP3345	LTP3445
Print system	Thermal line dot system	Thermal line dot system	Thermal line dot system	Thermal line dot system
Head up/down detection	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch
Paper detection	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter
Dot resolution (dots / mm)	8	8	8	8
Dot configuration (dots / line)	384	384	576	832
Printin speed (mm / sec.) (max.)	22.5 (180 dotlines / sec.)	54.5 (437 dotlines / sec.)	45 (360 dotlines / sec.) during 7V drive	56.25 (450 dotlines / sec.) during 8.5V drive 50 (400 dotlines / sec.) during 7.2V drive
Printing width/Paper width (mm)	48 / 58	48 / 58	72 / 80	104 / 112
Thermal head service life	Anti-pulse characteristic	5 x 10 ⁷ pulses	5 x 10 ⁷ pulses	5 x 10 ⁷ pulses
	Abration resistance	30 km	30 km	30 km
Operation voltage range(V)	Logic	4.2 to 5.5	4.2 to 5.5	4.5 to 5.5
	Head	4.2 to 6.0	4.2 to 7.0	4.2 to 7.0
Dimensions (W x D x H) (mm)	76.3 x 50.0 x 20.0	76.0 x 54.0 x 21.0	97.0 x 57.0 x 21.0	129.0 x 51.0 x 21.0
Weight (g)	Approx. 80	Approx. 105	Approx. 115	Approx. 135



LTP3000 Series Interface Boards & CPUs

IF3001-01B

The IF3001-01B is an interface board used specifically for the LTP3245A/B. It is equipped with 8-bit parallel and serial RS-232C data input terminals. The IF3001-01B brings its printing functions into full play using a wide variety of characters and function commands. The IF3001-01B also has a function to print on two-ply thermal paper.

IF3002-01B

The IF3002-01B is an interface board used specifically for the LTP3345 printer mechanism. It prints both 16-dot and 24-dot ANK. Since it automatically measures the head resistance, temperature, and voltage, adjustment of applied energy is not needed. It is suited for battery power which requires very little energy to drive the printer, and can be powered by environmentally-friendly Ni-HM batteries.

External appearance		
	IF3001-01B	IF3002-01B
Model	IF3001-01B	IF3002-01B
CPU	PT300P01	PT301P01
Operation voltage range (V)	Vp : 4.2 to 6.0, Vcc : 4.75 to 5.25	Vp : 4.2 to 7.0, Vcc : 4.5 to 5.5
Character matrix (H x W) (dots)	24 x 12	16-dot characters 16 x 8 24-dot characters 24 x 12
Character type	IBM compatible characters	Extended graphics character set
Input method	Simplified Centronics, RS-232C (TTL level)	Simplified Centronics, RS-232C (TTL level)
Dimensions (W x D x H) (mm)	67.0 x 75.0 x 20.0	80.0 x 80.0 x 18.0

CPU (PT300P01, PT301P01, PT303P01, PT304P02) for LTP3000 Series

FEATURES

- Prints with less current using division control in accordance with the number of dots to be activated.
- Supports both parallel and serial input.
- Ensures high-quality print by measuring the temperature and voltage, and automatically adjusting the print density.
- Provides a wide variety of character functions including double-width/double-height, reverse print, inverse print, and character spacing control.
- Superimposes characters and bit image data.
- Provides a ruler line function which enables ruler lines and characters to be superimposed.
- Prints on two-ply thermal paper.

Model number	PT300P01	PT301P01	PT303P01	PT304P02
Package form	64-pin flat package	80-pin flat package	80-pin flat package	80-pin flat package
Dimensions (W x D x H) (mm)	23.6 x 17.6 x 2.7	22.8 x 16.8 x 3.05	22.8 x 16.8 x 3.05	22.8 x 16.8 x 3.05
Configuration	C-MOS LSI	C-MOS LSI	C-MOS LSI	C-MOS LSI
Input method	8-bit parallel (Centronics), asynchronous serial			
Applied mechanism	LTP3245A/B	LTP3345	LTP3245F / G, LTP3345	LTP3445
Character type	Extended graphics character set			
Line spacing	16-dot line space (can be changed via a command)			
Character spacing	4-dot space (can be changed via a command)			
Operating voltage (Vcc)	5.0 ± 0.5	5.0 ± 0.5	5.0 ± 0.5	5.0 ± 0.5
Operating frequency (MHz)	14.7456 ± 0.5%	16 ± 0.5%	16 ± 0.5%	16 ± 0.5%
Remark	Use together with a gate array (PT500GA1) as a pair.			

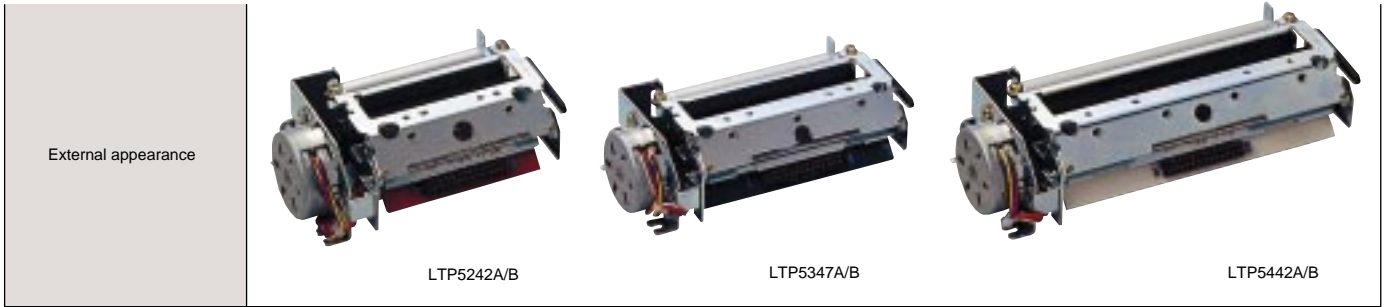
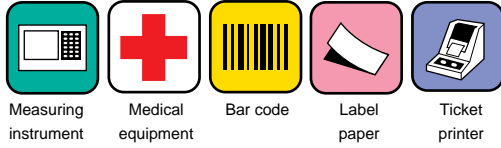
LTP5000 Series Printers & Interface

The LTP5000 is a series of compact, lightweight and ultra high-speed thermal line printers in response to increasingly diversified needs for thermal line printers. The Series boasts high reliability, high-speed and high-resolution, stemming from SII's technological expertise. The LTP5000 Series comes in three types of paper width, all with the ability to be equipped with an auto cutter. The LTP5000 is an enhanced series of thermal line printers, ensuring a high-performance interface with a wide variety of characters and commands.

FEATURES

- High-resolution print (8 dots/mm).
- Selectable printing speed (50 mm/sec and 25mm/sec max. for 24-V type).
- The use of the head open mechanism ensures easy maintenance.
- Two ways to insert the paper, straight and curl (thick paper and label printing via the straight pass).
- A specified auto cutter (ACU5000 Series) can be easily attached.

Applications

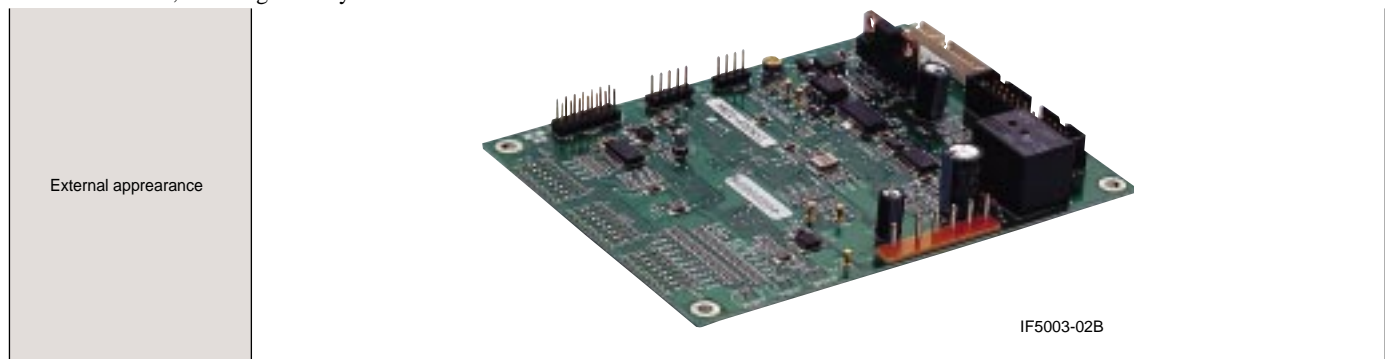


Model	LTP5242A / B	LTP5246A / B	LTP5347A / B	LTP5442A / B	LTP5446A / B	LTP5437A / B
Print system	Thermal line dot system	Thermal line dot system	Thermal line dot system	Thermal line dot system	Thermal line dot system	Thermal line dot system
Head up/down detection	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch	Detection by mechanical switch
Paper detection	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter	Detection by photo interrupter
Dot resolution (dots / mm)	8	8	8	8	8	6
Dot configuration (dots / line)	448	448	576	832	832	640
Printing speed (mm / sec.) (max.)	50	25	50	50	25	50
Printing width/Paper width (mm)	56 / 60	56 / 60	72 / 80	104 / 112	104 / 112	105.6 / 112
Thermal head service life	Anti-pulse characteristic	5×10^7 pulses	5×10^7 pulses	5×10^7 pulses	5×10^7 pulses	5×10^7 pulses
	Abrasion resistance	30 km	30 km	30 km	30 km	30 km
Operating voltage range (V)	Logic	5 ± 0.25	5 ± 0.25	5 ± 0.25	5 ± 0.25	5 ± 0.25
	Head	22.1 to 25.4	11.5 to 12.2	23.1 to 25.1	22.1 to 25.4	11.5 to 12.2
Dimensions (W x D x H) (mm)	105.4 x 59.5 x 36.5	105.4 x 59.5 x 36.5	125.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5
Weight (g) (approx.)	280	280	320	380	380	380

IF5003-02B

The IF5003-02B is an interface board used specifically for the printer mechanism of the LTP5000 Series that supports parallel and serial data input.

A wide variety of characters and commands responds to diverse needs. The IF5003-02B is equipped with a drive terminal for the ACU5000 Series auto cutter, allowing for easy attachment.



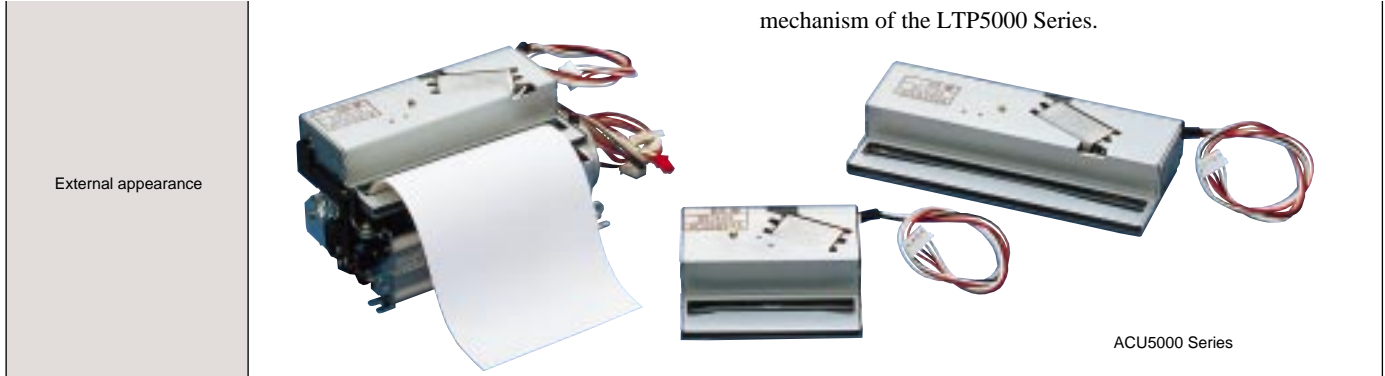
Model	IF5003-02B
CPU	PT502P02
Operating voltage range (V)	Vp : 24 ± 1.0 , 12 ± 1.0 , Vcc : 5 ± 0.25
Character matrix (H x W) (dots)	Normal size : 24 x 12 Double-width : 24 x 24 Double-height : 48 x 12 Double-width/double height : 48 x 24
Character type	IBM compatible characters
Input method	Centronics, RS-232C (TTL level)
Dimensions (W x D x H) (mm)	100.0 x 130.0 x 22.0

Auto Cutters & CPU

The ACU5000 Series Auto Cutter is a guillotine type cutter developed for the LTP5000 Series thermal line printer mechanism. Full or partial paper cut (one point remaining cut) is available by command input. This cutter can be easily mounted on the LTP5000 Series using a specified attachment, allowing for easy maintenance.

FEATURES

- Full or partial paper cut is available by command input.
- Can be easily mounted using a specified attachment.
- After having been mounted, the cutter can be easily opened, allowing for easy maintenance.
- A wide variety of models in response to each and every mechanism of the LTP5000 Series.



Model	ACU5224A	ACU5212A	ACU5324A	ACU5424A	ACU5412A	
Cut method	Guillotine type	Guillotine type	Guillotine type	Guillotine type	Guillotine type	
Cut width(mm)	63	63	97	122	122	
Paper thickness(μm)	65 to 95	65 to 95	65 to 95	65 to 95	65 to 95	
Cut condition	Full or partial cut (leaving one-point, 2 mm wide)					
Drive voltage (V)	Motor	24 ± 2.4	12 ± 1.2	24 ± 2.4	24 ± 2.4	12 ± 1.2
	Detector (Control switch)	5 ± 0.25	5 ± 0.25	5 ± 0.25	5 ± 0.25	5 ± 0.25
Starting current (A) (max.)	1.2	4.5	1.0	1.0	2.4	
Operation time (msec. / cycle) (max.)	700	700	700	700	850	
Cut frequency (cut/minute) (max.)	10	10	10	10	10	
Life (cuts)	300,000	300,000	300,000	300,000	300,000	
Dimensions (W x D x H) (mm)	70.0 x 58.0 x 21.5	70.0 x 58.0 x 21.5	105.0 x 58.0 x 21.5	130.0 x 58.0 x 21.5	130.0 x 58.0 x 21.5	
Weight (g) (approx.)	150	150	210	250	250	

PT502P02

When used together with a gate array as a pair, the CPU for the LTP5000 Series can easily create a drive board with the same variety of functions as the interface board.

FEATURES

- Prints with less current via division control in accordance with the number of dots to be activated.
- Supports both parallel and serial input.
- Dual-power drive system for the stepping motor minimizes fluctuation in voltage.
- Adjusts the print energy by measuring the resistance of the thermal head.
- Ensures high-quality print by measuring the temperature and voltage, and adjusting the print density.

- Detects an abnormality/error in head resistance, voltage, or temperature.
- Provides a wide variety of character functions including double-width/double height, inverse print, underlining, and character spacing control.
- Superimposes characters and bit image data.
- Provides a ruler line function, allowing ruler lines and characters to be easily superimposed.
- High or Low print speed selection.
- Miniaturization of the control circuit through integration of peripheral ICs onto a gate array.
- Prints on two-ply thermal paper.
- Drives the ACU5000 Series auto cutter.

Model number	PT502P02
Package form	80-pin flat package
Dimensions (W x D x H) (mm)	25.2 x 19.2 x 2.15
Configuration	C-MOS LSI
Input method	8-bit parallel (conforming to Centronics), asynchronous serial
Applied mechanism	LTP5242, LTP5246, LTP5347, LTP5442, LTP5446, LTP5437
Character type	Graphics and characters
Line spacing	16 dot lines space (can be changed via a command)
Character spacing	4-dots space (normal) (can be changed via a command)
Operating voltage (Vcc) (V)	5.0 ± 0.25
Operating frequency (MHz)	16 ± 0.5 %

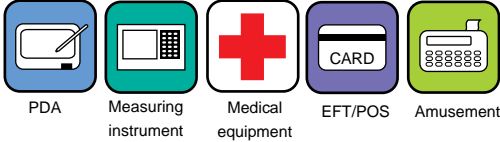
. Use this CPU and a gate array (PT500GA1) as a pair.

STP Series printers

STP SERIES

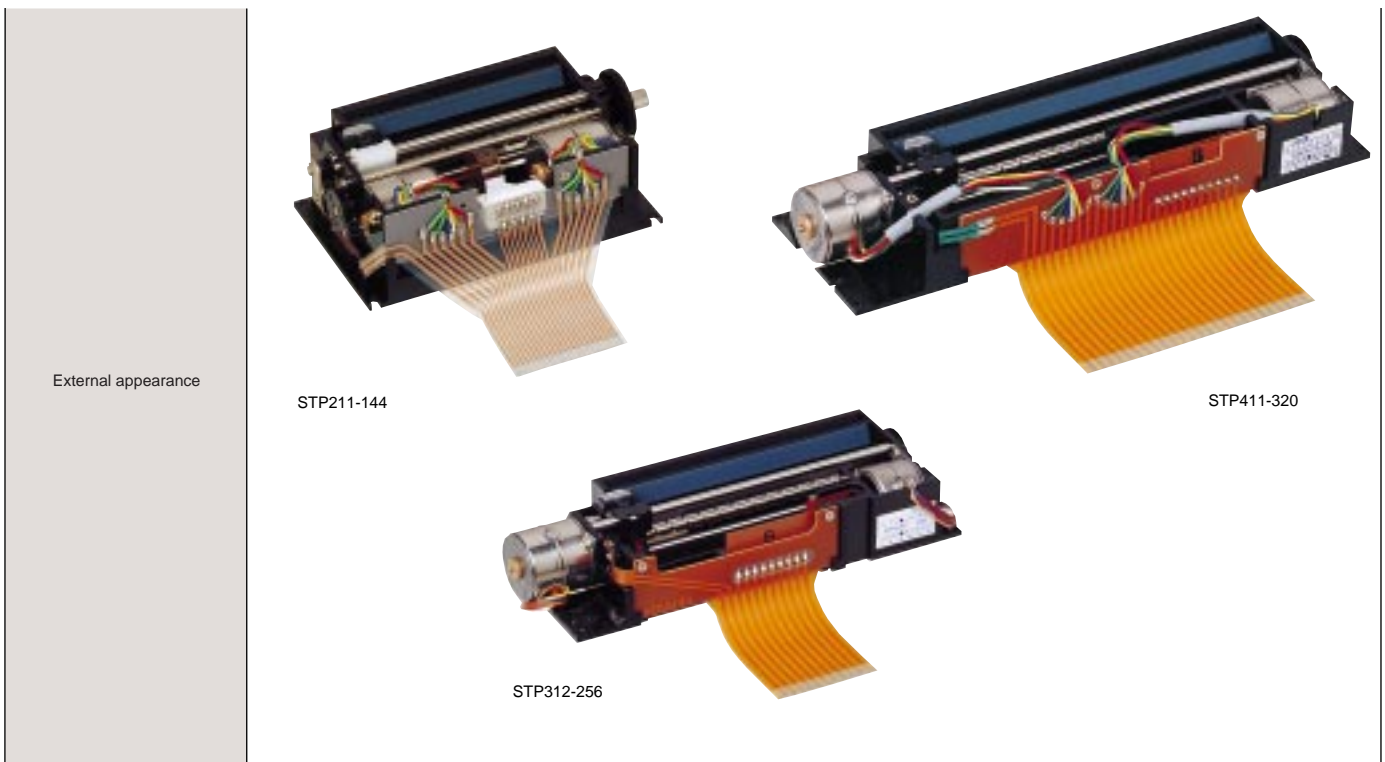
The STP is a series of compact and high-performance serial type thermal printers developed as an upper version of the MTP Series. Due to its wide variety of functions, such as character print, graphic print and bidirectional logical seek, the STP Series has met with customer approval since its debut on the market. It is even easier to use with the addition of high-speed print. Furthermore, an enhanced lineup of models makes it possible to respond to the diverse needs of the market.

APPLICATIONS



FEATURES

- Compact and lightweight.
- High-quality.
- Simple mechanism ensures high reliability.
- Prints characters and graphics.
- Independent head feed and paper feed and shortest distance print.
- Silent print assured by stepping motor drive.



Model	STP211		STP312	STP411	
Model number	-144	-192	-256	-256	-320
Print system	Thermal serial dot system		Thermal serial dot system	Thermal serial dot system	
Print direction	Character : Bidirectional logical seek Graphics : Unidirectional logical seek			Character : Bidirectional logical seek Graphics : Unidirectional logical seek	
Print timing	Synchronized with the stepping motor		Synchronized with the stepping motor	Synchronized with the stepping motor	
Home position detection	Mechanical switching system		Mechanical switching system	Mechanical switching system	
Number of columns	24	32	42	42	40
Character matrix (H x W) (dots)	7 x 5	7 x 5	7 x 5	7 x 5	9 x 7
Character size (H x W) (mm)	2.40 x 1.50	2.40 x 1.20	2.40 x 1.26	2.40 x 1.60	2.47 x 1.88
Dot configuration/line (H x W) (dots)	8 x 144	8 x 192	8 x 256	8 x 256	9 x 320
Dot pitch (vertical) (mm)	0.35	0.35	0.35	0.35	0.28
Dot pitch (horizontal) (mm)	0.32	0.24	0.25	0.35	0.28
Printing width/Paper width (mm)	46.1 / 58.0	46.1 / 58.0	64.0 / 80.0	89.6 / 112.0	89.6 / 112.0
Printing speed (cps)	46	46	42	41	31 / 52*
Operating voltage range (V)	5.0 ^{+0.5} _{-1.0}	5.0 ^{+0.5} _{-1.0}	5.0 ± 0.5	5.0 ± 0.5	5.0 ± 0.5
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Dimensions (W x D x H) (mm)	84.0 x 47.0 x 27.0		126.5 x 45.0 x 20.4	153.0 x 44.5 x 20.0	
Weight (g)	Approx. 110	Approx. 110	Approx. 120	Approx. 135	Approx. 135

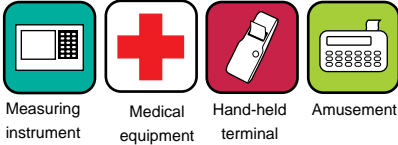
* Available depending upon the motor control method

MTP Series Printers

MTP SERIES

The MTP is a series of ultra small and low-end thermal printers developed in response to the demand for compact and low price requirements. An enhanced lineup of the MTP Series covers both character and graphic print. High-reliability, high-quality print is assured due to the ultra simple design and operationability. Since its debut on the market, the MTP Series has met with great customer satisfaction.

APPLICATIONS

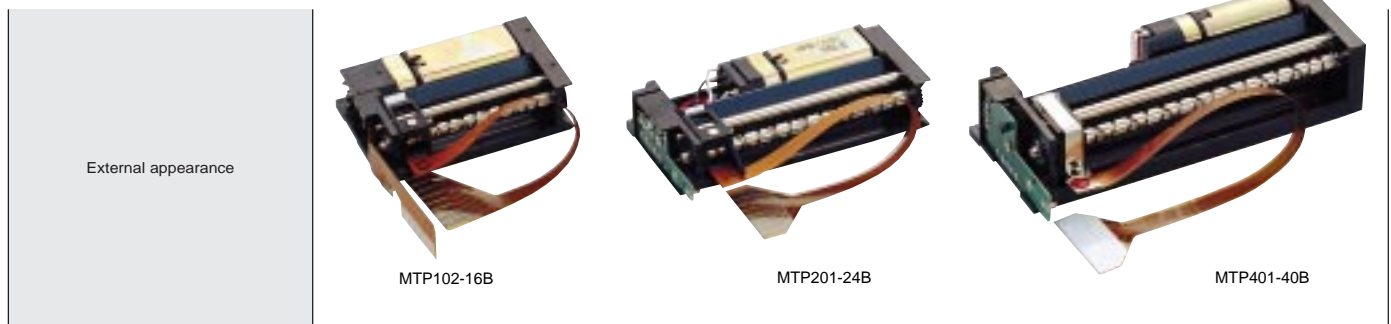


Measuring instrument Medical equipment Hand-held terminal Amusement

FEATURES

- Compact and lightweight.
- High-quality.
- Battery-powered.
- High-cost performance.
- Designed for versatile applications.
- Simple mechanism ensures high-reliability

CHARACTER PRINTERS



Model	MTP102		MTP201		MTP401
Model number	-13B	-16B	-20B	-24B	-40B
Print system	Thermal serial dot system		Thermal serial dot system		Thermal serial dot system
Print direction	Left to right		Left to right		Left to right
Print timing	Synchronized with the tachogenerator		Synchronized with the tachogenerator		Synchronized with tachogenerator
Home position detection	Mechanical switching system		Mechanical switching system		Mechanical switching system
Printing speed (room temperature, 5.0V) (lines/sec.)	Approx. 1.5	Approx. 1.2	Approx. 0.9	Approx. 0.8	Approx. 0.6
Number of columns	13	16	20	24	40
Character matrix (H x W) (dots)	7 x 5	7 x 5	7 x 5	7 x 5	7 x 5
Character size (H x W) (mm)	2.4 x 1.5	2.4 x 1.2	2.4 x 1.6	2.4 x 1.4	2.4 x 1.2
Printing width/Paper width (mm)	26.7/38.0	26.4/38.0	45.9/58.0	46.0/58.0	66.7/80.0
Reliability	MCTF 5×10^5 lines/Failure rate : 1×10^{-6} /line max. (5.0V rated energy, room temperature, character "8" full columns print)				
Operating voltage range (V)	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Dimensions (W x D x H) (mm)	48.0 x 31.0 x 13.8	48.0 x 31.0 x 13.8	70.0 x 34.0 x 14.4	70.0 x 34.0 x 14.4	91.5 x 35.5 x 20.0
Weight (g)	Approx. 35	Approx. 35	Approx. 40	Approx. 40	Approx. 50

GRAPHIC PRINTERS

Model	MTP201		MTP401	
Model number	-G128	-G166	-G256	-G280
Print system	Thermal serial dot system	Thermal serial dot system	Thermal serial dot system	Thermal serial dot system
Print direction	Left to right	Left to right	Left to right	Left to right
Print timing	Synchronized with the tachogenerator	Synchronized with the tachogenerator	Synchronized with the tachogenerator	Synchronized with the tachogenerator
Home position detection	Mechanical switching system	Mechanical switching system	Mechanical switching system	Mechanical switching system
Printing speed (room temperature, 5.0V) (lines/sec.)	Approx. 0.9	Approx. 0.8	Approx. 0.6	Approx. 0.6
Character matrix (H x W) (dots)	7 x 5	7 x 5	7 x 5	7 x 5
Character size (H x W) (mm)	2.4 x 1.7	2.4 x 1.4	2.4 x 1.3	2.4 x 1.2
Dot configuration/line (H x W) (dots)	8 x 128	8 x 166	8 x 256	8 x 280
Dot pitch (vertical) (mm)	0.35	0.35	0.35	0.35
Dot pitch (horizontal) (mm)	0.35	0.28	0.26	0.24
Printing width/Paper width (mm)	44.8/58.0	46.0/58.0	66.6/80.0	67.2/80.0
Reliability	MCTF 5×10^5 lines/Failure rate : 1×10^{-6} /line max. (5.0V rated energy, room temperature, character "8" full columns print)			
Operating voltage range (V)	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50
Dimensions (W x D x H) (mm)	70.0 x 34.0 x 14.4	70.0 x 34.0 x 14.4	91.5 x 35.5 x 20.0	91.5 x 35.5 x 20.0
Weight (g)	Approx.	Approx. 40	Approx. 50	Approx. 50

Interface

IF4112-GCB

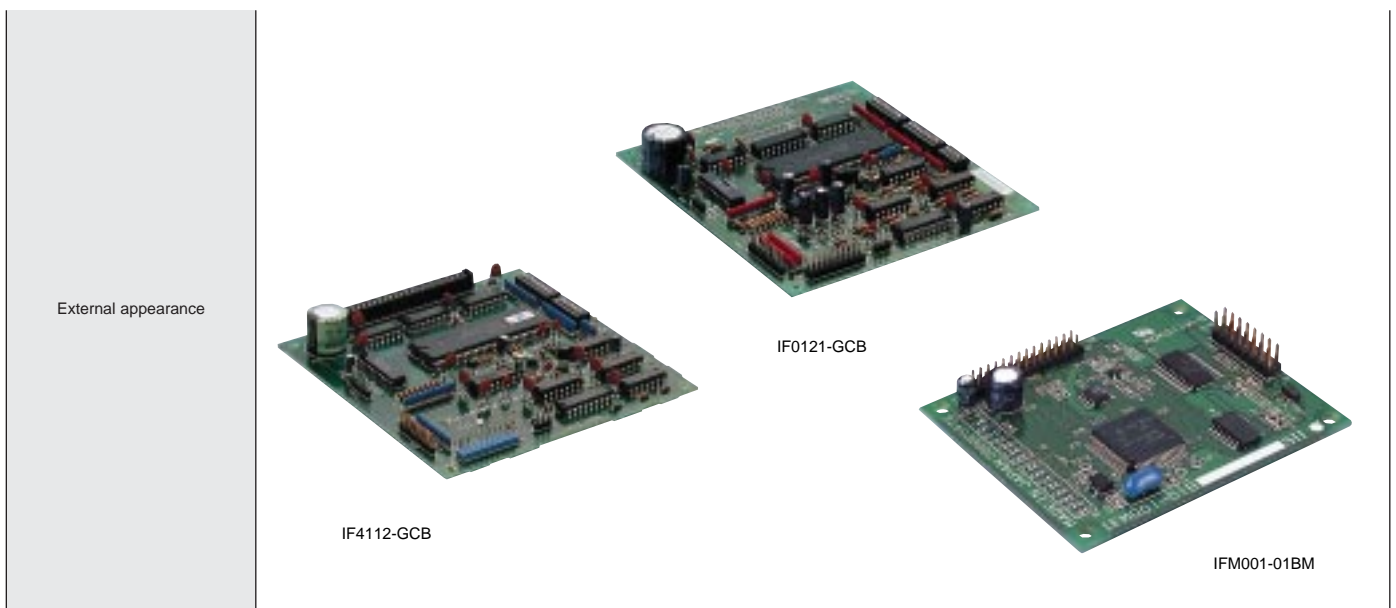
The IF4112-GCB is an interface board used specifically for the STP411-320 thermal serial printer. Compressed/expanded characters and international special characters can be printed. Graphics and characters can be printed on the same line. Both 8-bit parallel and serial (RS-232C) input are available.

IF0121-GCB

The IF0121-GCB is an interface board for the 8-dot thermal print head mechanism of the STP Series. It can drive all 5 models of the STP Series and print ANK, international characters, and graphics. Graphics and characters can be printed on the same line. Both 8-bit parallel and serial (RS-232C) input are available.

IFM001-01B/01BM

The IFM001-01B is a new interface board that prints data from a host system on all the models in the MTP Series. Both 8-bit parallel and serial (RS-232C) input are available. The IFM001-01B is equipped with a wide variety of commands such as double-width print, character spacing control, and inverse print, and can print on a graphic printer. The IFM001-01BM is equipped with an EEPROM, allowing downloaded characters to be printed.



Model	IF4112-GCB	IF0121-GCB	IFM001-01B	IFM001-01BM
CPU	M50747-500SP	M50747-753SP	HD6433238R43F	HD6433238R43F
Operating voltage range (V)	DC 5 ± 0.5	DC 5 ± 0.5	Vp : 5.0 ± 1.0 Vcc : 5.0 ± 0.5	Vp : 5.0 ± 1.0 Vcc : 5.0 ± 0.5
Character matrix (H x W) (dots)	9 x 7	7 x 5	7 x 5, 8 x 5	7 x 5, 8 x 5
Character type	Alphanumerals, symbols, special patterns, international characters	Alphanumerals, symbols, special patterns, international characters	Alphanumerals, symbols, special patterns, international characters	Alphanumerals, symbols, special patterns, international characters downloaded characters
Input method	8-bit parallel, RS-232C	8-bit parallel, RS-232C	8-bit parallel, RS-232C	8-bit parallel, RS-232C
Print mode	Character & graphics mode	Character & graphics mode	Character & graphics mode	Character & graphics mode
Dimensions (W x D x H) (mm)	120.0 x 119.0 x 22.0	130.0 x 118.0 x 22.0	71.5 x 59.0 x 11.5	71.5 x 59.0 x 11.5

Printer control CPU
When you create an interface board originally, CPU only is available.

INTERFACES and compatible mechanisms

Interface	IF4112-GCB	IF0121-GCB	IFM001-01B/01BM
Printer mechanism	STP411-320	STP211-144/192 STP312-256 STP411-256/320	All MTP Series mechanisms

DPU-3372 Printer Units

DPU-3372

The DPU-3372 is a new design, easy-to use, stand-alone, desk top multifunctional thermal line printer unit. A wide variety of commands, downloaded characters/graphics, and firmware rewrite function by the built-in flash memory respond to diversified customer needs.

FEATURES



- Conforms to the "ESC/POS™" command system.
- Downloaded characters/bit image backup function.
- Firmware can be rewritten by the built-in flash memory.
- Interface can be input in parallel via the optional board.
- Two models with and without auto cutter are available.
- Two colors (gray / ivory) are available

ESC/POS™ is a trademark of Seiko Epson Corporation.

APPLICATIONS



POS/ECR

External appearance				
	GRAY		IVORY	
Model	DPU-3372			
Model number	DPU-3372-1AS		DPU-3372-0AS	
Number of columns	Font A : 42, Font B : 56, Font C : 34, Font D : 23			
Character matrix (H x W) (dots)	Font A : 24 x 12, Font B : 17 x 9, Font C : 24 x 15, Font D : 24 x 22			
Character size (H x W) (mm)	Font A : 3.2 x 1.5, Font B : 2.3 x 1.3, Font C : 3.2 x 2.0, Font D : 3.2 x 3.0			
Character type	IBM compatible characters			
Dot configuration (dots/line)	512		512	
Printing speed (mm/sec.) (max.)	50.8 (2 inches/sec.)		50.8 (2 inches/sec.)	
Printing width/Paper width (mm)	72/80		72/80	
Input method (connector type)	Standard specification: Serial : RS-232C (25-pin D-SUB) Optional board: Parallel : Centronics (36-pin Amphenol)			
Power source (model number)	Specified AC adapter (PW-3024)			
Paper cut	Auto cutter		Tear bar	
Dimensions (W x D x H) (mm)	145.0 x 224.0 x 129.0 (excluding AC adapter)		145.0 x 224.0 x 129.0 (excluding AC adapter)	
Weight (g)	Approx. 1,100 (excluding paper and AC adapter)		Approx. 900 (excluding paper and AC adapter)	

* Ivory type : DPU - 3372 - 1AS - A
DPU - 3372 - 0AS - A

DPU-5000 Series Printer Units

DPU-5300/5400

The DPU5300/5400 is a multifunctional thermal line printer designed specifically for use in POS systems. It performs high speed printing at 50mm/sec max., and prints on label and two-ply thermal paper. It brings its printing functions into full play using a wide variety of characters and function commands. It can also easily print bar code using a

bar code print function. Some models are equipped with an auto cutter to enrich this series. The DPU5300/5400 can be installed either vertically (basic position) or horizontally.

APPLICATIONS



POS/ECR



Bar code



Label paper



Measuring instrument

FEATURES

- Prints, international characters of 13 countries, extended graphics, and other user-defined external characters.
- Automatic load system ensures correct and easy paper load.
- Long paper rolls (approx. 100m) can be loaded, saving time to be consumed for paper replacement.
- The bar-code function allows for easy bar-code print (CODE39, UPC, JAN, EAN, ITF, CODABAR).
- Some models of the DPU-5300/5400 are equipped with an auto cutter.



External appearance

DPU-5300

DPU-5400
(Automation Cutter Model)

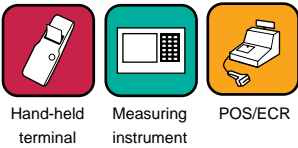
Model	DPU-5300		DPU-5400	
Model number	DPU-5347-0B	DPU-5347-1B	DPU-5442-0B	DPU-5442-1B
Number of columns	41		59	
Character matrix (H x W) (dots)	24 x 12		24 x 12	
Character size (H x W) (mm)	3.0 x 1.5		3.0 x 1.5	
Character type	Extended graphics character set, international characters		Extended graphics character set, international characters	
Dot configuration (H x W) (dots)	576		832	
Printing speed (mm/sec.) (max.)	50		50	
Print width/Paper width (mm)	72 / 80		104 / 112	
Input method (connector type)	8-bit parallel (36-pin, Amphenol), Serial (9-pin, D-SUB)		8-bit parallel (36-pin, Amphenol), Serial (9-pin, D-SUB)	
Power source (Model number)	Specified AC adapter (PW-5024)		Specified AC adapter (PW-5024)	
Operating temperature range (°C)	5 ~ 40		5 ~ 40	
Paper cut	Tear bar	Auto cutter	Tear bar	Auto cutter
Dimensions (W x D x H) (mm)	190 x 140 x 224	190 x 140 x 249	190 x 140 x 224	190 x 140 x 249
Weight (g)	Approx. 2,200	Approx. 2,500	Approx. 2,300	Approx. 2,600

DPU-3245 Printer Units

DPU-3245

The DPU-3245 is a portable, high-speed (25 mm/sec max.) and high-resolution (8 dots/mm) thermal line printer unit. It can print high-resolution characters, and has a wide variety of characters and commands. The DPU-3245 can print not only on normal thermal paper, but also on two-ply thermal paper or thermal labels. This model is suited for printing receipts, measurement results, and labels for inventory control. The DPU-3245 uses rechargeable packed nickel-hydrogen batteries, allowing for easy battery charge and replacement. Because the battery charger can be attached under the printer unit and used as an AC adapter, it requires less space.

APPLICATIONS



FEATURE

- Small-size and portability give it approx. 8-fold speed advantage over conventional serial printers (maximum print speed: 25 mm/sec).
- Prints graphic characters, international characters, downloaded characters, and user-defined characters by command input.
- Enough space to load long paper rolls of approx. 34 m and enough power to print one or more paper rolls with fully-charged.
- Automatic load system ensures correct and easy paper load.
- Automatic power OFF switch minimizes battery consumption.
- Prints on two-ply thermal paper and labels.
- Optional AC adapter stand.



Model	DPU-3245
Model number	DPU-3245
Number of columns	24 (24 x 12 dots), 16 (24 x 24 dots), 24 (16 x 16 dots)
Character matrix (H x W) (dots)	24 x 12, 24 x 24, 16 x 16
Character size (H x W) (mm)	3.0 X 1.5 (24 X 12 dots), 3.0 X 3.0 (24 X 24 dots), 2.0 X 2.0 (16 X 16 dots)
Character type	Alphanumerals, graphics, international characters
Dot configuration (dots/line)	384
Printing speed (mm/sec.) (max.)	25
Printing width/Paper width (mm)	48/58
Input method (connector type)	Serial (9-pin D-SUB)
Power source (Model number)	Specified AC adapter with a charger (PWC-3007), Specified AC adapter (PW-3006), Battery pack (BP-3006)
Paper cut	Tear bar
Dimensions (W x D x H) (mm)	93 x 252 x 64 (printer with a paper holder), 97 x 177 x 42.5 (AC adapter with a charger), 97 x 177 x 33 (AC adapter)
Weight (g)	Approx. 430 (printer and paper holder, without paper and battery) Approx. 380 (AC adapter with a charger, without AC cable) Approx. 330 (AC adapter without AC cable)

DPU Series Printer Units (Stand-alone type)

DPU-201G/GS

The DPU-201G/GS is a compact, lightweight, portable thermal serial printer powered by Ni-Cd rechargeable batteries and can be installed anywhere. It can print a wide variety of characters. The DPU-201G is an 8-bit parallel input type powered only by rechargeable batteries. The DPU-201GS is a serial input printer powered by rechargeable batteries or an AC adapter and used as a stand-alone printer.

DPU-414

The DPU-414 is a compact desktop thermal printer ensuring silent and high-quality print. The auto loading function to facilitate paper loading and replacement and the dual-power supply (AC adapter and rechargeable batteries) make this printer more convenient. It is equipped with serial parallel interfaces. It contains international characters of 11 countries and about 28K bytes of buffer memory to meet various needs.

FEATURES

- Compact and lightweight (DPU-201G: Approx. 400 g; DPU-201GS: Approx. 370 g).
- Supports simple Centronics input (DPU-201G) and serial input (DPU-201GS).
- Ni-Cd rechargeable batteries are built in, allowing for easy transportation.
- Silent print and maintenance-free.

FEATURES

- High-speed print (52.5 characters/sec).
- Incorporating international characters of 11 countries.
- Prints 40 column-standard characters and 80 column-condensed characters.
- Equipped with an auto loading function to facilitate paper loading and replacement.
- Dual-power supply (Can be install rechargeable batterie)
- Environmentally-friendly Nickel hydrogen (Ni-MH) batteries available.
- Equipped with both simplified Centronics and serial input terminals.

APPLICATIONS



Measuring instrument



Medical equipment

External appearance



DPU-201GS



DPU-414

Model	DPU-201G	DPU-201GS	DPU-414
Model number	DPU-201G-01PU/PE	DPU-201GS-01SU/SE	DPU-414-30B
Ni-Cd battery	Yes	Yes	No
No. of columns (Half-size)	27	27	40 (Normal), 80 (Condensed)
Character matrix (H x W) (dots)	7 x 5	7 x 5	9 x 7
Character size (H x W) (mm)	2.4 x 1.4	2.4 x 1.4	2.5 x 1.9 (Normal), 2.5 x 0.9 (Condensed)
Character type	extended graphics character set, international characters		
Dot configuration/line (H x W) (dots)	8 x 166	8 x 166	9 x 320
Printing speed (CPS) (max.)	22	22	52.5 (Normal characters)
Paper width (mm)	58	58	112
Input method	8-bit parallel	Serial	8-bit parallel/serial
Power source	Built-in charger	Supplied special AC adapter and built-in charger	Special AC adapter and battery
Operating temperature range (°C)	0 to 40	0 to 40	0 to 40
Paper cut	Tear bar	Tear bar	Tear bar
Dimensions (W x D x H)	135 x 100 x 35	135 x 100 x 35	160 x 170 x 66.5
Weight (g)	Approx. 400	Approx. 370	Approx. 580

DPU Series Printer Units (Panel-mount type)

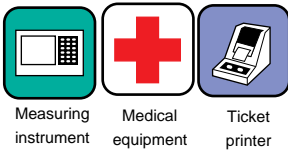
DPU-10/DPU-20

The DPU-10/DPU-20 is an ultra small panel-mount type thermal serial printer unit incorporating a data memory as well as a character generator, and can easily be mounted on any device taking up a minimum space. The Series can print a wide variety of characters and data from a computer or host system via the Centronics input. The DPU-20 can also print double-width and inverse characters. The DPU-10/DPU-20 can be installed anywhere horizontally or vertically making them ideal for recording data from all types of host systems.

FEATURES (Panel-mount type)

- Compact, lightweight, small attachment area in response to compact devices.
- Paper replacement and maintenance can be easily made from the panel side.
- A 5-V single power drive simplifies the power system.
- Maintenance-free ensures long-term operation only by replenishing paper.
- Can be mounted horizontally or vertically.
- The DPU-20 can prints double-width/double-height, and inverse characters.

APPLICATIONS



Measuring instrument

Medical equipment

Ticket printer



External appearance

DPU-10-16CF

DPU-20-20CF

Model	DPU10			DPU20	
Model number	DPU-10-13CF	DPU-10-16CF	DPU-10-20CF	DPU-20-20CF	DPU-20-24CF
Number of columns	13	16	20	20	24
Character matrix (H x W) (dots)	7 x 5	7 x 5	7 x 5	7 x 5	7 x 5
Character size (H x W) (mm)	2.4 x 1.5	2.4 x 1.2	2.0 x 1.1	2.4 x 1.6	2.4 x 1.4
Character type	Alphanumerals, characters			Alphanumerals, characters, International characters	
Dot configuration/line (H x W) (dots)	7 x 89	7 x 110	7 x 138	7 x 138	7 x 166
Printing speed (CPS)	20	19	20	16	19
Paper width (mm)	38	38	38	58	58
Input method (connector type)	8-bit parallel (34-pin ribbon cable)			8-bit parallel (34-pin ribbon cable)	
Power source	No (DC 5V)	No (DC 5V)	No (DC 5V)	No (DC 5V)	No (DC 5V)
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Paper cut	Tear bar	Tear bar	Tear bar	Tear bar	Tear bar
Dimensions (W x D x H) (mm)	86 x 107 x 37	86 x 107 x 37	86 x 107 x 37	108 x 121 x 68	108 x 121 x 68
Weight (g)	Approx. 140	Approx. 140	Approx. 140	Approx. 360	Approx. 360

Printer Mechanism Specifications List

LTP2000

Model	LTP2242	LTP2342	LTP2442
Number of columns	27	36	52
Printing speed (mm/sec.) (max.)	90 (720 dotlines / s)	75 (600 dotlines / s)	75 (600 dotlines / s)
Character matrix (H x W) (dots)	24 x 12	24 x 12	24 x 12
Dot resolution (dots/mm)	8	8	8
Dot configuration (dots/line)	432	576	832
Printing width/Paper width (mm)	54 / 60	72 / 80	104 / 112
Operating voltage range Logic & head (V)	5.0 ± 0.25 24 ± 2.4	5.0 ± 0.25 24 ± 2.4	5.0 ± 0.25 24 ± 2.4
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	6.3	8.4	10.6
Thermal head service life	Anti-pulse characteristic: 10 ⁸ pulses, abrasion resistance: 50km		
Dimensions (W x D x H) (mm) Exclusive of lever	85.2 x 61.4 x 27	106.4 x 61.4 x 27	138.2 x 61.4 x 27
Weight (g)	Approx. 115	Approx. 135	Approx. 160

LTP1245

Model	LTP1245
Number of columns	24
Printing speed (mm/sec.) (max.)	62.5 (500 dotlines / s) : Vp = 8V
Character matrix (H x W) (dots)	24 x 12
Dot resolution (dots/mm)	8
Dot configuration (dots/line)	384
Printing width/Paper width (mm)	48 / 58
Operating voltage range Logic & head (V)	4.5 to 5.5 4.2 to 8.5
Operating temperature range (°C)	-5 to 50
Peak current Vp (A)	3.3 : Vp = 8.0 V
Thermal head service life	Anti-pulse characteristic: 10 ⁸ pulses, abrasion resistance: 50km
Dimensions (W x D x H) (mm) Exclusive of lever	72 x 39.5 x 16
Weight (g)	Approx. 45

LTP5000 Series

Model	LTP5242-448	LTP5246 448	LTP5347-576	LTP5442-832	LTP5446-832	LTP5437-640
Number of columns	28	28	36	52	52	40
Printing speed (mm/sec.) (max.)	50 (400 dot lines/sec.)	25 (200 dot lines/sec.)	50 (400 dot lines/sec.)	50 (400 dot lines/sec.)	25 (200 dot lines/sec.)	50 (300 dot lines/sec.)
Character matrix (H x W) (dots)	24 x 12	24 x 12	24 x 12	24 x 12	24 x 12	24 x 12
Dot resolution (dots/mm)	8	8	8	8	8	6
Dot configuration (dots/line)	448	448	576	832	832	640
Printing width/Paper width (mm)	56/60	56/60	72/80	104/112	104/112	105.6/112
Operating voltage range logic & Head (V)	DC 5.0 ± 0.25 DC 22.1 to 25.4	DC 5.0 ± 0.25 DC 11.5 to 12.2	DC 5.0 ± 0.25 DC 23.1 to 25.1	DC 5.0 ± 0.25 DC 22.1 to 25.4	DC 5.0 ± 0.25 DC 11.5 to 12.2	DC 5.0 ± 0.25 DC 22.9 to 24.9
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	6.7 (2-blocks division)	6.9 (2-blocks division)	10.9 (2-blocks division) 7.1 (3-blocks division)	10.8 (2-blocks division)	11.0 (2-blocks division)	12.6 (2-blocks division)
Thermal head service life	Anti-pulse characteristic : 5 x 10 ⁷ pulses Abrasion resistance : 30 km					
Dimensions (W x D x H) (mm)	105.4 x 59.5 x 36.5	105.4 x 59.5 x 36.5	125.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5	157.4 x 59.5 x 36.5
Weight (g)	Approx. 280	Approx. 280	Approx. 320	Approx. 380	Approx. 380	Approx. 380

LTP3000 Series

Model	LTP3245A/B-384	LTP3245F/G-384	LTP3345-576	LTP3342-576	LTP3445-832
Number of columns	24	24	36		52
Printing speed (mm/sec.) (max.)	22.5 (180 dot lines/sec.)	27.5 (220 dot lines/sec.) : Vp = 5V 54.5 (43 dot lines/sec.) : Vp = 7V	25 (200 dot lines/sec.) : Vp = 5V 45 (360 dot lines/sec.) : Vp = 7V	50 (400 dot lines/sec.)	56.25 (450 dot lines/sec.) : Vp = 8.5V 50 (400 dot lines/sec.) : Vp = 7.2V
Character matrix (H x W) (dots)	24 x 12	24 x 12	24 x 12	24 x 12	24 x 12
Dot resolution (dots/mm)	8	8	8	8	8
Dot configuration (dots/line)	384	384	576	576	832
Printing width/Paper width (mm)	48/58	48/58	72/80	72/80	104/112
Operating voltage range logic & Head (V)	DC 4.2 to 5.5 DC 4.2 to 6.0	DC 4.2 to 5.5 DC 4.2 to 7.0	DC 5.0 ± 0.5 DC 4.2 to 7.0	DC 5.0 ± 0.25 DC 24.0 ± 1.2	DC 5.0 ± 0.5 DC 4.2 to 8.5
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	3.8	4.0 : Vp = 5V	3.5 : Vp = 5V 4.9 : Vp = 7V	2.7	2.8 : Vp = 7.2V
Thermal head service life	Anti-pulse characteristic : 5 x 10 ⁷ pulses, Abrasion resistance : 30 km (Abrasion resistance : 50 km LTP3445 only)				
Dimensions (W x D x H) (mm)	76.3 x 50.0 x 20.0	76.0 x 54.0 x 21.0	97.0 x 57.0 x 21.0	97.0 x 57.0 x 21.0	129.0 x 51.0 x 21.0
Weight (g)	Approx. 80	Approx. 105	Approx. 115	Approx. 115	Approx. 135

LTP Series

Model	LTP256-192	CAP256	LTP4242-432	LTP7242-432
Number of columns	24	24	27	27
Printing speed (mm/sec.) (max.)	70 (280 dot lines/sec.)	70 (280 dot lines/sec.)	70 (560 dot lines/sec.)	100 (800 dot lines/sec.)
Character matrix (H x W) (dots)	9 X 8	9 X 8	24 x 12 (Normal)	24 x 12 (Normal)
Dot resolution (dots/mm)	4	4	8	8
Dot configuration (dots/line)	192	192	432	432
Printing width/Paper width (mm)	48/58	48/58	54/58	54/58
Operating voltage range logic & Head (V)	DC 5.0 ± 0.25 DC 24.0 ± 1.0	DC 5.0 ± 0.25 DC 24.0 ± 1.0	DC 5.0 ± 0.5 DC 24.0 ± 2.4	DC 5.0 ± 0.25 DC 24.0 ± 2.4
Operating temperature range (° C)	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	5.6	5.6	7.4 (2-blocks division)	9.1 (2-blocks divide)
Thermal head service life	Anti-pulse characteristic : 5 x 10 ⁷ pulses, Abrasion resistance : 30 km			Anti-pulse characteristic : 1 x 10 ⁸ pulses Abrasion resistance : 100 km
Dimensions (W x D x H) (mm)	80.0 x 62.0 x 41.0	84.0 x 73.0 x 70.0	86.5 x 52.0 x 22.0	88.0 x 73.0 x 36.3
Weight (g)	Approx. 170	Approx. 330	Approx. 150	Approx. 210

STP Series

Model	STP211-144	STP211-192	STP312-256	STP411-256	STP411-320
Number of columns	24	32	42	42	40
Printing speed (CPS)	46	46	42	41	31/52*
Character matrix (H x W) (dots)	7 X 5	7 X 5	7 X 5	7 X 5	9 X 7
Character size (H x W) (mm)	2.40 x 1.50	2.40 x 1.20	2.40 x 1.26	2.40 x 1.60	2.47 x 1.88
Dot configuration/line (H x W) (dots)	8 x 144	8 x 192	8 x 256	8 x 256	9 x 320
Printing width/Paper width (mm)	46.1/58	46.1/58	64.0/80	89.6/112	89.6/112
Operating voltage range (V)	DC 5.0 ^{+0.5} / _{1.0}		DC 5.0 ± 0.5	DC 5.0 ± 0.5	DC 5.0 ± 0.5
Operating temperature range (° C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	3.5 (5.5 V)		3.5 (5.0 V)	3.2 (5.0 V)	3.5 (5.0 V)
Reliability	MCTF : 5 x 10 ⁵ lines/Failure rate : 1 x 10 ⁻⁶ /line				
Dimensions (W x D x H) (mm)	80.0 x 47.0 x 27.0		126.5 x 45.0 x 20.4	153.0 x 44.5 x 20.0	
Weight (g)	Approx. 110	Approx. 110	Approx. 120	Approx. 135	Approx. 135

*. Available depending upon the motor control method

MTP Series

Model	MTP102-13B	MTP102-16B	MTP201-20B	MTP201-24B
Number of columns	13	16	20	24
Printing speed (lines/sec.)	Approx. 1.5 (20 CPS)	Approx. 1.2 (19 CPS)	Approx. 0.9 (18 CPS)	Approx. 0.8 (19 CPS)
Character matrix (H x W) (dots)	7 X 5	7 X 5	7 X 5	7 X 5
Character size (H x W) (mm)	2.4 x 1.5	2.4 x 1.2	2.4 x 1.6	2.4 x 1.4
Dot configuration/line (H x W) (dots)	7 x 89	7 x 110	7 x 138	7 x 166
Printing width/Paper width (mm)	26.7/38	26.4/38	45.9/58	46.0/58
Operating voltage range (V)	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0
Operating temperature range (° C)	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	3.2 A (5.0 V, All dots on)			
Reliability	MCTF : 5 x 10 ⁵ lines/Failure rate : 1 x 10 ⁻⁶ /line			
Dimensions (W x D x H) (mm)	48.0 x 31.0 x 13.8	48.0 x 31.0 x 13.8	70.0 x 34.0 x 14.4	70.0 x 34.0 x 14.4
Weight (g)	Approx. 35	Approx. 35	Approx. 40	Approx. 40

Model	MTP401-40B	MTP201-G128	MTP201-G166	MTP401-G256	MTP401-G280
Number of columns	40	18	24	36	40
Printing speed (lines/sec.)	Approx. 0.6 (24 CPS)	Approx. 0.9 (16 CPS)	Approx. 0.8 (19 CPS)	Approx. 0.6 (22 CPS)	Approx. 0.6 (24 CPS)
Character matrix (H x W) (dots)	7 X 5	7 X 5	7 X 5	7 X 5	7 X 5
Character size (H x W) (mm)	2.4 x 1.2	2.4 x 1.7	2.4 x 1.4	2.4 x 1.3	2.4 x 1.2
Dot configuration/line (H x W) (dots)	7 x 278	8 x 128	8 x 166	8 x 256	8 x 280
Printing width/Paper width (mm)	66.7/80	44.8/58	46.0/58	66.6/80	67.2/80
Operating voltage range (V)	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0	DC 5.0 ± 1.0
Operating temperature range (° C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Peak current Vp (A)	3.2 A (5.0 V, All dots on)				
Reliability	MCTF : 5 x 10 ⁵ lines/Failure rate : 1 x 10 ⁻⁶ /line				
Dimensions (W x D x H) (mm)	91.5 x 35.5 x 20.0	70.0 x 34.0 x 14.4	70.0 x 34.0 x 14.4	91.5 x 35.5 x 20.0	91.5 x 35.5 x 20.0
Weight (g)	Approx. 50	Approx. 40	Approx. 40	Approx. 50	Approx. 50

DPU Series Specifications List

Model	DPU-10			DPU-20		DPU-201G	DPU-201GS	DPU-414
Model number	DPU-10-13CF	DPU-10-16CF	DPU-10-20CF	DPU-20-20CF	DPU-20-24CF	DPU-201G-01PU/PE	DPU-201G-01SU/SE	DPU-414-30B
Number of columns (Normal)	13	16	20	20	24	27	27	40 (Normal) 80 (Condensed)
Character matrix (H x W) (dots)	7 X 5	7 X 5	7 X 5	7 X 5	7 X 5	7 X 5	7 X 5	9 X 7
Character size (H x W) (mm)	2.4 x 1.5	2.4 x 1.2	2.0 x 1.1	2.4 x 1.6	2.4 x 1.4	2.4 x 1.4	2.4 x 1.4	2.5 x 1.9 (Normal) 2.5 x 0.9 (Condensed)
Character type	Alphanumerals			Alphanumerals, international characters		Alphanumerals, extended graphics character set, international characters		
Dot configuration (H x W) (dots/line)	7 x 89	7 x 110	7 x 138	7 x 138	7 x 168	8 x 166	8 x 166	9 x 320
Printing speed (Normal size) (CPS)	20	19	20	16	19	22	22	52.5
Paper width (mm)	38	38	38	58	58	58	58	112
Input method (connector type)	8-bit parallel (34-pin ribbon cable)					8-bit Parallel (14-pin Amphenol)	Serial (9-pin D-SUB)	8-bit parallel(36-pin, Amphenol)Serial (9-pin, D-SUB)
Power source	No (to be supplied externally: 5 V 5% DC)					Built-in Battery	Specified AC Adapter and built-in Battery	Special AC adapter and battery
Operating temperature range (°C)	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50	0 to 40	0 to 40	0 to 40
Paper cut	Tear bar	Tear bar	Tear bar	Tear bar	Tear bar	Tear bar	Tear bar	Tear bar
Dimensions (W x D x H) (mm)	86 x 107 x 37			108 x 121 x 68		135 x 100 x 35		160 x 170 x 66.5
Weight (g)	Approx. 140	Approx. 140	Approx. 140	Approx. 360	Approx. 360	Approx. 400	Approx. 370	Approx. 580

Model	DPU-3245	DPU-3372		DPU-5300		DPU-5400	
Model number	DPU-3245	DPU-3372-0AS	DPU-3372-1AS	DPU-5347-0B	DPU-5347-1B	DPU-5442-0B	DPU-5442-1B
Number of columns	24 (24 x 12) 16 (24 x 24) 24 (16 x 16)	Font A: 42, Font B: 56 Font C: 34, Font D: 23		41		59	
Character matrix (H x W) (dots)	24 x 12	Font A: 24 x 12 Font B: 17 x 9 Font C: 24 x 15 Font D: 24 x 22		24 x 12		24 x 12	
Character size (H x W) (mm)	3.0 x 1.5 (24 x 12) 3.0 x 3.0 (24 x 24) 2.0 x 2.0 (16 x 16)	Font A: 3.2 x 1.5 Font B: 2.3 x 1.3 Font C: 3.2 x 2.0 Font D: 3.2 x 3.0		3.0 x 1.5		3.0 x 1.5	
Character type	Alpanumerals, extended graphics character set, international characters	IBM compatible character set		Alpanumerals, extended graphics character set, international characters, bar code			
Dot configuration (H x W) (dots/line)	384	512		576		832	
Printing speed (max.)	200 (dot lines/s)	360 (dot lines/s) (2 inches/s)		400 (dot lines/s)		400 (dot lines/s)	
Paper width (mm)	58	80		80		112	
Input method (connector type)	Serial (9-pin, D-SUB)	Serial (25-pin, D-SUB) (Option) 8-bit parallel (36-pin, Amphenol)		8-bit parallel (36-pin, Amphenol) Serial (25-pin, D-SUB)			
Power source	AC adapter with special charger and battery pack	Special AC adapter		Special AC adapter		Special AC adapter	
Operating temperature range (°C)	5 to 40	5 to 40	5 to 40	5 to 40	5 to 40	5 to 40	5 to 40
Paper cut	Tear bar	Tear bar	Auto cutter	Tear bar	Auto cutter	Tear bar	Auto cutter
Dimensions (W x D x H)	93 x 252 x 64	145 x 224 x 129		190 x 140 x 224	190 x 140 x 249	190 x 140 x 224	190 x 140 x 249
Weight (g)	Approx. 430	Approx. 900	Approx. 1,100	Approx. 2,200	Approx. 2,500	Approx. 2,300	Approx. 2,600



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).

GENERAL NOTES

1. Because of our continuous research for improvements, the contents in this catalog may be changed without prior notice.
2. Since the photo of each product is printed, the color of the photo may be different from that of the real product. Before use, please check the actual color of the product.
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5. Warranty is limited to the product unit delivered. We will be exempted from responsibility for any damage which may be caused by any defect of this product.

Recommended thermal paper

Seiko Instruments Inc. recommends the following paper to best print.

Printer	Thermal paper	Conventional thermal paper	Specifications					
			Paper width (mm)	External diameter (mm)	Internal diameter (mm)	Length (m)	Rolls/Box	Core
MTP102	TP-102C	TP038-08C	38	28	11.2	(8)	10	Yes
MTP201	TP-211C	TP058-25C	58	48	12	(25)	10	Yes
MTP401	TP-312C	TP080-25C	80	48	12	(25)	10	Yes
STP211	TP-211C	TP058-25C	58	48	12	(25)	10	Yes
STP312	TP-312C	TP080-25C	80	48	12	(25)	10	Yes
STP411	TP-451C	TP112-25C	112	48	12	(25)	10	Yes
LTP1245/LTP32XX	TP-322L	TP058-09L	58	30	9	(9)	10	No
LTP22XX/LTP52XX	TP-521C	TP060-25C	60	48	12	(25)	10	Yes
LTP23XX/LTP53XX/LTP33XX	TP-312C	TP080-25C	80	48	12	(25)	10	Yes
LTP24XX/LTP54XX/LTP3445	TP-451C	TP112-25C	112	48	12	(25)	10	Yes
LTP256/CAP256	TP-251C	TP058-28CH1	58	50	12	(28)	10	Yes
LTP4242/LTP7242	TP-211C	TP058-25C	58	48	12	(25)	10	Yes
DPU-10	TP-102C	TP038-08C	38	28	11.2	(8)	10	Yes
DPU-20	TP-201C	TP058-18C	58	38	9	(18)	10	Yes
DPU-201G	TP-202L	TP058-07L	58	25	9	(7)	10	No
DPU-414/DPU-412	TP-411L	TP411-28CL	112	48	9	(28)	10	No
DPU-3245	TP-321L	TP-321L	58	55	9	(34)	10	No
DPU3372	TP-531	TP-531	80	90	12	(100)	12	Yes
DPU5300	TP531	TP-531				(100)		
	TP-535 (2-PLAY PAPER)	TP-535 (2-PLAY PAPER)				(70)		
DPU-5400	TP-541	TP-541	112	90	12	(100)	12	Yes
	TP-545 (2-PLAY PAPER)	TP-545 (2-PLAY PAPER)				(70)		
	TP-547 (RECYCLED PAPER)					(100)		
						(100)		

Note: The thermal paper is rolled in accordance with its external dimensions. Values of the paper length listed on the above table are only for your reference.

Custom Products

Seiko Instruments Inc. offers paper meeting each and every customer request (ex. preprint paper). Contact us.



The Thermal Printer Division of Seiko Instruments Inc. who manufactures the products described in this catalog holds the ISO-9001 quality system certificate.



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