



**MINI PRINTER
KIOSK PRINTER
PRINTER MECHANISM
PRODUCT GUIDE**



CITIZEN SYSTEMS JAPAN CO., LTD.

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Leading Technology for Humanity

Citizen is renowned for creativity and innovation, and for the development of miniaturized and sophisticated technologies.

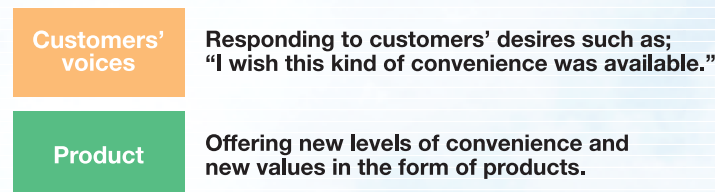
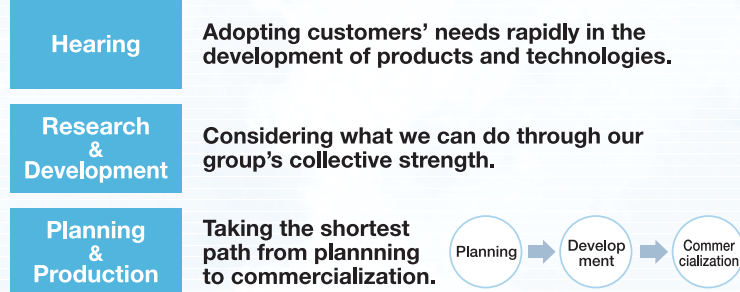
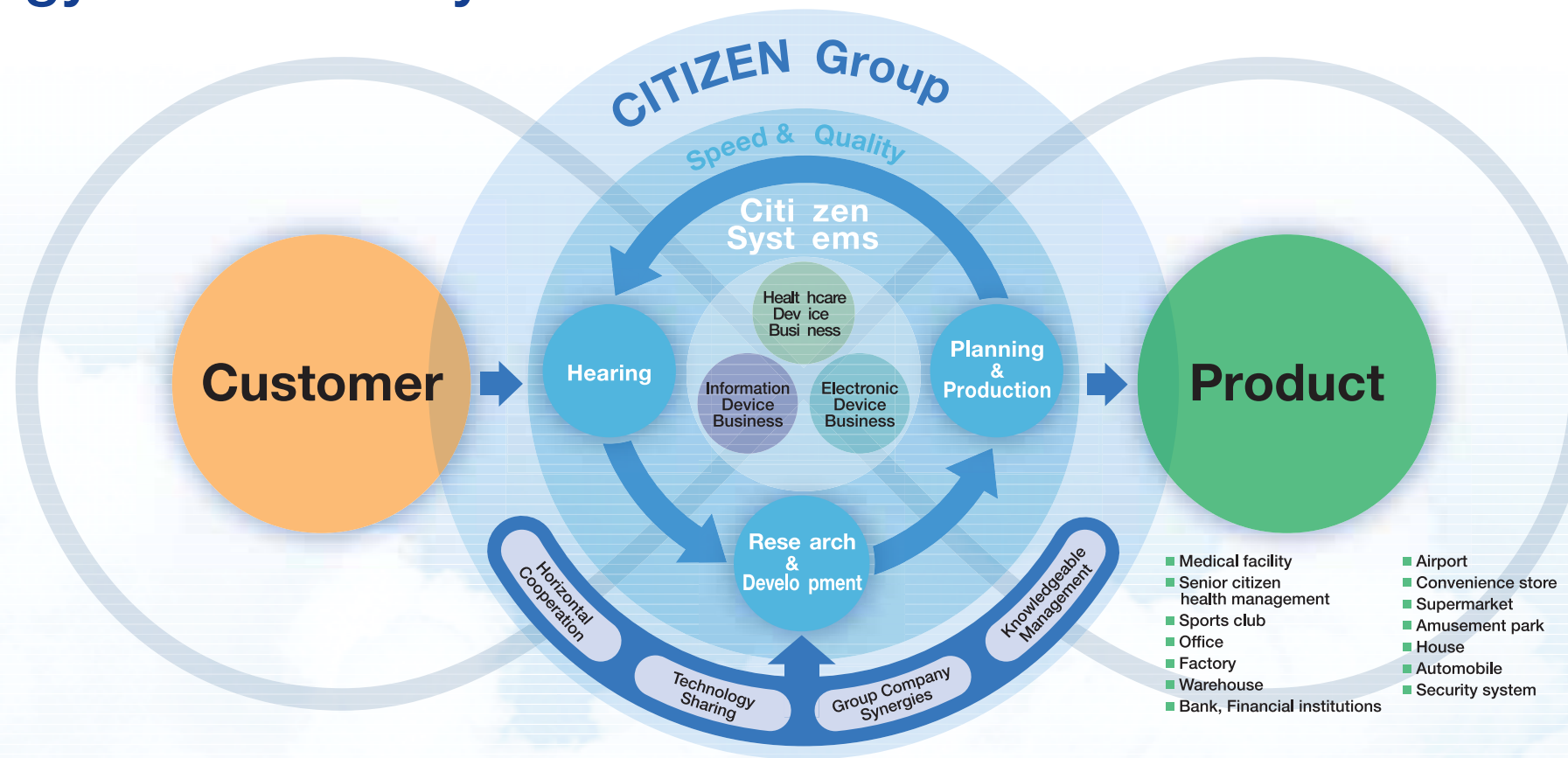
In particular, we have the skills, experience and resources to design and manufacture products that meet the exact needs of our customers; and to lead the way in identifying emerging market trends and customer needs.

Our fundamental philosophy of *Leading Technology for Humanity* drives everything that we do and ensures that we constantly meet new challenges to support our customers around the world, today, tomorrow and far into the future.

Toshihiko Nakai

President&CEO

CITIZEN SYSTEMS JAPAN CO., LTD.



ECO

Eco and Environmental protection activities

We have been promoting environmentally conscious products that comply with standards including Resource and energy saving, Recycling, Long-term usability, Environmental preservation, Environmental information service, and Packing material, centering on information devices such as printers and healthcare devices.

Our products also comply with the RoHS Directive enacted in July 2006 by the EU, and other regulations for chemical substance management.

CSR

CSR through creativity

We offer products that support life and business through three products: Healthcare devices such as electronic blood-pressure monitors and digital scales, Electronic devices such as electronic dictionary and calculators, and Information devices centering on business-use printers.

The development of these products adopts a quality management system with a strong focus on the Design Review (DR) process.

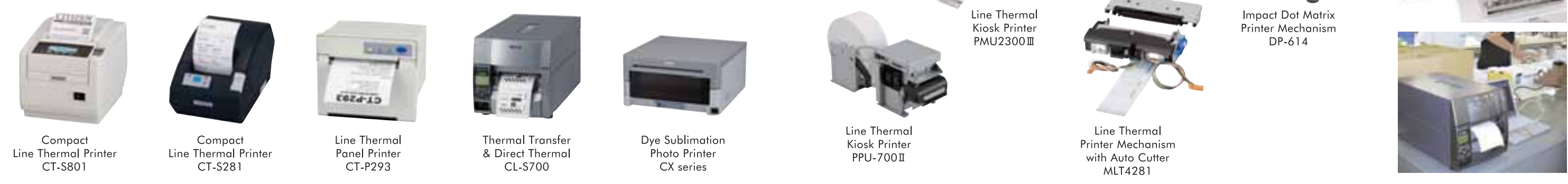
DR is a method to ensure product reliability and safety by evaluating and improving quality at each process from design to delivery.

We adopt the method as a five-step approval system: Shift to prototype, Shift to mold, Pre-shift to mass-production, Shift to mass-production, and Delivery approval. In particular, concerning safety, products delivered need to pass all 68 items on the "Product Safety Check sheet."

Leading Technology for Humanity.
Under this slogan, we will continue to create high-quality products that are trusted and appreciated by customers.

We Are Nearly Everywhere

Citizen Systems engineers receipt printers, POS printers, barcode label printers and dye sublimation photo printers that make business easier for a world hard at work. Our high-quality, feature-rich products are designed with practicality and reliability in mind—a commitment to our customers that's clearly visible in every POS printer, barcode label printer and receipt printer we ship. In industries varying from hospitality and restaurant environments to healthcare and small manufacturing organizations, our array of thermal, impact and barcode label printers are known to perform optimally—even in busy, hot or cramped environments. Can a POS receipt printer really do all of that? It can. In fact, the same is true for our Bluetooth-enabled mobile printers. Citizen has worked tirelessly to establish our reputation as a leader in POS printers, receipt printers, barcode label printers and dye sublimation photo printers.



Line Thermal Printer
CT-S801/851/601/651



Line Thermal Mobile Printer
CMP-20/30



Line Thermal Printer mechanism with auto cutter
MLT4281



Line Thermal Panel Printer
CT-P291/293



Line Thermal Kiosk Printer
PMU2200 II/2300 II/2300 III



The world's fastest ^{*1}, most reliable, easiest to configure and customize POS printer

CT-S801	CT-S851
	
SPEED 300 mm/sec. MAX.	SPEED 300 mm/sec. MAX.
→ P9-10	→ P11-12
Top paper exit	Front paper exit
300mm/sec printing speed	300mm/sec printing speed
Backlit graphic LCD display	Backlit graphic LCD display
—	Splash proof (IEC60529 PX1)

Offers more features for less price

CT-S601	CT-S651
	
SPEED 200 mm/sec. MAX.	SPEED 200 mm/sec. MAX.
→ P13-14	→ P15-16
Top paper exit	Front paper exit
200mm/sec printing speed	200mm/sec printing speed
3 LEDs and a buzzer	3 LEDs and a buzzer
—	Splash proof (IEC60529 PX1)

Rack mountable panel printer with easy drop-in paper loading

CT-P291	CT-P293
	
SPEED 150 mm/sec. MAX.	SPEED 150 mm/sec. MAX.
→ P25-26	→ P25-26
*Release in 2011	
58mm paper width	80mm paper width
150mm/sec printing speed	150mm/sec printing speed
Equipped with auto cutter	Equipped with auto cutter
Splash proof (IEC60529 PX1)	Splash proof (IEC60529 PX1)

Compact, robust and powerful mobile printers

CMP-20	CMP-30
	
SPEED 80 mm/sec. MAX.	SPEED 100 mm/sec. MAX.
→ P27-28	→ P27-28
58mm paper width	80mm paper width
80mm/sec printing speed	100mm/sec printing speed
Li-Ion Battery included	
USB, Serial plus Bluetooth and Wireless LAN	

2D barcode support allows wider applications

Easy maintenance and easy access to printer head and auto cutter

Industry standard footprint

Clamshell structure facilitates easy paper handling and head cleaning

Copmact design

Easy media loading with drop-in paper loading and paper out indicators

Magnetic stripe reader and IC card reader options

*1: As of October, 2010

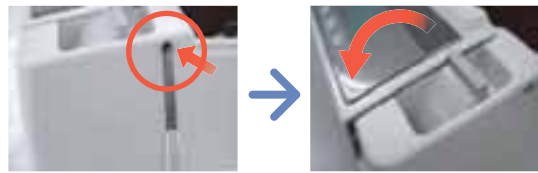
Line Thermal Printer CT-S801/851/601/651

Easy maintenance

No tools are needed for handling paper jams and replacing the cutter or the printer head.

CT-S801/601 (Paper top exit)

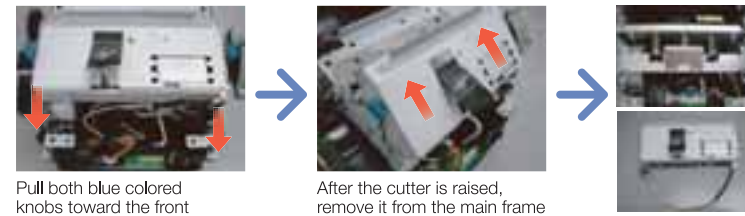
Open the front cover



Push the release knob utilizing an object with a pointed edge

Pull the front cover to open the cover

Remove the cutter and printer head

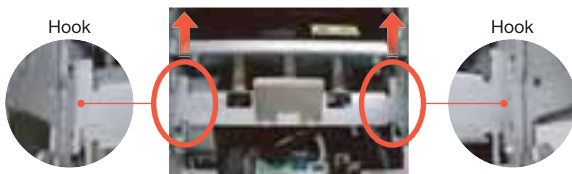


Pull both blue colored knobs toward the front

After the cutter is raised, remove it from the main frame

* Be careful to handle the cable and connector

Disassembling the printer head



Hold both sides of printer head spring holder, then push down and slide it toward the printer head till disengaging it from two hooks on both sides

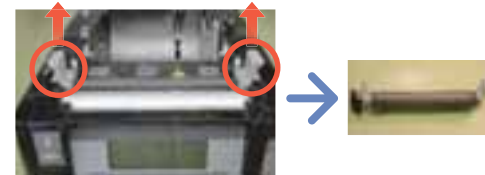
* Be careful to the printer head. It is very hot

CT-S851/651 (Paper front exit)

Open the top cover

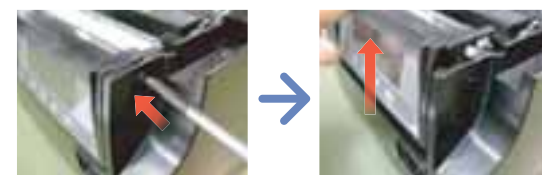


Disassembling the platen



Pull up "Platen" handle

Disassembling the cutter



Push the release knob with a pointed edge

Push up the operation panel



Pull up the cutter unit

* Be careful to handle the cable and connector

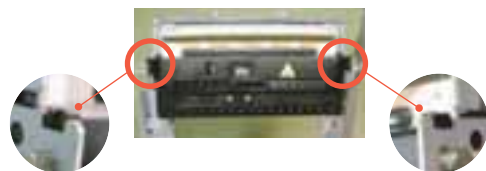


Pull down to release the cutter lock



Pull to the front

Disassembling the printer head cover



Push to release the lock and pull out the cover

Disassembling the printer head



Hold lugs and slide down to release the locks



Pull up

* Be careful to the printer head. It is very hot



CT-S801

CT-S851

CT-S601

CT-S651

Backlit graphic LCD display

CT-S801/851

A truly, unique printer: the industry's first POS printer with a backlit graphic LCD display communicates with you. "Apps" helps customers change, customize or edit the display message. The characters of languages contained in TrueType font and the bitmap data can be utilized.

LCD color alerts the printer status (Examples of message customization)



Normal operation in green

Errors in red

* LCD displays are simulated pictures

Splash proof conforms to IEC60529IPX1

CT-S851/651



CT-S851



CT-S651

Longer cutter reliability of 2 million cuts

CT-S801/851/601/651



		Line Thermal Printers														Impact Dot Matrix Printers						
		POS Printer											Panel Printer	Mobile Printer			Kiosk Printer			POS Printer		Panel Printer
		NEW CT-S801 CT-S801L	NEW CT-S851	NEW CT-S601	NEW CT-S651	CT-S310	CT-S2000 CT-S2000L	CT-S4000 CT-S4000L		CT-S280 CT-S281 CT-S281L	NEW CT-P291 CT-P293	CMP-20 CMP-20BT CMP-30 CMP-30BT	CMP-10 CMP-10BT	PD-24 PD-24BT	NEW PPU-700 PHU-331	NEW PMU2300 PHU-102T PHU-203T	PMU2200 PMU2300	CD-S500 CD-S501	iDP-3550 iDP-3551	CBM-910	CBM-920	
		→ P9-10	→ P11-12	→ P13-14	→ P15-16	→ P17-18	→ P19-20	→ P21-22		→ P23-24	→ P25-26	→ P27-28	→ P29	→ P30	→ P31-32	→ P33-34	→ P35-36	→ P37-38	→ P39	→ P40	→ P41	
	Paper width (mm)	58	58	58	58	58	58	58		58	58	58	58		58		58	58	76	58	58	
		60	60	60	60		60	60								67		60	69			
		80	80	80	80	80	80	80			80	80				80	80	80	76			
		83	83	83	83		83	83								83						
								112														
	Receipt printer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Ticket printing	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-	-	
	Kitchen printer	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-	✓	-	-	-	
	Mobile printer	-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-	
	Kiosk printer	-	-	-	-	-	-	-	-	✓	-	-	-	-	✓	✓	✓	-	-	✓	-	
	Magnetic card reader	-	-	-	-	-	-	-	-	-	✓ Option	✓ Option	-	-	-	-	-	-	-	-	-	
	IC card reader	-	-	-	-	-	-	-	-	-	✓ Option	-	-	-	-	-	-	-	-	-	-	
	Barcode printing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	
	2D barcode QR-code and PDF417 printing	✓	✓	✓	✓	✓	✓	✓	✓ CT-S281 only	-	-	-	✓	✓	✓	✓	✓	-	-	-	-	
	2 color printing	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	✓	✓	-	-	
	Journal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	
	Label printing	✓ CT-S801L only	-	-	-	-	✓ CT-S2000L only	✓ CT-S4000L only	✓ CT-S281L only	-	-	-	-	-	-	-	-	-	-	-	-	
	Cut sheet paper (Min. length : 120mm, Max. length : 250mm)	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	
	Fanfolded paper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓ iDP-3550P only	-	-	
	Black mark	✓ CT-S801L only	-	-	-	✓ BM model only	✓ CT-S2000L only	✓ CT-S4000L only	✓ CT-S281L only	-	✓ CMP-30L only	-	-	-	✓ Option	✓ Option	✓ Option	✓	-	-	-	

CT-S801/801 Label

NEW

The first in a new line of revolutionary "Intelligent" printers, featuring the industry's first POS printer with a back lit graphic LCD display that communicates with you.

SPEED
300 mm/sec. MAX

The world's fastest print speed
The world's fastest *1, printing speed of 300mm/sec.

Backlit graphic LCD display
A truly, unique printer: the industry's first POS printer with a backlit graphic LCD display communicates with you. "Apps" helps customers change, customize or edit the display message. → P6

Green color LCD for "normal operation"
Red color LCD for "error happened"

Easy maintenance
Thanks to Citizen's snap-in system, no tools are necessary to replace either the cutter or the printer head. → P5

Auto cutter
2 million cuts

2-million longer cutter life
Longer cutter life delivers lower maintenance costs.



CT-S801 Cool White (Type S: Built-in power supply type)



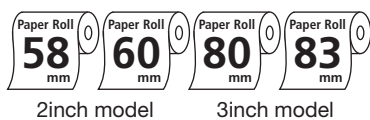
CT-S801 Black (Type S: Built-in power supply type)



CT-S801 (Type A: AC adapter type)



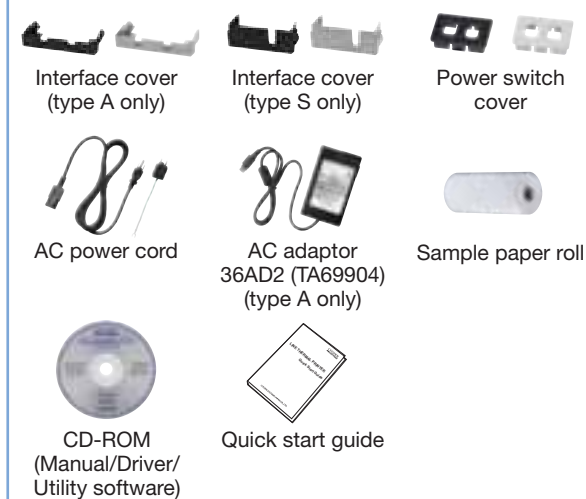
CT-S801 (Back view)



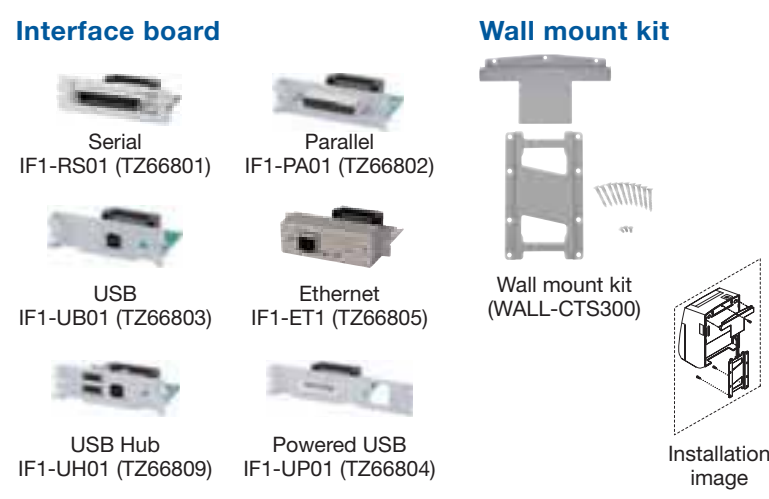
ENERGY STAR® qualified printer



Standard Accessories



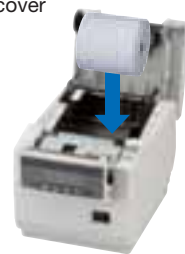
Optional Accessories



Features

Drop-in paper loading

Just drop paper in and close the top cover



Power supply choices



Vertical installation

Can be horizontally, vertically or wall mounted *



* Wall mount installation requires an optional accessory of wall mount kit

- Longer cutter life (2 million cuts) delivers lower maintenance costs
- Greater reliability delivers longer life & lower maintenance costs
- Wider paper width allows printing of additional information & larger fonts
- Interchangeable interfaces
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost devices
- Built in power supply eliminates unsightly "brick" and frees up space
- Cash drawer kick-out external device port supports 2 cash drawers
- 2-color printing supported (when specified paper used)

Customization / Utility

- POS Printer Utility
- LCD display customize

→ P43-44

Specifications

Printing method	Line thermal dot printing method						
Print width *1	80mm/640 dots, 72mm/576 dots, 64mm/512 dots, 54.5mm/436 dots, 54mm/432 dots, 52.5mm/420 dots, 48mm/384 dots, 45mm/360 dots, 48.75mm/390 dots, 68.25mm/546 dots						
Dot density	8 x 8 dots/mm (203 dpi)						
Print speed	Roll paper: 300mm/sec 1600 dot-lines/sec. Label: 150mm/sec 1200 dot-lines/sec (fastest, print density 100%)						
Number of print columns *2	Paper width	Maximum number of characters (columns)				Dot configuration (dots)	
		Font	83mm	80mm	60mm		58mm
		Font A	53	48	36		35
		Font B	71	64	48		46
Font C	80	72	54	52	8 x 16		
Character size *3	Font A: 1.50 x 3.00mm Font B: 1.13 x 2.13mm Font C: 1.00 x 2.00mm						
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18						
User memory	384 KB (capable of storing user-defined characters and logos)						
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR (NW-7), CODE93, PDF417, QR Code						
Line spacing	4.23 mm (1/6 inch) (changeable using commands)						
	Roll paper	Width	83 mm / 80 mm / 60 mm / 58 mm				
		Thickness	65 to 75µm (core tube diameter: inner 12mm/outer 18mm) 75 to 150µm (core tube diameter: inner 25.4mm/outer 32mm)				
	Paper roll	Diameter	83mm or less				
Label paper		Thickness	Label paper: 65 to 85µm, Liner: 60µm or less 83 mm or less (Core tube diameter: inner 25.4mm/outer 32mm)				
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB, USB with hub, Powered USB, Ethernet						
Cash drawer kick-out	Supports 2 cash drawers						
External device port	RJ-45, 8-pin connector						
Buffer size	4 k bytes/45 bytes						
Supply voltage	DC 24V±5%						
Power consumption	Approx. 45W (normal printing), 3W (standby)						
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2.1 A (By using of Powered USB, no AC adapter is required)						
Weight (approx.)	CT-S801S (Built-in power supply type): 2 kg CT-S801A (AC adapter type): 1.6 kg						
Outside dimensions	CT-S801S (Built-in power supply type): 145 (W) x 192 (D) x 148 (H)mm						
	CT-S801A (AC adapter type) : 145 (W) x 192 (D) x 120 (H)mm						
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)						
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)						
Reliability *4	Print head life: 150 km, 200 million pulses Auto cutter life: 2 million cuts						
Safety standard *5	UL, C-UL, FCC Class A, TÜV-Bauart, CE-Marking, CCC						

*1: When paper width is 83, 80, 60 or 58mm.
*2: The number of printable columns is selected using a memory switch. The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.
*3: Characters appear small because the dimensions include a blank area surrounding each character.
*4: At normal temperature/humidity, using recommended paper and paper thickness of 65µm.
*5: Compliant if the Citizen Systems AC adapter (36AD2/36AD3) is used.

Model classification
CT-S801 S 3 NN E - BK - P L M1
1) 2) 3) 4) 5) 6) 7) 8)

1) Power supply
DC: No power source
S: Built-in power supply type
A: AC adapter type

2) Paper width
3: 3 inch (80/83mm)
2: 2 inch (58/60mm)

3) Interface (option)
• Parallel
• Serial RS-232C
• USB
• USB with hub
• Ethernet
• Powered USB

4) Market
E: Europe/Asia
U: The Americas
C: China

5) Body case color
WH: Cool white
BK: Black

6) PNE sensor
None: No sensor
P: PNE sensor

7) Label
None: Standard type
L: Label type

8) Black Mark sensor
None: No sensor
M1: Left side
M2: Right side

POS PRINTER CT-S851

NEW

The CT-S851 represents the industry's first "Front Exit" and "Intelligent" POS printer with a back lit graphic LCD display which includes an editor to customize display messages.

SPEED
300 mm/sec. MAX

The world's fastest print speed
The world's fastest *1, printing speed of 300mm/sec.

Backlit graphic LCD display
A truly, unique printer: the industry's first POS printer with a backlit graphic LCD display communicates with you. "Apps" helps customers change, customize or edit the display message. → P6

Easy maintenance
Thanks to Citizen's snap-in system, no tools are necessary to replace either the cutter or the printer head. → P5

Auto cutter
2 million cuts

2-million longer cutter life
Longer cutter life delivers lower maintenance costs.



CT-S851 Cool White (Type S: Built-in power supply type)
CT-S851 Black (Type S: Built-in power supply type)
CT-S851 (Type A: AC adapter type)
CT-S851 (Back view)

*1: As of October 2010

Paper Roll 58mm, 60mm, 80mm, 83mm
2inch model, 3inch model

Receipt, Kitchen, Kiosk, Barcode printing, 2D QR-code PDF417 printing, 2 color printing → P7-8

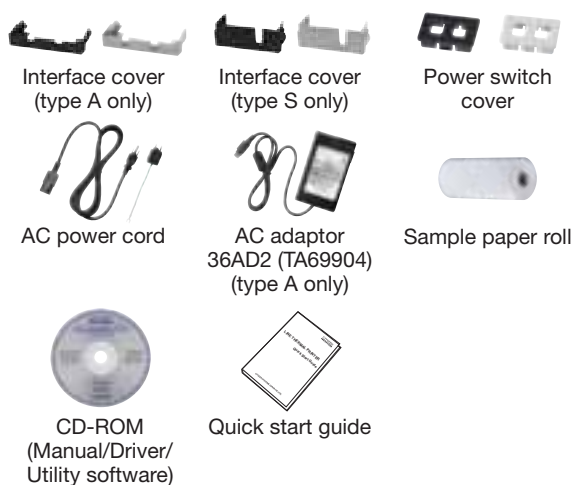
SPEED 300 mm/sec. MAX, **PAPER DROP IN**, **STATUS BUZZER**, **BUILT-IN POWER**, **2 COLOR PRINTING**, **DRAWER KICK-OUT**, **LCD DISPLAY**, **SPLASH PROOF**

Driver: Win 7, OPOS, JAVA POS, POS for.NET, CUPS
Interface: Serial, Parallel, USB, USB HUB, Powered USB, Ethernet → P42



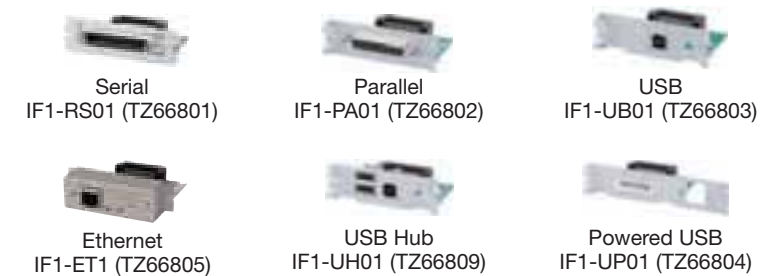
ENERGY STAR® qualified printer

Standard Accessories



Optional Accessories

Interface board



Features

Drop-in paper loading
Just drop paper in and close the top cover

One touch cover open

Power supply choices

Type A AC adapter type
Type S Built-in power supply

Splash proof
Conforms to IEC60529 IPX1

- Splash proof conforms to IEC60529 IPX1
- Longer cutter life (2 million cuts) delivers lower maintenance costs
- Greater reliability delivers longer life & lower maintenance costs
- Wider paper width allows printing of additional information & larger fonts
- Interchangeable interfaces
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost devices
- Built in power supply eliminates unsightly "brick" and frees up space
- Cash drawer kick-out external device port supports 2 cash drawers
- 2-color printing supported (when specified paper used)

Customization / Utility

- POS Printer Utility
- LCD display customize

→ P43-44

Specifications

Printing method	Line thermal dot printing method						
Print width *1	80mm/640 dots, 72mm/576 dots, 64mm/512 dots, 54.5mm/436 dots, 54mm/432 dots, 52.5mm/420 dots, 48mm/384 dots, 45mm/360 dots, 48.75mm/390 dots, 68.25mm/546 dots						
Dot density	8 x 8 dots/mm (203 dpi)						
Print speed	300mm/sec. (fastest, print density 100%), 2400 dot-lines/sec.						
Number of print columns *2	Paper width	Maximum number of characters (columns)				Dot configuration (dots)	
		Font	83mm	80mm	60mm		58mm
		Font A	53	48	36		35
		Font B	71	64	48		46
Font C	80	72	54	52	8 x 16		
Character size *3	Font A: 1.50 x 3.00mm Font B: 1.13 x 2.13mm Font C: 1.00 x 2.00mm						
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18						
User memory	384 KB (capable of storing user-defined characters and logos)						
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR (NW-7), CODE93, PDF417, QR Code						
Line spacing	4.23mm (1/6 inch) (changeable using commands)						
	Paper roll	83 mm / 80 mm / 60 mm / 58 mm					
	Paper roll	65 to 75 μm (core tube diameter: inner 12mm/outer 18mm)					
Paper roll	Paperthickness	75 to 150 μm (core tube diameter: inner 25.4mm/outer 32mm)					
	Diameter	83 mm or less					
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB, USB with hub, Powered USB, Ethernet						
Cash drawer kick-out	Supports 2 cash drawers						
External device port	RJ-45, 8-pin connector						
Buffer size	4 k bytes/45 bytes						
Supply voltage	DC 24V±5%						
Power consumption	Approx. 45W (normal printing), 3W (standby)						
AC adaptor	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2.1 A (By using of Powered USB, no AC adaptor is required)						
Weight (approx.)	CT-S851S (Built-in power supply type): 1.9 kg CT-S851A (AC adapter type): 1.5 kg						
Outside dimensions	CT-S851S (Built-in power supply type): 145 (W) x 192 (D) x 142 (H)mm						
	CT-S851A (AC adapter type) : 145 (W) x 192 (D) x 114 (H)mm						
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)						
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)						
Reliability *4	Print head life: 150 km, 200 million pulses						
Safety standard *5	Auto cutter life: 2 million cuts						
	UL, C-UL, FCC Class A, TÜV-Bauart, CE-Marking, CCC						

*1: When paper width is 83, 80, 60 or 58mm.

*2: The number of printable columns is selected using a memory switch.

The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.

*3: Characters appear small because the dimensions include a blank area surrounding each character.

*4: At normal temperature/humidity, using recommended paper and paper thickness of 65μm.

*5: Compliant if the Citizen Systems AC adaptor (36AD2/36AD3) is used.

Model classification

CT-S851 S 3 NN E - BK - P
1) 2) 3) 4) 5) 6)

1) Power supply

DC: No power source
S: Built-in power supply type
A: AC adapter type

2) Paper width

3: 3 inch (80/83mm)
2: 2 inch (58/60mm)

3) Interface (option)

• Parallel
• Serial RS-232C
• USB
• USB with hub
• Ethernet
• Powered USB

4) Market

E: Europe/Asia
U: The Americas
C: China

5) Body case color

WH: Cool white
BK: Black

6) PNE sensor

None: No sensor
P: PNE sensor

POS PRINTER CT-S601

NEW

The New CT-S601 is your Next Best Printing Solution for your receipt applications as it not only offers more features for less price than any other competitive model, but also it is fully compatible with previous Citizen models - making the CT-S601 the Best Value in any class!

SPEED
200 mm/sec. MAX

High-speed printing
High-speed (200mm/sec) printing.

Easy maintenance
Thanks to Citizen's snap-in system, no tools are necessary to replace either the cutter or the printer head. [P5](#)

Versatile installation
Can be desktop or wall mounted*.

Auto cutter
2 million cuts

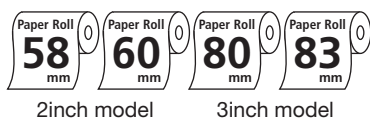
2-million longer cutter life
Longer cutter life delivers lower maintenance costs.



CT-S601 Cool White (Type S: Built-in power supply type) CT-S601 Black (Type S: Built-in power supply type)

CT-S601 (Type A: AC adapter type) CT-S601 (Back view)

*Wall mount installation requires an optional accessory of wall mount kit



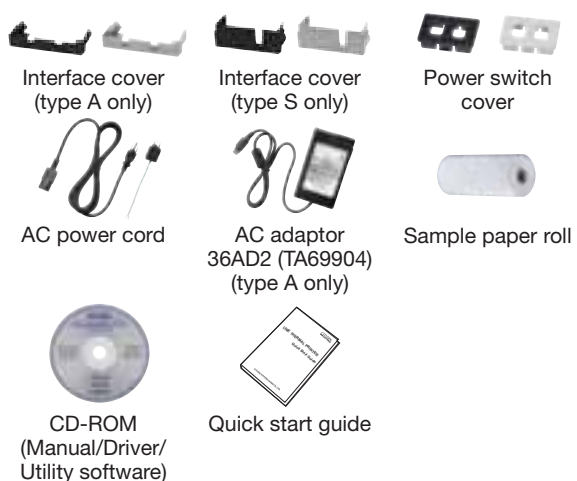
ENERGY STAR® qualified printer



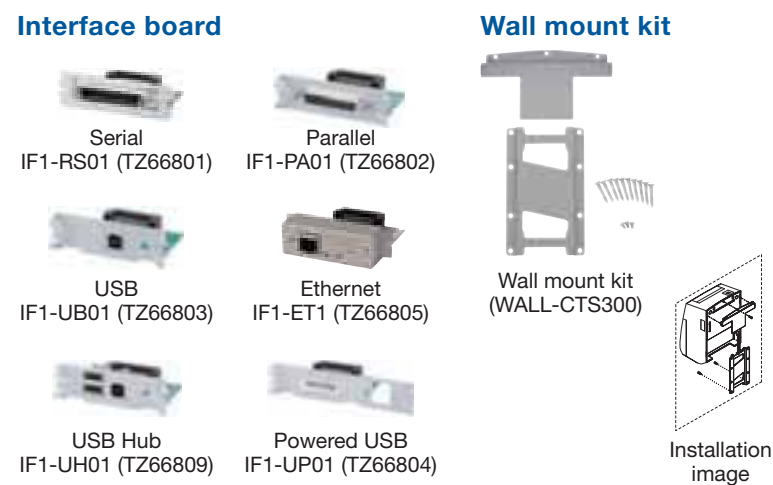
[P42](#)

*Optional accessory

Standard Accessories



Optional Accessories



Features

Drop-in paper loading Power supply choices

Just drop paper in and close the top cover



LEDs and buzzer Vertical installation

LED indicates the printer's status, types of errors, and messages. Buzzer alerts you when errors occur, operations or command operations are operated

Can be horizontally, vertically or wall mounted*



* Wall mount installation requires an optional accessory of wall mount kit

Customization / Utility

- POS Printer Utility

[P43-44](#)

- Longer cutter life (2 million cuts) delivers lower maintenance costs
- Greater reliability delivers longer life & lower maintenance costs
- Wider paper width allows printing of additional information & larger fonts
- Interchangeable interfaces
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost devices
- Built in power supply eliminates unsightly "brick" and frees up space
- Cash drawer kick-out external device port supports 2 cash drawers
- 2-color printing supported (when specified paper used)

Specifications

Printing method	Line thermal dot printing method					
Print width ¹	80mm/640 dots, 72mm/576 dots, 64mm/512 dots, 54.5mm/436 dots, 54mm/432 dots, 52.5mm/420 dots, 48mm/384 dots, 45mm/360 dots, 48.75mm/390 dots, 68.25mm/546 dots					
Dot density	8 x 8 dots/mm (203 dpi)					
Print speed	200mm/sec. (fastest, print density 100%), 1600 dot-lines/sec.					
Number of print columns ²	Paper width		Maximum number of characters (columns)			Dot configuration (dots)
	Font	83mm	80mm	60mm	58mm	
	Font A	53	48	36	35	
	Font B	71	64	48	46	
Font C	80	72	54	52	8 x 16	
Character size ³	Font A: 1.50 x 3.00mm Font B: 1.13 x 2.13mm Font C: 1.00 x 2.00mm					
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18					
User memory	384 KB (capable of storing user-defined characters and logos)					
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR (NW-7), CODE93, PDF417, QR Code					
Line spacing	4.23mm (1/6 inch) (changeable using commands)					
Paper roll	Paper roll	83 mm / 80 mm / 60 mm / 58 mm				
	Paperthickness	65 to 75 μm (core tube diameter: inner 12mm/outer 18mm)				
	Diameter	75 to 85 μm (core tube diameter: inner 25.4mm/outer 32mm) 83 mm or less				
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB, USB with hub, Powered USB, Ethernet					
Cash drawer kick-out	Supports 2 cash drawers					
Buffer size	4 k bytes/45 bytes					
Supply voltage	DC 24V±5%					
Power consumption	Approx. 45W (normal printing), 3W (standby)					
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2.1 A (By using of Powered USB, no AC adapter is required)					
Weight (approx.)	CT-S601S (Built-in power supply type): Approx. 2 kg CT-S601A (AC adapter type): Approx. 1.6 kg					
Outside dimensions	CT-S601S (Built-in power supply type): 145 (W) x 192 (D) x 148 (H)mm CT-S601A (AC adapter type): 145 (W) x 192 (D) x 120 (H)mm					
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)					
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)					
Reliability ⁴	Print head life: 150 km, 200 million pulses					
Safety standard ⁵	Auto cutter life: 2 million cuts					
	UL, C-UL, FCC Class A, TÜV-Bauart, CE-Marking, CCC					

¹: When paper width is 83, 80, 60 or 58mm.

²: The number of printable columns is selected using a memory switch.

The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.

³: Characters appear small because the dimensions include a blank area surrounding each character.

⁴: At normal temperature/humidity, using recommended paper and paper thickness of 65μm.

⁵: Compliant if the Citizen Systems AC adapter (36AD2/36AD3) is used.

Model classification

CT - S601 S 3 NN E - BK - P
1) 2) 3) 4) 5) 6)

1) Power supply

DC: No power source
S: Built-in power supply type
A: AC adapter type

2) Paper width

3: 3 inch (80/83mm)
2: 2 inch (58/60mm)

3) Interface (option)

• Parallel • USB with hub
• Serial RS-232C • Ethernet
• USB • Powered USB

4) Market

E: Europe/Asia
U: The Americas
C: China

5) Body case color

WH: Cool white
BK: Black

6) PNE sensor

None: No sensor
P: PNE sensor

POS PRINTER CT-S651

NEW

The new CT-S651 is your Next Best Printing Solution for your receipt applications as it not only offers Front Exit and more features for less money, but also it is fully compatible with previous Citizen models and with competitive models.

SPEED
200 mm/sec. MAX

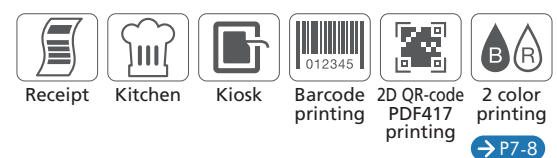
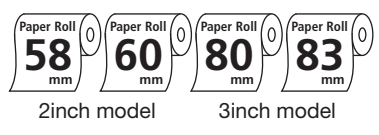
High-speed printing
High-speed (200mm/sec) printing.

Easy maintenance
Thanks to Citizen's snap-in system, no tools are necessary to replace either the cutter or the printer head. [P5](#)

Splash proof *
Splash proof construction prevents water from entering through top.
*Conforms to IEC60529 IPX1

Auto cutter
2 million cuts

2-million longer cutter life
Longer cutter life delivers lower maintenance costs.



Driver
Win 7 OPOS JAVA POS POS for NET CUPS

Interface
Serial Parallel USB USB HUB Powered USB Ethernet

[P42](#) *Optional accessory

Standard Accessories

Interface cover (type A only)

Interface cover (type S only)

Power switch cover

AC power cord

AC adaptor 36AD2 (TA69904) (type A only)

Sample paper roll

CD-ROM (Manual/Driver/Utility software)

Quick start guide

Optional Accessories

Interface board

Serial IF1-RS01 (TZ66801)

Parallel IF1-PA01 (TZ66802)

USB IF1-UB01 (TZ66803)

Ethernet IF1-ET1 (TZ66805)

USB Hub IF1-UH01 (TZ66809)

Powered USB IF1-UP01 (TZ66804)

Features

Drop-in paper loading

Just drop paper in and close the top cover

One touch cover open

Power supply choices

Type A AC adapter type

Type S Built-in power supply

Splash proof

Conforms to IEC60529 IPX1

- Splash proof conforms to IEC60529 IPX1
- Longer cutter life (2 million cuts) delivers lower maintenance costs
- Greater reliability delivers longer life & lower maintenance costs
- Wider paper width allows printing of additional information & larger fonts
- Interchangeable interfaces
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost
- Built in power supply eliminates unsightly "brick" and frees up space
- Cash drawer kick-out external device port supports 2 cash drawers
- 2-color printing supported (when specified paper used)

Customization / Utility

- POS Printer Utility [P43-44](#)

Specifications

Printing method	Line thermal dot printing method					
Print width ¹⁾	80mm/640 dots, 72mm/576 dots, 64mm/512 dots, 54.5mm/436 dots, 54mm/432 dots, 52.5mm/420 dots, 48mm/384 dots, 45mm/360 dots, 48.75mm/390 dots, 68.25mm/546 dots					
Dot density	8 x 8 dots/mm (203 dpi)					
Print speed	200mm/sec. (fastest, print density 100%), 1600 dot-lines/sec.					
Number of print columns ²⁾	Paper width		Maximum number of characters (columns)			Dot configuration (dots)
	Font	83mm	80mm	60mm	58mm	
	Font A	53	48	36	35	
	Font B	71	64	48	46	
Font C	80	72	54	52	8 x 16	
Character size ³⁾	Font A: 1.50 x 3.00mm Font B: 1.13 x 2.13mm Font C: 1.00 x 2.00mm					
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18					
User memory	384 KB (capable of storing user-defined characters and logos)					
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR (NW-7), CODE93, PDF417, QR Code					
Line spacing	4.23mm (1/6 inch) (changeable using commands)					
Paper roll	Paper roll:	83 mm / 80 mm / 60 mm / 58 mm				
	Paperthickness	65 to 75 μm (core tube diameter: inner 12mm/outer 18mm)				
	Diameter	75 to 85 μm (core tube diameter: inner 25.4mm/outer 32mm) 83 mm or less				
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB, USB with hub, Powered USB, Ethernet					
Cash drawer kick-out	Supports 2 cash drawers					
Buffer size	4 k bytes/45 bytes					
Supply voltage	DC 24V±5%					
Power consumption	Approx. 45W (normal printing), 3W (standby)					
AC adaptor	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2.1 A (By using of Powered USB, no AC adapter is required)					
Weight (approx.)	CT-S601S (Built-in power supply type): Approx. 1.9 kg CT-S601A (AC adapter type): Approx. 1.5 kg					
Outside dimensions	CT-S601S (Built-in power supply type): 145 (W) x 192 (D) x 142 (H)mm					
	CT-S601A (AC adapter type): 145 (W) x 192 (D) x 114 (H)mm					
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)					
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)					
Reliability ⁴⁾	Print head life: 150 km, 200 million pulses					
Safety standard ⁵⁾	Auto cutter life: 2 million cuts					
	UL, C-UL, FCC Class A, TÜV-Bauart, CE-Marking, CCC					

¹⁾ When paper width is 83, 80, 60 or 58mm.
²⁾ The number of printable columns is selected using a memory switch. The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.
³⁾ Characters appear small because the dimensions include a blank area surrounding each character.
⁴⁾ At normal temperature/humidity, using recommended paper and paper thickness of 65μm.
⁵⁾ Compliant if the Citizen Systems AC adapter (36AD2/36AD3) is used.

Model classification
CT - S651 S 3 NN E - BK - P
 1) 2) 3) 4) 5) 6)

1) Power supply
 DC: No power source
 S: Built-in power supply type
 A: AC adapter type

2) Paper width
 3: 3 inch (80/83mm)
 2: 2 inch (58/60mm)

3) Interface (option)
 • Parallel • USB with hub
 • Serial RS-232C • Etherne
 • USB • Powered USB

4) Market
 E: Europe/Asia
 U: The Americas
 C: China

5) Body case color
 WH: Cool white
 BK: Black

6) PNE sensor
 None: No sensor
 P: PNE sensor

POS PRINTER CT-S310

The CT-S310 POS printer has it all: 150mm/sec high-speed printing, the smallest footprint in its class and a dual-interface standard (USB + Serial, Parallel, or Ethernet) on all models. All this, plus it can be positioned horizontally, vertically, or even wall mounted for extra versatility.

High speed printing

SPEED
150 mm/sec. MAX

The smallest footprint in its class, but it is high-speed printing at 150mm/sec.

Drop-in paper loading

Drop-in paper loading mechanism facilitates paper handling and head cleaning.

USB interface standard

USB is default in addition to Serial, Parallel or Ethernet interface board.



CT-S310 Cool White (Type S: Built-in power supply type)



CT-S310 Black (Type S: Built-in power supply type)



CT-S310 Cool White (Type DC: AC adapter type)



CT-S310 Cool White (Vertical installation)

Paper Roll 58mm, Paper Roll 80mm

Receipt, Kitchen, Kiosk, Barcode printing, 2D QR-code PDF417 printing, 2 color printing, Black mark

→ P7-8

SPEED 150 mm/sec. MAX, PAPER DROP IN, STATUS BUZZER, BUILT-IN POWER, 2 COLOR PRINTING, DRAWER KICK-OUT

Driver: Win 7, OPOS, JAVA POS, POS for. NET, CUPS

Interface: Serial, Parallel, USB, Ethernet

→ P42 *Optional accessory

Standard Accessories

AC power cord, AC adapter 36AD2 (TA69904) (type DC only), Sample paper roll, Partition for 58mm wide paper roll, CD-ROM (Manual/Driver/Utility software), User's manual

Optional Accessories

Wall mount kit (WALL-CTS300), Installation image, Splash proof cover (SPROOF-CTS300) * Available for built-in AC adapter type only

Interface board

Serial (TB66832), Parallel (TA66811), Ethernet (950053), Ethernet PS112 (TA66814)

Model classification
CT - S310 S RS E BK M1
1) 2) 3) 4) 5)

1) Power supply
S: Built-in power supply type
DC: AC adapter type

2) Interface
PA: Parallel (IEEE1284) & USB
RS: Serial (RS-232C) & USB
UB: USB only

3) Market
E: Europe/Asia
U: The Americas

Features

Drop-in paper loading

Just drop paper in and close the top cover



Various installations

Vertical and wall mount options provide extra versatility



USB-interface standard

USB is default in addition to Serial, Parallel or Ethernet interface board



- High speed, 150mm/sec printing
- Two-color and monochrome thermal printing
- Drop-in paper loading
- Internal buzzer
- Permanent logo storage
- Two cash drawer kick-out
- Programmable full or partial cut auto cutter
- 80mm or 58mm paper width
- 2D barcode (QR-code and PDF417) support allows wider applications
- Optional built-in AC power base available
- Horizontal, vertical and wall mount options
- Dual-interface standard on all units (USB + Serial, Parallel or Ethernet)

Customization / Utility

- Printer customization
- POS Printer Utility

→ P43-44

Specifications

		CT-S310		
Printing method	Line thermal dot printing method			
Print width ¹⁾	72mm/576 dots, 48mm/384 dots (when 58mm width paper is used)			
Dot density	8 x 8 dots/mm (203 dpi)			
Print speed	150mm/sec. (fastest, print density 100%), 1200 dot-lines/sec.			
Number of print columns ²⁾	Paper width	Maximum number of characters (columns)		Dot configuration (dots)
		80mm	58mm	
	Font A	48/42	32/30	9 x 17
	Font B	64/56	42/40	8 x 16
	Font C	72/63	48/45	
Character size ³⁾	Font A: 1.50 x 3.00mm Font B: 1.13 x 2.13mm Font C: 1.0 x 2.00mm			
Character type	Alphanumeric, international, PC850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18			
User memory	256 KB (capable of storing user-defined characters and logos)			
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code			
Line spacing	4.23mm (1/6 inch) (changeable using commands)			
Paper roll	Paper roll	80 mm / 58 mm		
	Paper thickness	65 to 75 μm (core tube diameter: inner 12mm/outer 18mm)		
	Diameter	83 mm or less		
Interface	Serial (RS-232C compliant) & USB, Parallel (IEEE 1284 compliant) & USB, USB, Ethernet			
Cash drawer kick-out	Supports 2 cash drawers			
Buffer size	Serial: 4k/45 bytes, Parallel: 4k bytes, USB: 4k bytes			
Supply voltage	DC 24V±7% (DC power supply type)			
Power consumption	Approx. 70W (normal printing)			
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2 A			
Weight (approx.)	CT-S310S (Built-in power supply type): 1.7 kg CT-S310A (AC adapter type): 1.2 kg			
Outside dimensions	CT-S310S (Built-in power supply type): 145 (W) x 195 (D) x 159 (H)mm			
	CT-S310A (AC adapter type) : 145 (W) x 195 (D) x 121 (H)mm			
Operating temperature and humidity	5 to 40°C, 35 to 85% RH (no condensation)			
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)			
Reliability ⁴⁾	Print head life: 100 km, 100 million pulses			
	Auto cutter life: 1 million cuts			
Safety standard ⁵⁾	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking			

*1: When paper width is 80 or 58mm.

*2: The number of printable columns is selected using a memory switch. The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.

*3: Characters appear small because the dimensions include a blank area surrounding each character.

*4: At normal temperature/humidity, using recommended paper and paper thickness of 65μm.

*5: Compliant if the Citizen Systems AC adapter (36AD2/36AD3) is used.

CT-S2000/2000Label

The CT-S2000 is a two-color, thermal printer capable of “real-world” speeds up to 220mm/sec and offers variety of advanced printer features, including: USB interface standard on all units (Serial and Parallel) and can accommodate four different paper widths (58, 60, 80, and 82.5mm).

SPEED
220 mm/sec. MAX

High speed printing
High speed (220mm/sec) printing.

Splash proof construction
Spill-Shield design to prevent damage from moisture or foreign objects to the internal mechanism.

Drop-in paper loading
Drop-in paper loading mechanism facilitates paper handling and head cleaning.



CT-S2000 Cool White

CT-S2000 Black



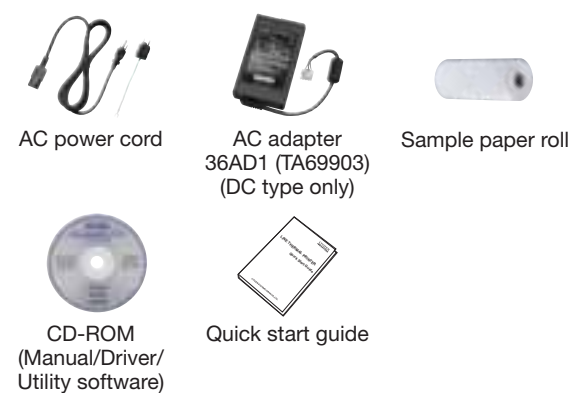
CT-S2000 Cool White (Label type)



→ P42

*Optional accessory

Standard Accessories



Optional Accessories

Interface board



Features

One-touch cover open



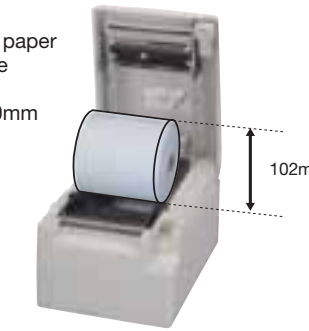
USB-interface standard

USB is default in addition to Serial, Parallel or Ethernet interface board



Large capacity of 102mm diameter

Large capacity of 102mm diameter paper roll and selectable paper width from 83mm, 80mm, 60mm or 58mm



- High speed up to 220mm/sec.
- Large capacity (102mm) drop-in paper loading
- Spill-Shield™ design prevents damage from moisture or foreign objects
- Quick-Clear™ technology for one-touch clearing of cutter jams
- Two-million cuts rated auto cutter
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost devices
- Built in power supply eliminates unsightly “brick” and frees up space
- Cash drawer kick-out external device port supports 2 cash drawers
- USB interface standard on all units: Serial, Parallel or Ethernet (Option)

Customization / Utility

- Printer customization
- POS Printer Utility

→ P43-44

Specifications

Printing method	Line thermal dot printing method					
Print width *1	80mm/640 dots, 72mm/576 dots, 54.5mm/436 dots, 54mm/432 dots					
Dot density	8 x 8 dots/mm (203 dpi)					
Print speed	220mm/sec. (fastest, print density 100%), 1760 dot-lines/sec.					
Number of print columns *2	Paper width	Maximum number of characters (columns)				Dot configuration (dots)
		82.5mm	80mm	60mm	58mm	
	Font A	53	48	35	35	12 x 24
	Font B	71	64	48	46	9 x 24
	Font C	80	72	54	52	8 x 16
Character size *3	Font A: 1.50 x 3.00mm Font B: 1.13 x 3.00mm Font C: 1.00 x 2.00mm					
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18					
User memory	384 KB (capable of storing user-defined characters and logos)					
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code					
Line spacing	4.23mm (1/6 inch) (changeable using commands)					
Paper roll	Roll paper	Width	83 ⁺⁰ mm / 80 ⁺⁰ mm / 60 ⁺⁰ mm / 58 ⁺⁰ mm			
		Thickness	65 to 75µm (core tube diameter: inner 12mm/outer 18mm) 75 to 85µm (core tube diameter: inner 25.4mm/outer 32mm)			
	Label paper	Diameter	102 mm or less			
		Width	Liner: 57.5 ±0.5mm / 59.5 ±0.5mm / 79.5 ±0.5mm / 82.5 ±0.5mm, Label: 53.5 ±0.5mm / 55.5 ±0.5mm / 75.5 ±0.5mm / 78.5 ±0.5mm			
Thickness	Label paper: 65 to 85µm, Liner: 60µm or less					
Diameter	102 mm or less (Core tube diameter: inner 25.4mm/outer 32mm)					
Interface	Serial (RS-232C compliant) & USB, Parallel (IEEE 1284 compliant) & USB, USB, Ethernet					
Cash drawer kick-out	Supports 2 cash drawers					
External device port	RJ-45, 6-pin connector					
Buffer size	4 k bytes/45 bytes					
Supply voltage	DC 24V±7%					
Power consumption	Approx. 70W (normal printing)					
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2 A					
Weight (approx.)	CT-S2000 (Built-in power supply type): 2.0 kg CT-S2000DC (AC adapter type): 1.8 kg					
Outside dimensions	CT-S2000 (Built-in power supply type): 147 (W) x 207 (D) x 147 (H)mm					
	CT-S2000DC (AC adapter type) : 147 (W) x 207 (D) x 147 (H)mm					
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)					
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)					
Reliability *4	Print head life: 150 km, 200 million pulses					
	Auto cutter life: 2 million cuts					
Safety standard *5	UL, C-UL, FCC Class A, TÜV-GS, CE-Marking					

*1: When paper width is 80 or 58mm.

*2: The number of printable columns is selected using a memory switch. The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.

*3: Characters appear small because the dimensions include a blank area surrounding each character.

*4: At normal temperature/humidity, using recommended paper and paper thickness of 75µm.

*5: Compliant if the Citizen Systems AC adapter (36AD2/31AD3) is used.

Model classification

CT - S2000 RS E L BK
1) 2) 3) 4)

1) Interface

PA: Parallel (IEEE1284) & USB
RS: Serial (RS-232C) & USB
UB: USB only

2) Market

E: Europe/Asia
U: The Americas
C: China

DC: AC adapter type

3) Label

None: Standard type
L: Label type
M: Black mark

4) Body case color

WH: Cool white
BK: Black

CT-S4000/4000Label

The CT-S4000 thermal printer offers high-speed printing with selectable paper widths up to 112mm. This printer is ideal for printing applications that require larger amounts of data or information, including secure prescription printing.

SPEED
150 mm/sec. MAX

High speed printing
High-speed (150mm/sec) printing.

Paper width
112 mm

Selectable paper width
Accommodates three different paper widths from 112mm, 82.5mm or 80mm.

Drop-in paper loading
Drop-in paper loading mechanism facilitates paper handling and head cleaning.

USB interface standard
USB is default in addition to Serial, Parallel or Ethernet interface board.

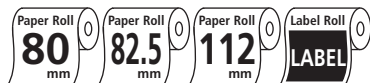


CT-S4000 Cool White

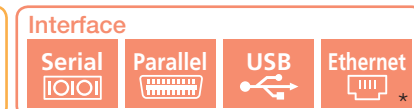
CT-S4000 Black

CT-S4000 Cool White (Label type)

CT-S4000 Cool White (Vertical installation)



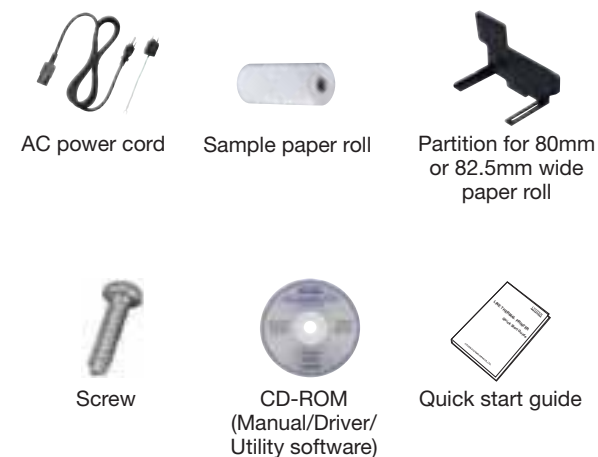
→ P7-8



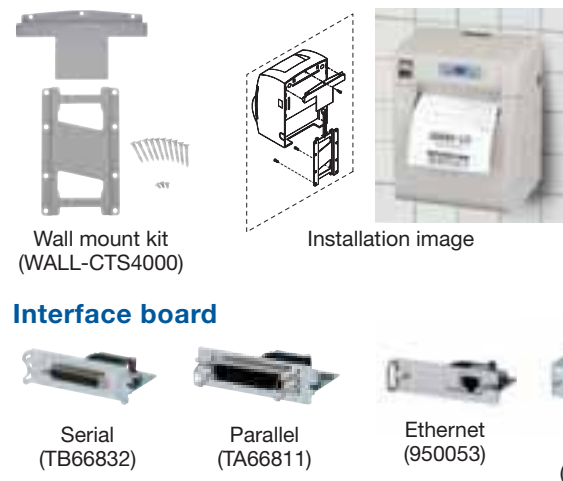
→ P42

*Optional accessory

Standard Accessories



Optional Accessories



Model classification

CT - S4000 RS E DC BK L
1) 2) 3) 4) 5)

1) Interface
PA: Parallel (IEEE1284) & USB
RS: Serial (RS-232C) & USB
UB: USB only

2) Market
E: Europe/Asia
U: The Americas
C: China

3) Power supply
DC: AC adapter type
None: Built-in power supply type

4) Body case color
WH: Cool white
BK: Black

5) Label / Black mark
None: Standard type
L: Label type
M: Black mark

Features

Drop-in paper loading

Just drop paper in and close the top cover



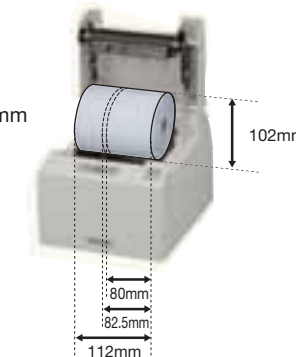
Various installations

Vertical and wall mount options provide extra versatility



Large capacity of 102mm diameter

Large capacity of 102mm diameter paper roll and selectable paper width from 112mm, 82.5mm or 80mm



- Drop-in design for easy paper loading
- Expanded 102mm paper roll capacity for fewer roll changes
- Can accommodate three different paper widths (112, 82.5, 80mm)
- Two-color printing
- Built-in power supply
- Unique DMA (Direct Memory Access) allows faster text and graphics downloads and increase productivity
- Can be positioned horizontally, vertically, or wall mounted
- 2D barcode (QR-code and PDF417) support allows wider applications
- Built in buzzer provides audible alert without adding extra cost devices
- Cash drawer kick-out external device port supports 2 cash drawers
- USB interface standard on all units: Serial, Parallel or Ethernet (Option)

Customization / Utility

- Printer customization
- POS Printer Utility

→ P43-44

Specifications

Printing method	Line thermal dot printing method				
Print width *1	112mm/832 dots, 82.5mm/660 dots, 80mm/576 dots				
Dot density	8 x 8 dots/mm (203 dpi)				
Print speed	150mm/sec. (fastest, print density 100%), 1200 dot-lines/sec.				
Number of print columns *2	Paper width	Maximum number of characters (columns)			Dot configuration (dots)
		112mm	82.5mm	80mm	
	Font	112mm	82.5mm	80mm	12 x 24
		Font A	69	55	
Font B		92	73	64	
Font C	104	82	72	8 x 16	
Character size *3	Font A: 1.50 x 3.00mm Font B: 1.13 x 3.00mm Font C: 1.00 x 2.00mm				
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18				
User memory	384 KB (capable of storing user-defined characters and logos)				
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code				
Line spacing	4.23mm (1/6 inch) (changeable using commands)				
Paper roll	Roll paper	Width	112 ^{-0.1} mm / 82.5mm, 80 ^{-0.1} mm		
		Thickness	65 to 75µm (core tube diameter: inner 12mm/outer 18mm)		
	Label paper	Diameter	75 to 150µm (core tube diameter: inner 25.4mm/outer 32mm)		
		Diameter	102 mm or less		
Label paper	Width	Liner: 58 to 112 ^{-0.1} mm, Label: 54 to 108±0.5mm			
	Thickness	150µm or less			
Label paper	Diameter	Label width: 54 to 108mm, Label length: 25 to 300mm			
		Diameter: 102mm or less			
Interface	Serial (RS-232C compliant) & USB, Parallel (IEEE 1284 compliant) & USB, USB				
Cash drawer kick-out	Supports 2 cash drawers				
External device port	RJ-45, 8-pin connector				
Buffer size	Serial / Parallel: 4 k / 45 bytes, USB: 16 k bytes				
Supply voltage	DC 24V±7%				
Power consumption	Approx. 70W (normal printing)				
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 130 VA Rate output: DC 24 V, 2 A				
Weight (approx.)	CT-S4000 (Built-in power supply type): 2.3 kg CT-S4000DC (AC adapter type): 2.0 kg				
Outside dimensions	CT-S4000 (Built-in power supply type): 177 (W) x 213 (D) x 147 (H)mm			CT-S4000DC (AC adapter type) : 177 (W) x 213 (D) x 114 (H)mm	
Operating temperature and humidity	5 to 45°C, 10 to 90% RH (no condensation)				
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)				
Reliability *4	Print head life: 100 km, 100 million pulses				
	Auto cutter life: 1 million cuts				
Safety standard *5	UL, C-UL, FCC Class A, TÜV-GS, CE-Marking, CCC				

*1: When paper width is 112, 82.5 or 80mm.

*2: The number of printable columns is selected using a memory switch.

The number of columns noted in this table refer to typical models. The number of columns varies depending on specifications.

*3: Characters appear small because the dimensions include a blank area surrounding each character.

*4: Thickness of label paper is the total thickness of "liner sheet" and "label".

*5: At normal temperature/humidity, using recommended paper and paper thickness of 75µm.

*6: Compliant if the Citizen Systems AC adapter (36AD2/36AD3) is used.

POS PRINTER CT-S280

The CT-S280 is a two inch data printer offering high-end features rarely found in a printer of this size. With its compact design and easy drop-in paper loading, this printer is a convenient, low maintenance data printing solution. Built for hi-speed and low-noise operation, the CT-S280 is ideal for a variety of business applications including coin-counting, ticketing, automotive testing, data-logging, and credit card processing.



CT-S280 Cool White CT-S280 Black



SPEED 80 mm/sec. MAX. **PAPER DROP IN** **BUILT-IN POWER** **2 COLOR PRINTING**

Driver
Win 7 CUPS

Interface
Serial [IOIO] Parallel [IEEE1284] USB

Customization / Utility

- Printer customization
- POS Printer Utility

→ P43-44

Features

Drop-in paper loading

Just drop paper in and close the top cover



- Low-noise, compact design
- 80mm/sec print speed
- Barcode printing
- Registration of user-defined characters and logos into flash memory
- Horizontal or wall mount installation
- Drop-in paper loading
- Built-in input buffer
- Two-color printing

Specifications

	CT-S280RSU / PAU / UBU	CT-S280RSE / PAE / UBE
Printing method	Line thermal dot printing method	
Print width	48mm/384 dots	
Dot density	8 x 8 dots/mm (203 dpi)	
Print speed	80mm/sec. (fastest, print density 100%), 640 dot-lines/sec.	
Number of print columns Character size	Font A	Maximum number of characters: 32 columns Character size: 1.50 x 3.00mm Dot configuration: 12 x 24 dots
	Font B	Maximum number of characters: 42 columns Character size: 1.13 x 3.00mm Dot configuration: 9 x 24 dots
	Font C	Maximum number of characters: 48 columns Character size: 1.00 x 2.00mm Dot configuration: 8 x 16 dots
	Font D	Maximum number of characters: 48 columns Character size: 1.00 x 2.00mm Dot configuration: 8 x 16 dots
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18	
User memory	256 KB (capable of storing user-defined characters and logos)	
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93	
Line spacing	4.23mm (1/6 inch) (changeable using commands)	
Paper roll	Paper roll: 58mm x maximum 83mm Paper thickness: 65 to 75µm (core tube diameter: inner 12mm/outer 18mm)	
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB	
Buffer size	4 k bytes/45 bytes	
Supply voltage	DC 8.5V±5%	
Power consumption	Approx. 18W (normal printing), 2W (standby)	
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 8.5 V, 2.5 A	
Weight (approx.)	Printer: Approx. 430 g AC adapter: Approx. 240 g	
Outside dimensions	106 (W) x 170 (D) x 116.5 (H)mm	
Operating temperature and humidity	5 to 40°C, 10 to 85% RH (no condensation)	
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)	
Reliability ¹⁾	Print head life: 50 km, 100 million pulses	
Safety standard ²⁾	UL, C-UL, FCC Class A	TÜV, GS, CE-Marking

*1: At normal temperature/humidity, using recommended paper and paper thickness of 65µm.

*2: Compliant if the Citizen Systems AC adapter (28AD series) is used.

Model classification
CT - S280 RS E - BK
1) 2) 3)

1) Interface
PA: Parallel (IEEE1284)
RS: Serial (RS-232C)
UB: USB

2) Market
E: Europe/Asia
U: The Americas

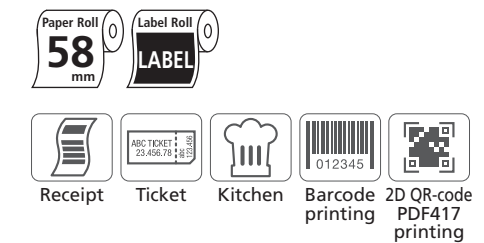
3) Body case color
WH: Cool white
BK: Black

POS PRINTER CT-S281/281Label

The CT-S281 is the industry's most advanced two-inch thermal printer. Featuring a powerful one million cut rated auto-cutter that supports both full and partial cuts, hi-speed text and graphics, and two-dimensional barcode printing the CT-S281 packs a lot into small footprint package.



CT-S281 Cool White CT-S281 Black



SPEED 80 mm/sec. MAX. **PAPER DROP IN** **BUILT-IN POWER** **2 COLOR PRINTING**

SPEED 80 mm/sec. MAX. **PAPER DROP IN** **BUILT-IN POWER** **2 COLOR PRINTING**

Driver
Win 7 CUPS

Interface
Serial [IOIO] USB

Customization / Utility

- Printer customization
- POS Printer Utility

→ P43-44

Features

Drop-in paper loading

Just drop paper in and close the top cover



Wall-mount installation



- Auto cutter
- 80 mm/sec print speed
- Built-in input buffer
- Built-in rotating gear to recover from paper jams
- 2D/PDF417 bar code support allows wider applications
- Horizontal or wall-mount installation
- FCC Class B complied ^{*2}
- Compact design
- Two-color printing
- Low-noise printing

Specifications

	CT-S281RSU / UBU	CT-S281RSE / UBE
Printing method	Line thermal dot printing method	
Print width	48mm/384 dots	
Dot density	8 x 8 dots/mm (203 dpi)	
Print speed	80mm/sec. (fastest, print density: Standard level), 640 dot-lines/sec. 60mm/sec.	
Number of print columns Character size	Font A	Maximum number of characters: 32 columns Character size: 1.50 x 3.00mm Dot configuration: 12 x 24 dots
	Font B	Maximum number of characters: 42 columns Character size: 1.13 x 3.00mm Dot configuration: 9 x 24 dots
	Font C	Maximum number of characters: 48 columns Character size: 1.00 x 2.00mm Dot configuration: 8 x 16 dots
	Font D	Maximum number of characters: 48 columns Character size: 1.00 x 2.00mm Dot configuration: 8 x 16 dots
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana/Thai code 18	
User memory	256 KB (capable of storing user-defined characters and logos)	
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code	
Line spacing	4.23mm (1/6 inch) (changeable using commands)	
Paper roll	Paper roll: 58mm x maximum 83mm, Label paper roll: 58mm x maximum 80mm, Paper thickness: 60 to 100µm	
Interface	Serial (RS-232C compliant), USB	
Buffer size	4 k bytes/45 bytes	
Supply voltage	DC 8.5V±5%	
Power consumption	Approx. 18W (normal printing), 2W (standby)	
AC adapter	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 8.5 V, 2.5 A	
Weight (approx.)	Printer: Approx. 630 g AC adapter: Approx. 240 g	
Outside dimensions	106 (W) x 180 (D) x 105 (H)mm	
Operating temperature and humidity	5 to 40°C, 10 to 85% RH (no condensation)	
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)	
Reliability ¹⁾	Print head life: 50 km, 100 million pulses Auto cutter life: 1 million cuts	
Safety standard ²⁾	UL, C-UL, FCC Class B	TÜV, GS, CE-Marking

*1: At normal temperature/humidity, using recommended paper and paper thickness of 65µm.

*2: Compliant if the Citizen Systems AC adapter (28AD series) is used.

Model classification
CT - S281 RS E BK PL M1
1) 2) 3) 4) 5)

1) Interface
RS: Serial (RS-232C)
UB: USB

2) Market
E: Europe/Asia
U: The Americas


3) Body case color
WH: Cool white
BK: Black

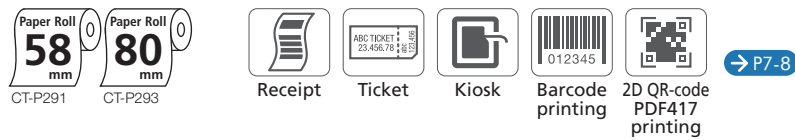
4) Sensor
P: With PNE sensor
PL: With PNE sensor and label sensor

5) Black mark sensor
M1: With Black mark sensor

PANEL PRINTER CT-P291/293

The CT-P291/293 is a rack mountable thermal panel printer, with easy drop-in paper loading. It is widely applicable in various kinds of data logging and measuring applications.

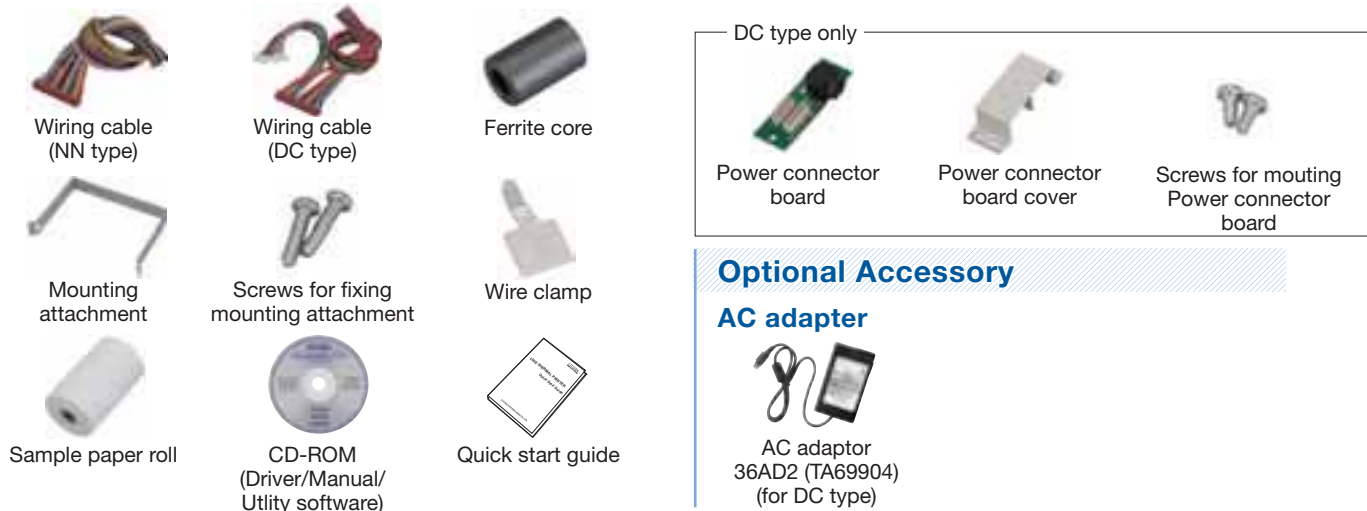
SPEED 150 mm/sec. MAX	High speed printing High speed (150mm/sec) printing.
	Splash proof Splash-proof design of panel, against vertical drips (Conforms IEC60529 IPX1)
Low temperature -20°C	Durability Operates even under extreme temperatures (-20°C to 50°C)



SPEED 150 mm/sec. MAX	PAPER DROP IN	SPLASH PROOF
Driver Win 7 CUPS	Interface Serial Parallel USB	

→ P42

Standard Accessories



Optional Accessory



Features

Easy paper loading

Just insert paper in and close the front cover



- Small and compact design
- Clamshell structure facilitates paper handling and head cleaning
- Splash-proof design of panel, against vertical drips (IEC60529 IPX1)
- High speed 150mm/sec printing
- Durable to low temperature operation down to -20°C
- Equipped with auto cutter (Full or partial cut)
- A variety of multiple choices of functions by memory switch
- Registration of user-defined characters and logos into flash memory
- Page mode offers to arrange pages freely
- 1D and 2D bar codes available

Customization / Utility

- Printer customization

→ P43-44

Specifications

	CT-P291	CT-P293
Printing method	Line thermal dot printing method	
Print width	54mm (default 51mm)/432 dots, 72mm/576 dots	
Dot density	8 x 8 dots/mm (203 dpi)	
Print speed *1	150mm/sec. 1200 dot-lines/sec.	
Number of print columns	Font A: 34 columns (default) Max. 36 columns	Font A: 48 columns
	Font B: 45 columns (default) Max. 48 columns	Font B: 64 columns
	Font C: 51 columns (default) Max. 54 columns	Font C: 72 columns
Character size *2	Font A: 12 x 24 dots, 1.50 x 3.00mm	
	Font B: 9 x 17 dots, 1.13 x 2.13mm	
	Font C: 8 x 16 dots, 1.00 x 2.00mm	
Character type	Alphanumeric, international (12 characters x 16 countries), PC437/850/852/857/858/860/863/864/865/866/WPC1252/katakana/Thai code 18	
User memory	256 KB (capable of storing user-defined characters and logos)	
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code	
Line spacing	4.25mm (1/6 inch) (changeable using commands)	
Paper roll	Paper width 48 to 58mm	Paper width 58 to 80mm
	Paper thickness: 65 to 75µm	
Interface *3	Serial (RS-232C compliant), Parallel (Centronics or IEEE 1284 nibble mode compliant), USB	
Buffer size	4 k bytes/45 bytes (Parallel is only for 4K setting)	
Supply voltage	DC 24V±10%, Current consumption: 1.9A (9A at peak)	
Power consumption	Approx. 1.9A (Peak), 80mA (standby)	
Weight (approx.)	700 g	800 g
Outside dimensions	107 (W) x 120.5 (D) x 109 (H)mm	127 (W) x 120.5 (D) x 109 (H)mm
Operating temperature and humidity *4	-20 to 50°C (0 to 45°C: in the use of 36AD2), 35 to 85% RH (no condensation)	
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)	
Reliability *5	Print head life: 100 km, 100 million pulses	
	Auto cutter life: 1 million cuts (with 65µm paper with full cutting)	
Safety standard *6	UL, C-UL, FCC Class A, TÜV-Bauart, CE-Marking	

*1: The print speed is available under the condition of 24.0V, 25°C and print duty of 12.5%. Print speed may be delayed by the setting of print conditions or by the combination of commands.

*2: As space for internal space of character font is included, actual character is smaller than those in the above table.

*3: Interface installed varies by model category.

*4: Print quality may partly be out of warranty.

*5: At normal temperature/humidity, using recommended paper and paper thickness.

*6: Compliant if the Citizen Systems AC adaptor (36AD2) is used.

Model classification
CT-P291 PR U WH NN
1) 2) 3) 4) 5)

1) Model
1: 2 inch
3: 3 inch

2) Interface
PR: Serial + Parallel
UB: USB only (option)
AL: Serial + Parallel + USB

3) Market
U: International

4) Body case color
WH: White

5) Wiring cable
NN: Standard harness
DC: HOSHIDEN connector use

CMP-20/CMP-30

NEW

Bluetooth / WiFi

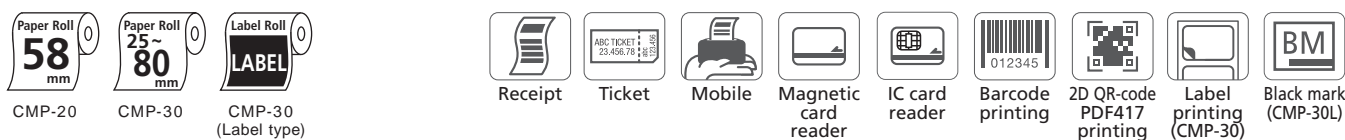
The CMP-20 and CMP-30 printers are designed like all Citizen printers...simple to use and easy to operate. This, combined with the durable, strong plastic case which is designed to take the occasional knock, means our printers keep running and running. Compact, robust and powerful, the CMP-20 and CMP-30 printers are ideal "Next Best Mobile Printing Solution" for your receipt and labeling needs.

SPEED
100 mm/sec. MAX
(for CMP-30)

High speed (100mm/sec) printing
High-speed (100mm/sec), low-noise printing

Card readers available
Magnetic stripe reader and IC card ("chip card") reader available as options

Battery life status with 3 LED
3 LED to indicate battery life status



SPEED 80 mm/sec. MAX (CMP-20) | **SPEED** 100 mm/sec. MAX (CMP-30)

PAPER DROP IN | **STATUS BUZZER** | **BATTERY (LITHIUM)**

Driver / SDK
Win Mobile | Win CE 4.2/5.0/6.5

Interface
Serial | USB | Wireless LAN * | Bluetooth *

→ P42 | *Optional accessory

Standard Accessories



Optional Accessories

- External battery charger : CMP-BC20 for CMP-20, CMP-BC30 for CMP-30
- Car battery charger : CMP-CC20
- USB cable : CA20-U01
- Leather case : SC30-01
- Strap : STP20-01

Model classification
CMP - 30 BT U MC L
1) 2) 3) 4) 5)

1) Model
20: CMP-20 (58mm paper width)
30: CMP-30 (80mm paper width)

2) Interface
None: USB and Serial
BT : USB, Serial and Bluetooth
WF : USB, Serial and WiFi

3) Market
U: The Americas (US + EU plugs)
E: Europe/Asia (EU plugs)

Features

Drop-in paper loading

Just drop paper in and close the top cover



CMP-20

CMP-30

Magnetic stripe and IC card reader

Magnetic stripe reader and IC card ("chip card") reader available as options



Magnetic stripe reader

IC card reader

- 80mm/sec (CMP-20) and 100mm/sec (CMP-30) printing speed
- Easy paper loading with drop-in paper loading and paper out indicators
- Integral tear bar to cut paper to length
- Li-ion battery technology and easy-to-change power modules
- High capacity batteries provide users with day-long printing capabilities
- AC adapter as standard designed to recharge batteries on-board the printer or via an external charging station
- Range of interfacing options including USB, industry standard Serial plus Bluetooth and Wireless LAN (WiFi) networking options
- ESC/POS Emulation supported
- Windows drivers and software development toolkits for a range of application platforms
- 3 LED to indicate battery life status

Customization / Utility

- Serial port configure settings
- Bluetooth settings
- Wi-Fi settings
- Power save mode settings

→ P43-44

Application tips

- Mobile receipt
- Queue busting
- Delivery slips
- Price markdown
- Labeling
- Ticketing
- Payments
- Taxi receipts

Specifications

	CMP-20	CMP-30
Printing method	Line thermal dot printing method	
Print width	48mm / 384 dots	72mm / 576 dots
Dot density	203 dpi x 203 dpi	
Print speed *1	80mm/sec. (fastest, print density level 2)	100mm/sec. (fastest, print density level 2)
Number of print columns	Font A: 32 columns	Font A: 48 columns
	Font B: 42 columns	Font B: 64 columns
Character size	Font A: 12 x 24 dots	Font A: 12 x 24 dots
	Font B: 9 x 17 dots	Font B: 9 x 17 dots
Character type	Alphanumeric character, Extension character, 18 codepages, 14 international characters	
User memory	256 KB (capable of storing user-defined characters and logos)	
Bar code types	UPC/A, JAN (EAN) 13/8 columns, ITF, CODE39, CODEBAR, CODE93, CODE 128, PDF417 (2D)	
Line spacing	4.23mm (1/6 inch) (changeable using commands)	
Emulation	ESC/POS	ESC/POS, CPCL, Command compatibility
Sensor	Paper end sensor, Gap sensor, Cover open sensor	
Paper roll	Width	58mm
	Thickness	65µm
	Diameter	Max. 48mm
	Core diameter	12.5 ±0.5mm
Interface	Serial (RS-232C compliant), USB, Bluetooth Class 2, Wireless Lan 802.11b/g	
	Card standard	ISO7811/2
Magnetic Stripe Reader	Track	Track 1, Track 2, Track 3
	Magnetic head lifetime	Min. 300,000 Passes
IC-Card Reader	EMV level one certified smart card reader	
Battery charger	Input	AC100 - 240V, 50/60Hz
	Output	8.4V, 1200mA
Battery	Battery type	Li-ion
	Output	7.4V, 1800mA
Weight (approx.)	442 g	600 g
Outside dimensions	96 (W) x 136 (D) x 58 (H)mm	120 (W) x 152 (D) x 70 (H)mm
Operating temperature and humidity	5 to 40°C, 35 to 95% RH (no condensation)	
Storage temperature and humidity	-10 to 50°C, 10 to 95% RH (no condensation)	
Reliability *2	Print head life: 50 km	
Safety standard *3	Battery: Continuous printing for 90 minutes, Standby for 24 hours	
	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking, CCC	

*1: Print speed is under the condition of 24.0V, 25°C, print duty of 12.5%.

*2: At normal temperature/humidity, using recommended paper.

*3: Compliant if the Citizen Systems AC adapter is used.

4) Reader
None: Without reader
M : Magnetic stripe reader
C : IC card reader
MC : Magnetic stripe + IC card reader

5) Label (CMP-30 only)
None: No label function
L : Label function model

MOBILE PRINTER CMP-10

Bluetooth

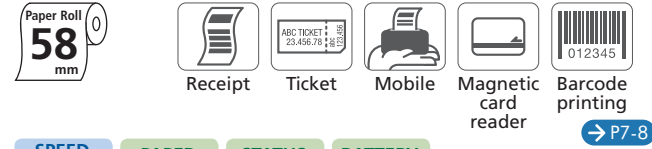
The CMP-10 is a small, lightweight mobile receipt printer that brings convenience, value, and feature-rich functionality to any mobile environment. Printing at 50mm/sec, it accommodates maximum wireless freedom through infrared (IrDA) or Bluetooth (optional) interfaces.



CMP-10 (Standard type)



CMP-10 (Mag stripe reader type)
* Picture includes the optional soft case SC10-01



SPEED 50 mm/sec. MAX
PAPER DROP IN
STATUS BUZZER
BATTERY (LITHIUM)

Driver: Win Mobile, Win CE 4.2/5.0
Interface: Serial, IrDA, Bluetooth
*Optional accessory

→ P42

Features



Just drop paper in and close the top cover
Wireless communication using IrDA
Long battery life using Li-ion battery
CMP-10 with softcase SC10-01 (Optional)

- Long-life Lithium-Ion battery (16 hours active run time on a single charge)
- Dual or Triple Interface: Serial and IrDA plus optional Bluetooth
- ESC/POS Emulation
- High Security Version: 128 bit encryption and non-discoverability mode for secure credit card transactions available
- Downloadable Fonts and logos
- Magnetic stripe reader (Optional)

Customization / Utility

- Printer customization

→ P43-44

Standard Accessories

- Sample paper roll
- Li-ion battery pack
- Belt clip with set up accessories
- AC adapter/charger
- User's manual

Optional Accessories



Softcase SC10-01
Serial interface cable CA10-01

Specifications

CMP-10/CMP-10Bluetooth	
Printing method	Line thermal dot printing method
Print width	48mm/384 dots
Dot density	8 x 8 dots/mm (203 dpi)
Print speed	50mm/sec. (fastest, print density: Standard level)
Number of print columns	Maximum number of characters
	Character size
Character size	Font A
	Font B
Dot configuration	Font A: 32 columns, 1.25 x 3.00mm, 12 x 24 dots Font B: 42 columns, 0.88 x 2.13mm, 9 x 16 dots
Character type	ASCII Code, Alphanumeric, international, Windows Code page
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93
Line spacing	4.23mm (1/6 inch) (changeable using commands)
Paper roll	Width: 58±0.5mm Diameter: 40mm (40mm type), 50mm (50mm type)
	Minimum core diameter: 8mm Paper thickness: 60-65µm
Interface ¹⁾	IrDA ver. 1.0, Bluetooth ver. 1.1, Serial (RS-232C compliant)
Buffer size	64 k bytes
Sensor and error monitoring	Paper end, Cover open, Low battery, Head temperature
Power supply monitoring	Auto power OFF (Programmable from 1 to 60 min.), Low battery monitoring
Power supply	Li-ion battery pack (2000 mAh, 7.4V)
Power consumption	Approx. 15W (normal printing), Approx. 2W (standby)
AC adapter	Rated output: DC 9.0V, 1.0A (AC adapter is only for a battery charging)
Weight (approx.)	Printer: Approx. 370 g (with battery and belt clip without paper)
Outside dimensions	116 (W) x 104 (D) x 63 (H)mm (50mm paper cover and Mag stripe reader)
Operating temperature and humidity	5 to 40°C, 35 to 80% RH (no condensation)
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)
Reliability ²⁾	Print head life: 50 km, 100 million pulses Mechanism: 15 million lines
Safety standard	UL, c-UL, TÜV, GS, CE-Marking, FCC Class B

¹⁾: Serial I/F requires the optional cable (CA10-01)
²⁾: Normal temperature, 12.5% density, rated energy

Model classification: CMP-10 BT E 5 M
1) Interface: None: Standard type, BT: With Bluetooth (Optional)
2) Market: E: Europe/Asia, U: The Americas
3) Paper diameter: 5: 50mm
4) Mag stripe reader: None: Not included, M: Included (Optional)

MOBILE PRINTER PD-24

Bluetooth

The PD-24 is a light weight, four-inch (112mm) portable printer with features that make it ideal for a wide range of mobile printing application including field service, mobile diagnostics, route accounting, healthcare, law enforcement, and retail.



PD-24/PD-24Bluetooth



SPEED 50 mm/sec. MAX
PAPER DROP IN
BATTERY (LITHIUM)

Driver: XP, 2003, Vista, NT4 2000 XP, Win Mobile, Win CE 4.2/5.0
Interface: Serial, IrDA, Bluetooth, USB
*Optional accessory

→ P42

Features



Just drop paper in and closed the top cover

- 50mm/sec. printing speed
- 112mm printing width for portable applications that require more data
- IrDA, Serial and USB interfaces with optional Bluetooth V.1.1
- Long-life Li-ion battery
- Easy paper loading
- Can print A4 documents in a 4-inch format
- AC charger included
- Optional car charger and external battery charger available

Standard Accessories

- AC adapter
- Sample paper roll
- Li-ion battery pack
- Power cord for AC adapter
- User's manual

Optional Accessories

- Battery pack charger: PD69923-0 (for USA/CANADA), PD69926-0 (for EUROPE)
- USB cable (PD79920-0)
- Serial interface cable (PD79921-0)

Specifications

PD-24/PD-24Bluetooth	
Printing method	Line thermal dot printing method
Print width	104mm/832 dots
Dot density	8 x 8 dots/mm (203 dpi)
Print speed	50mm/sec. (at room temperature 25°C, printing density 0, battery fully charged)
Number of print columns	10CPI:46, 12CPI:55, 15CPI:69, 17CPI:79, 20CPI:92
	10CPI:18 x 24, 12CPI:15 x 24, 15CPI:12 x 24, 17CPI:10 x 24, 20CPI:09 x 24
Dot configuration (dots)	ASCII 96 Characters, International Characters (16 languages + 1 legal), IBM Graphics Characters, Code Page 33 page, Windows Page 5 page
Character type	Roman, San Serif, Prestige Elite, Courier Script
Fonts style	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93
Bar code types	QR code, PDF417
Emulations	ESC/P command compatibility + Citizen original command ESC/POS (supports only barcode commands)
Paper roll	Paper roll: Width: 112mm, Diameter: 50mm max., Internal diameter: 8.0 to 8.5mm min.
	Cut sheet paper: Min. paper length: 110mm, Max. paper length: 250mm
Interface	IrDA ver. 1.2, Bluetooth ver. 1.1, Serial (RS-232C compliant), USB
Buffer size	64 k bytes
Sensor and error monitoring	Paper end, Blackmark, Low battery, Battery/Head/Motor temperature, Cover open
Power supply monitoring	Auto power OFF (Programmable from 3, 5 10 min.), Low battery monitoring
Power supply	Li-ion battery pack Battery: Rated voltage 7.2V, Rated amperage 2.0A AC adapter: Rated voltage 8.0V, Rated amperage 2.0A
Power source/consumption	Approx. 15W (normal printing), Approx. 2W (standby)
	Rate output: DC 8.0V
Weight (approx.)	Printer: Approx. 540 g (including battery, without paper)
Outside dimensions	147 (W) x 140 (D) x 63 (H)mm (excluding protrudent parts)
Operating temperature and humidity	0 to 45°C, 30 to 90% RH (no condensation) (Operation with battery pack)
Storage temperature and humidity	0 to 40°C, 30 to 90% RH (no condensation) (Operation with AC adapter)
Reliability	Print head life: 50 million pulses, 30 km or more for 1P paper
Safety standard	UL60950 (3rd), CAN/CSA-C22.2 No.60950 (3rd), FCC Part 15 Subpart B (Class B) EN60950-1/55022 (Class B)/55024/61000-3-2/61000-3-3

Model classification: PD 24 B E
1) Interface: B: Bluetooth, USB, Serial (RS-232C), I: IrDA, USB, Serial (RS-232C)
2) Market: E: Europe/Asia, U: The Americas

KIOSK PRINTER

PPU-700 II, PHU-331/332

The PPU-700 is the most modular, flexible kiosk mechanism for paper width, interfaces, firmware settings and mechanical orientation. Small, lightweight and fast, the PPU-700 uses large paper rolls and auto-paper loading to make changing rolls faster and easier.

High speed (150mm/sec) printing

SPEED
150 mm/sec. MAX

High-speed (150mm/sec), low-noise printing

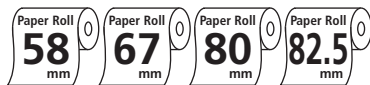
Retractor and presenter

Retractor withdraws the paper that have not been collected

Durability

Operates even under extreme temperatures (-10°C to 50°C)

Low temperature
-10°C



SPEED 150 mm/sec. MAX

STATUS BUZZER

2 COLOR PRINTING

Driver
Win 7 CUPS

Interface
Serial Parallel USB Ethernet

→ P42 *Optional accessory

Optional Accessories

Paper holder unit



PHU-331/PHU-332
(Paper insert from the side or the top is available)
203mm paper diameter is available

Interface board



AC adaptor



Customization / Utility

- Printer customization

→ P43-44

Features

Easy paper loading

Just drop paper in



With PHU-331S/332S (Paper insert from the side) With PHU-331T/332T (Paper insert from the top)

USB interface standard

USB interface is standard on all units (USB + Serial, USB + Parallel, USB + Ethernet* or USB only)
*Optional accessory



- Selectable paper widths of 58, 67, 80 and 82.5mm
- 150mm/sec. print speed
- Retractor and presenter
- Installable interface boards
- USB interface standard on all units (USB + Serial or Parallel, USB only or optional Ethernet)
- Paper auto loading
- Page Mode
- Black mark sensor option
- Large paper roll holder available (Option)
- Two-color thermal printing
- Barcode and 2D Barcode printing

Installation Images



Specifications

PPU-700 /PHU-331/332				
Printing method	Line thermal dot printing method			
Print width	80mm/640 dots			
Dot density	8 x 8 dots/mm (203 dpi)			
Print speed	150mm/sec. (fastest, print density level 2), 1200 dot-lines/sec.			
Number of print columns, character size, dot configuration	Font A	Number of print columns: 48 columns	Character size: 1.50 x 3.00mm	Dot configuration: 12 x 24 dots
	Font B	64 columns	1.13 x 2.13mm	9 x 17 dots
	Font C	72 columns	1.00 x 2.00mm	8 x 16 dots
	Character type	Alphanumeric, international, PC850/852/857/858/860/863/865/866, WPC1252, katakana		
User memory	256 KB (capable of storing user-defined characters and logos)			
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, QR Code, PDF417			
Line spacing	4.23mm (1/6 inch) (changeable using commands)			
Paper roll	Width: 58mm to 82.5mm			
	External diameter: maximum 203mm (When using PHU-331/332)			
	Core: Internal diameter: 25.4mm, Outer diameter: 30mm or more			
Presenter	Standard length: 90mm			
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB			
Buffer size	4 k bytes/72 bytes			
Supply voltage	DC 24V±7%			
Power consumption	Approx. 100W			
AC adapter *1	Rate input: AC 100 to 240 V, 50/60 Hz, 150 VA Rate output: DC 24 V, 2 A			
Weight (approx.)	PPU-700 : 2.1 kg, PHU-331/332: 0.95 kg (Paper roll excluded)			
Outside dimensions	PPU-700 : 163.2 (W) x 176 (D) x 144 (H)mm, PHU-331/332: 113.2 to 137.7 (W) x 122.6 (D) x 137.2 (H)mm			
Operating temperature and humidity	-10 to 50°C, 35 to 85% RH (no condensation)			
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)			
Reliability	Print head life: 150 km, 100 million pulses *2			
	Auto cutter life: 1 million cuts *3			
Safety standard *4	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking			

*1: Citizen Systems AC adapter (36AD2) is used.

*2: At normal temperature/humidity, using recommended paper and paper thickness.

*3: At normal temperature/humidity, using recommended paper and paper thickness of 65µm.

*4: Compliant if the Citizen Systems AC adapter (36AD2) is used.

Model classification
PPU - 700 RS U M1
1) 2) 3)

1) Interface
RS: Serial (RS-232C) + USB
PA: Parallel (IEEE1284) + USB
UB: USB only

2) Market
U: International

3) Black mark sensor position (Option)
None: No sensor (Standard type)
M1: Rear left
M2: Rear right (Head up lever side)
M3: Left of printer surface

PHU - 3 3 1 S
1) 2) 3)

1) Paper shaft length
3) Paper width 58 to 82.5mm (Standard)
2) Paper width 58 mm

2) Number of PNE sensor
1: 1 sensor (Standard)
2: 2 sensors

3) Paper insert direction
S: Side (Standard)
T: Top

PMU2300 III, PHU-102S/203T

“SMALL, FLEXIBLE and MIGHTY” - The new PMU-2300 Compact Kiosk printer is the ideal solution for kiosk applications where installation space is a premium and flexibility is a must. The new unit features an optional presenter with a LED-lighted bezel which will hold and present receipts up to 203mm diameter paper roll.

High speed (150mm/sec) printing

SPEED
150 mm/sec. MAX

High-speed (150mm/sec), low-noise printing

Presenter and LED lighted bezel

Presenter and LED lighted bezel are available*

Durability

Operates even under extreme temperatures from -10°C to 60°C and stores from -25°C to 65°C

Low temperature
-25°C

*The presenter is an optional accessory. Please refer the model classification.



Paper Roll 80mm

Receipt, Kitchen, Kiosk, Barcode printing, 2D QR-code PDF417 printing, 2 color printing, Label printing, Black mark

→ P7-8

SPEED 150 mm/sec. MAX

AUTO LOADING

2 COLOR PRINTING

Driver Win 7

Interface Serial, Parallel, USB

→ P42

Optional Accessories

Paper holder unit



PHU-102S
Paper holder
Paper diameter: 102mm
Paper insert: from Left



PHU-203T
Paper holder
Paper diameter: 203mm
Paper insert: from Top

AC adapter



AC adapter
36AD1 (TA69903)

Customization / Utility

- Printer customization

→ P43-44

Features

Easy recovery

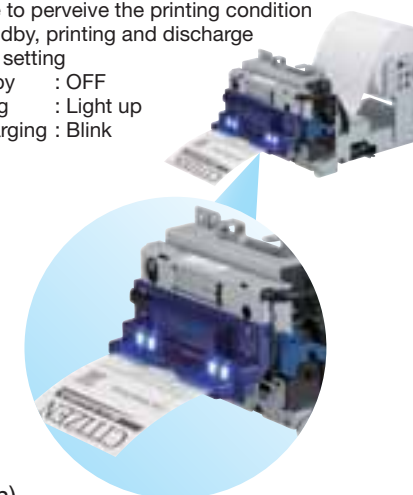
Easy recovery from paper jam and easy head cleaning owing to removable head design



LED lighted bezel

Enable to perceive the printing condition of standby, printing and discharge

- Initial setting
- Standby : OFF
- Printing : Light up
- Discharging : Blink



203mm diameter roll paper available

Large diameter of 203mm roll paper is available (Only for the use of optional paper holder PHU-203T)



Versatility

Various paper diameters and paper positions are selectable (Only for the use of optional paper holder PHU-102S)



Paper diameter selectable from 60mm, 80mm or 102mm



Paper position selectable from 3 distances

- Small foot print (compact design)
- 150mm/sec high-speed printing
- Easy recovery from paper jam and easy head cleaning owing to removable head design
- Serial, Parallel, USB interfaces available
- 203mm diameter roll paper holder PHU-203T available (Option)
- Wide variety of paper holding positions (with the optional paper holder PHU-102S)
- Black mark sensor available (Option)
- Barcode and 2D Barcode printing
- Wider operation temperature range -10°C ~ 60°C
- Wider storage temperature range -25°C ~ 65°C

Specifications

	PMU2300 SB (with Bezel)	PMU2300 PB (with Bezel and presenter)
Printing method	Line thermal dot printing method	
Print width	72mm / 576 dots	
Dot density	8 x 8 dots/mm (203 dpi)	
Print speed *1	150mm/sec. (fastest, print density level 2), 1200 dot-lines/sec.	
Paper feed	0.125mm	
Number of print columns	Font A: 48 columns	
	Font B: 64 columns	
	Font C: 72 columns	
Character size	Font A: 12 x 24 dots, 1.50 x 3.00mm	
	Font B: 9 x 24 dots, 1.13 x 3.00mm	
	Font C: 8 x 16 dots, 1.00 x 2.00mm	
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252, katakana, ThaiCode18	
User memory	256 KB (capable of storing user-defined characters and logos)	
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QRcode	
Line spacing	4.25mm (1/6 inch) (changeable using commands)	
	80mm	
Paper roll	Width	
	Diameter	
	Thickness	
	Core diameter	
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB	
Presenter	Minimum length of ticket: 75mm Number of paper discharge: 1 million times (65µm)	
Buffer size	4 k bytes/45 bytes (Parallel I/F: 4k bytes)	
Supply voltage	Input voltage: DC 24V±10%, Current consumption: 1.9A (peak 9A) *3	
Weight (approx.)	1.2 kg	
Outside dimensions	113 (W) x 208 (D) x 98 (H)mm	
Operating temperature and humidity	-10 to 60°C, 10 to 80% RH (no condensation) (10 to 45°C with 36AD1)	
	-25 to 65°C, 10 to 90% RH (no condensation)	
Storage temperature and humidity	-25 to 65°C, 10 to 90% RH (no condensation)	
	Print head life: 100 km, 100 million pulses	
Reliability *2	Auto cutter life: 1.0 million cuts (by paper thickness of 65µm, full cutting)	
Safety standard *3	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking	

*1: Print speed is under the condition of 24.0V, 25°C, print duty of 12.5%.

*2: At normal temperature/humidity, using recommended paper.

*3: Compliant if the Citizen Systems AC adapter (36AD1) is used.

Model classification

PMU2300 P B - RS U M1
1) 2) 3) 4) 5)

1) Presenter
S: Without presenter
P: With presenter

2) Bezel
B: With Bezel

3) Interface
RS: Serial (RS-232C)
PA: Parallel (IEEE1284)
UB: USB

4) Market
U: International

5) Black mark sensor (Option)
None: No sensor (Standard type)
M1: Left side
M2: Right side

PHU - 102S
1)

1) Maximum paper diameter / Paper insert direction
102S: 102mm (paper insert from left)
203T: 203mm (paper insert from top)

PMU2200 II / 2300 II

“Need Flexibility and Have Minimal Space?” - Citizen’s new Compact Kiosk printer is the ideal solution for kiosk applications where installation space is a premium and flexibility is a must. “Have different paper-roll handling configuration problems?” - There is maximum flexibility with 28 variations of paper-roll handling for 60 / 80 / 102mm diameter paper rolls and a wide variety of paper handling options.

SPEED
150 mm/sec. MAX

High speed (150mm/sec) printing
High-speed (150mm/sec), low-noise printing

Wide variety of paper holdings
Paper holding style 28 patterns for 60 / 80 / 102mm diameter paper roll support

Durability
Operates even under extreme temperatures from -20°C to 60°C and stores from -25°C to 65°C



Horizontal solution
PMU2200 / 2300



Vertical solution
(Back paper hold type)
PMU22x2 / 23x2



Vertical solution
(Front paper hold type)
PMU22x1 / 23x1

Paper Roll 58mm PMU2200
Paper Roll 60mm PMU2210 PMU2310
Paper Roll 80mm PMU2300

Receipt Kitchen Kiosk Barcode printing 2D QR-code PDF417 printing 2 color printing Label printing Black mark

SPEED 150 mm/sec. MAX
AUTO LOADING **STATUS BUZZER** **2 COLOR PRINTING**

Driver Win 7
Interface Serial Parallel USB

Optional Accessories

Paper holder unit



PHU-203T
Paper holder
Paper diameter: 203mm
Paper insert: from Top

AC adapter



AC adapter
36AD1 (TA69903)

Customization / Utility

- Printer customization

→ P43-44

Model classification

PMU2211 A RS U PM1 - 8 L 2
1) 2) 3) 4) 5) 6) 7) 8) 9) 10)

1) Mechanism mounted
2: 2 inch mechanism
3: 3 inch mechanism

2) Paper width
0: 58mm (using 2 inch mechanism)
0: 80mm (using 3 inch mechanism)
1: 60mm (using 2 inch mechanism)
1: 60mm (using 3 inch mechanism) *
* with paper guide for 60mm paper

3) Base style
0: Horizontal
1: Vertical (Paper front hold type)
2: Vertical (Paper back hold type)

4) Paper thickness
None: Standard paper (60 - 75µm)
A: Thick paper (105 - 150µm)

5) Interface
RS: Serial (RS-232C)
PA: Parallel (IEEE1284)
UB: USB
6) Market
U: International

7) Black mark sensor position (Option)
None: No sensor (Standard type)
P: ONE sensor
M1: Rear left
M2: Rear right (Head up lever side)
M3: Left of printer surface

8) Max. paper diameter
6: 60mm
8: 80mm
1: 102mm

9) Direction of paper insert
L: Insert from the left (Side without platen open lever)
R: Insert from the left (Side without platen open lever)
T: Insert from the top (Hold both sides, paper diameter fixed at 102mm)

10) Paper holder position
1: A bit near (One hole, toward left)
2: Standard (Hole 2, toward left)
3: A bit far (Hole 1, toward right)
4: Far (Hole 2, toward right)

Features

Easy recovery

Easy recovery from paper jam and easy head cleaning owing to removable head design



PMU2200/2300
(Horizontal type)



PMU2201/2301
(Vertical, paper front hold type)

Various paper insert directions



Paper insert from left



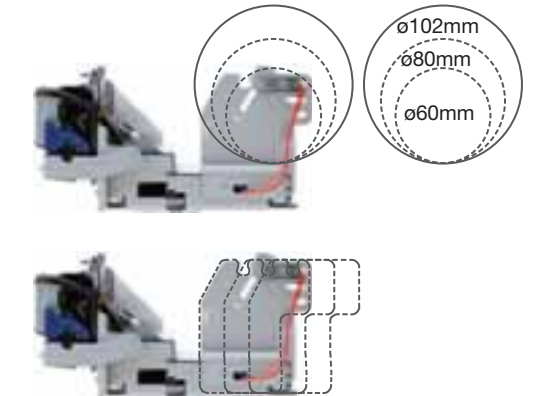
Paper insert from right



Paper insert from top

Versatility

Various paper diameters and paper positions are selectable (Only for the use of optional paper holder PHU-102S)



Paper position selectable from 3 distances

- Small foot print (compact design)
- 150mm/sec high-speed printing
- Easy recovery from paper jam and easy head cleaning owing to removable head design
- Serial, Parallel, USB interfaces available
- Wide variety of paper holding style 28 patterns for 60 / 80 / 102 / 203mm* diameter paper roll support
- Thicker paper capability (65µm-150µm)
- Black mark and PNE sensors available (Option)
- Barcode and 2D Barcode printing
- Wider operation temperature range -20°C ~ 60°C
- Wider storage temperature range -25°C ~ 65°C

*203mm diameter paper roll requires the optional paper holder PHU-102/203

Specifications

	PMU2200 Series		PMU2300 Series		
	PMU2200	PMU221x	PMU231x	PMU2300	PMU2301 / 2302
Printing method	Line thermal dot printing method				
Print width	54mm / 432 dots		72mm / 576 dots		
Dot density	8 x 8 dots/mm (203 dpi)				
Print speed ¹⁾	150mm/sec. (fastest, print density level 2), 1200 dot-lines/sec.				
Number of print columns	Font A: 36 columns		Font A: 48 columns		
	Font B: 48 columns		Font B: 64 columns		
	Font C: 54 columns		Font C: 72 columns		
Character size	Font A: 12 x 24 dots, 1.50 x 3.00mm		Font A: 12 x 24 dots, 1.50 x 3.00mm		
	Font B: 9 x 24 dots, 1.13 x 3.00mm		Font B: 9 x 24 dots, 1.13 x 3.00mm		
	Font C: 8 x 16 dots, 1.00 x 2.00mm		Font C: 8 x 16 dots, 1.00 x 2.00mm		
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/864/865/866, WPC1252/katakana, Thai code 18				
User memory	256 KB (capable of storing user-defined characters and logos)				
Bar code types	UPC/A/E, JAN (EAN) 13/8 columns, ITF, CODE39, CODE128, CODEBAR, CODE93, PDF417, QR Code				
Line spacing	4.25mm (1/6 inch) (changeable using commands)				
Paper roll	Width	58mm	60mm	80mm	
	Diameter	60, 80, 102mm			
	Thickness	PMU2xxx : 60 to 75µm, PMU2xx A: 105 to 150µm			
	Core diameter	Inner: 12mm, External: 18mm			
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB				
Buffer size	4 k bytes/45 bytes (Parallel I/F: 4k bytes)				
Supply voltage	Input voltage: DC 24V±7%, Current consumption: 1.9A (peak 9A) ³⁾				
Weight (approx.)	1.0 kg		1.1 kg		
Outside dimensions	98 (W) x 179 (D) x 98 (H)mm	98 (W) x 98 (D) x 213 (H)mm	113 (W) x 182 (D) x 98 (H)mm	113 (W) x 98 (D) x 213 (H)mm	
Operating temperature and humidity	-20 to 60°C, 35 to 85% RH (no condensation) (0 to 45°C with 36AD1)				
Storage temperature and humidity	-25 to 65°C, 10 to 90% RH (no condensation)				
Reliability ²⁾	Print head life: 100 km, 100 million pulses				
	Auto cutter life: 1.0 million cuts (by paper thickness of 65µm, full cutting)				
	0.6 million cuts (by paper thickness of 150µm, full cutting)				
Safety standard ³⁾	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking				

¹⁾ Print speed is under the condition of 24.0V, 25°C, print duty of 12.5%.

²⁾ At normal temperature/humidity, using recommended paper.

³⁾ Compliant if the Citizen Systems AC adapter (36AD1) is used.

POS PRINTER CD-S500/501

The CD-S500 is ideally suited for impact dot POS applications that require color or monochromatic one, two, or three-ply receipts. This robust, impact printer features the latest technological advances. The CD-S500 is available in two models; standard, and with auto cutter models.

High-speed printing

SPEED
5.0 line/sec. Max

High-speed (max. 5.0 lines/sec) printing for both character printings and graphic printings

Easy paper loading

Just drop paper in and close the top cover.

High reliability of printer head

Printer Head
150 million characters

High reliability of printer head drives 150 million characters on upto 3-ply paper



SPEED
5.0 line/sec. MAX.

PAPER
DROP IN

STATUS
BUZZER

BUILT-IN
POWER

2 COLOR
PRINTING

DRAWER
KICK-OUT

Driver
Win 7 OPOS CUPS

Interface
Serial Parallel USB Ethernet

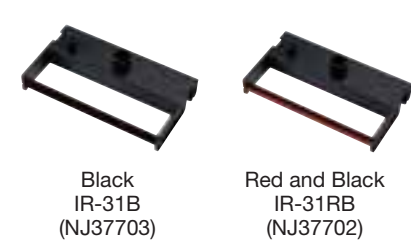
*Optional accessory

Optional Accessories

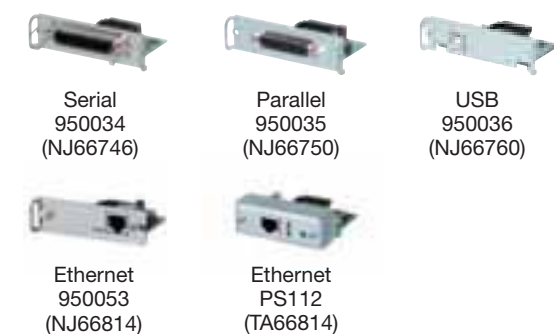
Wall mount kit



Ink ribbon cartridge



Interface board



Model classification
CD-S5 0 0 S RS E - BK - M4
1) 2) 3) 4) 5) 6)

1) Model name
0: Standard model
1: With auto cutter

2) Power supply
S: Built-in power supply type
A: AC adapter type

3) Interface (option)
PA: Parallel
RS: RS-232C
UB: USB

4) Market
E: Europe/Asia
U: The Americas
C: China

5) Body case color
WH: Cool white
BK: Black

6) Black Mark sensor
None: No sensor
M1: Left sensor for paper back
M2: Right sensor for paper back
M3: Left sensor for paper front
M4: Right sensor for paper front

Features

Versatile installation

The CD-S500 can also be wall-mounted and is ideal for kitchen slips, delivery slips, coupons, tickets, receipts, or daily reports



Power supply choices



- High-speed, two-color printing
- Logic-seeking control
- Drop-in paper loading
- Selectable paper widths
- One, two, or three ply receipts
- Built-in programmable buzzer
- ESC/POS, CBM, or STAR emulation
- Built-in NV memory
- User-installable interface cards
- Cash drawer kick-out
- Auto Cutter (optional)
- Black mark sensor (optional)

Customization / Utility

- POS Printer Utility
- CD-S500/501 customization

→ P43-44

Specifications

	CD-S500	CD-S501
Printing method	Serial impact dot matrix	
Printing direction	Bi-directional	
Font	Font A: 7 x 9 dots, Font B: 9 x 9 dots	
Head pins	9 pins (: 0.3mm, Pin interval: 1/72 inch)	
Print speed *1	5.0 lines/sec. (76.2mm with 40 columns)	
	5.4 lines/sec. (69.5mm with 36 columns)	
	6.0 lines/sec. (57.5mm with 30 columns)	
Number of print columns	76.2mm width paper: Font A 40/42 columns / Font B 33/35 columns	
	69.5mm width paper: Font A 36/40 columns / Font B 30/32 columns	
	57.5mm width paper: Font A 30/33 columns / Font B 25/27 columns	
Character type	Alphanumeric, international, PC437/850/852/857/858/860/863/865/866, WPC1252/katakana	
Paper feed method	Friction feed (Minimum pitch: 1/144 inch), Paper feed speed: 40 Lines/sec. (6 LPI)	
Paper *2	Types: 1 Ply roll paper, 2 Ply copy roll paper (1 original + 1 copy), 3 Ply copy roll paper (1 original + 2 copies)	
	Paper roll width: 76.2 / 69.5 / 57.5 ±0.5mm	
	Paper roll diameter: 30mm to 83mm	
	Paper roll core diameter Interior diameter: 10 ^{±0.2} mm, Exterior diameter: 27mm or less	
Ink ribbon cartridge *3	Method: Special ink ribbon cartridge	
	Colors: Single color (Black) or 2 colors (Red and Black)	
	Life time: Black: Approx. 3 million characters Red and Black: Red ... Approx. 0.75 million characters, Black ... Approx. 1.5 million characters	
Interface	Serial (RS-232C compliant), Parallel (IEEE 1284 compliant), USB	
Emulation	ESC/POS (Page mode), CBM mode, Star mode	
Buffer size	Receiving buffer: 4k bytes/40 bytes, NV bit image: 128k, User NV memory: 8k	
Cash drawer kick-out	Supports a drawer	
Supply voltage	AC adapter (Type A) Input: DC 24V, 1.0A Built-in AC adapter (Type S) Input: AC 100 to 240V, 0.55A to 0.35A, 50/60 Hz, Power consumption: 24W	
Outside dimensions	156 (W) x 247.7 (D) x 132 (H)mm (Type A)	
Weight (approx.)	2.2 Kg (Type A)	2.3 Kg (Type A)
Operating temperature and humidity	0 to 50°C, 10 to 90% RH (no condensation)	
Storage temperature and humidity	-20 to 70°C, 5 to 90% RH (no condensation)	
Reliability	Printer: MCBF 7.5 million lines	
	Print head life: 150 million characters	
	Auto cutter life: 1 million cuts	
Safety standard	UL, C-UL, FCC Class A, TÜV-GS, CE-Marking, CCC	

*1: When 3 Ply copy roll paper, the printing speed falls 16%

*2: No glue on the core or end of the paper

*3: Life time is calculated by the continuous printing at 25°C

POS PRINTER

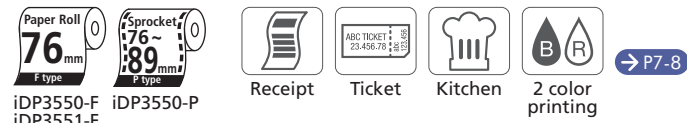
iDP3550/3551

Designed for impact dot printing applications such as kitchen printing, delivery receipts, journals, ticketing, and credit/debit card transactions, the iDP-3550 series features dual cash drawer kickout, 6k-byte memory buffer, two-color printing, and semi-automatic paper loading.



iDP3550

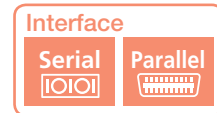
iDP3551



iDP3550-F
iDP3551-F



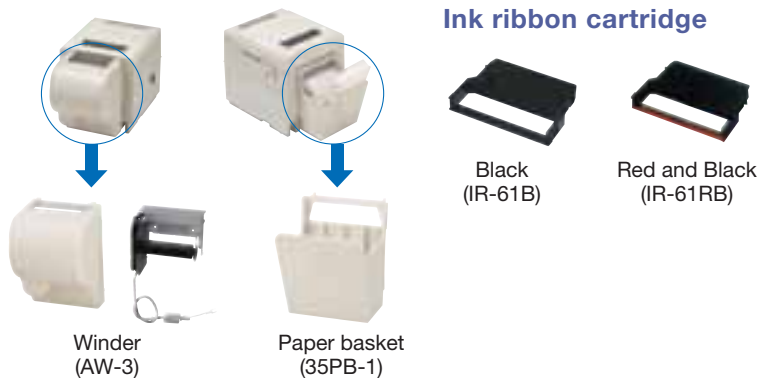
iDP3550-F
iDP3551-F



Features

- Compact design
- Bi-directional, two-color printing
- Paper end sensor
- Three-ply capable
- Internal power supply
- Auto-cutter version available (iDP3551)
- Pinfeed version available (P-type)
- Graphic version available (G-type)
- Auto-Winder option (AW-3)
- Paper basket option (35PB-1)

Optional Accessories



Specifications

	iDP3550-F	iDP3551-F (With auto cutter, Friction feed)	iDP3550-P (Sprocket feed)
Printing method	Serial impact dot matrix		
Printing direction	Bi-directional		
Font	7 x 7 or 7 x 9 (half-dot)		
Head pins	9 pins		
Print speed	3.6 lines/sec. (Character type), 3.0 lines/sec. (Graphic type)		
Number of print columns	57.3mm width paper: 23 columns, 63.6mm width paper: 40 columns, 58.7mm width paper: 40 columns		
Character size	23 columns: 1.80 x 2.4mm (7 dots), 1.80 x 3.1mm (9 dots)		
	40 columns (Character type): 1.36 (W) x 2.4mm (H) (7 dots), 1.36 (W) x 3.1mm (H) (9 dots)		
Character type	40 columns (Graphic type): 1.36 (W) x 2.4mm (H) (7 dots), 1.36 (W) x 3.1mm (H) (9 dots)		
	Alphanumeric, international, PC850/852/857/860/863/865/866, katakana		
Line spacing	23 columns / 40 columns (Character type): 4.23mm (1/6 inch), 40 columns (Graphic type): 2.82mm (1/9 inch)		
Paper	Type	Ordinary paper and non-carbon paper	
	Paper width	76±0.5mm (W) x 83mm or less (80mm or less for the copying paper)	
	Paper thickness	Single-sheet paper: 45 to 55 Kg/1,000 sheets / 1,091 x 788mm	
	Copying paper	Non-carbon paper or 1 original + 1 copy (34 Kg for each paper) Total thickness: 0.2mm or less	
Ink ribbon cartridge ¹⁾	Special ink ribbon cartridge, Colors: Single color (Black) or 2 colors (Red and Black)		
Interface	Serial (RS-232C compliant), Parallel (Centronics compliant)		
Emulation	ESC/POS, CBM mode, Star mode		
Buffer size	6k bytes/256 bytes (selectable with memory switch)		
Cash drawer kick-out	2 drawers		
Supply voltage	AC 120V ±10%, 50/60 Hz AC230V ±10%, 50/60 Hz		
Power consumption	Approx. 30W (Normal printing), Approx. 10W (Standby)		
Outside dimensions	160 (W) x 212 (D) x 173 (H)mm		160 (W) x 212 (D) x 194 (H)mm
	Approx. 2.8 Kg		Approx. 3.0 Kg
Weight (approx.)	Approx. 2.8 Kg		
Operating temperature and humidity	0 to 40°C, 35 to 85% RH (no condensation)		
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)		
Reliability ²⁾	Printer: MCBF 4 million lines, Print head life: 80 million characters, Auto cutter life: 300 thousands cuts		
Safety standard	UL, C-UL, FCC Class A, TÜV, GS, CE-Marking		

*1: Life time is calculated by the continuous printing at 25°C *2: With single-sheet recommended paper and 25°C temperature)

Model classification	1) Model name	2) Paper feed system	3) Column capacity	4) Interface	5) Power supply	6) Character type
iDP - 3 5 5 0 F - 40 RF 230 C	0: iDP3550	F: Friction	23: 23 columns / 230 dots	RF: Serial	120: AC 120V	C: Character type
1) 2) 3) 4) 5) 6)	1: iDP3551	P: Pin tractor (Sprocket)	40: 40 columns / 360 dots	(RS-232C)	230: AC 230V	G: Graphic type
		(iDP3550 only)	40: 40 columns / 400 dots	PF: Parallel		
		(iDP3550 only)	(Graphic type)	(Centronics)		

POS PRINTER

CBM-910 II

The CBM-910 is an ultra-compact impact dot printer designed for bankcard, POS, ticketing, kitchen, deliver, slip, etc.



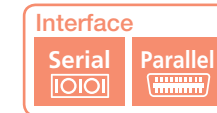
CBM-910



24 columns
40 columns



24 columns
40 columns



Features

- Palm-sized and lightweight
- Bit image graphics printing
- 2k bytes input buffer
- Paper near end sensor
- Wall mount installation available

Optional Accessory

Ink ribbon cartridge



Black (IR-91B)

Specifications

	CBM-910 (24 columns)	CBM-910 (40 columns)	
Printing method	Serial impact dot matrix		
Printing direction	One-way printing		
Font	(5 + 1) x 8	(4 + 0.5) x 8	
Head pins	8 pins (4 pins x 2 heads)		
Print speed	Approx. 2.5 lines/sec.	Approx. 1.8 lines/sec.	
Number of print columns	24 columns: 144 dots/line	40 columns: 180 dots/line	
Character size	1.62 x 2.4mm		
Character spacing	1.98mm		
Paper feed speed	Approx. 5 lines/sec.		
Character type	PC437/852/857/858/860/863/864/865/866/869, WPC1252, katakana, CBM-910 emulation (Japan, International)		
Line pitch	3.52mm		
Paper	Type	Single sheet, copier paper (original and copy)	
	Size	57.5±0.5 (W) x 60 or 80mm (Core internal dimension: 12±1mm, Core outer dimension: 18±1mm)	
	Thickness	Total thickness: 0.13mm or less	
Ink ribbon cartridge	Special ink ribbon cartridge, Color: Single color (Black)		
Interface	Serial (RS-232C compliant), Parallel (Centronics compliant)		
Emulation	CBM910 and iDP3110 (selectable with memory switch)		
Buffer size	2k bytes/72 bytes (selectable with memory switch on Serial I/F model)		
Supply voltage	Input: AC120V/230V (AC adapter 92A), Output: DC 7±1V (Printing)		
Power consumption	Approx. 7VA (Printing), Approx. 0.5VA (Stand-by)		
Outside dimensions	106 (W) x 180 (D) x 88 (H)mm		
Weight (approx.)	Approx. 0.47 Kg		
Operating temperature and humidity	0 to 40°C, 35 to 85% RH (no condensation)		
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)		
Reliability	Printer: MCBF 1.5 million lines	Printer: MCBF 1.0 million lines	
Safety standard ¹⁾	Printer: CE Marking, TÜV-GS, FCC Class B AC adapter: UL, C-UL, TÜV-GS		

*1: Compliant if the Citizen Systems AC adapter (92A) is used.

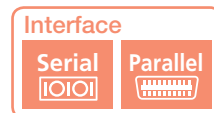
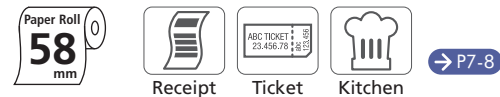
Model classification	1) Number of columns	2) Interface	3) Market	4) AC adapter	5) Printer cover size
CBM - 910 - 40 R F 230 A	24: 24 columns / 144 dots	R: Serial (RS-232C)	F: International	120: AC 120V	A: 60mm (Dia.) paper roll
1) 2) 3) 4) 5)	40: 40 columns / 180 dots	P: Parallel (Centronics)		230: AC 230V	B: 80mm (Dia.) paper roll

PANEL PRINTER CBM-920 II

The CBM-920 is a compact dot-impact printer. The extensive list of functions supported by CBM-920 makes it ideal for communication terminals, POS and measurement terminals.



CBM-920



Features

- Palm-sized and lightweight
- Bit image graphics printing
- 2k bytes input buffer
- Paper near end sensor
- Paper end sensor
- Paper auto loading
- Panel mount installation for industrial applications

Standard Accessory



Wiring cable

Optional Accessory

Ink ribbon cartridge



Black (IR-91B)

Specifications

	CBM-920 (24 columns)	CBM-920 (40 columns)
Printing method	Serial impact dot matrix	
Printing direction	One-way printing	
Font	(5 + 1) x 8	(4 + 0.5) x 8
Head pins	8 pins	
Print speed	Approx. 2.5 lines/sec.	Approx. 1.8 lines/sec.
Number of print columns	24 columns: 144 dots/line	40 columns: 180 dots/line
Character size	1.62 x 2.4mm	1.08 x 2.4mm
Character spacing	1.98mm	1.19mm
Paper feed speed	Approx. 5 lines/sec.	Approx. 3.6 lines/sec.
Character type	PC437/852/857/858/860/863/864/865/866/869, WPC1252, katakana, CBM-920 emulation	
Line pitch	3.52mm	
Paper	Type	Single sheet, copier paper (original and copy)
	Size	57.5±0.5 (W) x 50mm (Core internal dimension: 12±1mm, Core outer dimension: 18±1mm)
	Thickness	Total thickness: 0.09mm or less
Ink ribbon cartridge	Special ink ribbon cartridge, Color: Single color (Black)	
Interface	Serial (RS-232C compliant), Parallel (Centronics compliant)	
Emulation	CBM920 and iDP3110 (selectable with memory switch)	
Buffer size	2k bytes/72 bytes (selectable with memory switch)	
Supply voltage ¹⁾	Control system: DC 5V±5% (0.2A) Driving system: DC 5V±10% (Approx. 2.5A, Approx. 4A peak)	
Power consumption	Approx. 7VA (Printing), Approx. 0.5VA (Stand-by)	
Outside dimensions	115 (W) x 65 (D) x 119 (H)mm	
	109 (W) x 62 (D) + 0mm, -0.5mm (Panel installation hole size)	
Weight (approx.)	Approx. 0.5 Kg (Including mounting brackets, ink ribbon cartridge)	
Operating temperature and humidity	0 to 40°C, 35 to 85% RH (no condensation)	
Storage temperature and humidity	-20 to 60°C, 10 to 90% RH (no condensation)	
Reliability	Printer: MCBF 1.5 million lines	Printer: MCBF 1.0 million lines
Safety standard	UL (RU), TÜV, CE Marking, FCC Class A	

¹⁾: The power supply is not included, please prepare for the appropriate voltage of DC 5V±5% and current capacity of 2.5A or more and a peak current of 4A or more.

Model classification 1) Number of columns 2) Interface 3) Market 4) Model type 5) Power supply
CBM - 920 - 40 R F 2 DC5v
 1) 2) 3) 4) 5)
 24: 24 columns / 144 dots R: Serial (RS-232C) F: International 2: CBM-920 type DC5v: DC 5V operation
 40: 40 columns / 180 dots P: Parallel (Centronics)

Drivers (December 2010)

Model	Driver	Windows (New OS)	UPOS			CUPS	Windows CE					
		7 2003Server 32 Bit/64 Bit	Java POS	OPOS Ver.1.13	POS for .NET Ver.1.12	Linux Unix Mac OS X	Windows Mobile 2003 (SE) 5.0/6.x	Windows CE 4.2	Windows CE 5.0	Windows CE 6.5		
Line Thermal Printer	POS / Receipt	CT-S2000					Universal driver					
		CT-S280		-	-	-						
		CT-S281										
		CT-S310										
		CT-S4000										
		CT-S4000 A4 compressed		-	-	-		-				
		CT-S601/651										
		CT-S801/851										
		Panel	Kiosk	CT-P291/293		-		-	-			
				CBM-291/293	-	-		-	-			
Mobile	Kiosk	PMU2xxx /2300		-	-	-						
		PPU-700		-	-	-						
		CMP-10	-	-	-	-						
Impact Dot Printer	Control Board	CMP-20/30		-	-	-						
		PD-24		-	-	-						
		PD-24 A4 compressed		-	-	-	-	-	-			
		CD-S500/501		-	-	-	-	-	-			
Control Board	Control Board	CBM-910	-	-	-	-	-	-	-			
		CBM-920	-	-	-	-	-	-	-			
		iDP-3550/3551	-	-	-	-	-	-	-			
		BD2-2220/2221	-	-	-	-	-	-	-			
		BD2-3880UC	-	-	-	-	-	-	-			
Control Board	Control Board	BD2-3890UC	-	-	-	-	-	-	-			
		BD2-4280/4281	-	-	-	-	-	-	-			

Download for driver



Some drivers are available on demand. Please contact us for further details.

<http://www.citizen-systems.co.jp/english/support/download/printer/driver/index.html>

Download / Technical support / Inquiries

Have questions about your current product or need more information about a new model? We are ready to help. Please visit our web site for further information. You can also check out our FAQ Knowledge base for quick answers to many of the most commonly-asked questions.

Download	Driver
	User Manual
	Utility Software
	Command Reference
Technical support	Catalogue / Brochure
	FAQ's
About printer	Technical contact
Sales	About printer and printer supplies
	Sales contact

Technical support/Inquiries



<http://www.citizen-systems.co.jp/english/support/index.html>

Utility Software

We are offering some utility softwares to customize your printers.


	CT-S801	CT-S851	CT-S601	CT-S651	CT-S310	CT-S2000	CT-S4000	CT-S280	CT-S281
1.Printer customization	-	-	-	-					
2.POS printer utility									
3.LCD display customize			-	-	-	-	-	-	-

	CT-P291 CT-P293	PPU-700	PMU2xxx PMU23xx	CD-S500 CD-S501	CBM-910	CBM-920	CMP-10	CMP-20 CMP-30
1.Printer customization		-		-	-	-	-	-
2.POS printer utility	-				-	-	-	-
3.LCD display customize	-	-	-	-	-	-	-	-
4.CMP-20/30 Utility *1	-	-	-	-	-	-	-	
5.Customized software	-	-	-					-


Example of utility softwares

“POS Printer Utility”


Printer setup




Internal setup (Interface)




Internal setup (Cutter)



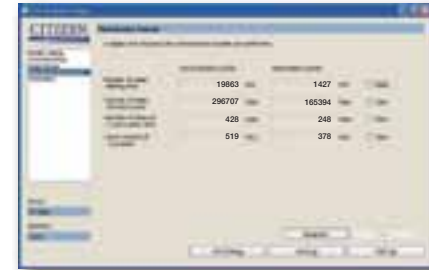
Internal setup (Equipment)




Logo setup



Maintenance counter



Test print




*1 CMP-20/30 Utility

- Contents of CMP-20/30 Utility software
1. Serial port configure settings
 2. Bluetooth settings
 3. Wi-Fi settings
 4. Power save mode settings
 5. Discoverable mode information

“Printer Customization”


Memory switches

Memory switch (software switch) is included as a standard feature. It is a lot easier to operate than the manual hardware switch. However, the hardware switch supports a lot more attributes.




Internal setup (attributes)

Although the memory switch operation is similar, it varies slightly in terms of the configuration methods.




Print configuration

Verifies the configuration of printer set up.




User font registration

Supports creation and registration of user defined characters. 2-inch kanji characters are not supported.



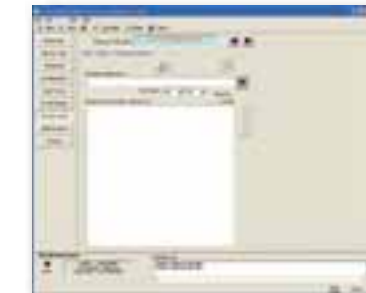
Logo registration

The logo data is saved under the NV memory of the printer. A special function to convert data from color to black and white (monochrome) is supported by certain models.




User character registration

Modifications to memory switch settings are saved on the PC and can be recalled later.




Maintenance counter

Displays the operation hours or the operation count information for paper feed, print head, auto cutter etc.




Others (Test print, etc)


The printer permits demo printing. The contents of the printout depend on the utility software being utilized. Certain versions of the software support the ability to write/record serial numbers.



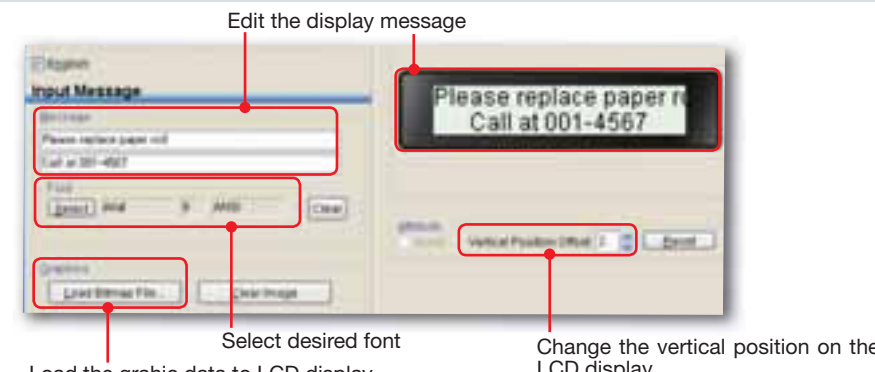
Model information



“LCD Message Editor”



Modifications to memory switch settings are saved on the PC and can be recalled later.
* CT-S801 and CT-S851 are only applicable



Download for utility software



In order to facilitate ease of access, the POS printer utility is available on the download page.

<http://www.citizen-systems.co.jp/english/support/download/printer/utility/software/index.html>

Model classification by "Operating voltage"
5V operation

<p>MLT4280/4280K</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT4281</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P48</p>	<p>MLT-288</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P49</p>	<p>MLT-289</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT-388</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>	<p>MLT-389</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>	<p>LT-286</p> <p>Paper Roll 58 mm</p> <p>SPEED 50 mm/sec. MAX.</p> <p>→ P50</p>
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24V operation

<p>LT2220</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT2221/2221C</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>	<p>LT2320</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT2321/2321C</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>	<p>LT-281</p> <p>Paper Roll 60 mm</p> <p>SPEED 101.6 mm/sec. MAX.</p> <p>→ P54</p>	<p>LT-481</p> <p>Paper Roll 112 mm</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P54</p>	<p>LT-483</p> <p>Paper Roll 50 mm / Paper Roll 50 mm / 2 Station</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P55</p>	<p>LT1322</p> <p>Paper Roll 38 mm / Paper Roll 38 mm / 2 Station</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P55</p>
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Model classification by "Paper width" and "Two stations"
58 mm paper width

<p>MLT4280/4280K</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT4281</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P48</p>	<p>MLT-288</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P49</p>	<p>MLT-289</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT-288</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P49</p>	<p>LT2220</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT2221/2221C</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>	<p>LT-281</p> <p>Paper Roll 60 mm</p> <p>SPEED 101.6 mm/sec. MAX.</p> <p>→ P54</p>
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80 mm paper width

<p>MLT-388</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>	<p>MLT-389</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>	<p>LT2320</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT2321/2321C</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>
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112 mm paper width

<p>LT-481</p> <p>Paper Roll 112 mm</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P54</p>
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Two station

<p>LT1322</p> <p>Paper Roll 38 mm / Paper Roll 38 mm / 2 Station</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P55</p>	<p>LT-483</p> <p>Paper Roll 50 mm / Paper Roll 50 mm / 2 Station</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P55</p>
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60 mm paper width

<p>LT-281</p> <p>Paper Roll 60 mm</p> <p>SPEED 101.6 mm/sec. MAX.</p> <p>→ P54</p>

Model classification by "Platen"
Removable platen

<p>MLT4281</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P48</p>	<p>MLT-289</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT-389</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>	<p>LT2221/2221C</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>	<p>LT2321/2321C</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P53</p>
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Fixed platen

<p>MLT4280/4280K</p> <p>Paper Roll 58 mm</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P49</p>	<p>MLT-288</p> <p>Paper Roll 58 mm</p> <p>SPEED 52.5 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P49</p>	<p>MLT-388</p> <p>Paper Roll 80 mm</p> <p>SPEED 60 mm/sec. MAX.</p> <p>→ P51</p>
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Fixed platen

<p>LT-286</p> <p>Paper Roll 58 mm</p> <p>SPEED 50 mm/sec. MAX.</p> <p>→ P50</p>	<p>LT2220</p> <p>Paper Roll 58 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT2320</p> <p>Paper Roll 80 mm</p> <p>SPEED 150 mm/sec. MAX.</p> <p>Paper Path Straight available</p> <p>→ P52</p>	<p>LT-281</p> <p>Paper Roll 60 mm</p> <p>SPEED 101.6 mm/sec. MAX.</p> <p>→ P54</p>	<p>LT-481</p> <p>Paper Roll 112 mm</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P54</p>	<p>LT-483</p> <p>Paper Roll 50 mm / Paper Roll 50 mm / 2 Station</p> <p>SPEED 100 mm/sec. MAX.</p> <p>→ P55</p>	<p>LT1322</p> <p>Paper Roll 38 mm / Paper Roll 38 mm / 2 Station</p> <p>SPEED 80 mm/sec. MAX.</p> <p>→ P55</p>
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LINE THERMAL PRINTER MECHANISM MLT4281



Features

- Ultra compact design and low voltage usage (5V)
- High-speed print: Max. 80mm/sec
- Built-in higher reliability (1 million cuts life) auto cutter
- Auto-cutter and a clamshell design for the easiest paper loading possible
- Robust and highly reliable Zinc die-cast frame works with a full range of portable applications
- Available sensors for head temperature, paper, platen and cutter position
- Tailor-made for handheld applications

Paper Roll
58 mm

SPEED 80 mm/sec MAX
REMOVABLE PLATEN
AUTO CUTTER

Optional Accessory

Control board



BD2-4281U

Specifications

		MLT4281
Printing method		Thermal dot line printing method
Total dots		384 dots/line
Dot density		8 dots/mm
Printing width		48mm
Printing speed		Max. 80mm/sec. (640 dot-lines/sec.)
Paper width		58mm
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interruptor
	Head temperature sensor	Thermistor
	Paper sensor	Photo-interruptor
	Platen sensor	Mechanical switch
	Cutter position sensor	Photo-interruptor
Frame		Zinc (Die cast)
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 3.0 to 5.5V
Current consumption	Head (VH)	Max. 2.2A approx.(VH=5V)
	Motor (VH)	Max. 3.7A approx. (VH=8.5V)
	Cutter driver motor (VH)	Max. 0.8A approx.(VH=8.5V)
		Max. 0.8A approx.(VH=8.5V)
Recommended paper	Width	58mm
	Thickness	60mm or less *2
	Diameter	59 to 75µm
	Paper (Manufacturer)	TF50KS-E2D (Nippon paper)
	Head pulse-resistance	100 million pulses or more
Reliability *3	Head wear-resistance	50km or more
	Auto cutter	1 million cuts *4
	Environment	
	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH (No condensation)
Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH (No condensation)	
External dimensions		79.0 (W) x 48.3 (D) x 18.0 (H)mm (Excluding the platen ass'y, motor and lever)
Weight		Approx. 110g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

*4: Performance may be changed depending on the cutter equipping method.

Model classification
MLT4281 - P1
1)

1) PNE sensor
None: No sensor
P1: PNE sensor

LINE THERMAL PRINTER MECHANISM MLT4280 / 4280K



Features

- Ultra compact design and low voltage usage (5V)
- High-speed print: Max. 80mm/sec
- Easy platen release construction
- Robust and highly reliable Zinc die-cast frame works with a full range of portable applications
- Available sensors for head temperature, paper, platen and cutter position
- Tailor-made for handheld applications
- Label version available

Paper Roll
58 mm

SPEED 80 mm/sec MAX
REMOVABLE PLATEN

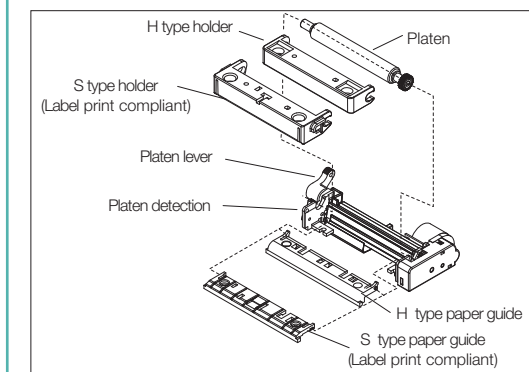
Optional Accessory

Control board



BD2-4281U

Model classification exploded view



Specifications

		Thermal paper type	Thermal label paper type
Printing method		Thermal dot line printing method	
Total dots		384 dots/line	
Dot density		8 dots/mm	
Printing width		48mm	
Printing speed		Max. 80mm/sec. (640 dot-lines/sec)	
Paper width		58mm	
Paper feeding pitch		0.125mm	
Sensors	PE sensor	Photo-interruptor	
	Head temperature sensor	Thermistor	
	Paper sensor	Photo-interruptor	
	Platen sensor	Mechanical switch	
	Label paper sensor	—	Photo-interruptor
	Blackmark sensor	—	Photo-interruptor
Frame		Zinc (Die cast)	
Operating voltage range *1	VH	DC 4.2 to 8.5V	DC 6.0 to 8.5V
	Vdd	DC 3.0 to 5.5V	
Current consumption	Head (VH)	Max. 1.5A approx.(VH=5V)	Max. 2.3A approx.(VH=6V)
	Motor (VH)	Max. 3.9A approx. (VH=8.5V)	Max. 3.9A approx. (VH=8.5V)
		Max. 0.9A approx.	
		Max. 0.9A approx.	
Recommended paper	Width	58mm	
	Thickness	62 to 100µm	152µm
	Diameter *2	60mm or less	
	Paper (Manufacturer)	TF50KS-E2D (Nippon paper)	HD75 (Nippon paper)
	Head pulse-resistance	100 million pulses or more	
Reliability *3	Head wear-resistance	50km or more	
	Environment		
	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH (No condensation)	
Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH (No condensation)		
External dimensions		MLT4280-P1: 69.5 (W) x 36.7 (D) x 12.7 (H) mm	MLT4280KS-LM1/2: 73.0 (W) x 45.0 (D) x 16.0 (H) mm
(Excluding the platen ass'ys, motor and lever)		MLT4280KH-P1: 71.6 (W) x 36.7 (D) x 12.7 (H) mm	MLT4280KS-P1: 73.0 (W) x 45.0 (D) x 16.0 (H) mm
Weight		MLT4280-P1: Approx. 40g	MLT4280KS-LM1/2: Approx. 52g
		MLT4280KH-P1: Approx. 49g	MLT4280KS-P1: Approx. 50g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification
MLT4280 K H - P1
1) 2) 3)

1) Platen lever
None: No platen lever
K: With platen lever

2) Platen holder & platen sensor
None: No platen holder and no platen sensor
H: Normal platen holder with platen sensor
S: Label/black mark compliant platen holder with platen sensor

3) Paper sensor
P1: Paper end sensor
LM1: Black mark sensor (located at the motor side)
LM2: Black mark sensor (located at the lever side)

LINE THERMAL PRINTER MECHANISM

MLT-288

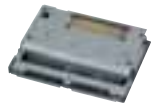
Paper Roll
58
mmSPEED
52.5
mm/sec
MAX.

Features

- 58mm paper width
- 5V operation
- Print speed: Max. 52.5mm/sec
- Ultra compact design

Optional Accessory

Auto cutter



ACS-228

Specifications

		MLT-288
Printing method		Thermal dot line printing method
Total dots		384 dots/lines
Dot density		8 dots/mm
Printing width		48mm
Printing speed		Max. 52.5mm/sec (420 dot-lines/sec)
Paper width		58mm
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interrupter
	Head temperature	Thermistor
	Head-up	Mechanical switch
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (VH = 5V)	Max. 1.7A approx.
	Motor (VH = 7.2V)	Max. 0.5A approx.
	Width	58mm
Recommended paper	Thickness	60 to 72µm
	Paper diameter *2	60mm or less
	Paper (Manufacturer)	TF50KS-E2C (Nippon Paper)
Reliability *3	Head pulse-resistance	50 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		72.7 (W) × 38 (D) × 13 (H)mm
Weight		Approx. 45g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

LINE THERMAL PRINTER MECHANISM

LT-286

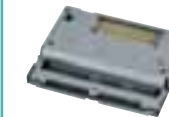
Paper Roll
58
mmSPEED
50
mm/sec
MAX.

Features

- 58mm paper width
- 5V operation
- Print speed: Max. 50mm/sec
- Compact design

Optional Accessory

Auto cutter



ACS-224

LINE THERMAL PRINTER MECHANISM

MLT-289

Paper Roll
58
mmSPEED
52.5
mm/sec
MAX.REMOVABLE
PLATEN

Features

- 58mm paper width
- 5V operation
- Print speed: Max. 52.5mm/sec
- Ultra compact design
- Platen removable design

Specifications

		MLT-289
Printing method		Thermal dot line printing method
Total dots		384 dots/lines
Dot density		8 dots/mm
Printing width		48mm
Printing speed		Max. 52.5mm/sec (420 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interrupter
	Head temperature	Thermistor
	Platen	Mechanical switch
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (VH = 5V)	Max. 2.5A approx.
	Motor (VH = 5V)	Max. 0.5A approx.
	Width	58mm
Recommended paper	Thickness	65µm
	Paper diameter *2	60mm or less
	Paper (Manufacturer)	TF50KS-E2C (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		76.8 (W) × 37 (D) × 16 (H)mm
Weight		Approx. 50g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Specifications

		LT-286
Printing method		Thermal dot line printing method
Total dots		384 dots/line
Dot density		8 dots/mm
Printing width		48mm
Printing speed		Max. 50mm/sec (400 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interrupter
	Head temperature	Thermistor
	Head-up	Mechanical switch
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (VH = 5V)	Max. 2.3A approx.
	Motor (VH = 5V)	Max. 0.5A approx.
	Width	58mm
Recommended paper	Thickness	60 to 72µm
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	KF50-HAD(Shin-Oji)
Reliability *3	Head pulse-resistance	50 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		75 (W) × 56.5 (D) × 21 (H)mm
Weight		Approx. 82g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification 1) Model 2) Paper path
MLT - 288 V 1) MLT-288 H: Curl 2) BD2 - 2880 U C V: Straight

1) Auto cutter drive
None: Without auto cutter function
C: With auto cutter function

1) Model MLT-289
MLT - 289 1)

1) Auto cutter drive
None: Without auto cutter function
C: With auto cutter function

Model classification 1) Model
LT - 286 1) LT-286

LINE THERMAL PRINTER MECHANISM

MLT-388

Paper Roll
80
mmSPEED
60
mm/sec.
MAX.

Features

- 80mm paper width
- 5V operation
- Print speed: Max. 60mm/sec
- Ultra compact design

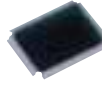
Optional Accessories

Control board



BD2-3880U

Gate array



202LA-00

Specifications

		MLT-388
Printing method		Thermal dot line printing method
Total dots		576 dots/line
Dot density		8 dots/mm
Printing width		72mm
Printing speed		Max. 60mm/sec. (480 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interrupter
	Head temperature	Thermistor
	Head-up	Mechanical switch
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp = 5V)	Max. 2.5A approx.
	Motor (Vp = 5V)	Max. 0.5A approx.
	Width	80mm
Recommended paper	Thickness	65µm
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D(Nippon-Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		99.5 (W) × 41 (D) × 21 (H)mm
Weight		Approx. 95g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

LINE THERMAL PRINTER MECHANISM

MLT-389

Paper Roll
80
mmSPEED
60
mm/sec.
MAX.REMOVABLE
PLATEN

Features

- 80mm paper width
- 5V operation
- Print speed: Max. 60mm/sec
- Ultra compact design
- Platen removable design

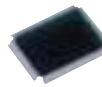
Optional Accessories

Control board



BD2-3890UC

Gate array



202LA-00

Specifications

		MLT-389
Printing method		Thermal dot line printing method
Total dots		576 dots/lines
Dot density		8 dots/mm
Printing width		72mm
Printing speed		Max. 60mm/sec. (480 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-interrupter
	Head temperature	Thermistor
	Platen	Mechanical switch
Operating voltage range *1	VH	DC 4.2 to 8.5V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp = 5V)	Max. 2.5A approx.
	Motor (Vp = 5V)	Max. 0.5A approx.
	Width	80mm
Recommended paper	Thickness	65µm
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		99.5 (W) × 41 (D) × 21 (H)mm
Weight		Approx. 95g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification

MLT - 388

1)

1) Model

MLT-388

MLT-389

1) Applicable model

8: MLT-388

9: MLT-389

2) Auto cutter drive

C: With auto cutter function

BD2 - 38 9 0U C

1)

2)

LINE THERMAL PRINTER MECHANISM

LT2220

Paper Roll
58
mmSPEED
150
mm/sec.
MAX.

Features

- 58mm paper width
- 24V operation
- High-speed print: Max. 150mm/sec
- Thick paper up to 0.15mm (LT2220A)
- Compact design

Optional Accessories

Control board



BD2-2220

Auto cutter



ACS-225

Specifications

		LT2220
Printing method		Thermal dot line printing method
Total dots		432 dots/lines
Dot density		8 dots/mm
Printing width		54mm
Printing speed		Max. 150mm/sec. (1200 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-sensor
	Head temperature	Thermistor
	Head-up	Photo-sensor
Operating voltage range *1	VH	DC 21.6 to 26.4V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp = 5V)	Max. 4.9A approx.
	Motor (Vp = 5V)	Max. 0.3A approx.
	Width	58mm
Recommended paper	Thickness	60 to 105µm (Standard), 110 to 150µm (A type)
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	100km or more
Environment	Operation	Temperature: 0 to 50°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		91.5 (W) × 58 (D) × 20 (H)mm
Weight		Approx. 91g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

LINE THERMAL PRINTER MECHANISM

LT2320

Paper Roll
80
mmSPEED
150
mm/sec.
MAX.

Features

- 80mm paper width
- 24V operation
- High-speed print: Max. 150mm/sec
- Thick paper up to 0.15mm (LT2320A)
- Compact design

Optional Accessories

Control board



BD2-2220

Auto cutter



ACS-235

Specifications

		LT2320
Printing method		Thermal dot line printing method
Total dots		576 dots/lines
Dot density		8 dots/mm
Printing width		72mm
Printing speed		Max. 150mm/sec. (1200 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-sensor
	Head temperature	Thermistor
	Head-up	Photo-sensor
Operating voltage range *1	VH	DC 21.6 to 26.4V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp = 5V)	Max. 4.9A approx.
	Motor (Vp = 5V)	Max. 0.3A approx.
	Width	80mm
Recommended paper	Thickness	60 to 105µm (Standard), 110 to 150µm (A type)
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	100km or more
Environment	Operation	Temperature: 0 to 50°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		108 (W) × 58 (D) × 20 (H)mm
Weight		Approx. 103g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification

LT2220HA

1) 2) 3) 4) 5)

1) Paper width

2: 58mm

3: 80mm

2) Voltage

2: 24V

3) Type

0: Standard

4) Paper path

H: Curl

V: Straight

5) Paper thickness

None: Standard (60-105µm)

A: For thick paper (110-150µm)

Model classification

BD2 - 2220RSU

1) 2)

1) Applicable Mechanisms

0: LT2×20

1: LT2×21

2) Interface

PA: Parallel (IEEE1284 compliant)

RS: Serial (RS-232C compliant)

UB: USB

LINE THERMAL PRINTER MECHANISM LT2221 / LT2221C

Paper Roll
58
mm

SPEED
150 mm/sec.
MAX.

**REMOVABLE
PLATEN**



Features

- 58mm paper width
- 24V operation
- High-speed print: Max. 150mm/sec
- Platen removable design
- Auto cutter equipped (LT2221C)
- Compact design

Optional Accessory

Control board



BD2-2221

Specifications

		LT2221 / LT2221C
Printing method		Thermal dot line printing method
Total dots		432 dots/lines
Dot density		8 dots/mm
Printing width		54mm
Printing speed		Max. 150mm /sec (1200 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter
	Head temperature	Thermistor
	Platen	Photo-Interrupter
Operating voltage range *1	VH	DC 21.6 to 26.4V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp=5V)	Max. 4.9A approx.
	Motor (Vp=5V)	Max. 0.46A approx.
Recommended paper	Thickness	60 to 105µm (Standard) 110 to 150µm (A type)
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
	Head pulse-resistance	100 million pulses or more
Reliability *3	Head wear-resistance	100km or more
	Auto cutter life *4	0.3 million cuts
Environment	Operation	Temperature: 0 to 50°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		91.5 (W) × 58 (D) × 20 (H)mm (LT2221) 101.3 (W) × 61.5 (D) × 37.2 (H)mm (LT2221C)
Weight		Approx. 88g (LT2221) Approx. 281g (LT2221C)

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.
*2: The number of diameter varies depending on the conditions.
*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.
*4: The number is under the condition of 150µm paper thickness. Performance may be changed depending on the cutter equipping method.

LINE THERMAL PRINTER MECHANISM LT-281

Paper Roll
60
mm

SPEED
101.6 mm/sec.
MAX.



Features

- 60mm paper width
- 24V operation
- High-speed print: Max. 101.6mm/sec
- Heavy duty design offers higher reliability

Optional Accessories

Auto cutter



AC-5/5F (Saw tooth blade)



ACS-229 (V-shaped blade)

Specifications

		LT-281
Printing method		Thermal dot line printing method
Total dots		448 dots/lines
Dot density		8 dots/mm
Printing width		56mm
Printing speed		Max. 101.6mm/sec. (813 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter
	Head temperature	Thermistor
	Head-up	Machanical switch
Operating voltage range *1	Vp	DC 22.8 to 25.2V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head	0.9A
	Motor	0.39A
Recommended paper	Thickness	59.5mm ±0.5mm
	Paper thickness	65µm
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50SY-EY, TF50KS-E2C (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	100km or more
Environment	Operation	Temperature: 5 to 40°C Humidity: 35 to 80% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		111.5 (W) × 53.5 (D) × 40.8 (H)mm
Weight		Approx. 300g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.
*2: The number of diameter varies depending on the conditions.
*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

LINE THERMAL PRINTER MECHANISM LT2321 / LT2321C

Paper Roll
80
mm

SPEED
150 mm/sec.
MAX.

**REMOVABLE
PLATEN**



Features

- 80mm paper width
- 24V operation
- High-speed print: Max. 150mm/sec
- Platen removable design
- Auto cutter equipped (LT2321C)
- Compact design

Optional Accessory

Control board



BD2-2221

Specifications

		LT2321 / LT2321C
Printing method		Thermal dot line printing method
Total dots		576 dots/lines
Dot density		8 dots/mm
Printing width		72mm
Printing speed		Max. 150mm /sec (1200 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter
	Head temperature	Thermistor
	Platen	Photo-Interrupter
Operating voltage range *1	VH	DC 21.6 to 26.4V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head (Vp=5V)	Max. 4.9A approx.
	Motor (Vp=5V)	Max. 0.3A approx.
Recommended paper	Thickness	60 to 105µm (Standard) 110 to 150µm (A type)
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
	Head pulse-resistance	100 million pulses or more
Reliability *3	Head wear-resistance	100km or more
	Auto cutter life *4	0.3 million cuts
Environment	Operation	Temperature: 0 to 50°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		108 (W) × 58 (D) × 20 (H)mm (LT2321) 119 (W) × 61.5 (D) × 37.2 (H)mm (LT2321C)
Weight		Approx. 98g (LT2321) Approx. 331g (LT2321C)

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.
*2: The number of diameter varies depending on the conditions.
*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.
*4: The number is under the condition of 150µm paper thickness. Performance may be changed depending on the cutter equipping method.

LINE THERMAL PRINTER MECHANISM LT-481

Paper Roll
112
mm

SPEED
100 mm/sec.
MAX.



Features

- 112mm paper width
- 24V operation
- High-speed print: Max. 100mm/sec
- Heavy duty design offers higher reliability

Optional Accessories

Auto cutter



AC-6 (Saw tooth blade)



ACS-249 (V-shaped blade)

Specifications

		LT-481
Printing method		Thermal dot line printing method
Total dots		832 dots/lines
Dot density		8 dots/mm
Printing width		104mm
Printing speed		Max. 100mm/sec. (800 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter
	Head temperature	Thermistor
	Head-up	Machanical switch
Operating voltage range *1	Vp	DC 22.8 to 25.2V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head	1.6A
	Motor	0.48A
Recommended paper	Thickness	111.5mm ±0.5mm
	Paper thickness	65µm
	Paper diameter *2	83mm or less
	Paper (Manufacturer)	TF50SY-EY, TF50KS-E2C (Nippon Paper)
Reliability *3	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	100km or more
Environment	Operation	Temperature: 5 to 40°C Humidity: 35 to 80% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		161 (W) × 60 (D) × 41 (H)mm
Weight		Approx. 420g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.
*2: The number of diameter varies depending on the conditions.
*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification
LT2221HC
1) 2) 3) 4) 5)

1) Paper width
2: 58mm
3: 80mm
2) Voltage
2: 24V

3) Type
1: Platen removable model
4) Paper path
H: Curl
5) Cutter
None: Standard
C: With cutter

Model classification
BD2 - 2221RSU
1) 2)

1) Applicable Mechanisms
0: LT2X20
1: LT2X21

1) Applicable Mechanisms
0: LT2X20
1: LT2X21
2) Interface
PA: Parallel (IEEE1284 compliant)
RS: Serial (RS-232C compliant)
UB: USB

Model classification
LT - 281
1)

1) Model
LT-281

Model classification
LT - 481
1)

1) Model
LT-481

LINE THERMAL PRINTER MECHANISM

LT-483



SPEED
80
mm/sec.
MAX.



Features

- 2 station printing
- 50+50mm paper width
- 24V operation
- High-speed print: Max. 100mm/sec
- Heavy duty design offers higher reliability

Optional Accessories

Auto cutter



AC-4P / 4F (Guillotine type)

Paper winder



AW-4H / 4V

Specifications

		LT-483
Printing method		Thermal dot line printing method
Total dots		832 dots/lines
Dot density		8 dots/mm
Printing width		44mm × 2
Printing speed		Max. 100mm/sec. (800 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter
	Head temperature	Thermistor
	Head-up	Mechanical switch
Operating voltage range *1	Vp	DC 22.8 to 25.2V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head	1.2A approx.
	Motor	0.96A approx.
Recommended paper	Width	49.5mm ± 0.5mm
	Paper thickness	65µm
	Paper diameter *2	83mm or less
Reliability *3	Paper (Manufacturer)	TF50KS-E2C (Nippon Paper)
	Head pulse-resistance	100 million pulses or more
	Head wear-resistance	100km or more
Environment	Operation	Temperature: 5 to 40°C Humidity: 35 to 80% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		LT483: 155.2 (W) × 60 (D) × 71.5 (H)mm LT483CF: 155.2 (W) × 67 (D) × 98.9 (H)mm
Weight		LT483: Approx. 560g LT483CF: Approx. 750g

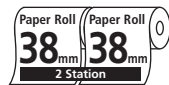
*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

LINE THERMAL PRINTER MECHANISM

LT-1322



SPEED
80
mm/sec.
MAX.



Features

- 2 station printing
- 38+38mm paper width
- 24V operation
- Print speed: Max. 80mm/sec

Specifications

		LT-1322
Printing method		Thermal dot line printing method
Total dots		248 dots/lines × 2
Dot density		8 dots/mm
Printing width		38mm × 2
Printing speed		Max. 80mm/sec. (640 dot-lines/sec)
Paper feeding pitch		0.125mm
Sensors	PE sensor	Photo-Interrupter × 2
	Head temperature	Thermistor
	Head-up	Photo-Interrupter
Operating voltage range *1	Vp	DC 22.8 to 25.2V
	Vdd	DC 4.75 to 5.25V
Current consumption	Head	Max. 4.5A approx.
	Motor	Max. 0.4A approx.
Recommended paper	Width	38mm × 2
	Paper thickness	60 to 75µm
	Paper diameter *2	83mm or less
Reliability *3	Paper (Manufacturer)	TF50KS-E2C (Nippon Paper)
	Head pulse-resistance	50 million pulses or more
	Head wear-resistance	50km or more
Environment	Operation	Temperature: 0 to 45°C Humidity: 35 to 85% RH
	Storage	Temperature: -20 to 60°C Humidity: 10 to 90% RH
External dimensions		120 (W) × 58 (D) × 24.5 (H)mm
Weight		Approx. 97g

*1: Voltage drop at maximum current may cause the print quality problem. Please check it carefully in your environment such as control board, wiring, etc. Also please keep the voltage within the specified voltage range even by the voltage drop.

*2: The number of diameter varies depending on the conditions.

*3: Normal temperature at 25°C, normal humidity, 12.5% printing ratio, rated energy and by use of the recommended print paper.

Model classification
LT - 483 - CF
1)

1) Auto cutter code
CF: Partial cut / full cut
None: Without auto cutter

LT - 1322H
1)

1) Model
LT-1322H

Impact dot matrix printer mechanism index list

Model classification by "Printing color"

One color

MD-910/911



SPEED
2.5
mm/sec.
MAX.
MD-910
SPEED
1.8
mm/sec.
MAX.
MD-911
→ P58



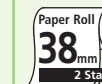
DP-624



SPEED
3.6
mm/sec.
MAX.
→ P59



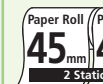
DP-630



SPEED
3.0
mm/sec.
MAX.
→ P60



DP-730



SPEED
3.0
mm/sec.
MAX.
→ P60



Two color print

DP-331/332



SPEED
4.3
mm/sec.
MAX.
→ P57



DP-330



SPEED
4.3
mm/sec.
MAX.
→ P57



DP-614/617



SPEED
4.0
mm/sec.
MAX.
→ P58



DP-654/657



SPEED
3.6
mm/sec.
MAX.
DP-654
SPEED
3.0
mm/sec.
MAX.
DP-657
→ P59



Model classification by "Two station"

Two station

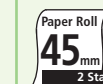
DP-630



SPEED
3.0
mm/sec.
MAX.
→ P60



DP-730



SPEED
3.0
mm/sec.
MAX.
→ P60



Impact
Dot
Matrix
Printer
Mechanism

Model classification by "Paper feed"

Friction feed / Sprocket feed

DP-614/617



SPEED
4.0
mm/sec.
MAX.
→ P58



DP-624



SPEED
3.6
mm/sec.
MAX.
→ P59



DP-654/657



SPEED
3.6
mm/sec.
MAX.
DP-654
SPEED
3.0
mm/sec.
MAX.
DP-657
→ P59



Friction feed

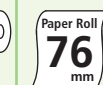
DP-331/332



SPEED
4.3
mm/sec.
MAX.
→ P57



DP-330



SPEED
4.3
mm/sec.
MAX.
→ P57



MD-910/911



SPEED
2.5
mm/sec.
MAX.
MD-910
SPEED
1.8
mm/sec.
MAX.
MD-911
→ P58

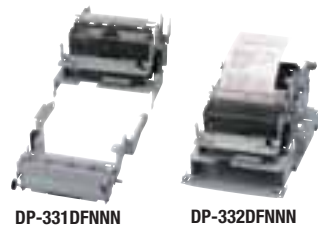


IMPACT DOT MATRIX PRINTER MECHANISM

DP-331 / 332



SPEED
5.0 line/sec. Max.



Features

- Drop-in paper loading
- 3 ply paper (1 original + 2 copies) compatible
- High-speed print: Max. 5.0 lines/sec
- 76.2/69.5/57.5mm paper width
- 24V operation
- 2 color printing

Optional Accessories

→ P62-63

Ink ribbon cartridge



Black IR-31B (NJ37703) Red and Black IR-31RB (NJ37702)

Specifications

		DP-331	DP-332
Printing method		Serial impact dot matrix method	
Printing direction		Bi-directional	
Printing speed (lines/sec)		Approx. 5.0 lines/sec	
Total number of dots (dots/lines) *1		180 (360)	
Number of columns		42 columns	
Font (W x H) *1		7 x 9 matrix	
Character size (WxH) mm *1		1.36 x 2.4 (3.1)	
Line spacing		0.176mm (1/144 inch)	
Number of wires		9 pins	
Motor		Voltage: 24 ±2.4VDC / Current Peak approx. 1A / Average 0.2A or less	
Sensor	Home position	Photo interrupter	
	Paper end	Photo interrupter	
	Paper near end	-	
Printing solenoid		Voltage: 24 ±5%VDC	
Printing feed solenoid		Voltage: 24 ±5%VDC	
Paper feed		Friction	
Paper feeding speed (lines/sec.)		Approx. 18	
Printing paper	Width	76.2/69.5/57.5±0.5mm	
	Roll diameter	30 to 83mm	
	Thickness	1P: 60 to 85µm, Copy paper: 50 to 200µm (Total thickness)	
Copy *2		1P roll paper, 2P copy roll paper (1 original + 1 copy), 3P (1 original + 2 copies)	
Ink ribbon cartridge		Two colors (Red and Black), Single color (Black)	
External dimensions		136 (W) x 144.4 (D) x 95.85 (H)mm	150 (W) x 240.7 (D) x 119.9 (H)mm
Weight		Approx. 950g	
Environment	Operation	0 to 50°C	
	Storage	-20 to 70°C	
	Mechanism	MCBF 7.5 million lines	
Reliability	Mechanism	MCBF 7.5 million lines	
	Pritner head	150 million characters	

*1: Figures in () are available by including half-dot.
*2: Total paper thickness is 0.2mm or less.

IMPACT DOT MATRIX PRINTER MECHANISM

DP-330



SPEED
4.3 line/sec. Max.



Features

- 76mm paper width
- High-speed print: Max. 4.3 lines/sec
- 3 ply paper (1 original + 2 copies) compatible
- Head carriage by stepping motor
- 24V operation
- 2 color printing

Optional Accessories

→ P62-63

Auto cutter

Ink ribbon cartridge



ACS-236 (Partial cut) Black IR-31B (NJ37703) Red and Black IR-31RB (NJ37702)

Specifications

		DP-330
Printing method		Serial impact dot matrix method
Printing direction		Bi-directional
Printing speed (lines/sec)		Approx. 4.3
Total number of dots (dots/lines)		210
Number of columns		42 columns
Font (W x H) *1		7 x 7 (9) matrix
Character size (WxH) mm		1.25 x 2.42 (3.12)
Line spacing		0.176mm (1/144 inch)
Number of wires		9 pins
Motor		Voltage: 24 ±2.4VDC
Sensor	Home position	Photo interrupter
	Paper end	Photo interrupter
Printing solenoid		Voltage: 24 ±2.4VDC
Printing feed solenoid		Voltage: 24 ±2.4VDC
Paper feed		Friction
Paper feeding speed (lines/sec.)		Approx. 34
Printing paper	Roll paper	Width: 76.2 ± 0.5mm x 83mm, Thickness: 60 to 85µm
	Validation paper	Paper size: 130 (W) x 60 (H) mm Paper thickness: 85 to 100µm (Total thickness: 250µm or less) (Max. 3 papers)
	Copy	Roll paper: 1 original + 1 copy, Validation paper: 3 sheets (1 original + 2 copy)
Ink ribbon cartridge		Two colors (Red and Black), Single color (Black)
External dimensions		126.7 (W) x 97.5 (D) x 52.7 (H)mm
Weight		Approx. 450g
Environment	Operation	0 to 50°C
	Storage	-25 to 70°C
Reliability	Mechanism	MCBF 10 million lines
	Pritner head	150 million characters

*1: Figures in () are available by including half-dot.

Model classification
DP-331 D FNNN
1) 2)

1) Type
1: DP-331
2: DP-332
2) Ribbon
D: 2 color
M: 1 color

Model classification
DP-330 D F V *
1) 2) 3) 4)

1) Ribbon
D: 2 color
M: 1 color
2) Paper feed method
F: Friction feed
3) Blackmark sensor volume
N: No volume
V: BM sensor volume
4) Blackmark sensor position
*: Six sensor positions are available
Please contact dealer.

IMPACT DOT MATRIX PRINTER MECHANISM

MD-910 / 911



SPEED
2.5 line/sec. Max.
MD-910

SPEED
1.8 line/sec. Max.
MD-911



Features

- 58mm paper width
- 5V operation
- Print speed: Max. 2.5 lines/sec
- Ultra compact design

Optional Accessories

→ P62-63

Paper winder



AW-5

Ink ribbon cartridge



Black IR-91B

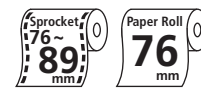
Specifications

		MD-910	MD-911
Printing method		Serial impact dot matrix method	
Printing direction		Bi-directional	
Printing speed (lines/sec)		Approx. 2.5 *1	Approx. 1.8 *1
Total number of dots (dots/lines)		144	180
Number of columns		24 columns	40 columns
Font (W x H)		(5+1) x 8 matrix	(4+0.5) x 8 matrix
Character size (WxH) mm		1.7 x 2.4	
Line spacing		3.52mm	
Number of wires		8 pins (4 pins x 2 heads)	
Motor		Voltage: 5 +1/-1.2VDC / Current Peak approx. 1A / Average 0.3A or less	
Sensor	Reset pulse	Mechanical leaf switch	
	Dot pulse	Photo interrupter	
Printing solenoid		Voltage: 5 +0.5/-1.2 VDC	
Printing feed solenoid		Voltage: 5 +0.5/-1.2 VDC	
Paper feed		Friction	
Paper feeding speed (lines/sec.)		Approx. 5	Approx. 3.6
Printing paper	Width	57.5mm ±0.5 x 83mm	
	Diameter	83mm or less	
	Thickness	Total 130µm or less	
Copy		1 original + 1 copy	
Ink ribbon cartridge		Single color (Black)	
External dimensions		90 (W) x 45.5 (D) x 15.8 (H)mm	
Weight		Approx. 105g	
Environment	Operation	0 to 50°C	
	Storage	-25 to 70°C	
Reliability	Mechanism	MCBF 1.5 million lines	MCBF 1.0 million lines
	Pritner head	80 million characters	

*1: 5V, 25°C, continuous printing.

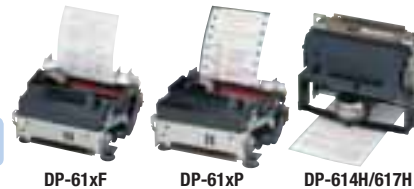
IMPACT DOT MATRIX PRINTER MECHANISM

DP-61X SERIES



SPEED
3.0 line/sec. Max.
DP-614

SPEED
2.4 line/sec. Max.
DP-617



Features

- 76mm paper width
- Print speed: Max. 3.0 lines/sec (DP-614)
- Selectable from Friction (type F) or Sprocket (type P) paper feeding
- 24V operation
- 2 color printing

Optional Accessories

→ P62-63

Auto cutter



ACS-236 (Full cut or Partial cut)



ACS-134 (Full cut or Partial cut)

Paper winder

AW-2NC (without outer case)

Ink ribbon cartridge



Red and Black IR-61RB (IR606RB)



Black IR-61B (IR606B)

Specifications

		DP-614	DP-617
Printing method		Serial impact dot matrix method	
Printing direction		Bi-directional	
Printing speed (lines/sec)		Approx. 3.0	Approx. 2.4
Total number of dots (dots/lines) *1		180 (360)	200 (400)
Number of columns		40 columns	40 columns
Font (W x H) *1		7 x 7 (9) matrix	
Character size (WxH) mm *1		1.36 x 2.4 (3.1)	
Line spacing		C type: 4.23mm (1/6 inch), G type: 2.82mm (1/9 inch)	
Number of wires		9 pins	
Motor		Voltage: 24V ±1/-2VDC / Current Peak approx. 1A / Average 0.2A or less	
Sensor	Reset pulse	Mechanical leaf switch	
	Home position	Photo interrupter	
Printing solenoid		Voltage: 24V ±1 VDC	
Printing feed solenoid		Voltage: 24V ±1/-2 VDC	
Color change solenoid		Voltage: 24V ±1/-2 VDC	
Paper feed		Friction or sprocket	
Paper feeding speed (lines/sec.)		Approx. 18	Approx. 15
Printing paper		Friction feed: 76mm ±0.5 x 83mm, Sprocket feed: 76 to 89mm (fanfold paper)	
Paper thickness		Total thickness: 200µm or less	
Copy		Friction feed: 1 original + 1 copy, Sprocket feed: 1 original + 2 copies	
Ink ribbon cartridge		Two colors (Red and Black), Single color (Black)	
External dimensions		Two colors: 137 (W) x 136 (D) x 63.5 (H)mm Single color: 134 (W) x 136 (D) x 63.5 (H)mm	
Weight		Approx. 690g	
Environment	Operation	0 to 50°C	
	Storage	-25 to 70°C	
Reliability	Mechanism	MCBF 4.0 million lines	
	Pritner head	80 million characters	

*1: Figures in () are available by including half-dot.

Model classification
MD - 910 - SS
1) 2)

1) Type
910: 24 columns
911: 40 columns

2) Knob
SS: No knob
HS: Horizontal knob
VS: Vertical knob

Model classification
DP - 617 D F C
1) 2) 3) 4)

1) Type
614: 40 columns
617: 40 columns
2) Ribbon
D: 2 color
M: 1 color

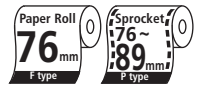
3) Paper feeding method
F: Friction feeding
P: Sprocket feeding
4) Character / Graphic
C: Character only
G: Graphic

Model classification
DP - 614 H
1)

1) Type
614H: DP-614H
617H: DP-617H

IMPACT DOT MATRIX PRINTER MECHANISM

DP-624



SPEED
3.6 line/sec.
Max.



DP-624MF (Friction feeding model)
DP-624MP (Sprocket feeding model)

Features

- 76mm paper width
- Print speed: Max. 3.6 lines/sec
- Selectable from Friction (type F) or Sprocket (type P) paper feeding
- 24V operation
- 1 color printing

Optional Accessories

Auto cutter

ACS-134
(Full cut or Partial cut)

Paper winder

AW-2NC
(without outer case)

Ink ribbon cartridge

Black
IR-61B (IR606B)

Specifications

		DP-624
Printing method		Serial impact dot matrix method
Printing direction		Bi-directional
Printing speed (lines/sec)		Approx. 3.6
Total number of dots (dots/lines) *1		180 (360)
Number of columns		40 columns
Font (W x H) *1		7 x 7 (9) matrix
Character size (WxH) mm *1		1.36 x 3.1 (2.4)
Line spacing		0.176mm (1/144 inch)
Number of wires		9 pins
Motor		Voltage: 24V ±10% / Current Peak approx. 1.5A / Average 0.3A or less
Sensor	Home position	Photo interrupter
	Dot pulse	Photo interrupter
	Reset pulse	Mechanical leaf switch
Printing solenoid		Voltage: 24 ±1 VDC
Printing feed solenoid		Voltage: 24 ±5% VDC
Paper feed		Friction or sprocket
Paper feeding speed (lines/sec.)		Approx. 25
Printing paper	Friction feed:	76 to 89 (W) mm x 83mm
	Sprocket feed:	76 to 89mm (fanfold paper)
Copy	Friction feed:	1 original + 1 copy (Total thickness: 140µm or less)
	Sprocket feed:	1 original + 2 copies (Total thickness: 200µm or less)
Ink ribbon cartridge		Single color (Black)
External dimensions		140.9 (W) x 153.2 (D) x 63.5 (H)mm
Weight		Approx. 730g
Environment	Operation	0 to 50°C
	Storage	-25 to 70°C
Reliability	Mechanism	MCBF 5.0 million lines
	Printner head	80 million characters

*1: Figures in () are available by including half-dot.

IMPACT DOT MATRIX PRINTER MECHANISM

DP-654 / 657



SPEED
3.6 line/sec.
Max.

SPEED
3.0 line/sec.
Max.



DP-65xP
(Friction feeding model)

Features

- 76mm paper width
- Print speed: Max. 3.6 lines/sec (DP-654)
- Selectable from Friction (type F) or Sprocket (type P) paper feeding
- 24V operation
- 2 color printing

Optional Accessories

Auto cutter

AC-2
(Full cut or Partial cut)

ACS-134
(Full cut or Partial cut)

Paper winder

AW-2
(with outer case)

AW-2NC
(without outer case)

Ink ribbon cartridge

Red and Black
IR-61RB (IR606RB)

Black
IR-61B (IR606B)

Specifications

		DP-654	DP-657
Printing method		Serial impact dot matrix method	
Printing direction		Bi-directional	
Printing speed (lines/sec)		Approx. 3.6	Approx. 3.0
Total number of dots (dots/lines) *1		180 (360)	200 (400)
Number of columns		40 columns	
Font (W x H) *1		7 x 7 (9) matrix	
Character size (WxH)mm *1		1.36 x 2.4 (3.1)	1.2 x 2.4 (3.1)
Line spacing		4.23mm (1/6 inch)	2.82mm (1/9 inch)
Number of wires		9 pins	
Motor		Voltage: 24 +1/-2 VDC / Current Peak approx. 1.5A / Average 0.3A	
Sensor	Home position	Photo interrupter	
	Dot pulse	Photo interrupter	
	Paper end	Photo interrupter	
	Reset sensor	Mechanical leaf switch	
Printing solenoid		Voltage: 24 ±5% VDC	
Printing feed solenoid		Voltage: 24 +1/-2 VDC	
Color change solenoid		Voltage: 24 +1/-2 VDC	
Paper feed		Friction	
Paper feeding speed (lines/sec.)		Approx. 21	Approx. 18
Printing paper	Width	76 ±0.5 (W) mm x 83mm	
	Thickness	Total thickness: 130µm or less	
Copy		1 original + 1 copy	
Ink ribbon cartridge		Two colors (Red and Black), Single color (Black)	
External dimensions		137 (W) x 138 (D) x 63.5 (H)mm	
Weight		Approx. 690g	
Environment	Operation	0 to 50°C	
	Storage	-25 to 70°C	
Reliability	Mechanism	MCBF 4.0 million lines	
	Printner head	80 million characters	

*1: Figures in () are available by including half-dot.

Model classification
DP - 624 M P C S
1) 2) 3) 4)

1) Ribbon
M: 1 color
2) Paper feeding method
F: Friction feeding
P: Sprocket feeding

3) Character
C: Character only
4) Sensor
S: Paper sensor

Model classification
DP - 654 D F C V
1) 2) 3) 4) 5)

1) Type
654: DP-654
657: DP-657

2) Ribbon
D: 2 color

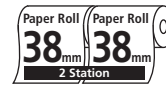
3) Paper feeding method
F: Friction feeding
P: Sprocket feeding

4) Character / Graphic
C: Character only
G: Graphic

5) Sensor
S: Paper sensor

IMPACT DOT MATRIX PRINTER MECHANISM

DP-630



SPEED
3.0 line/sec.
Max.



Features

- 2 station printing
- 38 + 38mm paper width
- 24V operation
- Print speed: Max. 3.0 lines/sec
- Validation printing (option)

Optional Accessory

Ink ribbon cartridge

Black
IR-61B (IR606B)

Specifications

		DP-630
Printing method		Serial impact dot matrix method
Printing direction		Bi-directional
Printing speed (lines/sec)		Approx. 3.0
Total number of dots (dots/lines) *1		180 (360)
Number of columns		Receipt: 18, Journal: 18
Font (W x H) *1		7 x (7) matrix
Character size (WxH) mm		1.36 x 2.4
Line spacing		5.08mm
Number of wires		9 pins
Motor		Voltage: 24 +1/-2 VDC / Current Peak approx. 1A / Average 0.2A or less
Sensor	Home position	Photo interrupter
	Dot pulse	Photo interrupter
	Reset pulse	Mechanical leaf switch
Printing solenoid		Voltage: 24 ±1 VDC
Printing feed solenoid		Voltage: 24 +1/-2 VDC
Paper feed		Friction
Paper feeding speed (lines/sec.)		Approx. 18
Printing paper	Width	37 to 38 (W)mm x 83mm or less (for receipt and journal)
	Thickness	Single paper: 60 to 85µm
Ink ribbon cartridge		Single color (Black)
External dimensions		134 (W) x 136 (D) x 63.5 (H)mm
Weight		Approx. 690g
Environment	Operation	0 to 50°C
	Storage	-25 to 70°C
Reliability	Mechanism	MCBF 2.5 million lines
	Printner head	50 million characters

*1: Figures in () are available by including half-dot.

IMPACT DOT MATRIX PRINTER MECHANISM

DP-730



SPEED
3.0 line/sec.
Max.



Features

- 2 station printing
- 76mm paper width
- Print speed: Max. 3.0 lines/sec
- 24V operation

Optional Accessory

Ink ribbon cartridge

Black
IR-71B

Specifications

		DP-730
Printing method		Serial impact dot matrix method
Printing direction		Bi-directional
Printing speed (lines/sec)		Approx. 3.0
Total number of dots (dots/lines)		Receipt: 108, Journal: 108, Validation: 248
Number of columns		Receipt: 24, Journal: 24, Validation: 55
Font (W x H) *1		7 x 7 (9) matrix
Character size (WxH) mm *1		1.36 x 2.4 (3.1)
Line spacing		4.23mm (1/6 inch)
Number of wires		9 pins
Motor		Voltage: 24 ±10% VDC / Current Peak approx. 2.5A / Average 0.45A or less
Sensor	Home position	Photo interrupter
	Dot pulse	Photo interrupter
	Reset pulse	Mechanical leaf switch
Printing solenoid		Voltage: 24 ±10% VDC
Printing feed solenoid		Voltage: 24 ±10% VDC
Paper feed		Friction
Paper feeding speed (lines/sec.)		Approx. 30
Printing paper	Roll paper	44.5 ± 0.5 (W)mm x 83mm, Thickness: 60 to 90µm
	Validation paper (1 line validation)	135 to 210 (W)mm x 70 (H)mm or higher Thickness 1 sheet : 70 to 140µm, Original copy: 40 to 90µm Backing paper : 70 to 140µm
Copy *2		Roll paper: 1 original + 1 copy, Validation paper: 3 sheets (1 original + 2 copy)
Ink ribbon cartridge		Single color (Black)
External dimensions		151 (W) x 234.6 (D) x 123.7 (H)mm
Weight		Approx. 1,250g
Environment	Operation	0 to 50°C
	Storage	-25 to 70°C
Reliability	Mechanism	MCBF 4.0 million lines
	Printner head	100 million characters

*1: Figures in () are available by including half-dot.

*2: Total paper thickness is 0.2mm or less.

Model classification
DP - 630 - V S C
1) 2) 3)

1) Validation sensor
V: With validation sensor
None: No validation sensor

2) Stamp
S: With stamp
None: No stamp





3) Cutter
C: With cutter
None: No cutter

Model classification
DP - 730 - S R B
1) 2)

1) Validation sensor
R: No validation sensor

2) Winder/Stamp
B: With winder and Stamp

Control Board

Model		BD2-2220	BD2-2221	BD2-3880 BD2-3890	BD2-4280
					
Supporting model		LT2220 LT2320	LT2221 LT2321	MLT-388 MLT-389	MLT4280 MLT4281
Interface	Parallel	Centronics	Centronics	Centronics	
	Serial	RS-232C	RS-232C	RS-232C	RS-232C
	USB				Mini-B
Number of columns		LT2220 Font-A: 36 Font-B: 48 Font-C: 54 LT2230 Font-A: 48 Font-B: 64 Font-C: 72	LT2221 Font-A: 36 Font-B: 48 Font-C: 54 LT2231 Font-A: 48 Font-B: 64 Font-C: 72	Font-A: 48 Font-B: 64	Font-A: 32 Font-B: 42 Font-C: 48
Size of character	Font-A	12 x 24 dots (1.50 x 3.00 mm)	12 x 24 dots (1.50 x 3.00 mm)	12 x 24 dots (1.25 x 3.00 mm)	12 x 24 dots (1.50 x 3.00 mm)
	Font-B	9 x 24 dots (1.13 x 3.00 mm)	9 x 24 dots (1.13 x 3.00 mm)	9 x 24 dots (0.88 x 3.00 mm)	9 x 24 dots (1.10 x 3.00 mm)
	Font-C	8 x 16 dots (1.00 x 2.00 mm)	8 x 16 dots (1.00 x 2.00 mm)		8 x 16 dots (1.00 x 2.00 mm)
Emulation		ESC/POS	ESC/POS	ESC/POS	ESC/POS
Bar code		Supported	Supported	Supported	
Buffer		4k byte	4k byte	4k byte	2k byte
Logo registration					
Supporting device		Auto cutter Paper sensor Head up sensor Line feed switch Error LED Paper end LED	Auto cutter Paper sensor Head up sensor Line feed switch Error LED Paper end LED	Auto cutter Paper sensor Head up sensor Line feed switch Error LED Paper end LED	Auto cutter PNE sensor (Optional) Paper end
Outer dimension (W x D)		90 x 65 mm	90 x 65 mm	80 x 90 mm	69 x 60 mm
Weight		Approx. 37 g	Approx. 37 g	Approx. 50 g	Approx. 23 g
Supply voltage	VCC	5.0V±5%	5.0V±5%	DC4.2V to 8.5V	DC4.2V to 8.5V
	VP	24V±5%	24V±5%		
Custom control chip					
Gate array				202LA-00	






Paper Winder







Paper Stacker



Auto Cutter

Model	AC-125	AC-134/135	ACS-224/225/228/229	ACS-235/236/238	ACS-249	
						
Cutting method		Guillotine		Slide cutting		
Paper cutting		Partial cut or Full cut				
Paper width		38 ~ 69mm	50 ~ 89mm	45 ~ 69mm	50 ~ 89mm	55 ~ 115mm
Paper thickness		60 ~ 90µm		60 ~ 150µm		
Maximum cutting (Times / minute)		20 cuts / min.				
Supplying voltage		24V±10% (ACS-224: 5V±10%)				
Power consumption		0.8A				
Operating temperature		0 ~ 45				
Dimension (W x D x H)		80x57x15mm	102x57x15mm	80x55.7x15mm	102x55.7x15mm	130x55.7x15mm
Weight		130g	160g	140g	180g	220g
Reliability		300,000 cuts				
Supporting model		AC-125: LT2220	AC-134: DP-6xx AC-135: LT2320	ACS-224: LT-286 (5V) ACS-225: LT2220 ACS-228: MLT-288 (5V) ACS-229: LT-281	ACS-235: LT1320/2320 ACS-236: DP-330 ACS-238: MLT-388 (5V)	ACS-249: LT-481

Model	AC-2	AC-4	AC-5	AC-6	
					
Cutting method		Guillotine			
Paper cutting		Partial cut or Full cut			
Paper width		76±0.5mm	49.5±0.5mm	59.5±0.5mm	111.5±0.5mm
Paper thickness		60 ~ 85µm	65µm	65µm	65µm
Maximum cutting (Times / minute)		20 cuts / min.	6 cuts / min.		
Supplying voltage		24V±10%	24V±5%	24V±10%	
Power consumption		0.8A	1.3A		1.0A
Operating temperature		0 ~ 40		5 ~ 40	
Dimension (W x D x H)		99x74x30mm	60x55x23mm	70x55x31.7mm	130x55x21.5mm
Weight		200g	260g	160g	260g
Reliability		300,000 cuts			
Supporting model		DP-6xx	LT-483	LT-281	LT-481

Ink Ribbon Cartridge

Ink ribbon cartridge name	Applicable models		Packed Q'ty per a carton
	Printer	Printer mechanism	
IR-31RB (NJ37702): Red and Black	CD-S500/501	DP-330	10 pcs
IR-31B (NJ37703): Black	CD-S500/501	DP-330	10 pcs
IR-61RB (IR606RB): Red and Black	IDP-3550/3551	DP-610/612/617/654/657	200 pcs
IR-61B (IR606B): Black	IDP-3550/3551	DP-610/612/617/624/627/654/657	200 pcs
IR-71B: Black		DP-730	96 pcs
IR-91B: Black	CBM-910 /920	MD-910/911	500 pcs