



SATO Value Line Printers

Trusted Dependability, Quality Assured, Exceptional Value



OS Series



X Series



CP Series

Product Guide



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1 About SATO Corporation

SATO Corporation, Japan, was established in 1940 to manufacture and sell packaging machinery. In 1962, SATO invented the world's first hand-held labeler and operations as an international supplier of labeling machinery began. SATO America, US subsidiary was established in 1977 and eventually became SATO America, Inc. in 1987.

Since SATO's 1979 introduction of the world's first thermal transfer barcode printer, Model 2311, SATO has continued to be in the forefront of thermal printing technologies. Barcodes have proven to be a medium for inputting information that satisfies all requirements, including high reading speed, incomparable accuracy, and low cost. Barcodes have therefore gone into widespread use in a variety of business sectors. Recognizing this, SATO Corporation has developed barcode solutions for a wide spectrum of markets and applications.

SATO acquired Argox Information Co., Ltd. in 2011, making Argox a member of the SATO Group of Companies and expanding the availability of Argox products globally.

Today, SATO continues its tradition of designing and manufacturing high quality industrial printers, which deliver reliable performance with each print job.

Information about SATO and SATO products can be found at <http://www.satoamerica.com>.

1.1 Contacting SATO America, Inc.

SATO America, Inc.

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2 SATO Value Line Positioning

SATO's Value Line consists of three separate printer series – the OS Series, CP Series, and X Series. The OS Series and CP Series desktop printers are designed for lower and mid volume applications, while the X Series industrial printers are designed for higher volume printing. The series are also differentiated by the following printer models:

OS-2140DZ

The OS-2140DZ direct thermal barcode printer offers excellent value for meeting your low to medium volume printing requirements. Fast and reliable with a printing speed of 4 inches per second, this printer features a 32-bit CPU, 4M Flash memory and 8M DRAM. It also offers extended printing length of up to 100-inches to facilitate a wide range of media.

Space-saving and user-friendly the OS-2140DZ is simple to set up and operate, and creating labels is easy. A see-through window lets users monitor when to change media. A USB interface offers more flexible connectivity. The printer supports 1D/GS1 Data Bar, 2D/Composite codes and QR barcodes. The OS-2140DZ provides true value for a compact and dependable high-performance direct thermal printer.

- 203dpi resolution
- Durable and easy maintenance; only 8 screws disassemble entire unit
- Snap-in thermal print head loads in seconds
- Detachable top cover for kiosk and other special applications
- PPLZ emulation
- Support 1D/GS1 Data bar, 2D/Composite codes and QR barcodes
- Full range of options: Cutter, external label unwinder, memory card, and RTC
- Ability to download 2-byte Asian fonts

OS-214plus

The OS-214plus is the newest generation of Argox's most successful medium volume printer model. Its attractive and stylish design is just one of several new features and advanced functions. The significantly larger onboard memory increases print capability for producing a wider range of label applications. A full-speed USB interface adds flexibility for use with any of today's notebook and other computers. Its space-saving design offers the same small footprint and light weight as previous models for easy and convenient placement. The new OS-214plus maintains Argox's leading position as the industry standard for style, price, and performance.

- Direct thermal or thermal transfer printing
- 203dpi resolution
- Centronics Parallel, RS-232, and USB interfaces
- Durable and easy maintenance; only 10 screws disassemble entire unit
- Snap-in thermal print head loads in seconds
- Easy media loading & ribbon installation
- Detachable top cover for kiosk and other special applications
- PPLA, PPLB emulations available
- Support 1D/GS1 Data bar, 2D/Composite codes and QR barcodes
- Full range of options: Cutter, external label unwinder, font card, and RTC
- Printer Server external for Ethernet/Wireless options



CP-2140Z

The compact CP-2140Z desktop printer not only saves space, it lets you install a large 300M long ribbon for bigger printing demands. Ribbons and media are easy to load, and you can use ribbons ink-side in or ink-side out. A media sensor system delivers greater flexibility for diverse media and applications. A head-open switch initiates auto-calibration for more precise printing. Multiple communication interfaces include parallel, RS-232, and USB.

The CP-2140Z prints at 203dpi resolution and a speed of 4ips. Standard memory includes 4MB Flash and 8MB SDRAM. The printer has a modular design for easy maintenance. It supports the Windows 7 OS, 1D/GS1 Data bar, 2D/Composite codes, QR barcodes, and Windows TrueType fonts.

With the CP-2140Z you get the convenience of a small size printer with the functions of a large printer and at a more competitive cost. It's the perfect printer for applications such as clothing tags, self-labeling, mailing, retail, shipping & receiving, inventory and patient tracking. The new CP-2140Z printers continue Argox's leading position in innovation, price, and performance.

- Compact size and 300M ribbon capacity
- Easy media and ribbon loading
- Multiple communication interfaces
- Robust paper sensor system for diverse applications
- Ribbons can be wound ink-side out or ink-side in
- Printing speed 4 ips, standard memory of 4MB FLASH and 8MB SDRAM
- Module design for easy maintenance
- Four Auto-Calibration Modes
- Supports 1D/GS1 Data bar, 2D/Composite codes and QR barcodes, and windows true type font download

X-2000V

The versatile new X-2000V industrial barcode printer features "stand-alone" operation using a standard PS/2 interface for connecting a PC keyboard or scanner for data input—no extra cost for KDU or printer controller is required. A multilingual LCD display on the front panel makes installation, configuration, and operation simple and convenient. The X-2000V has a 32-bit RISC microprocessor for printing speeds up to 6ips as well as 4MB of Flash memory, and 8MB SDRAM. Enhanced features include an easy-to-adjust print mechanism, selectable inside or outside ribbon coating; easily adjusted thermal print head pressure, a button for fine-tuning ribbon tension, and many more. Plug-and-play setup with parallel, serial and bi-directional USB interfaces offers maximum flexibility and connectivity. The X-2000V is an industrial-strength barcode printer that is easy to adjust and delivers excellent cost-performance.

- Heavy duty label printer
- 32-bit CPU and up to 6ips printing speed
- LCD display for easy operation
- Movable reflective & transmissive media sensors
- Centronics parallel, RS-232 and USB interfaces available, and PS/2 interface for standalone operation: directly connecting a PC keyboard to input label data without a PC
- Industrial-strength media management: 360M ribbon & 8" media compartment
- Easy media loading & ribbon installation
- Ribbons can be wound ink-side out or ink-side in
- PPLA, PPLB emulations available
- Durable and easy maintenance; easy-to-replace cutter and peeler
- Support 1D/GS1 Data bar, 2D/ Composite codes and QR barcodes
- Full range of options: Cutter, Peeler, external label unwinder, font card, and RTC
- Printer Server external for Ethernet/Wireless/Bluetooth options

X-2000V Zip

The X-2000V Zip is the same as the X-2000V, except it has PPLZ emulation instead.



X-2300ZE

The X-2300ZE is a high-performance, flexible, and easy-to-use industrial barcode printer with Ethernet capabilities. The durable X-2300ZE features direct thermal and thermal transfer printing with 203dpi resolution and up to 6ips printing speed. A 32-bit CPU, 8MB Flash and 16MB SDRAM onboard memory assures high quality performance. Communication interfaces include parallel port, RS-232, USB, PS/2 keyboard and Ethernet for easy connectivity. An SNMP trap function allows the monitoring of network attached devices in real-time. The X-2300ZE's standard PS/2 interface connects an input device such as a keyboard or scanner for stand-alone operation.

The multilingual LCD facilitates easy installation and operation, and a built-in RTC lets you print times and/or dates on labels. The flexible X-2300ZE has an adjustable reflective and transmissive double sensor system that ensures precise label detection for many types of media. A printer switch also lets you use either inside or outside coated ribbons.

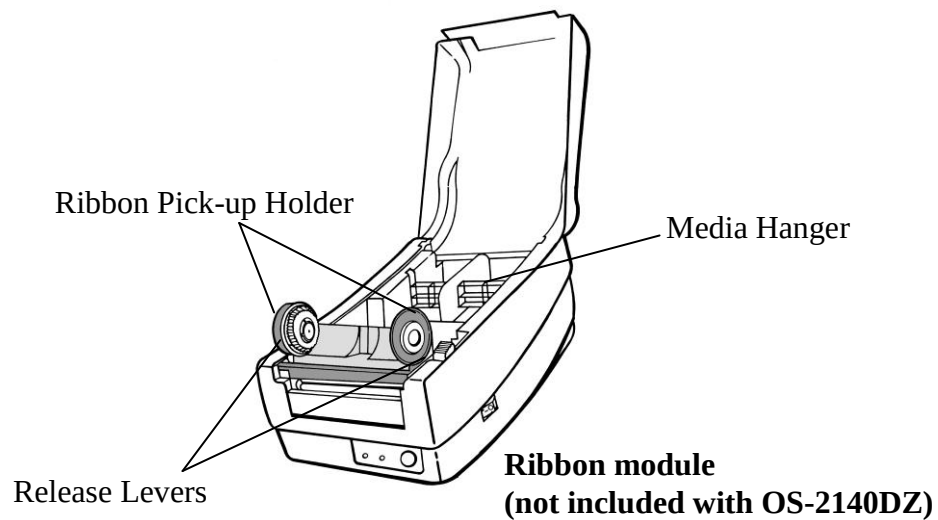
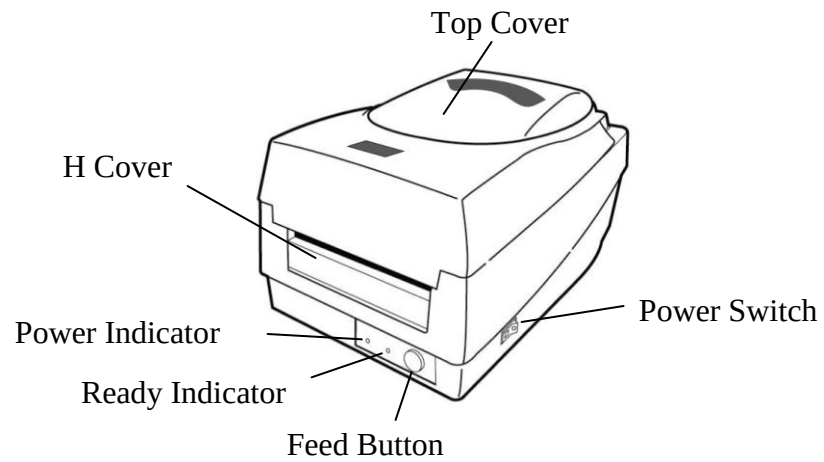
The X-2300ZE offers the latest features, high-performance, flexibility, and easy operation, delivering exceptional value all at a competitive price.

- Heavy duty label printer
- LCD display for easy operation
- 32-bit CPU and 8MB Flash; 16MB SDRAM memory standard
- Multiple communication interfaces – Parallel, RS-232, USB, PS/2 Keyboard, and Ethernet
- Media Auto Calibration function
- SNMP trap function for network management
- Real Time Clock (RTC) Built-in
- PPLZ emulation
- Movable reflective & transmissive media sensors
- Ribbons can be wound ink-side out or ink-side in



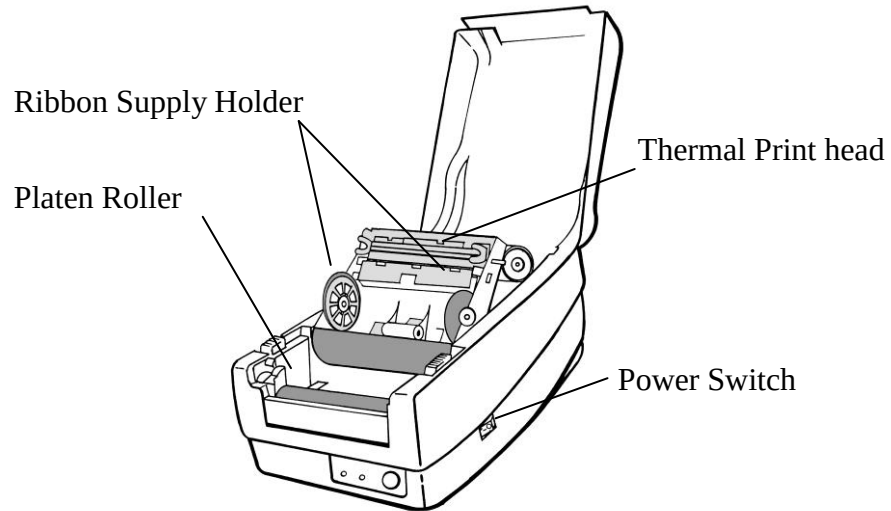
3 Product Tour

OS Series





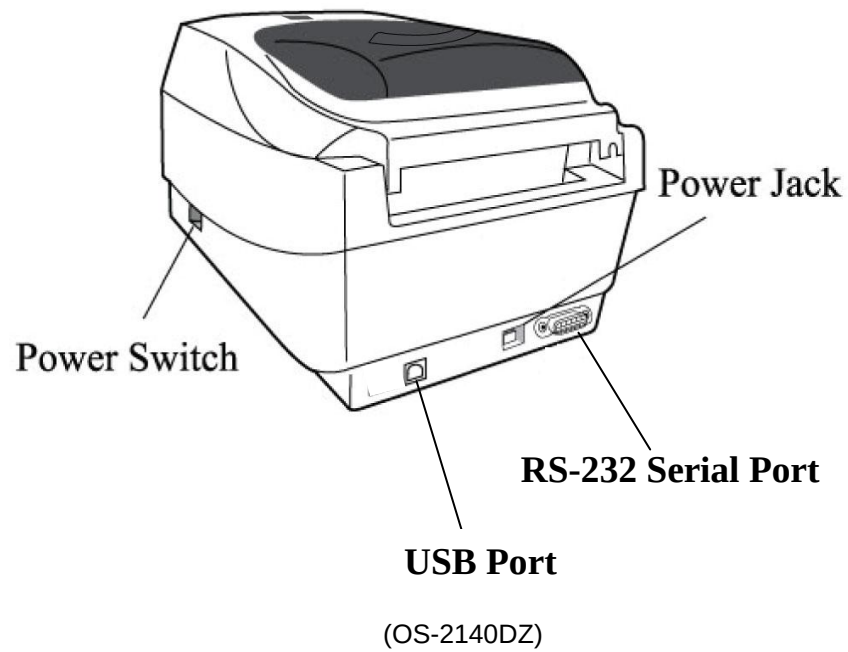
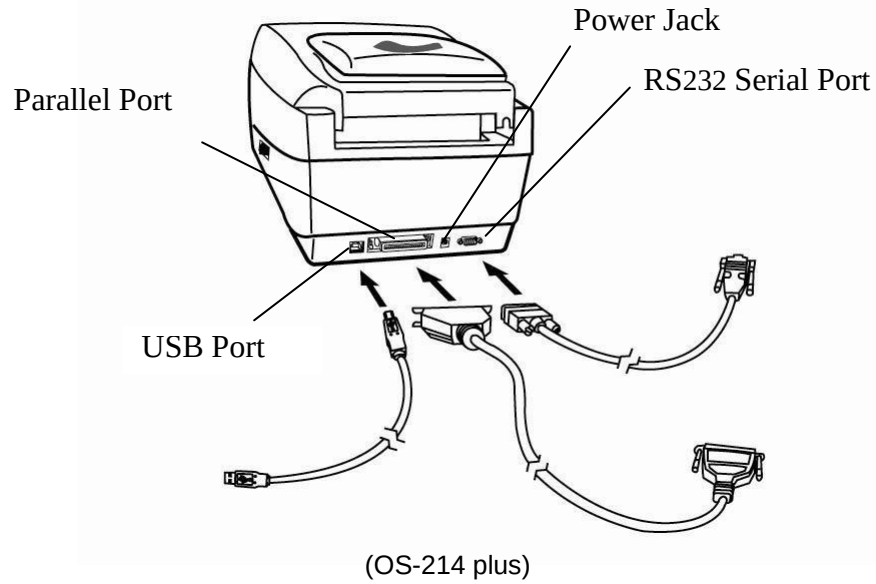
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See next page for interface options

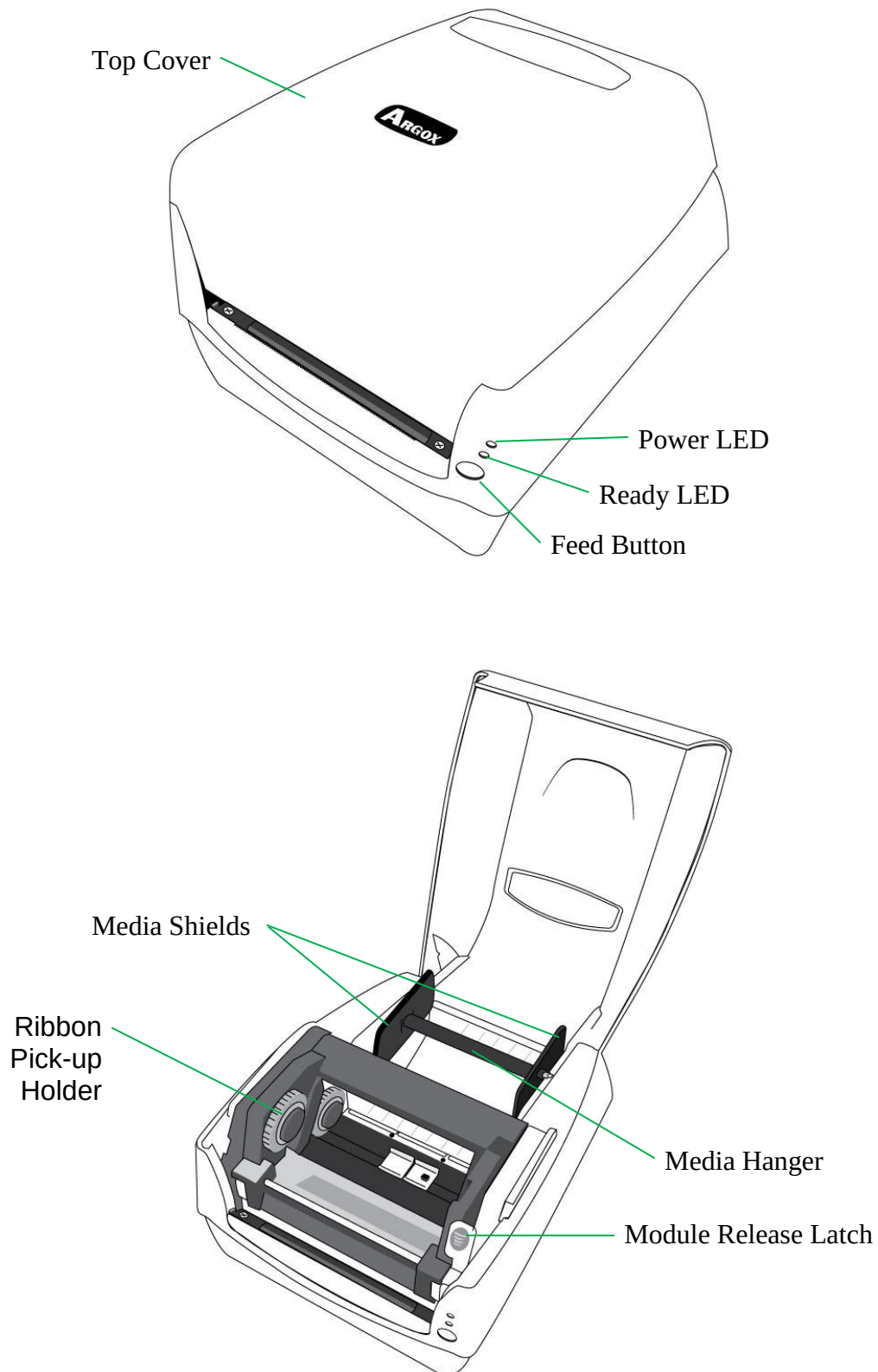


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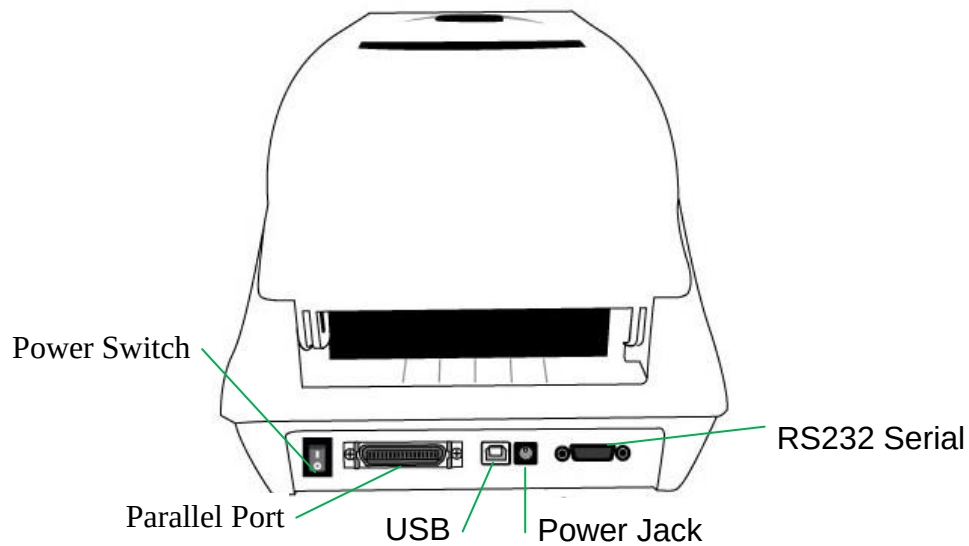
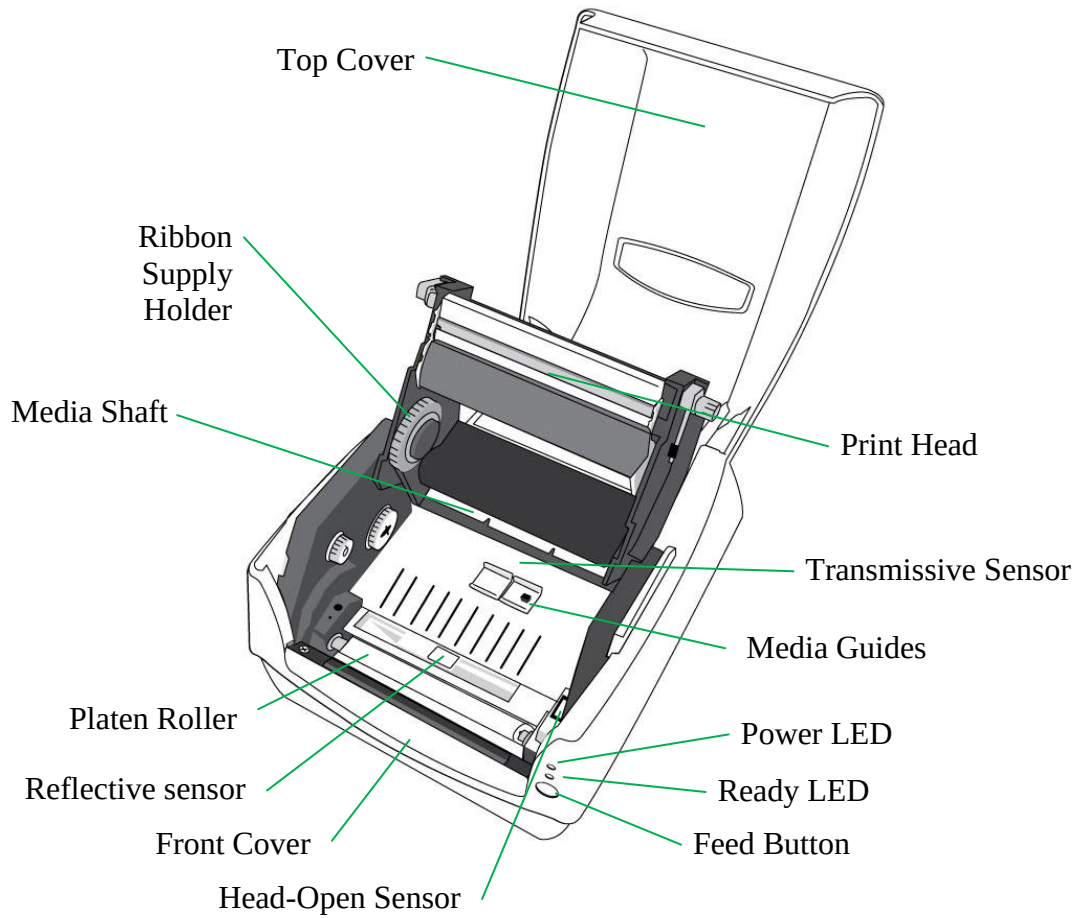


CP Series



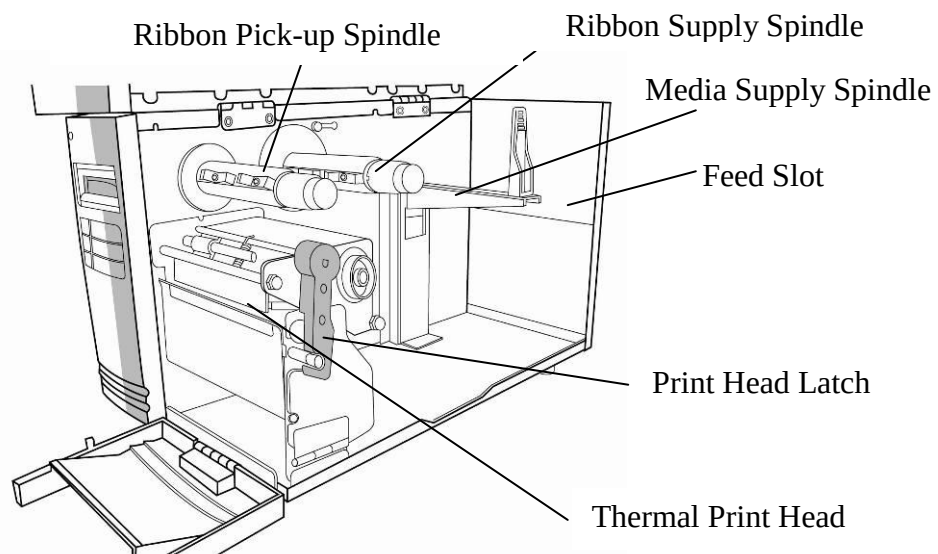
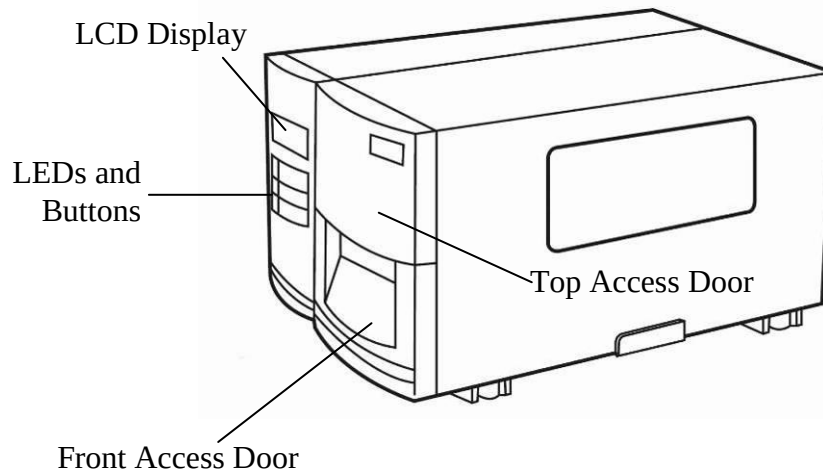


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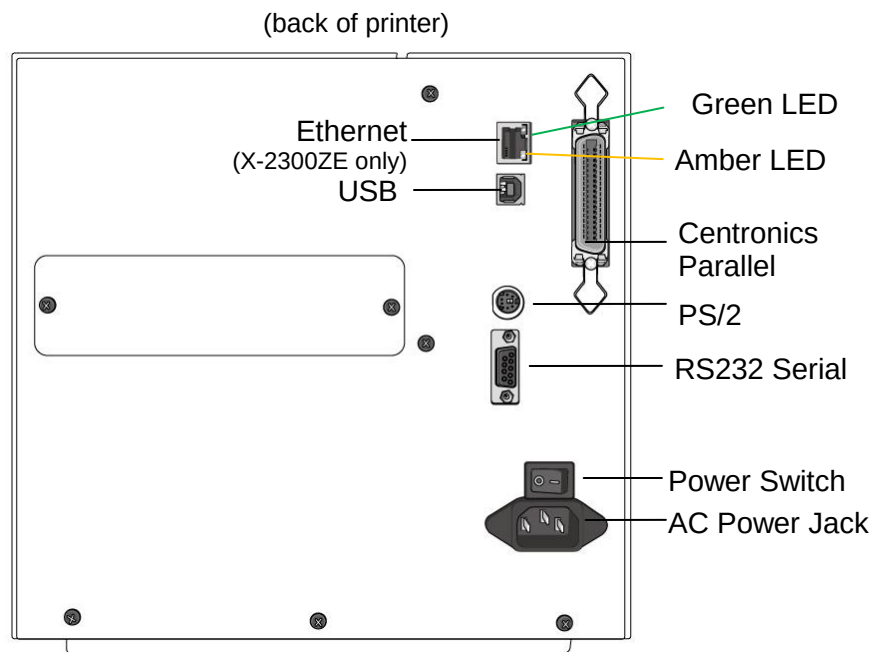
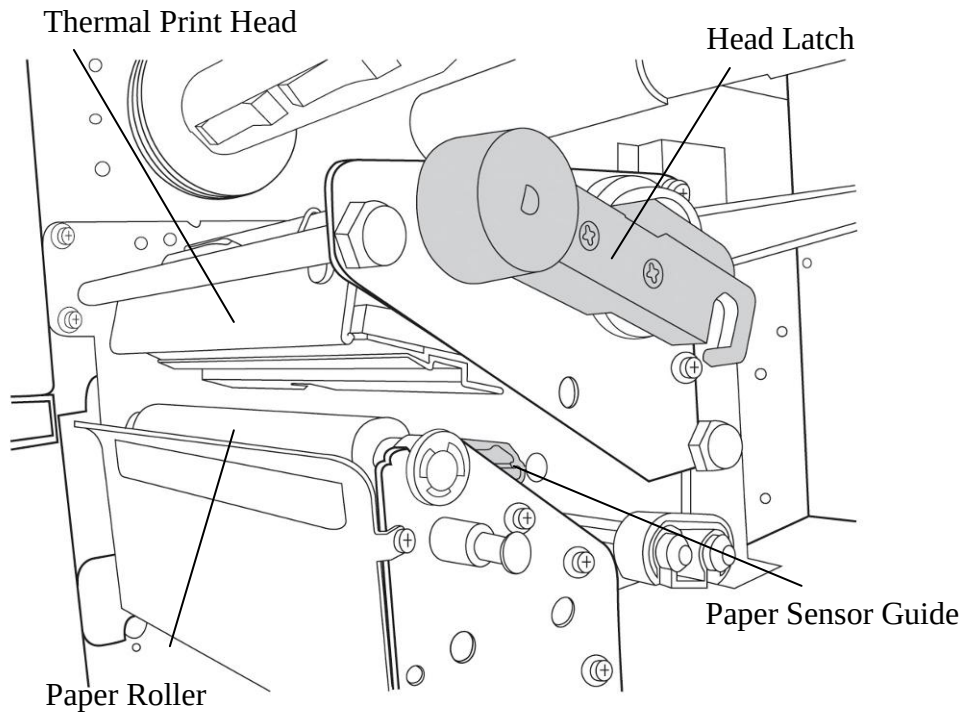


X Series





X Series (cont.)





4 Key Selling Points

The best selling point of SATO's Value Line is in the name – Value! All Value Line printers have an attractive price rarely seen for quality printers with all the features offered by the OS Series, CP Series, and X Series. Specific product features are outlined in the following sections to highlight the value these printers offer.

4.1 Durability

The OS Series and CP Series printers have a high-impact ABS housing and all-metal print mechanism to assure dependable performance. The X Series printers take industrial design to the next level with an all-metal housing for harsh environments. Just like all SATO printers, customers can be confident knowing the printers are made to last.

4.2 Emulations

Three of the most popular thermal language emulations are available for SATO's Value Line of printers:

PPLA – DPL emulation

PPLB – EPL II emulation

PPLZ – ZPL II emulation

These emulations make it easy to integrate the printers for any customer using DPL, EPL, or ZPL print language. The Value Line printers can also be phased in to an existing fleet of printers without using different software or commands to print. A breakdown of the emulation(s) included with each model is listed below:

Printer Model	Emulation
OS-2140DZ	PPLZ
OS-214plus	PPLA/PPLB
CP-2140Z	PPLZ
X-2000V	PPLA/PPLB
X-2000V Zip	PPLZ
X-2300ZE	PPLZ

4.3 Interface Connectivity Options

SATO's Value Line has flexible communication ports to meet any need. A breakdown of the interface options by model are listed below:

Printer Model	USB	RS-232 Serial	Parallel	Ethernet
OS-2140DZ	Yes	Yes	No	No
OS-214plus	Yes	Yes	Yes	No
CP-2140Z	Yes	Yes	Yes	No
X-2000V	Yes	Yes	Yes	No
X-2000V Zip	Yes	Yes	Yes	No
X-2300ZE	Yes	Yes	Yes	Yes

4.4 Media and Ribbon Loading

All Value Line printers are engineered for ease-of-use, and loading labels and ribbons is no exception. Instructional videos for loading media and ribbons can be found on the web:

OS Series:

CP Series:

X Series:

Label auto detection features align the labels after loading is complete, so operators don't need to worry about manual calibration.

4.5 Bi-Directional Ribbon Capability

The ribbon drive system of the CP Series and X Series printers are designed to accommodate both coated-side-in (CSI) and coated-side-out (CSO) ribbons. This design element allows users a greater selection of ribbon materials and supply sourcing options.



4.6 Modular Design

All Value Line printers continue SATO's strong history of serviceability. The platen rollers and print heads can be replaced in less than 5 minutes. In fact, the OS-2140DZ printers can be entirely disassembled by removing just 8 screws. The modular design allows parts assemblies to be quickly and easily replaced, and also provides flexibility for installing options and accessories as needed.

4.7 Accessories

All Value Line printers can have an optional cutter installed to precisely cut individual label and tag stocks as they are printed.

A Real Time Clock comes standard with the X-2300ZE, and can be added to all other Value Line models upon request. The clock/calendar enables users to print an accurate time and/or date on the labels.



SATO's External Label Unwinder can be used with any printer with a fanfold slot. However, it was designed for the OS Series and CP printers to accommodate label rolls up to 8.5" in diameter.



The X Series printers have a dispenser option for customers who apply the labels as soon as they're printed. The dispenser presents each printed label removed from the liner for ready application. The X Series printers can also have an integrated liner take up that allows efficient and safe rewinding of the backing material from dispensed labels.

4.8 CP-2140Z Ribbon Capacity

The CP-2140Z printers were designed to print higher volumes than similar desktop models. The ability to hold 300M rolls of thermal ribbons cuts the downtime due to roll changes by more than half. Use 300M ribbons and larger label rolls with the external label unwinder for maximum efficiency. The CP-2140Z printers can also use ribbons wound in or out, so customers can standardize what they use with other tabletop printers.

4.9 CP-2140Z Label Detection Sensors

The CP-2140Z printers have a fixed center transmissive sensor for detecting gaps between labels/tags and a movable reflective sensor for detecting black marks. This adjustable dual-sensor system provides greater flexibility to accommodate diverse media and applications.



4.10 X Series LCD Display and User Interface

The X Series printers' front panel includes:

- 3 LED indicators (READY, MEDIA, and RIBBON)
- 3 buttons (FEED/Config., PAUSE/Calibr., CANCEL/Reset)
- LCD Display



The multi-function operation panel and LCD screen makes installation, configuration, and operation simple and convenient. The LCD screen can also display information in Spanish, French, German, Italian, Portuguese, or Simplified Chinese.

Changing settings, managing print jobs, recovering from errors, and diagnostic updates can all be performed without a PC.

4.11 X Series Label Detection Sensors

The X Series printers have a movable transmissive sensor for detecting gaps between labels/tags and a movable reflective sensor for detecting black marks. This adjustable dual-sensor system provides greater flexibility to accommodate diverse media and applications.



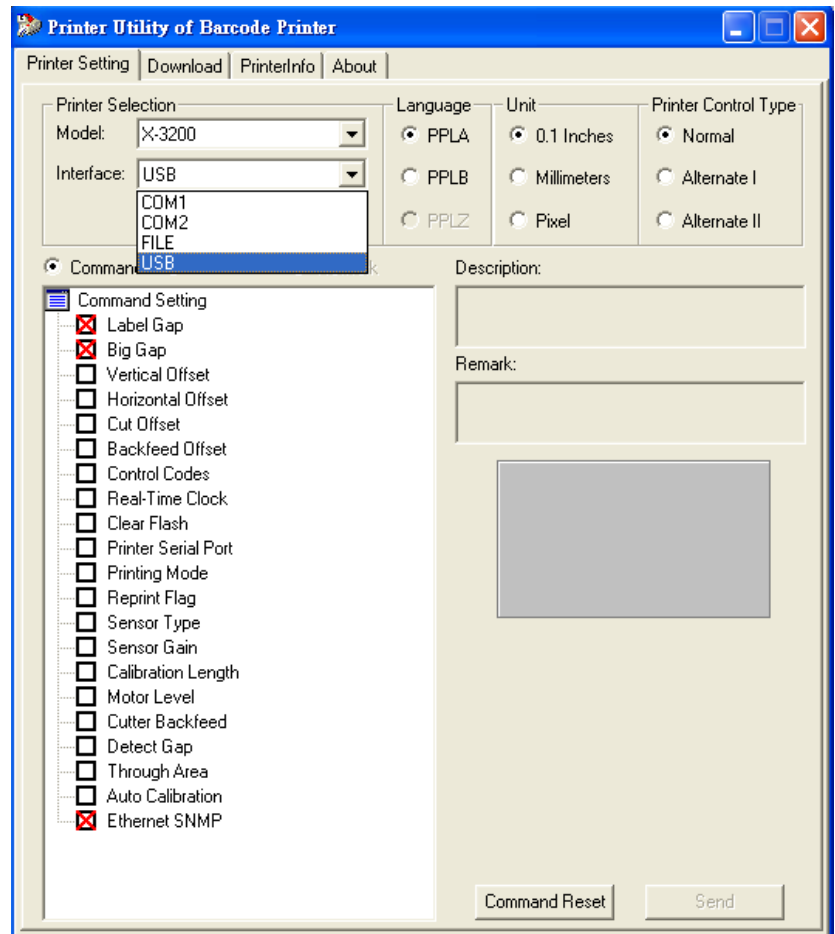
5 Software / Applications

Multiple software packages are included with each Value Line printer, and they are also available for download from SATO's website.

Printer Utility

The Argox Printer Utility has a simple GUI interface and allows users to:

- Update printer configuration settings
- Perform Self Tests
- Perform media calibration
- Download/update firmware



Font Utility

Windows True Type Fonts can be downloaded and stored in the printer's memory using the Font Utility. The ability to recall a large variety of fonts provides flexibility and helps meet the needs of customers with specific requirements.

Bartender UltraLite

Bartender is one of the world's most popular label design software packages, and SATO offers a free Argox-only edition. Label formats can easily be designed with Bartender UltraLite, and the free version allows an unlimited number of labels to be printed.

Advanced features can be tried for 30 days. If required or desired, customers can purchase the full retail edition upon expiration.

Drivers

Windows drivers (Seagull Scientific) are also included and available for download for every Value Line printer.



6 Printer Specifications

OS Series

Specification	OS-2140DZ	OS-214plus
Printing method	Direct Transfer	Direct Transfer/Thermal Transfer
Printing resolution	203 dpi (8dots/mm)	
Printing speed	Up to 4ips (102mm/s)	2~3ips(51~76mm/s)
Printing length	Max 100" (2540mm)	Max 43"(1092mm)
Printing width	Max 4.16" (105mm)	
Memory	8MB DRAM(6MB user available) 4MB Flash ROM(2MB user available)	
CPU type	32 bit RISC microprocessor	
Media sensor	Reflective x 1	
Operation interface	LED indicator(Power/Ready)x2, Button(Feed)x1	
Communication Interface	RS-232(Baud rate 2400 ~ 115200 bps), USB(2.0)	Centronics Parallel, RS-232(Baud rate 2400 ~ 115200 bps), USB(2.0)
Fonts	Internal character sets standard 5 alpha-numeric fonts from 0.049"H ~ 0.23" H (1.25mm ~ 6.0mm) Internal fonts are expandable up to 24x24 4 direction 0 ~ 270 rotation Soft fonts are downloadable	
Emulation	PPLZ	PPLA/PPLB
Software-Label editing	Windows Driver (Win 2003/XP/Vista/Windows 7) BarTender	
Software-Utility	Printer Utility, Font Utility	
Media Type	Roll-feed, die-cut, continuous, fan-fold, tags, ticket in thermal paper or plain paper and fabric label	
Media	Max Width:4.33"(110mm) Min Width:1"(25.4mm) Thickness:0.0025"~0.01"(0.0635~0.254mm) Max roll capacity(OD):4.3"(109mm) Core size:0.5"(12.7mm) (1"(25.4mm) optional)	
Ribbon	N/A	Ribbon Width: 1"~4" Ribbon roll – max OD: 1.45"(37mm) Ribbon Length: max 92m Core size – ID: 0.5"(13mm) with notch Wax, Wax/Resin, Resin (Outside Ribbon)
Dimensions	W 186mm x H 153mm x L 278mm	
Weight	2.0kgs	
Power Source	Universal Switching Power Supply Input: 100V~240V, 1.5A, 50~60Hz, Output: 24VDC, 2.4A	
Operation Environment	Operation Temperature: 40°F~100°F (4°C~38°C), 10% ~ 90% non-condensing, Storage Temperature: -4°F~122°F (-20°C~50°C)	
Optional Items	Cutter, label unwinder, RTC Card, 2MB Asian Font Card (Traditional Chinese, Simplified Chinese, Korean and Japanese)	
Agency Listing	CE, FCC, cTUVus, CCC, 	



1D Barcodes	<u>PPLZ:</u> Code 39 (standard/with check-sum digit), Code 93 Interleaved 2 of 5 (standard/with checksum digit/with human readable check digit), EAN-8, EAN-13, UPC-A, UPC-E, Postnet, Codabar, Code 128 subset A/B/C, Code 128 Auto, UPC/EAN-Extension, Plessey, Industrial 2 of 5, Standard 2 of 5, Logmars, MSI, Code 11, GS1 DataBar	<u>PPLA:</u> Code 39, Code 93, Code 128/subset A/B/C, Codabar, Interleaved 2 of 5, UPC A/E/2/5 add-on, EAN-13/8, UCC/EAN 128, Postnet, Plessey, Interleaved 2 of 5, Interleaved 2 of 5 with a modulo 10 checksum, Interleaved 2 of 5 with a modulo 10 checksum and shipping bearer bars, Code 128, UCC/EAN Code 128 Random Weight, HBIC, Telepen, FIM <u>PPLB:</u> Code 39, Code 93, Code 128/ subset A,B,C, Codabar, Interleaved 2 of 5, Interleaved 2 of 5 with check sum digit, Interleaved 2 of 5 with human readable check digit, Matrix 2 of 5, UPC A/E 2 and 5 add-on, EAN-8/13, Code 128UCC, UCC/EAN, Postnet
2D Barcodes	<u>PPLZ:</u> MaxiCode, PDF417, Data Matrix (ECC 200 only), QR code, Composite codes	<u>PPLA:</u> PDF-417, MaxiCode, Data Matrix (ECC200 only), QR Code, Composite codes <u>PPLB:</u> MaxiCode, PDF-417, QR Code, Composite codes
Graphic	<u>PPLZ:</u> GRF, Hex and GDI	<u>PPLA:</u> PCX, BMP, IMG, HEX, GDI <u>PPLB:</u> PCX, Binary raster, GDI



CP Series

Specifications	CP-2140Z
Printing Method	Direct Thermal / Thermal Transfer
Printing Resolution	203 dpi(8 dots/mm)
Printing Speed	2~4ips (50.8~101.6mm/s)
Printing Length	Max 100"(2540mm) Min 0.2"(5mm)
Printing Width	Max 4.1"(104mm)
Memory	8MB DRAM (5MB user available) 4MB Flash ROM (2MB user available)
CPU Type	32 bit RISC microprocessor
Sensors	Media Reflective sensor x 1 (movable) & Media Transmissive sensor x 1 (Center fixed) / Head open switch / Ribbon end sensor
Operation Interface	LED indicator (Power/Ready)x 2, Button(Feed) x 1
Communication Interface	Parallel, RS-232(Baud rate: 2400~115200 bps), USB
Emulation	PPLZ
Software - Label editing	Seagull Driver, BarTender
Software – Utility	Printer Utility, Font Utility
Media Type	Roll-feed, die-cut, continuous, fan-fold, tags, ticket in thermal paper or plain paper and fabric label
Media	Max Width:4.33"(110mm) Min Width:1"(25.4mm) Thick- ness:0.0025"~0.01"(0.0635~0.254mm) Max roll capacity(OD):5"(127mm) Core size:1"(25.4mm) / Max roll capacity(OD):4.5"(114.3mm) Core size:0.5"(12.7mm) (optional) / Max roll capacity(OD):4.72"(120mm) Core size:1.5"(38.1mm) (optional) Min Length: 0.79"(20mm) for rotary cutter option
Ribbon	Ribbon roll – max OD: 2.6"(67mm) Ribbon Length: max 300m Core size – ID: 1"(25.4mm) Ribbon Width: 1"~4", Wax, Wax/Resin, Resin (Ribbon wound ink-side out or ink-side in)
Dimensions	L 273mm x W 225mm x H 186mm
Weight	2.1kg
Power Source	Universal Switching Power Supply Input: 100~240V,1.8A, 50-60Hz, Output: 24VDC, 2.4A
Operation Environment	Operation Temperature: 40°F~100°F (4°C~38°C), 10% ~ 90% non-condensing, Storage Temperature: -4°F~122°F (- 20°C~50°C)
Optional Items	Cutter, RTC Card, label unwinder
Agency Listing	CE, FCC, cTUVus, CCC, RoHS
1D Barcodes	Code39, UPC-A, UPC-E, Postnet, Code128 subset A/B/C, Interleave 2 of 5, Interleaved 2 of 5 with check sum, Interleaved 2 of 5 with human readable check digit, Code 93, Code 39 with check sum digit, MSI, EAN-8, Codabar, Code 11, EAN-13, Plessey, GS1 Data bar (RSS), Industrial 2 of 5, Standard 2 of 5, Logmars
2D Barcodes	MaxiCode, PDF417, Data Matrix (ECC 200 only), QR code, Composite codes



X Series

Specification	X-2000V / X-2000V Zip	X-2300ZE
Printing Method	Direct Thermal and Thermal Transfer	
Printing Resolution	203 dpi (8 dots/mm)	
Printing Width	Max 4.09" (104mm)	
Printing Length	Max. 50" (1270 mm) Min 0.2" (5mm)	Max. 100" (2540 mm) Min .2" (5mm)
Printing Speed	2 ~ 6 IPS (51~152 mm/s)	
Memory	8MB DRAM (7MB User Available) 4MB Flash ROM (3MB User Available)	16 MB DRAM (13MB User Available) 8MBFlash ROM (6MB User Available)
CPU Type	32 bit RISC CPU	
Sensors	Reflective & See-through media sensors (movable) Head open switch Ribbon end sensor	
Display	LED indicator x 3, Button x 3, Back-lit LCD Display 16 x 2-line, Multilingual	
Communication interfaces	Centronics parallel, RS-232 serial, USB, PS/2 interface, Ethernet 10/100MB (X-2300E)	
Media Types	Roll-feed, die-cut, continuous, fan-fold, tags, ticket in thermal paper or plain paper, fabric labels	
Media	Max. media width: 4.4" (112mm) Min. media width: 1" (25.4 mm) Media thickness: 0.0025"~0.01"(0.0635mm~0.254mm) 8"(203mm) OD on a 3"(76mm) ID core 7"(177.8mm) OD on a 1.5"(38mm) ID core Min Length: 0.79"(20mm) for rotary cutter option	
Ribbon	Wax, Wax/Resin, Resin (ribbon wound ink-side out or ink-side in available)	
Ribbon Size	Ribbon width: 1"~4"(25.4 mm~101.6 mm) Ribbon Length: max 360m Wax, 300m Semi-Resin Ribbon roll max OD 3" (76 mm) Core size ID 1"(25.4 mm)	
Compact Size	W250 x L418 x H263 mm	
Weight	24lbs(11kgs)	
Power Source	100~240 VAC, 50/60 Hz, internal universal power supply	
Operation Environment	Operating Temperature 40° F~100°F (4°C~38°C), 10% ~ 90% non-condensing, Storage Temperature -4°F~122°F (-20°C~50°C)	
Driver Operating Systems	Win XP/ Vista/ Windows 7	
Printer Languages	X-2000V: PPLA, PPLB X-2000V Zip, X-2300ZE: PPLZ	



Real Time Clock (RTC)	Optional	Standard (Battery for RTC: Type CR2032, +3V, 225mAh)
Options and Accessories	Cutter Dispenser Rewinder Label Unwinder RTC Font card (Simplified Chinese, Traditional Chinese, Japanese, Korean)	Cutter Dispenser Rewinder Label Unwinder
Agency Listing	CE, cULus, FCC class A, CCC, S-Mark, RoHS	
1D Barcodes	PPLA: Code 39, UPC-A, UPC-E, Code 128 subset A/B/C, EAN-13, EAN-8, HIBC, Codabar, Plessey, UPC2, UPC5, Code 93, Postnet, UCC/EAN, Code 128 K-MARK, UCC/EAN Code 128 Random, Telepen, FIM, UCC/EAN code 128, Interleave 2 of 5 (Standard/with checksum/with human readable check digit), GS1 Data bar (RSS) PPLB: Code 39, UPC-A, UPC-E, German Postnet, Matrix 2 of 5, UPC-Interleaved 2 of 5, Code 39 with check sum digit, Code 93, EAN-13, EAN-8 (Standard, 2 /5digit add-on), Codabar, Postnet, Code128 subset A/B/C, Code 128 UCC (shipping container code), Code 128 auto, UCC/EAN code 128 (GS1-128), Interleave 2 of 5, Interleaved 2 of 5 with check sum, Interleaved 2 of 5 with human readable check digit, German Postcode, Matrix 2 of 5, UPC Interleaved 2 of 5, EAN-13 2/5 digit add-on, UPCA2/5 digit add-on, UPCE 2/5 digit add-on, GS1 Data bar (RSS) PPLZ: Code39, UPC-A, UPC-E, Postnet, Code128 subset A/B/C, Interleave 2 of 5, Interleaved 2 of 5 with check sun, Interleaved 2 of 5 with human readable check digit, Code 93, Code 39 with check sun digit, EAN-8, Codabar, EAN-13, Plessey, GS1 Data bar (RSS)	
2D Barcodes	PPLA/PPLB/PPLZ: MaxiCode, PDF417, Data Matrix (ECC 200 only), QR code, Composite codes	



7 Competitive Comparisons

	OS-2140DZ	TDP-245plus	EX2	B-SV4D
Model				
List Price	\$349	\$475	\$520	\$548
Flash memory	4MB	2MB	2M	1M
DRAM/ SRAM	8MB (S)	8MB (D)	2M (D)	2M (D)
Max Length (Inch)	100"	90"	11"	24"
Max width (inch)	4"	4"	4"	4"
Speed (IPS)	Up to 4"	5"	3"	Up to 5"
Media Max Width (mm)	4.16"/ 105mm	4.25"/ 108mm	4.12"/ 105mm	4.25"/ 108mm
Communication interface	x Serial RS-232 USB x	Parallel Serial RS-232 USB Ethernet (optional)	Parallel Serial RS-232 x x	Parallel Serial RS-232 USB Ethernet (optional)

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	OS-2140DZ	LP-2844	GK 420d
Model			
List Price	\$349	\$575	\$595
Flash memory	4MB	512K	4M
DRAM/ SRAM	8MB (S)	256K (S)	8M (S)
Max Length (Inch)	100"	11"	90"
Max width (inch)	4"	4"	4"
Speed (IPS)	Up to 4"	4"	5"
Media Max Width (mm)	4.16"/ 105mm	4.25"/ 108mm	4.25"/ 108mm
Communication interface	x Serial RS-232 USB x	Parallel Serial RS-232 USB Ethernet (optional)	x Serial RS-232 USB Ethernet (optional)



	0S-214plus	GK 420t	GX 420t	TLP 2844-Z
Model				
List Price	\$399	\$695	\$795	\$795
Flash memory	4M	4M	4M	4M
DRAM/ SRAM	8M (D)	8M (S)	8M (S)	8M(D)
Max Print Length	43"	39"	39"	39"
Print width	4"	4"	4"	4"
Speed (IPS)	3	5	6	4
Media Max Width	4.25"/ 108mm	4.25"/ 108mm	4.25"/ 108mm	4.25"/ 108mm
Ribbon Max Length	91M	74M	74M	74M
Communication inter- face	Parallel Serial RS-232 USB ×	× Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB Ethernet

Continued on next page



	0S-214plus	TTP-244	TTP-243 Plus	TTP-245 Plus
Model				
List Price	\$399	\$400	\$465	\$525
Flash memory	4M	2M	2M	2M
DRAM/ SRAM	8M (D)	2M (D)	2M (D)	8M (D)
Max Print Length	43"	40"	40"	90"
Print width	4"	4"	4"	4"
Speed (IPS)	3	Up to 4	3	5
Media Max Width	4.25"/ 108mm	4.49"/ 114mm	4.49"/ 114mm	4.49"/ 114mm
Ribbon Max Length	91M	300M	300M	300M
Communication interface	Parallel Serial RS-232 USB x	Parallel (Optional) Serial RS-232 USB x	Parallel Serial RS-232 x x	Parallel Serial RS-232 USB x



	CP-2140Z	TTP-244Plus	E-4204B	B-SV4T
Model				
List Price (USD)	\$429	\$400	\$595	\$625
Flash memory	4M	2M	64M	2M
DRAM/ SRAM	8M	8M	16M	2M
Max Length (Inch)	100"	90"	99"	39"
Max width (inch)	4.1"/ 104mm	4"	4"	4"
Speed (IPS)	Up to 4ips	4ips	4ips	Up to 5ips
Media Max Width	4.3"/ 110mm	4.49"/ 14mm	4.4"/ 112mm	4.4"/ 112mm
Ribbon Max Length	300M	300M	300M	300M
Communication interface	Parallel Serial RS-232 USB X	Parallel (Optional) Serial RS-232 USB x	x Serial RS-232 USB Internal Ethernet (Optional)	Parallel Serial RS-232 USB Internal Ethernet (Optional)

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	CP-2140Z	PF8t	EZ-1200 plus	CLP-S621
Model				
List Price (USD)	\$429	\$645	\$650	\$675
Flash memory	4M	4M	4M	4M
DRAM/ SRAM	8M	8M	8M	8M
Max Length (Inch)	100"	68"	68"	68"
Max width (inch)	4.1"/ 104mm	4"	4"	4"
Speed (IPS)	Up to 4ips	Up to 4ips	4ips	4sip
Media Max Width	4.3"/ 110mm	4.65"/ 118mm	4.64"/ 118mm	4.64"/ 118mm
Ribbon Max Length	300M	300M	300M	300M
Communication interface	Parallel Serial RS-232 USB X	Parallel Serial RS-232 USB x	Parallel Serial RS-232 USB Internal Ethernet (Optional)	Parallel Serial RS-232 USB Internal Ethernet (Optional)



Model	X-2000V X-2000V Zip	PD41	S4M	B-SX4T	M-4208
					
List Price(USD)	\$899	\$1195	\$1245	\$1411	\$1495
Flash memory	4M	4M	4M	4M	2M
DRAM/ SRAM	8M (S)	8M (D)	8M (D)	8M (D)	4M (D)
Max Length (Inch)	50"	59.8"	157"	59"	99"
Max width (inch)	4.1" /104mm	4"	4"	4"	4"
Speed (IPS)	6	6	6	10	6
Media Max Width (mm)	4.3"/ 110mm	4.6"/ 118mm	4.5 "/ 114mm	4.6"/ 118mm	4.6"/ 118mm
Ribbon Max Length (mm)	360mm	450mm	450mm	450mm	450mm
Communication interface	Parallel Serial RS-232 USB x	Parallel Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB x	Parallel Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB x



	X-2300ZE	PD42(E)	TTP-246M Plus(E)	M-4206 Mark II(E)	S4M(E)
Model					
List Price(USD)	\$1149	\$1345	\$1390	\$1454	\$1544
Flash memory	8M	8M	4M	4M	4M
DRAM/ SRAM	16M	16M	8M	8M	8M
Max Length (Inch)	100"	59.8"	90"	99"	157"
Max width (inch)	4"	4"	4"	4"	4"
Speed (IPS)	6	6	Up to 8	6	6
Media Max Width (mm)	4.3"/ 110mm	4.64"/ 118mm	4.64"/ 118mm	4.64"/ 118mm	4.5"/ 114mm
Ribbon Max length	360M	450M	600M	450M	450M
RTC	Built-in	optional	optional	X	optional
Communication interface	Parallel Serial RS-232 USB Ethernet	Parallel (optional) Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB Ethernet	Parallel (optional) Serial RS-232 USB Ethernet

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	X-2300ZE	EZ-2200 Plus(E)	CLP-7201(E)	B-SX4(E)
Model				
List Price(USD)	\$1149	\$1699	\$1842	\$2395
Flash memory	8M	4M	1M	4M
DRAM/ SRAM	16M	16M	2M	8M
Max Length (Inch)	100"	180"	32"	59"
Max width (inch)	4"	4"	4"	4"
Speed (IPS)	6	7	7	10
Media Max Width (mm)	4.3"/ 110mm	4.64"/ 118mm	4.64"/ 118mm	4.6"/ 118mm
Ribbon Max length	360M	450M	360M	450M
RTC	Built-in	Built-in	optional	X
Communication interface	Parallel Serial RS-232 USB Ethernet	X Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB Ethernet	Parallel Serial RS-232 USB (optional) Ethernet



8 Target Markets and Applications

The OS Series and CP Series printers are ideal for lower to mid volume printing. The following vertical markets and applications should be considered:



- *Retail Tag*
- *Shelf labeling*
- *Price marking*
- *Banking*



- *Logistic labeling*
- *Packing*
- *Inventory labeling*
- *Utilities*



- *Work in process*
- *Parts marking*
- *Product labeling*
- *Compliance labeling*
- *Pallet labeling*
- *Electronics parts labeling*
- *Materials Management*



- *Invoicing*
- *Document Printing*



- *Quotation printout*
- *File/Folder labeling*
- *Stationeries labeling*
- *Assets tracking*



- *Shipping & receiving*
- *Postal & mailing*
- *Luggage labeling*



- *Patient tracking*
- *Laboratory specimen labeling*
- *Pharmacy labeling*
- *Healthcare Materials Management*
- *Hospitals*



- *Check-in*
- *Education and Libraries*

The X Series printers are ideal for higher volume printing and industrial environments. The following vertical markets and applications should be considered:



- *Retail Tag*
- *Shelf labeling*
- *Price marking*



- *Logistic labeling*
- *Cargo tracking*
- *Packing*
- *Inventory labeling*
- *Utilities*



- *Work in process*
- *Parts marking*
- *Product labeling*
- *Compliance labeling*
- *Pallet labeling*
- *Electronics parts labeling*
- *Fabric label/Textiles*
- *Materials Management*



- *Assets tracking*



- *Shipping & receiving*
- *Luggage labeling*



- *Patient tracking*
- *Laboratory specimen labeling*
- *Pharmacy labeling*
- *Healthcare Materials Management*
- *Hospitals*



- *Education and Libraries*



9 Warranty and Maintenance Information

9.1 Standard Warranty

All Argox by SATO Value Line printers have a 2 year return to factory warranty. Warranty of Printheads, Spare Parts, Platen Rollers, Cutters, etc. are defined on the SATO America website "Global Warranty" section. For more info, visit <http://www.satoamerica.com/sato-service/warranty.aspx>.

9.2 Service Contract Options

Extended Warranties and Factory Service Contracts are available for all SATO Value Line printers.

The extended warranty is simply a service contract purchased at the time the printer is purchased or within 60 days of the original purchase date from SATO America. The extended warranty purchase provides a full three year warranty – 2 year manufacturer warranty + 1 year extended warranty. Extended warranties are available with or without thermal printhead coverage.

Factory service contracts are contracts purchased 61+ days after the units original purchase date. Service contracts are available in 1-year and 2-year terms with a renewal option at the end of the original contract term. Optional printhead coverage is available at an additional cost.

For mission critical X Series printers, SATO also offers onsite service contracts to get the printers up and running again as soon as possible. Onsite response times are available within 4 hours, next business day, or 2 business days.

For mission critical OS Series and CP Series printers in the United States, SATO offers a Spare-In-The-Air program for large install bases. A fully tested, working replacement printer will be shipped within 24 hours (business days only), and the customer simply returns the non-functioning one back for repair.

Service contracts provide the following benefits to resellers and end users:

- Fixed annual service costs for improved internal budgeting
- Unlimited repairs for the duration of the contract
- Guaranteed turnaround time of 5 days or less from date of receipt (factory service)
- Optional printhead coverage provides one printhead per printer per year at no charge
- Free preventative maintenance
- Free mechanical updates (hardware improvements)
- Free firmware upgrades when requested in writing
- Guaranteed use of genuine SATO parts
- Guaranteed factory service standards
- Fully warranted repairs

For complete details regarding SATO extended warranties and service contracts, including terms and conditions, please visit the SATO America website at www.satoamerica.com and click on "SATO Service" or contact either your Regional Manager or your SATO America customer service representative.



Value Line Price List

SATO, synonymous with trusted dependability, brings a new line of Value to market. Three innovative printer lines engineered and manufactured to fulfill the thermal printing demands of today's fast growing industries. Unique in their features, yet united in their dependability, the CP Series, the OS Series and the X Series boast industry-leading distinction in style, price and performance.

SATO Value Line Pricing		ITEM #	LIST
OS-214plus TT 4.1", 203 dpi, USB/Parallel/RS232	• Competitive Emulations E & D	99-21402-604	\$379.00
OS-2140DZ DT 4.1", 203 dpi, USB/RS232	• Competitive Emulation Z	99-20402-602	\$349.00
CP-2140Z 4.1", 203 dpi, USB/RS232	• Competitive Emulation Z	99-C2102-602	\$429.00
X-2000V TT 4.09", 203 dpi, USB/Parallel/RS232/PS2	• Competitive Emulations E & D	99-20002-601	\$899.00
X-2000V Zip TT 4.09" 203 dpi, USB/Parallel/RS232/PS2	• Competitive Emulation Z	99-20002-602	\$949.00
X-2300ZE TT 4.09", 203 dpi, Ethernet/USB/RS232/PS2, W/RTC	• Competitive Emulation Z	99-20002-604	\$1,149.00

SATO Value Line Print Head Pricing	ITEM #	LIST
OS Series Thermal Print Head	23-82424-004	\$119.00
CP-2140Z Thermal Print Head	59-C21A2-001	\$119.00
X-2000V/X-2000VZip/X-2300E Thermal Print Head	59-F10A1-001	\$385.00

SATO Value Line Accessory Pricing	ITEM #	LIST
Media Unwinder (OS/CP/CG Series Printer models)	59-C2103-001	\$29.00
Real Time Clock (OS/CP/XV Series Printer models) factory installed	55-20011-021	\$149.00
Memory Add-on Card (OS/CP/X2000V/X2300ZE) factory installed	55-20011-081	\$99.00
Rotary Cutter (OS-214Plus/OS2140DZ) factory installed	59-21404-011	\$199.00
Rotary Cutter (CP Series) factory installed	59-C2102-002	\$199.00
Rotary Cutter (X2000V/X2300ZE) factory installed	59-20001-011	\$299.00
Guillotine Cutter (X2000V/X2300ZE) factory installed	59-20007-001	\$199.00
Heavy Duty Rotary Cutter (X2000V/X2300ZE) factory installed	59-20012-001	\$499.00
Dispenser (X2000V/X2300ZE) factory installed	59-20003-012	\$109.00
Internal Label Rewind Option (X2000V/X2300ZE) factory installed	59-20005-002	\$159.00

Warranty Period - all Argox by SATO printers have a 2 year return to factory warranty - Warranty of Print Heads, Spare Parts, Platen Rollers, Cutters, etc. are defined on the SATO America website "Global Warranty" section





Value Line Onsite Service Plans

Definitions:

New Equipment: New Equipment is defined as a unit less than 60 days old

Existing Equipment: Existing Equipment is defined as a unit more than 60 days old

STD: Standard 2 business day response

NBD: Next business day response

Options: Options include: external rewind, external Ethernet, cutter, stacker, coax/ twinax, RFID etc. and are covered for an additional charge in addition to the cost of the contract

	List			SKU	Models Included	
NEW EQUIPMENT	Onsite Standard (2 business days)					
	SATO	1 YEAR	\$115	SATO-OSMC-NEW-12	CP-2140Z, OS-214plus, OS-2140DZ, X-2000V, X-2000V Zip, X-2300ZE	
	SATO	2 YEAR	\$424	SATO-OSMC-NEW-24		
	SATO	3 YEAR	\$680	SATO-OSMC-NEW-36		
	Onsite Next Business Day					
	SATO	1 YEAR	\$133	SATO-OSND-NEW-12		
	SATO	2 YEAR	\$487	SATO-OSND-NEW-24		
	SATO	3 YEAR	\$782	SATO-OSND-NEW-36		
	Onsite Same Business Day					
	SATO	1 YEAR	\$177	SATO-OSBD-NEW-12		
	SATO	2 YEAR	\$649	SATO-OSBD-NEW-24		
	SATO	3 YEAR	\$1,043	SATO-OSBD-NEW-36		
EXISTING EQUIPMENT ONE YEAR	Onsite Standard (2 business days)					
	SATO	CLASS 1	\$393	OSST-SATOCLS1		
	Onsite Next Business Day					
	SATO	CLASS 1	\$462	ONBD-SATOCLS1		
	Onsite Same Business Day					
	SATO	CLASS 1	\$616	OSBD-SATOCLS1		
EXISTING EQUIPMENT TWO YEAR	Onsite Standard (2 business days)					
	SATO	CLASS 1	\$767	OSST-SATOCLS1-24		
	Onsite Next Business Day					
	SATO	CLASS 1	\$931	ONBD-SATOCLS1-24		
EXISTING EQUIPMENT THREE YEAR	Onsite Standard (2 business days)					
	SATO	CLASS 1	\$1,121	OSST-SATOCLS1-36		
	Onsite Next Business Day					
	SATO	CLASS 1	\$1,317	ONBD-SATOCLS1-36		

PRINTER OPTION/ADD-ONS	List		SKU	Models Included
NEW OR EXISTING	Option Coverage	1 YEAR	\$82 SATO-PRT-ACC-12	Option Coverage for 12 months
	Option Coverage	2 YEAR	\$165 SATO-PRT-ACC-24	Option Coverage for 24 months
	Option Coverage	3 YEAR	\$247 SATO-PRT-ACC-36	Option Coverage for 36 months

Notes:

- Options are considered: Cutters, RTC, Dispenser, and Internal Rewinder
- Option prices are good for both standard and next business day barcode contracts
- Option prices are per option, per year and in addition to the cost of the contract
- End of Service Clause:** Should a printer model no longer be supported, some components may no longer be available. SATO America will place this model under agreement with the understanding that in the event that a repair is needed in which the part(s) are no longer available, the remainder of the contract will be credited at that time. The credit will be based on a pro-rated amount.

**For more information email sales@satoamerica.com
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About LOGISCENTER

Logiscenter is the leading provider of automatic identification and data capture equipments. Our products include barcode printing and reading devices, mobile computing devices, wireless access points, identification cards, and consumables.

Reasons to work with us

Our customers come first. Our objective is not only selling our products but also holding a long-lasting relationship with our customers, based on the benefits and advantages we create for you and your company.

The best brands. We offer products from the best manufacturers worldwide.

Expert technical support team. Our support staff are experts in the products we sell. But not just the products, they can tell you the best solution for your particular problem or need.

Largest stock. We have a permanent stock of more than 60,000 products.

Same-day shipping. For all orders placed and confirmed before 16:00 on working days.

Best prices. With Logiscenter, you can be sure that you are paying a fair price for your products, we will not overcharge you.

Easy returns. Damaged or defective products can be returned easily, for an exchange or reimbursement.



All Brands Technical Service

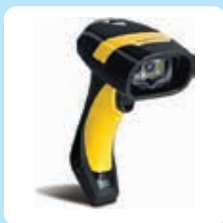
Our Brands



Solutions for: Industry • Consumer • Mobility Transportation and Logistics • Retail • Health



Label printers



Barcode readers



Data terminals & PDA



PVC card printers



RFID



Consumables
(labels, ribbons, PVC cards)