cab product marking

PX Series Print Module

Made in Germany.

The PX print and dispense module from cab

We aim to achieve:

Perfect functionality, high reliability, straightforward handling, minimum maintenance downtimes.

- The PX print and dispense module is designed for fully automated printing in industrial environments.
  The PX can be integrated in any installation position and solves even complex labeling tasks.
- A warp-resistant cast-aluminum design forms the frame for mounting of all the print components. The food safe coating and stainless steel facing supplement the perfect design with high-quality functionality. The unit is also compatible with competitor products.
- All print modules are available in either left-handed or right-handed versions with either 200, 300 and 600 dpi print resolution. They can be used for thermal transfer or thermal direct printing. A ribbon saver is also available.
- Individual parts or assemblies can be exchanged quickly and easily during maintenance or repair work.
- PX is equipped with all the current interfaces, such as RS 232, USB or Ethernet. The digital integration interface meets the highest demands.
- Data can be prepared in real time due to the fast 32-Bit processor and large RAM and Flash memories.
- Printing without a PC: in stand-alone mode, texts, graphics or printer-specific adjustments can be printed from the internal memory or a memory card.
- We ensure system compatibility and future-proof investments

Technical details

1 **Big graphic display**
White backlight for optimum readability.

2 **Navigator pad**
With illuminated lettering for interactive menu navigation.

3 **CF memory card**
Slot for CF memory card for storage of label formats, fonts, texts, graphics, programs or databases.

4 **USB slot**
Additional USB slot for service keys, keyboard, scanner or USB memory.

5 **Power switch**
Attached to the front for easier handling.

6 **Solid metal cover**
Made of die-cast aluminum with antibacterial coating.
All casings are made of stainless steel.

7 **Ribbon rewinder and unwinder**
The three-part tightening axles enable fast and easy ribbon exchange. Narrow ribbons can be fixed in any position.

8 **Ribbon saver**
Used for labels that are only to be partially printed. During label feed the printhead is lifted in the blank area and the ribbon is stopped.

9 **Back-feed**
Once a label has been dispensed, the next one can be fed back behind the print line to ensure it can be printed right to the edge and to prevent the liner from leaking adhesive during a longer pause. With very sensitive materials and to avoid ribbon folds, the printhead can be raised during this process.

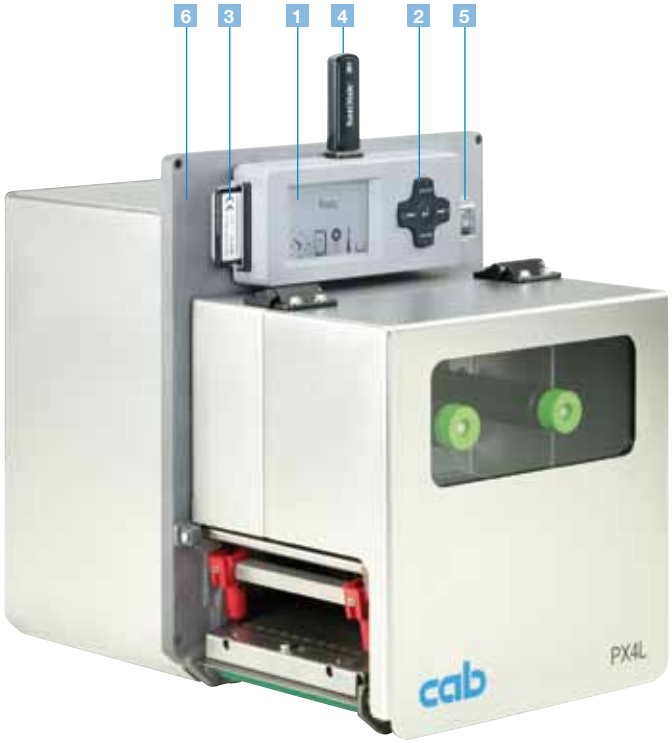
10 **Label sensor**
The gap or reflective sensor ensures the label is positioned precisely and identifies the end of the material – independent of gaps.

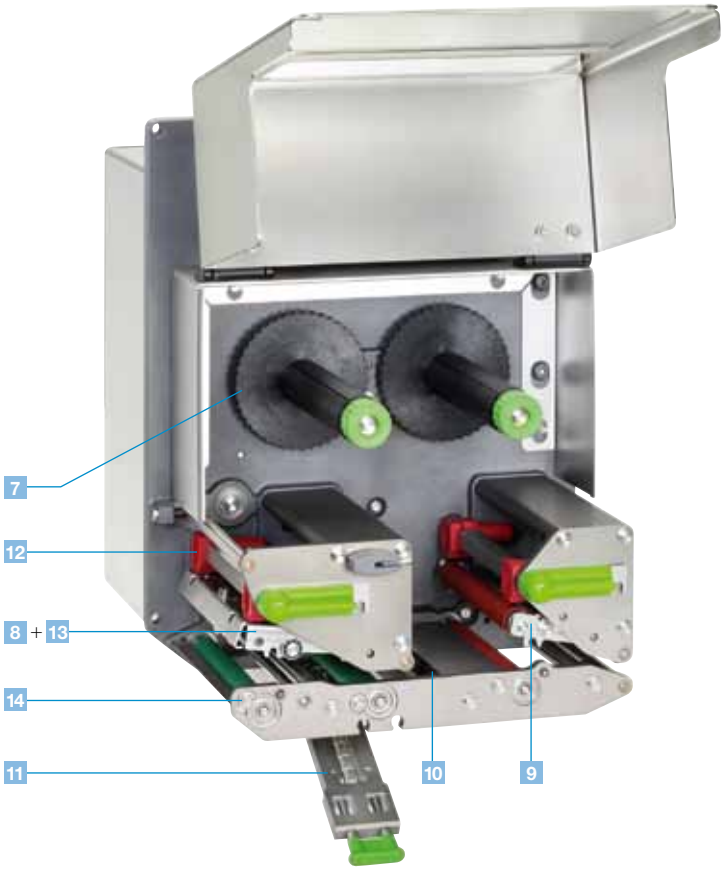
11 **Simple material replacement**
The label material is inserted edgewise up to the end position. The printhead and pressure roller are locked with locking levers.

12 **Adjustment of the print layout**
The pressure can be adjusted easily by moving the plungers.

13 **Fast printhead exchange**
The printhead can be exchanged and adjusted easily using the Allen key, which is ready to hand at the machine.

14 **Removing the print roller**
The print roller can be easily removed for cleaning or replacement.





Interfaces

1 RS232C interface
2 USB 2.0 slave interface
3 Ethernet 10/100 Base T interface with TCP/IP
4 Slot for wireless LAN card
5 Two USB master interfaces for connecting an external operation panel, keyboard, scanner or service key
6 Slot for CompactFlash Type I memory card
7 Digital I/O interface
25-pin SUB D socket
Each of the 24V inputs and outputs are electrically isolated

Inputs	Outputs
Label feed	Warning if end of ribbon
Repeat print run	Warning if end of label
Start printing	Paper feed ON
Pause	Print start
Label dispensed	Error end of ribbon
Cancel re-set with memory	Error end of label
Cancel re-set without memory	Print data available
	Operating status
	Label in dispensing position
	Error printer

8 OEM – digital I/O interface
15-pin SUB D socket
Each of the 5V inputs and outputs are electrically isolated

Inputs	Outputs
Label feed	Warning if end of ribbon
Repeat print run	Paper feed ON
Start printing	Error end of ribbon
Cancel re-set without memory	Error end of label
	Print data available
	Label in dispensing position
	Error printer

Options

› Centronics bi-directional interface acc. to IEEE 1284.
RS422/RS485 interface 1,200 up to 230,400 Baud/8 Bit.*
The interfaces are plugged into the PC.
Connection to the printer via mini USB connection cable.

› Label selection – I/O box.*
Up to 16 different labels can be loaded via PLC from a memory card. Operation of four inputs/outputs via Basic Interpreter.

› cab WLAN card 802.11 b/g.

Stand-alone operation

Printing with a cab printer without a PC.

The layout of the labels is created either using label software or through direct programming via a text editor on the PC. Label formats, fonts and graphic data, serial data and database contents are saved or imported on the CF memory card, USB flash drive or the internal IFFS printer memory.

Only variable data is sent to the printer via keyboard or host computer before being printed out. Data from a barcode scanner or a balance can also be received by the printer.

Accessories for stand-alone operation

Memory card
CompactFlash Type I

Compact keyboard
Connection: USB, number of keys: 86
L x W mm: 282 x 132
Cherry G84-4100

Device functionality and compliance with CE standards are only warranted by using the accessories provided or recommended by cab.

Technical data

Label printer			PX4			PX4.3[2]		PX6	
Printhead	Printing method		Thermal transfer / Thermal direct						
	Print resolution dpi		203	300	600	203	300	203	300
	Print speed up to mm / s		300	250	100	200	150	200	200
	Print width up to mm		104	105,6	105,6	104	108,4	168	162,6
Material	Labels, continuous rolls or fan-folded		Paper, cardboard, textiles, plastics such as PET, PE, PP, PVC, PU, acrylate, PI						
	Thickness mm / weight g/m²		0.055 – 0.35 / 60 – 160						
	Label width[1] mm		10 – 116					50-174	
	Width of carrier[1] mm		25 – 120					50-178	
	Label height[1]	min. mm without back-feed	6	6	6	6	6	12	12
		min. mm when dispensing[1]	12	12	12	12	12	25	25
		max. mm	5000	4000	1000	5000	4000	4000	3000
Ribbon	Ink		Outside or inside						
	Roll diamter up to mm		86						
	Core diameter mm		25						
	Ribbon length variable up to m		600						
	Width[3] up to mm		114						165
	Ribbon saver		□						
Label sensor	Gap sensor		For leading edge of the label or punching marks and end of material						
	Reflective sensor from the botton		For printing marks						
	Distance to locating edge mm		4 – 60						
Electronics	Processor high speed 32 Bit ColdFire / speed MHz		266						
	RAM MB		64						
	Menory IFFS MB Flash		8						
	Slot for CompactFlash Type I		■						
	Slot for wireless LAN card		■						
	Real-time clock, printout of date and time		■						
Interfaces	Centronics bidirectional acc. to IEEE 1284		□						
	RS232 C 1,200 to 230,400 Baud / 8 Bit		■						
	USB 2.0 high speed slave for PC connection		■						
	Ethernet 10 / 100 Base T, LPD, RawIP printing, ftp printing, DHCP, HTTP, FTP, SMTP, SNMP, TIME, Zeroconf, mDNS, SOAP		■						
	RS422, RS485 1.200 up to 230.400 Baud / 8 Bit		□						
	WLAN card 802.11b / g WEP / WPA PSK (TKIP)		□						
	Wireless bridge 802.11b		□						
	2x USB master for		External operation panel, keyboard, scanner or service key, USB flash drive						
	Digital I/O interface (cab other OEM version)		■						
Operating data	Power supply		100 – 240 V ~ 50 / 60 Hz, PFC						
	Energy consumption		Max. 250 W						
	Operating temperature		5 – 40°C						
	Humidity		30 – 85% not condensing						
	Approvals		CE, FCC class A, CB, CCC, UL						
Operation panel	Buttons / LED display		Pause, Feed, Cancel, Menu, Enter, 4 x Cursor						
	LCD graphic display		Text 4 lines, ca. 20 characters per line						
	Width x Height mm		60 x 40						
Settings			Digital or analog clock System settings Print parameters 24 language settings			Time Date Interfaces Security			
Monitoring	Stop printing if:		End of ribbon End of label Printhead open						
	On the display		Data reception WLAN field intensity Ethernet status Used memory Temperature of printhead Access to memory card			Clock Date sheet abc Debug Input buffer Remaining quantity of ribbon			

[1] Limitations may apply to small labels, thin materials or strong adhesives. Critical materials or applications must be tested and approved.
[2] Preferred for thermal transfer printing.
[3] The ribbon should be roughly the same width as the label in order to avoid folding.

For current data, please go to www.cab.de/en/px

Scan this QR code with your smartphone and learn more about the PX module.

Technical data

Label printer		PX series	
Test routines	System diagnosis	When switched on, incl. printhead testing	
	Short status, status print	Font list, device list, WLAN status, profile of label, test grid, monitor mode, PPP status	
	Status reports	Extensive status printout with information about setting, e.g. print length counter, runtime counter etc. Request of machine status via software command. Detailed status messages on the display, e.g. network error – no link, barcode error, etc..	
Fonts	Font types	5 Bitmap fonts incl. OCR-A, OCR-B and 3 Vector fonts Swiss 721, Swiss 721 Bold and Monospace 821 available internally, loadable TrueType fonts. Thai and Chinese (simplified Chinese) available as options.	
	Character sets	Windows 1250 up to 1257, DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869, EBC DIC 500, ISO 8859-1 to -10 and -13 up to -16, WinOEM 720, UTF-8, Macintosh Roman, DEC MCS, K0I8-R. All West and East European Latin, Cyrillic, Greek, Hebrew and Arabic characters are supported. Thai and Chinese available as options.	
	Bitmap fonts	Size of width and height 1 – 3 mm Zoom 2-10 Orientation 0°, 90°, 180°, 270°	
	Vector / TrueType fonts	Size of width and height 0.9 – 128 mm Variable zoom, Orientation 360° in steps of 1°	
	Font formats	Bold, italic, underlined, outline, negative, gray, vertical, depending on character fonts	
	Font width	Variable	
Graphics	Graphic elements	Line, arrow, box, circle, ellipse, filled and filled with fading	
	Graphic formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG	
Barcodes	Linear barcodes	Code 39, Code 93 Code 39 Full ASCII Code 128 A, B, C Codabar EAN 8, 13 EAN / UCC 128 EAN / UPC Appendix 2 EAN / UPC Appendix 5 FIM HIBC Interleaved 2 / 5 Ident- and lead code of Deutsche Post AG JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0	
	2D codes	Aztec, Codablock F, Data Matrix, PDF 417, Micro PDF 417, UPS Maxicode, QR-Code, RSS 14 truncated, limited, stacked and stacked omnidirectional, EAN-Datamatrix, GS1 Data Bar	
		All codes variable in height, module width and ratio. Orientation 0°, 90°, 180°, 270°. Optionally with check digit, printed characters and start/stop code, depending on code type.	
Software	Programming	J-Script direct programming abc-Basic Compiler Database Connector	■ ■ □
	System diagnosis / administration	Printer monitoring Network Manager	■ □
	Label software	cablabel R2+ Codesoft, Nicelabel, Easylabel Bartender, Label Matrix, Labelview	■ ○□ ○
	Windows driver certified	32 / 64 bit for Windows XP Server 2003 Windows Vista Server 2008 Windows 7 Server 2008 R2	■
	Stand-alone operation		■

For current data, please go to www.cab.de

Accessories

External panel

Connected via USB interface. Both panels provide the same functionality.

Interface cover

Protects the interfaces against humidity and contamination.

25-pin SUB D interface connector

With screw clamps for the cable connection.

15-pin SUB D interface connector

With screw clamps for the cable connection.

Device functionality and compliance with CE standards are only warranted by using the accessories provided or recommended by cab.

Software tools

Direct programming with J-Script

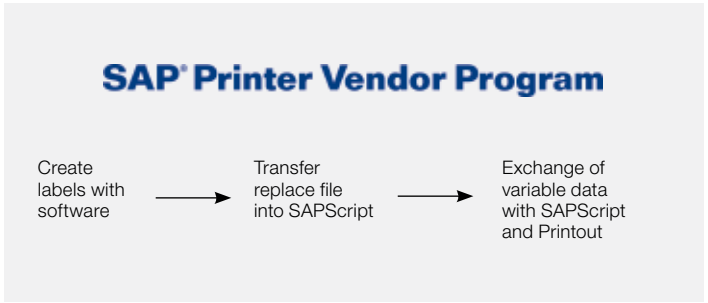
The printer language is easy to understand and simple to integrate into your host system. Variable data is linked with host applications. Label design, graphic data and fonts are recorded on the CompactFlash card. The host computer sends only variable data to the printer.

J	**Job start**
H 100	**Speed (100 mm/s)**
O R	**Orientation rotated by 180°**
S l1;0,0,68,70,100	**Size of label (100x68 mm, gap 2 mm)**
T 10, 10,0,5,pt20;sample	**Text object/font: Swiss bold, 20 pt**
B 10,20,0,EAN-13,SC2,401234512345	**Barcode EAN 13, size SC 2**
G 8,3.5,0;R:30,9,0.3;0.3	**Graphic, box 30 x 9 mm, Line strength 0.3 mm**
A 1	**Number of labels (in this example 1)**

Integration into SAP R/3*

In cooperation with SAP, cab developed the “replace method” for controlling cab printers quickly and easily from SAP R/3 using SAPScript. As a Silver Level partner in SAP‘s Printer Vendor Program, cab has access to the SAP development area for optimum printer support in SAP environments.

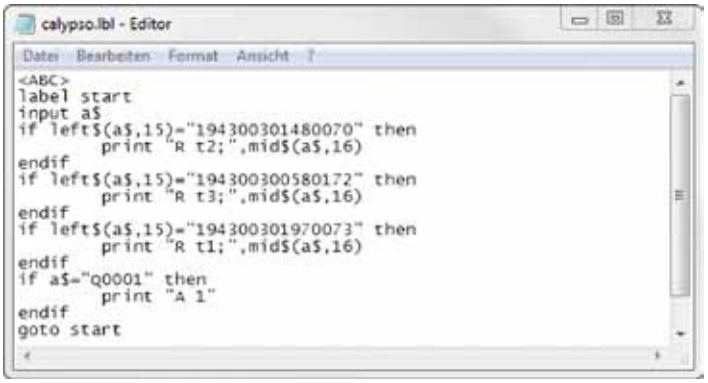
** SAP and R/3 are registered trademarks of SAP AG.*



abc – Basic Compiler

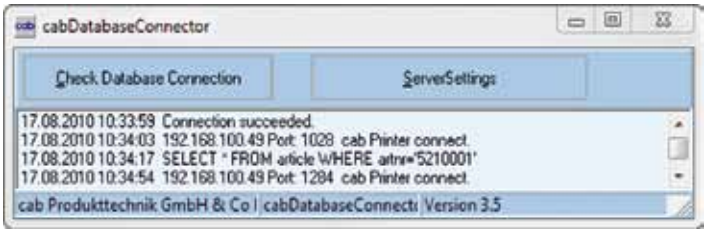
As an integrated element of the firmware, the Basic Compiler enables the printer to process data via BASIC programming before it is sent for print editing. This makes it possible for external printer languages to be replaced or data from other systems, e.g. a PLC or balance, to be transferred so information can be printed in different label formats.

Example of use:
Connection to a balance



Database Connector

In stand-alone mode with additional network connection, the Database Connector enables stand-alone printers to access data directly from a central SQL-compatible database and to print it as a label. Data can also be written back to the database or changed during the printing process.

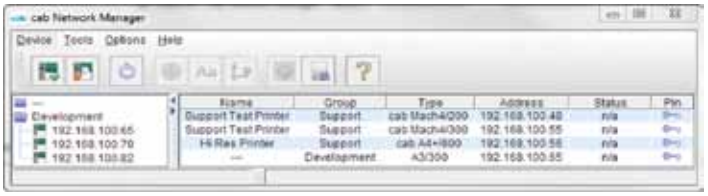


Printer monitoring with Intranet and Internet

Using standard programs such as the web browser or FTP clients, the integrated HTTP and FTP server enables print monitoring, configuration, firmware updates and memory card administration. Status, warning and error messages are sent to administrators or users as e-mails or SNMP datagrams via SNMP and SMTP clients. A time server is used to synchronize the time and date.

Administration Network Manager

The cab Network Manager enables the user to control multiple printers across a network simultaneously. It supports monitoring, configuration, firmware updates, memory card administration, file synchronization and PIN administration centrally.



Printer driver

WHQL-certified Windows printer driver for

Windows XP	Windows Server 2003
Windows Vista	Windows Server 2008
Windows 7	Windows Server 2008 R2

Our printer drivers are officially certified and signed by Microsoft. They ensure optimum stability on your Windows operating system. The programs Word, Excel, Access, Corel Draw, etc. can be used to design and print labels.

Microsoft® is a registered trademark of Microsoft Corporation.

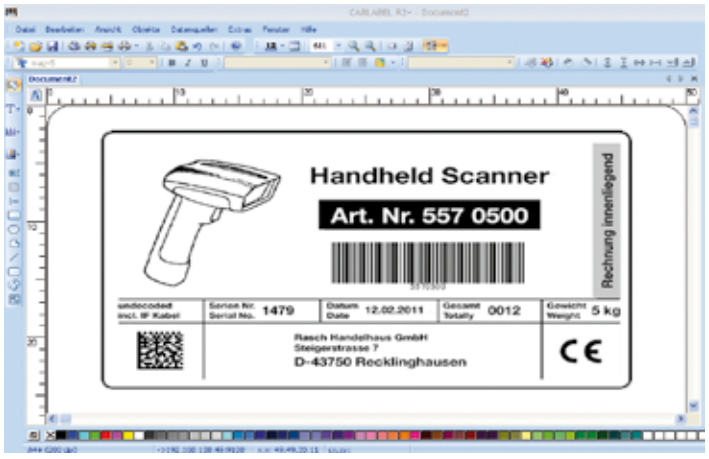
Label software

cablabel R2+
A powerful label software that is available free of charge and specially designed for cab printers and print & apply systems.

Different fonts, barcodes and graphics in variable heights, widths and printing directions can be used to produce the best possible label design.

In addition to the loadable TrueType fonts available with MS Windows, cab printers also offer a large number of internal bitmap and vector fonts. Thanks to the support of the most commonly used codepages, country-specific special characters can also be printed.

High-performance functions make it possible to design and print even complex labels in just a few minutes. cablabel R2+ supports special functions of the cab printers, such as real-time clock, printer counter, stand-alone operation without PC, circular fonts or the printout of the printer data stream in a file. The MDI technology makes it possible to open several labels at the same time and to move objects from one label to another.



cablabel R2+ is available in 24 different languages for the following operating systems:

Windows XP	Windows Server 2003*
Windows Vista	Windows Server 2008*
Windows 7	

** Terminalserver / Citrix are not supported.*

Additional label software
Highest possible variability – other commercially available label software solutions, such as Codesoft, Nicelabel, Easylabel, Bartender, Label Matrix or Labelview, support the cab label printers and labeling systems. More information is available on our website.

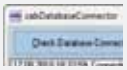
Delivery program for the PX print module

	Part no.	Hardware dpi	Part no.	Consumables	Part no.	Consumables
	**5956102.xxx** **5956103.xxx** **5956106.xxx**	Print module PX4L / 200 Print module PX4L / 300 Print module PX4L / 600	**5956381.001** **5956382.001** **5956383.001**	Printhead 4 / 203 Printhead 4 / 300 Printhead 4 / 600	**5954180.001**	Print roller DR4
	5956112.xxx **5956113.xxx** **5956116.xxx**	Print module PX4R / 200 Print module PX4R / 300 Print module PX4R / 600				
	5956142.xxx **5956143.xxx**	Print module PX4.3L / 200 Print module PX4.3L / 300	**5954085.001** **5956384.001**	Printhead 4.3 / 203 Printhead 4.3 / 300		
	5956152.xxx **5956153.xxx**	Print module PX4.3R / 200 Print module PX4.3R / 300				
	5956235.xxx **5956123.xxx**	Print module PX6L / 200 Print module PX6L / 300	**5954217.001** **5956322.001**	Printhead 6 / 200 Printhead 6 / 300	**5954245.001**	Print roller DR6
	5956236.xxx **5956133.xxx**	Print module PX6R / 200 Print module PX6R / 300				

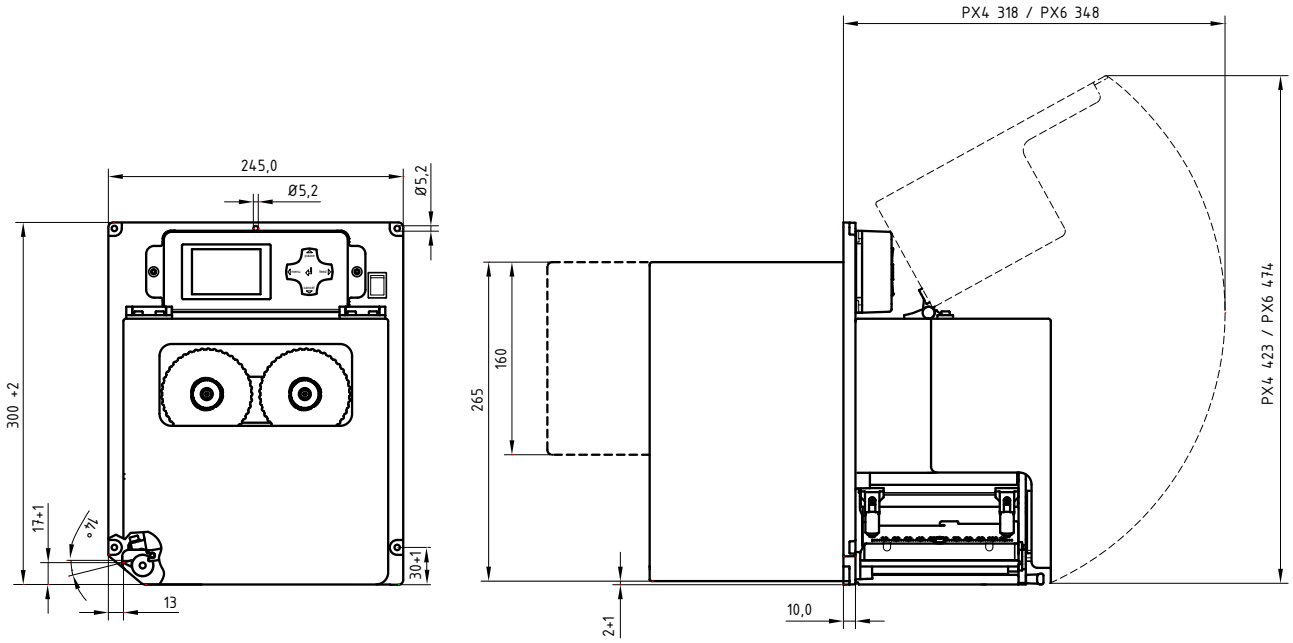
	.xxx	.201	.202	.203	.204
	Digital I/O interface	x	x		
→	OEM – digital I/O interface			x	x
	Ribbon saver		x		x

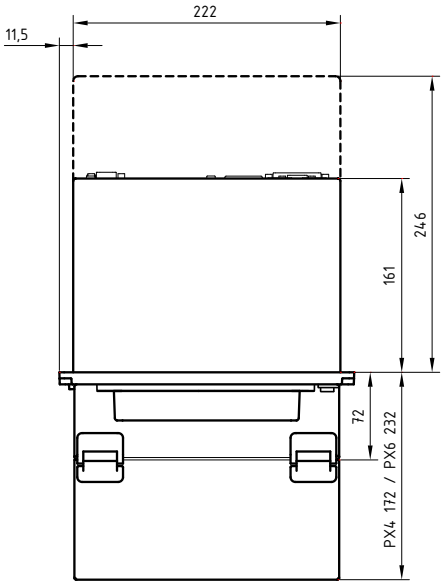
	Scope of delivery
	PX print module as label printer, Power cable type E+F, length 1.8 m, Connecting cables USB, length 1.8 m Operating manual de/en
DVD:	Operating manual de/en/fr, Configuration manual de/en/fr, Service manual de/en, Spare parts list de/en, Programming manual en, Windows printer driver 32/64 bit in 19 languages for Windows XP Server 2003 Windows Vista Server 2008 Windows 7 Server 2008 R2 Label software cablabel R2+ in 24 languages Database Connector en

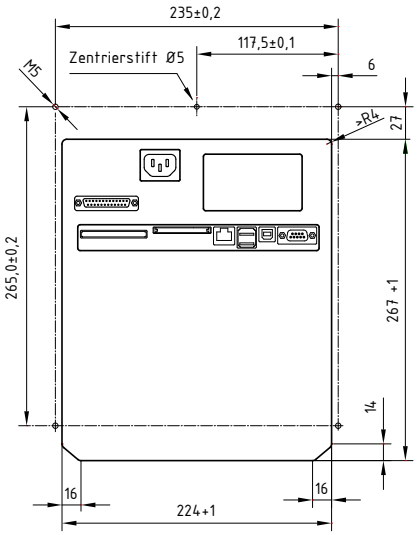
	Part no.	Accessories
	**5954380**	External operation panel
	**5965040**	Interface cover
	**5917651**	Interface connector 25-pin SUB D with screw clamps for cable connection
	**5917652**	Interface connector 15-pin SUB D with screw clamps for cable connection
	**5561043**	CompactFlash Type I memory card
	**5901630**	Compact keyboard USB Cherry G84-4100

	Part no.	Interfaces
	**5954200** **5954201**	Centronics interface RS422 / RS485 interface
	**5954191**	Label selection box
	**5561041**	WLAN card 802.11 b/g
	Part no.	**Connecting cable**
	**5550818**	Connecting cable RS232 C 9/9 pin, length 3 m
	**5918008**	Patch cable KAT 5e, 3 m gray
	Part no.	**Software**
	**DL 40100**	Database Connector license
	**5580215**	Administration Network Manager
	Scope of delivery	Label software cablabel R2+
	On request	Codesoft, NiceLabel, Easylabel
	9008486	Programming manual english, printed copy

Dimensions







Weight of print module	PX4+	PX4.3+	PX6+
in kg	8	8	12

The cab delivery program

EOS 1/4 label printer

MACH4 label printer

A+ series label printers

XD4 label printer

XC series label printer

Hermes+ Print and Apply

PX series print module

FL series laser marking systems

Laser safety housing

Label software

VS 120 label dispenser

Labels / ribbons

- *Headquarters in Germany*
- *cab subsidiaries*
  350 distribution partners
  in more than 80 countries.

cab is represented in every active commercial center - worldwide.

www.cab.de

Germany
cab Produkttechnik
GmbH & Co KG
Postfach 1904
76007 Karlsruhe
Wilhelm-Schickard-Str. 14
76131 Karlsruhe
Telefon +49 721 6626-0
Telefax +49 721 6626-249
www.cab.de
info@cab.de

Representatives in other countries on request.

France
cab technologies s.a.r.l.
67350 Niedermodern
Téléphone +33 388 722 501
www.cab.de/fr
info.fr@cab.de

USA
cab Technology Inc.
Tyngsboro MA, 01879
Phone +1 978 649 0293
www.cab.de/us
info.us@cab.de

South Africa
cab Technology (Pty.) Ltd.
2125 Randburg
Phone +27 11-886-3580
www.cab.de/za
info.za@cab.de

Asia 亚洲
cab Technology Co, Ltd.
希爱比科技股份有限公司
Junghe, Taipei, Taiwan
Phone +886 2 8227 3966
www.cab.de/tw
info.asia@cab.de

China 中国
cab (Shanghai) Trading Co., Ltd
锐博(上海)贸易有限公司
Phone +86 21 6236-3161
www.cab.de/cn
info.cn@cab.de