

Status: 04/2024



Products need labeling  
Print modules  
for industrial use

**PX Q**  
Made in Germany

## Print modules PX Q

Full functionality, high reliability, comfortable operation and low downtime related to maintenance! The PX Q print and peel-off module has been designed specifically for printing and labeling fully automatically in industrial applications. It can be integrated in any orientation of assembly to solve even complex marking tasks.

A torsion-resistant cast aluminum construction is basis to assemble all the components of the print mechanics. Food-safe coating and stainless steel casings add to the perfect shape with special features. Screwing is compatible to the devices of competitors.



### The universal one

Industrial device for accurate imprint

| Print module         |            | PX Q4.3 |       | PX Q4 |       |
|----------------------|------------|---------|-------|-------|-------|
| Printable resolution | dpi        | 203     | 300   | 300   | 600   |
| Print speed          | up to mm/s | 300     | 300   | 300   | 150   |
| Print width          | up to mm   | 104     | 108.4 | 105.7 | 105.7 |

### The wide one

Suitable for Odette and UCC labels

| Print module         |            | PX Q6.3 |       |
|----------------------|------------|---------|-------|
| Printable resolution | dpi        | 203     | 300   |
| Print speed          | up to mm/s | 250     | 250   |
| Print width          | up to mm   | 168     | 162.6 |

## Directions of label transfer



All the print modules are provided as left-hand and right-hand versions. As for printable resolutions, PX Q users can choose from 300 and 600 dpi, the PX Q4.3 and PX Q6.3. offer 203 and 300 dpi.

# Details



## 1 Operation panel

Operating the device is intuitive and simple with the help of self-explanatory symbols to configure settings

## 2 Ribbon holder

Three-part tightening axles enable the ribbon to be replaced quickly and easily.

## 3 Rugged metal chassis

made of cast aluminum; basis to assemble all units

## 4 Plungers

One plunger is fixed on the inner side. A second one is moved that far to the label margin, until a good print image evokes.

## 5 Print head

All print heads are freely interchangeable at equal width. Easy replacement

## 6 Automatic ribbon saving (option)

The print head is lifted during label feed and the ribbon is stopped.

## 7 Print roller removal

It can be easily removed or inserted in the cases of cleaning or wear.

## 8 Simple replacement of materials

Label materials are inserted until lateral stop. The print head and wipe-down rollers are locked by levers.

## 9 Label sensor

A gap sensor or a reflective sensor position the imprint precisely on the label and detect the end of the material.

## 10 Material backfeed

After a label has been peeled off, the next one can be retracted to behind the print line. By this, the whole label can be printed and adhesive leaking is avoided during a longer pause. In case sensitive materials are processed and to prevent the ribbon from wrinkling, the print head can be lifted.

### Imprint accuracy







The smaller a label, the higher are the requirements on the imprint accuracy. With the help of the adjustable slip correction, print offset can be reduced by  $\pm 0.2$  mm.

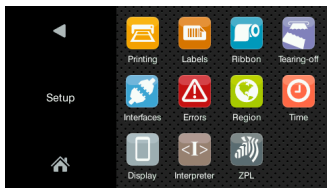
# Operation panel

Operating the device is intuitive and simple with the help of self-explanatory symbols to configure settings.

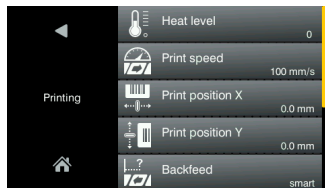
- 1 **LED signal:** Power ON
- 1 **Status bar:** data reception, record data stream, ribbon pre-warning, SD memory card / USB memory stick plugged, WLAN, Ethernet, USB slave, time
- 3 **Printer status:** Ready, Pause, number of labels printed in a print job, label in peel-off position, awaiting external start signal
- 4 **USB slot** to connect the Service Key or a memory stick, in order to transfer data to the IFFS memory

## 5 Operation

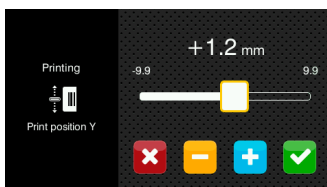
-  Print label
-  Jump to menu
-  Reprint last label
-  Interrupt and continue print job
-  Stop and delete all print jobs
-  Label feed



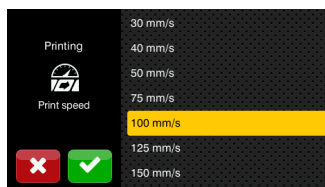
Setup options



Print parameters



Print position Y



Print speeds

Depending from the orientation of assembly, display is either in landscape or portrait mode.



Printer rotated by 90°



Video tutorials

# External operation panel

If the operation panel of a printer cannot be accessed, an additional external one can be plugged.

Same functionality as on the printer

Landscape or portrait mode

Operability as desired on the external operation panel or on the printer

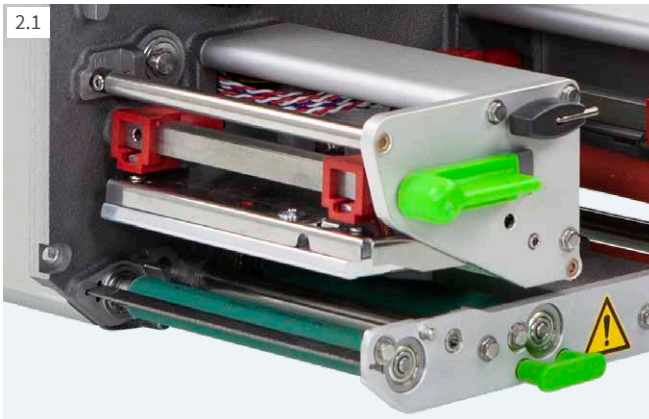
Printer connectivity: USB 2.0 Hi-Speed device

- 1 **LED:** Power ON
- 2 **USB port** to plug a service key or a memory stick, to transfer data to the IFFS memory
- 3 **Connecting USB cable** for power supply cab provides specified cables. Lengths are 1.8 m to 16 m.





## Print heads



**All print heads are freely interchangeable at equal width. They are automatically detected and calibrated by the CPU. The print distance to the locating edge can be adjusted.**

Major data such as running performance, maximum operating temperature and heat energy are directly stored in the print head. The data can be read at the plant.

**Print heads for print module PX Q4 - 300, 600 dpi**  
providing sharp-edged print images  
suitable for small fonts and graphics on typeplates  
suitable for markings on materials with high energy needs

**Print heads for print modules PX Q4.3 and PX Q6.3 - 203, 300 dpi**  
durable; suitable for rough surroundings and thermal direct printing

## Print rollers



**Two types of material:**

### Print rollers DR

Coating: synthetic rubber

They suit for highly accurate imprint and are provided as standard.

### Print rollers DRS

Coating: silicone

They have an extra long service life at a higher imprint tolerance.

## Interfaces

- 1 Slot to connect a **SD memory card**
- 2 **2 x USB Host** to connect a Service Key, an USB stick, a keyboard, an USB WLAN stick, external operation panel
- 3 **USB 2.0 Hi-speed device** to connect a PC
- 4 **Ethernet 10/100 Mbit/s**
- 5 **RS232C 1,200 to 230,400 baud/8 bit**

**Digital I/O interfaces;** compliant with IEC/EN 61131-2, type 1+3  
All inputs and outputs are galvanically isolated and protect from reverse polarity. In addition, outputs are short circuit protected.

- 6 **Digital I/O interface 24 VDC;** 25 pin SUB-D socket connector

### Inputs PNP

Start printing  
Reprint  
Delete print job  
Label removed  
Stop printing  
Label feed  
Pause  
Reset

### Outputs PNP, NPN

Device ready  
Print data available  
Label in peel-off position  
Paper feed ON  
Pre-warning to ribbon ending  
End of ribbon and/or end of labels  
Printer error  
Printing started

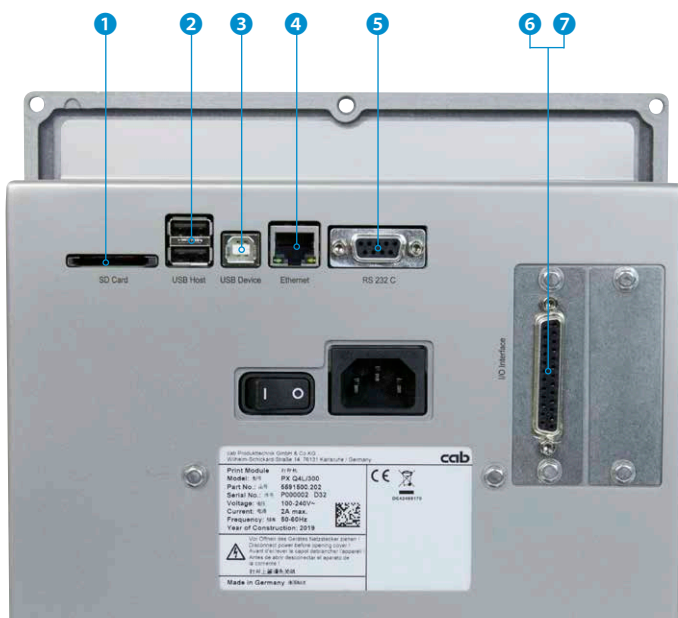
- 7 **Digital I/O interface 5 VDC;** 15 pin SUB-D socket connector

### Inputs PNP

Label feed  
Reprint  
Start printing  
Pause  
Delete print job

### Outputs PNP, NPN

Pre-warning to ribbon ending  
End of ribbon  
End of labels  
Print data available  
End of printing  
Printer error



**For more interfaces see "Options" on page 6**

**Options** are parts or units to perform special functions. They are assembled to a printer in addition to or instead of standards.

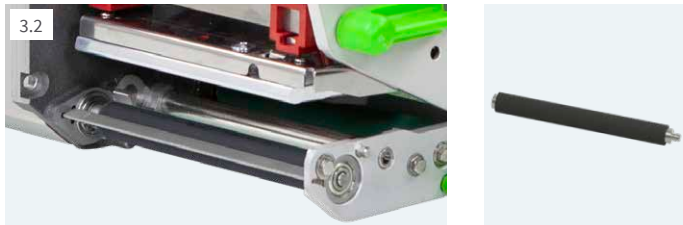
If order implies options be assembled ex factory, the part numbers of such printers and options are added by .250. Options delivered separately are added by .001.

| Pos. | Designation                                     | 1.1                      | 1.2                      | 1.3                      | .250 | .001 |
|------|---|--------------------------|--------------------------|--------------------------|------|------|
|      |   | PX Q4.3                  | PX Q4                    | PX Q6.3                  |      |      |
| 3.1  | Automatic ribbon saving                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | -    |
| 3.2  | Print roller DRS                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | ●    |
| 3.3  | Digital I/O interface 24 VDC                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | ●    |
| 3.4  | Digital I/O interface 5 VDC                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | ●    |
| 3.5  | 2 port Ethernet Switch 10/100 Mbit/s            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | ●    |
| 3.6  | Interface for plugging an external label sensor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ●    | ●    |



#### Automatic ribbon saving

Use is recommended in cases of at least 60 mm unprinted area on a label. While labels are fed, the print head is lifted and the ribbon stopped, resulting in less material consumption.



#### Print roller DRS

providing a silicone coating. Product life is extra long, taken a higher print offset into account on a label.



#### Digital I/O interface 24 VDC

25 pin SUB-D socket connector



#### Digital I/O interface 5 VDC

15 pin SUB-D socket connector



#### 2 port Ethernet Switch 10/100 Mbit/s

to connect another terminal device in a joint network. Signals are looped through
















#### Interface for plugging an external label sensor

M12 plug, 5 pins, a-coded  
Plug-compatible with CEON and other sensors based on PNP and 24 V

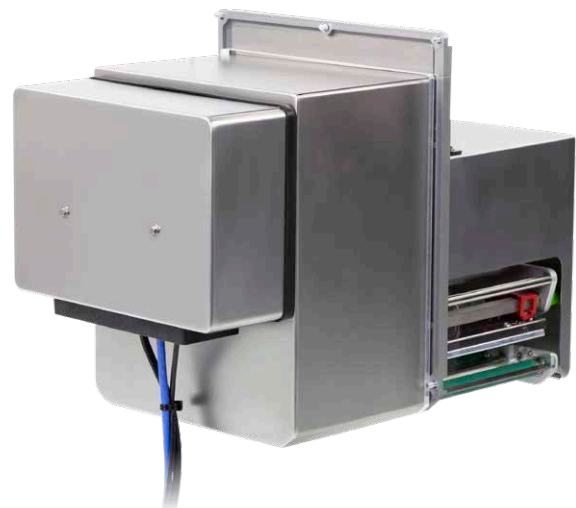
# Accessories

Accessorial products are plugged or screwed to a printer by the customer.

| Pos. | Designation                            | 1.1                      | 1.2                      | 1.3                      |
|------|--|--------------------------|--------------------------|--------------------------|
|      |  | PX Q4.3                  | PX Q4                    | PX Q6.3                  |
| 2.1  | SD memory card                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.2  | USB memory stick                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.3  | USB WLAN stick                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.4  | USB WLAN stick including a rod antenna | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.5  | USB Bluetooth adapter                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.6  | I/O interface connector SUB-D, 25 pins | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.7  | I/O interface connector SUB-D, 15 pins | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.8  | External operation panel               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|      | Connecting USB cable                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.9  | Label selection - I/O box              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.10 | Connecting RS232 C cable               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.11 | Interface cover unit                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|      |  |   |  |
|------|--|---|--|
| 2.1  |     | <b>SD memory card</b>   | <p><b>2.8</b></p>  <p><b>External operation panel</b><br/>If the operation panel of a printer cannot be accessed, an additional external one can be plugged.<br/>Same functionality as on the printer<br/>Landscape or portrait mode<br/>Operability as desired on the external operation panel or on the printer</p>  <p>Printer connectivity:<br/>USB 2.0 Hi-Speed device<br/>cab provides specified <b>connecting USB cables</b> for power supply.<br/>Lengths are 1.8 m to 16 m.</p> |
| 2.2  |     | <b>USB memory stick</b>   |  |
| 2.3  |    | <b>USB WLAN stick</b><br>2.4 GHz 802.11b/g/n<br>hotspot or infrastructure mode  |  |
| 2.4  |   | <b>USB WLAN stick including a rod antenna</b><br>to extend the range of operation<br>2.4 GHz 802.11b/g/n + 5 GHz 802.11a/n/ac<br>hotspot or infrastructure mode |  |
| 2.6  |   | <b>I/O interface connector SUB-D, 25 pins</b><br>All control signals can be attached to the I/O interface using clamping screws.                                |  |
| 2.7  |   | <b>I/O interface connector SUB-D, 15 pins</b><br>All control signals can be attached to the I/O interface using clamping screws.                                |  |
| 2.9  |   | <b>Label selection - I/O box</b><br>A maximum of 16 different labels can be selected from a memory card by a master control unit, e.g. PLC.                     | <p><b>2.9</b></p> <p><b>Label selection - I/O box</b><br/>A maximum of 16 different labels can be selected from a memory card by a master control unit, e.g. PLC.</p> <p><b>2.10</b></p>  <p><b>Connecting RS232 C cable</b><br/>9/9 pins, 3 m</p> <p><b>2.11</b></p>  <p><b>Interface cover unit</b><br/>to protect from humidity and contamination</p>  |
| 2.10 |   | <b>Connecting RS232 C cable</b><br>9/9 pins, 3 m  |  |
| 2.11 |  | <b>Interface cover unit</b><br>to protect from humidity and contamination   |  |
|      |  |   |  |

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



# Technical data

● typical ■ standard □ option

| Print module   |                                  | Type              | PX Q4.3   |  | PX Q4    |       | PX Q6.3         |         |  |
|--|----------------------------------|-------------------|---|--|----------|-------|-----------------|---------|--|
| Printing method  | Thermal transfer                 |                   | ●   | ●  | ●        | ●     | ●               | ●       |  |
|  | Thermal direct                   |                   | ●   | ●  | -        | -     | ●               | ●       |  |
| Printable resolution   | dpi                              |                   | 203   | 300  | 300      | 600   | 203             | 300     |  |
| Print speed  | up to mm/s                       |                   | 300   | 300  | 300      | 150   | 250             | 250     |  |
| Print width  | up to mm                         |                   | 104   | 108.4  | 105.7    | 105.7 | 168             | 162.6   |  |
| Direction of label transfer  |                                  |                   | L to the left or R to the right   |  |          |       |                 |         |  |
| Print distance to locating edge  | for L and R mm                   |                   | 1   | 1  | 1        | 1     | 1               | 1       |  |
|  | with automatic saving L and R mm |                   | 3.2/2.6   | 1/0.4  | 2/2      | 2/2   | 1.2/1.2         | 3.9/3.9 |  |
| <b>Material</b>  |                                  |                   |   |  |          |       |                 |         |  |
| Labels   |                                  |                   | Paper, plastics such as PET, PE, PP, PI, PVC, PU, acrylate, Tyvec   |  |          |       |                 |         |  |
| Labels <sup>1)</sup>   | Width                            | mm                | 10 - 116  |  | 10 - 116 |       | 50 - 174        |         |  |
|  | Height without backfeed          | from mm           | 6   |  | 6        |       | 12              |         |  |
|  | Height with backfeed             | from mm           | 12  |  | 12       |       | 25              |         |  |
|  | Thickness                        | up to mm          | 0.60  |  | 0.60     |       | 0.60            |         |  |
| Liner material   | Width                            | mm                | 25 - 120  |  | 25 - 120 |       | 50 - 178        |         |  |
|  | Thickness                        | mm                | 0.03 - 0.16   |  |          |       |                 |         |  |
| Ribbon <sup>2)</sup>   | Ink side                         |                   | outside or inside   |  |          |       |                 |         |  |
|  | Roll diameter                    | up to mm          | 90  |  |          |       |                 |         |  |
|  | Core diameter                    | mm                | 25.4  |  |          |       |                 |         |  |
|  | Variable length                  | up to m           | 600   |  |          |       |                 |         |  |
|  | Width                            | mm                | 25 - 114  |  | 25 - 114 |       | 50 - 170        |         |  |
|  | Automatic saving                 |                   | □   |  | □        |       | □               |         |  |
| <b>Print module dimensions and weights</b>                               |                                  |                   |   |  |          |       |                 |         |  |
| Width x Height x Depth   |                                  | mm                | 245 x 300 x 333   |  |          |       | 245 x 300 x 393 |         |  |
| Weight   |                                  | kg                | 11.5  |  |          |       | 12              |         |  |
| <b>Label sensor with position indication</b>                             |                                  |                   |   |  |          |       |                 |         |  |
| Gap sensor   |                                  | for               | labels, punch marks or print marks and end of material  |  |          |       |                 |         |  |
| Reflective sensor  |                                  | reflex from below | for   | print marks on non-transparent liner materials and end of material |          |       |                 |         |  |
| Distance of sensor to locating edge                                      |                                  | mm                | 4 - 60  |  | 4 - 60   |       | 4 - 60          |         |  |
| Material passage   |                                  | mm                | 2   |  |          |       |                 |         |  |
| <b>Electronics</b>   |                                  |                   |   |  |          |       |                 |         |  |
| Processor 32 bit clock rate  |                                  | MHz               | 800   |  |          |       |                 |         |  |
| Main memory (RAM)  |                                  | MB                | 256   |  |          |       |                 |         |  |
| Data memory (IFFS)   |                                  | MB                | 50  |  |          |       |                 |         |  |
| Slot to connect a SD memory card (SDHC, SDXC)                            |                                  |                   | ■   |  |          |       |                 |         |  |
| Battery for time and date, real-time clock                               |                                  |                   | ■   |  |          |       |                 |         |  |
| Data memory when power is switched off (e.g. serial numbering)           |                                  |                   | ■   |  |          |       |                 |         |  |
| <b>Interfaces</b>  |                                  |                   |   |  |          |       |                 |         |  |
| RS232C 1,200 to 230,400 baud/8 bit                                       |                                  |                   | ■   |  |          |       |                 |         |  |
| USB 2.0 Hi-speed device to connect a PC                                  |                                  |                   | ■   |  |          |       |                 |         |  |
| Ethernet 10/100 Mbit/s   |                                  |                   | LPD, RawIP printing, SOAP web service, OPC UA, WebDAV<br>DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC       |  |          |       |                 |         |  |
| 2 x USB host on the control panel,<br>2 x USB host on the back of a unit |                                  |                   | Service Key, USB stick, USB WLAN stick, USB WLAN stick with a rod antenna,<br>keyboard, barcode scanner, external control panel |  |          |       |                 |         |  |
| Digital I/O interface 24 VDC with 8 inputs and 9 outputs                 |                                  |                   | □   |  |          |       |                 |         |  |
| Digital I/O interface 5 VDC with 5 inputs and 6 outputs                  |                                  |                   | □   |  |          |       |                 |         |  |
| 2-Port Ethernet Switch 10/100 Mbit/s                                     |                                  |                   | □   |  |          |       |                 |         |  |
| <b>Operating data</b>  |                                  |                   |   |  |          |       |                 |         |  |
| Power supply   |                                  |                   | 100-240 VAC, 50/60 Hz, PFC  |  |          |       |                 |         |  |
| Power consumption  |                                  |                   | Standby <10 W / typical 100 W / max. 200 W  |  |          |       |                 |         |  |
| Temperature / humidity   |                                  | Operation         | +5 - 40°C / 10 - 85 %, not condensing   |  |          |       |                 |         |  |
|  |                                  | Stock             | 0 - 60°C / 20 - 85 %, not condensing  |  |          |       |                 |         |  |
|  |                                  | Transport         | -25 - 60°C / 20 - 85 %, not condensing  |  |          |       |                 |         |  |
| Approvals  |                                  |                   | CE, FCC Class A, ICES-3, cULus, CB, RCM Mark  |  |          |       |                 |         |  |

<sup>1)</sup> Limitations may apply to small labels, thin materials or strong adhesives. Critical applications need to be tested.

<sup>2)</sup> The ribbon should at least correspond with the width of the liner material.



# Technical data

■ standard □ option

| Operation panel   |  |  |
|---|--|--|
| Colored LCD touch display   | Screen diagonal  | " 4.3  |
|   |  | Resolution Width x Height px 480 x 272   |
| Setup options   |  |  |
| Print Labels<br>Ribbon<br>Peel-off<br>Apply<br>Interfaces<br>Error  | Region:<br>- Language<br>- Country<br>- Keyboard<br>- Time zone<br>Time<br>Display:<br>- Brightness<br>- Power saving mode<br>- Orientation<br>Interpreter   |  |
| Status bar  |  |  |
| Data reception<br>Record datastream<br>Ribbon warning<br>SD memory card plugged in<br>USB memory stick plugged in | WLAN<br>Ethernet<br>USB slave<br>Time  |  |
| Monitoring  |  |  |
| Ribbon<br>Labels<br>Print head Voltage  | Direction of winding<br>Pre-warning<br>End of material<br>End of material<br>Temperature<br>open   | Print roller for<br>backfeed open  |
| Test routines   |  |  |
| System diagnostics  | on start-up, including print head detection  |  |
| Information display,<br>test printout,<br>analysis  | Status printout<br>Fonts list<br>List of devices<br>WLAN status<br>Record print data on memory card  | Test grid<br>Label profile<br>List of events<br>Monitor mode   |
| Status reports  | - Printout of device settings,<br>e.g. print lengths and service hours<br>- Device status request by software command<br>- Display of, e.g., network errors, no links,<br>barcode errors, periphery errors, etc.   |  |
| Fonts   |  |  |
| Font types<br>provided internally   | 5 Bitmap fonts:<br>12 x 12 dots<br>16 x 16 dots<br>16 x 32 dots<br>OCR-A<br>OCR-B  | 7 vector fonts:<br>AR Heiti Medium GB-Mono<br>CG Triumvirate Condensed Bold<br>Garuda<br>HanWangHeiLight<br>Monospace 821<br>Swiss 721<br>Swiss 721 Bold |
| to be stored  | TrueType fonts   |  |
| Character sets  | Windows-1250 to -1257<br>DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869<br>EBCDIC 500<br>ISO 8859-1 to -10 and -13 to -16<br>WinOEM 720<br>UTF-8<br>MacRoman<br>DEC MCS<br>KOI8-R<br><br>Western European<br>Eastern European<br>Chinese simplified<br>Chinese traditional<br>Thai |  |
|   |  | Cyrillic<br>Greek<br>Latin<br>Hebrew<br>Arabic   |

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For information see [www.cab.de/opensource](http://www.cab.de/opensource)

| Fonts                          |  |  |
|--------------------------------|--|--|
| Bitmap fonts                   | Widths and heights 1 - 3 mm<br>Zoom factors 2 to 10<br>Orientations 0°, 90°, 180°, 270°  |  |
| Vector-/<br>TrueType fonts     | Widths and heights 0,9 - 128 mm<br>Continuous zoom<br>Orientation 360° in steps of 1°  |  |
| Font styles                    | bold, italic, underlined, outline, inverse<br>- depending from the font types  |  |
| Character spacing              | variable or monospace for fixed character spacings   |  |
| Graphics                       |  |  |
| Graphic elements               | Lines, arrows, rectangles, circles, ellipses<br>- filled or filled with fading   |  |
| Graphic formats                | PCX, IMG, BMP, TIF, MAC, GIF, PNG  |  |
| Codes                          |  |  |
| 1D barcodes<br>(linear)        | Code 39, Code 93<br>Code 39 Full ASCII<br>Code 128 A, B, C<br>EAN 8, 13<br>EAN/UCC 128/GS1-128<br>EAN/UPC Appendix 2<br>EAN/UPC Appendix 5<br>FIM<br>HIBC  | Interleaved 2/5<br>Ident and routing code<br>of Deutsche Post<br>Codabar<br>JAN 8, 13<br>MSI<br>Plessey<br>Postnet<br>RSS 14<br>UPC A, E, E0 |
| 2D and<br>stacked codes        | DataMatrix<br>DataMatrix Rectangle Extension<br>QR code<br>Micro QR code<br>GS1 QR code<br>GS1 DataMatrix<br>PDF 417<br>Micro PDF 417<br>UPS MaxiCode<br>GS1 DataBar<br>Aztec<br>Codablock F<br>Dotcode<br>RSS 14 truncated, limited, stacked,<br>stacked omni-directional<br><br>All codes are variable in terms of height,<br>modular width and ratio; orientations 0°, 90°, 180°, 270°<br><br>check digit, plain text printout and start / stop code<br>are options depending from the type of code |  |
| Software                       |  |  |
| Label software                 | cablabel S3 Lite<br>cablabel S3 Viewer<br>cablabel S3 Pro<br>cablabel S3 Print   | ■<br>■<br>□<br>□   |
| Running also with              | CODESOFT<br>Loftware Spectrum<br>NiceLabel<br>BarTender  |  |
| Stand-alone operation          |  | ■  |
| Windows<br>printer drivers for | Windows 10<br>Windows 11<br><br>Certification WHQL in preparation  | Server 2016<br>Server 2019<br>Server 2022<br><br>■   |
| Apple printer drivers          | Mac OS X 10.6 or any later release   |  |
| Linux printer drivers          | CUPS 1.2 or any later release  |  |
| Programming                    | JScript printer language<br>abc Basic Compiler<br>ZPL II (Datastream be tested in advance)   | ■<br>■<br>□  |
| Integration                    | SAP<br>Database Connector  | ■<br>■   |
| Administration                 | Printer control<br>Configuration in Intranet and Internet  | ■<br>■   |

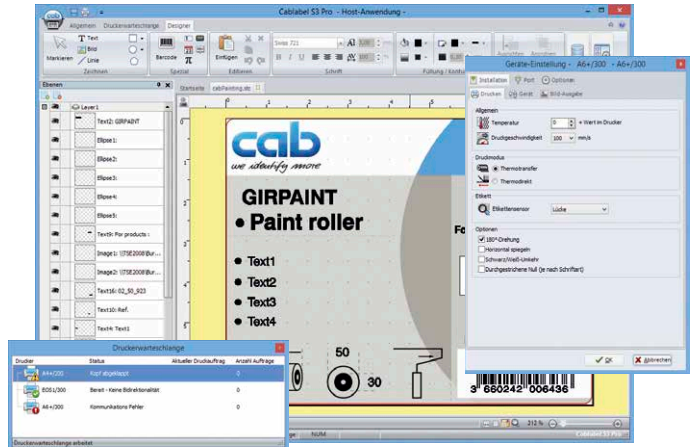
# cablabel S3 software

## Designing, printing, administrating

cablabel S3 opens up the full potential of cab devices. First of all, the label must be designed. cablabel S3 is of a modular design which makes it adaptable to requirements step by step. To support functions like native JScript programming, elements such as the JScript Viewer are embedded as plug-ins. The designer user interface and the JScript code are synchronized in real time. Special functions like the Database Connector or barcode testers can be integrated.



For further information see  
[www.cab.de/en/cablabel](http://www.cab.de/en/cablabel)



## Stand-alone printing

A printer can select and print labels even when the system is disconnected from a host.

Labels are designed using software such as cablabel S3 or a text editor on a PC. Label formats, texts, graphics and data taken from a database are transferred to a memory card, a USB memory stick or the internal IFFS memory.

Only variable data are sent to the printer using a keyboard, a barcode scanner, scale or another host system and/or are recalled from a host by the Database Connector and printed.



## OPC UA

The latest cab printers are ready to interact with machines and components of different manufacturers in industrial plants.

An OPC UA server and a client are part of the firmware.


The server enables a printer be configured and controlled. Dynamic print data can be edited using a defined programming interface.


The integral client enables reading data fields from other machines ready for OPC UA, as well as transferring data to a label. No additional software is needed.



# Printer control


## Drivers


 cab provides drivers to control a printer with software other than cablabel S3.

 Free download on [www.cab.de/en/support](http://www.cab.de/en/support)




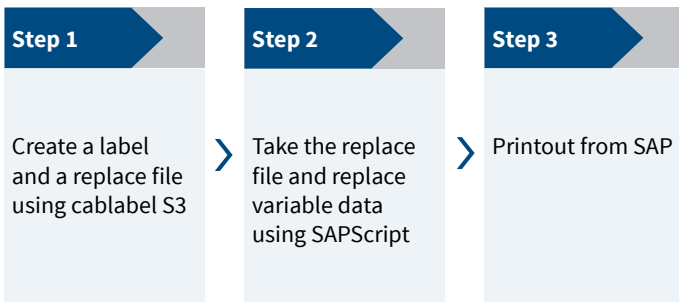
## Programming

 **JScript**  
To control a printer, cab developed the embedded JScript programming language. Free manual download on [www.cab.de/en/programming](http://www.cab.de/en/programming)

 **abc Basic Compiler**  
An integral part of the firmware, it adds to JScript in terms of programming a printer before data are edited for processing. For example, external printer languages can be replaced without intervening in the print job in process. Data may be transferred also from other systems, such as scales, barcode scanners or PLC.


## Integration

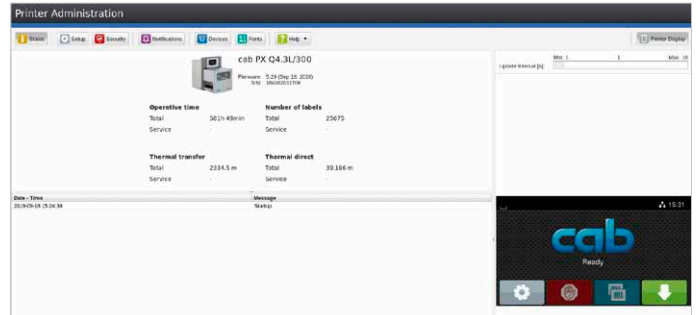
 **Printer Vendor Program**  
As a member in this program, cab developed a replace method by which cab printers can be controlled from SAP<sup>1)</sup>R/3 using SAPScript. Only variable data are sent by a host system to the printer. Data such as pictures and fonts which had been transferred to a local memory (IFFS, memory card, etc.) before, are collected.




<sup>1)</sup> SAP and all its corresponding logos are trademarks or registered trademarks of SAP SE

# Printer administration

 **Configuration on the Intranet / Internet**  
cab printers integrate a HTTP and FTP server. A printer can be controlled and configured, firmware updated and memory cards managed using a standard web browser or FTP client. Administrators and operators are notified of states, warnings and errors via email or datagrams, based on a SNMP/SMTP client. Time and date are synchronized by a time server.





 **Database Connector**  
Printers connected to a network are enabled to access data directly from a central ODBC / OLEDB database and transfer it to a label. While labels are printed, data can be rewritten to the database..





# PX Q delivery program

## Print modules L

| Pos. | Part no.  | Designation   |
|------|---|---|
| 1.1  |  | <b>5591501</b> Print module PX Q4.3L/200 I/O 24 VDC |
|      |   | <b>5591502</b> Print module PX Q4.3L/300 I/O 24 VDC |
|      |   | <b>5591503</b> Print module PX Q4L/300 I/O 24 VDC   |
|      |   | <b>5591504</b> Print module PX Q4L/600 I/O 24 VDC   |
| 1.2  |  | <b>5591505</b> Print module PX Q6.3L/200 I/O 24 VDC |
|      |   | <b>5591506</b> Print module PX Q6.3L/300 I/O 24 VDC |







xxxxxxx.250 if PX Q provides options

## Print modules R


| Pos. | Part no.  | Designation   |
|------|---|---|
| 1.1  |    | <b>5591510</b> Print module PX Q4.3R/200 I/O 24 VDC |
|      |   | <b>5591511</b> Print module PX Q4.3R/300 I/O 24 VDC |
|      |   | <b>5591512</b> Print module PX Q4R/300 I/O 24 VDC   |
|      |   | <b>5591513</b> Print module PX Q4R/600 I/O 24 VDC   |
| 1.2  |  | <b>5591514</b> Print module PX Q6.3R/200 I/O 24 VDC |
|      |   | <b>5591515</b> Print module PX Q6.3R/300 I/O 24 VDC |

xxxxxxx.250 if PX Q provides options

## Options

| Pos. | Part no.  | Designation  |
|------|---|--|
| 3.1  |   | <b>5591794.250</b> Automatic ribbon saving 4L                      |
|      |   | <b>5591796.250</b> Automatic ribbon saving 6L                      |
|      |   | <b>5591795.250</b> Automatic ribbon saving 4R                      |
|      |   | <b>5591797.250</b> Automatic ribbon saving 6R                      |
| 3.2  |    | <b>5954985.xxx</b> Print roller DRS4                               |
|      |   | <b>5954979.xxx</b> Print roller DRS6                               |
| 3.3  |    | <b>6010372.xxx</b> Digital I/O interface 24 VDC                    |
|      |   |  |
| 3.4  |    | <b>6010512.xxx</b> Digital I/O interface 5 VDC                     |
|      |   |  |
| 3.5  |   | <b>6010520.xxx</b> 2-Port Ethernet Switch 10/100 Mbit/s            |
|      |   |  |
| 3.6  |  | <b>5591816.xxx</b> Interface for plugging an external label sensor |
|      |   |  |

xxx - .250 assembled to the printer  
.001 delivered separately

| Scope of PX Q print module delivery  |  |
|--|--|
|  | PX Q print module<br>Power cable Type E+F, 1.8 m<br>Connecting USB cable, 1.8 m<br>Assembly instructions DE/EN/FR  |
| Available online   |  |
| <br><a href="https://setup.cab.de/en">https://setup.cab.de/en</a> | Assembly instructions DE/EN/FR,<br>Configuration manuals DE/EN/FR<br>Service manuals DE/EN<br>Spare parts lists DE/EN<br>Programming manual EN<br>Windows printer drivers for<br>Windows 10      Server 2016<br>Windows 11      Server 2019<br>Server 2022<br>Certification WHQL in preparation<br>Apple Mac OS X printer drivers DE/EN/FR<br>Linux printer drivers DE/EN/FR<br>cablabel S3 Lite software and Viewer<br>Database Connector (no activation) |

Scopes of delivery, design and technical specifications correspond to the date of the printing. Subject to change. The data provided in the catalog do not represent any warranty or guarantee.













Information is available also on the Internet:  
[www.cab.de/en/pxq](http://www.cab.de/en/pxq)



# PX Q delivery program




## Accessories

| Pos.               | Part no.   | Designation  |
|--------------------|--|--|
| 2.1                |  <b>5977370</b>   | SD memory card   |
| 2.2                |  <b>5977730</b>   | USB memory stick   |
| 2.3                |  <b>5978912</b>   | USB WLAN stick<br>2.4 GHz 802.11b/g/n  |
| 2.4                |  <b>5977731</b>   | USB WLAN stick<br>including a rod antenna<br>2.4 GHz 802.11b/g/n<br>+ 5 GHz a/n/ac |
| 2.6                |  <b>5917651</b>   | I/O interface connector<br>SUB-D, 25 pins  |
| 2.7                |  <b>5917652</b>   | I/O interface connector<br>SUB-D, 15 pins  |
| 2.8                |  <b>6010186</b>   | External operation panel   |
|                    | <b>5907718.850</b>   | Connecting USB cable, 1.8 m  |
|                    | <b>5907730.850</b>   | Connecting USB cable, 3 m  |
|                    | <b>5907750.850</b>   | Connecting USB cable, 5 m  |
|                    | <b>5907760.850</b>   | Connecting USB cable, 11 m   |
| <b>5907765.850</b> | Connecting USB cable, 16 m   |  |
| 2.9                |  <b>5948205</b> | Label selection - I/O box  |
| 2.10               |  <b>5550818</b> | Connecting RS232 C cable<br>9/9 pins, 3 m  |
| 2.11               |  <b>5591753</b> | Interface cover unit   |

## Label software

| Pos.  | Part no.       | Designation                                 |
|-------|----------------|---|
| 11.9  | Bundle         | cablabel S3 Lite<br>(download on cab.de/en) |
|       | <b>5588001</b> | cablabel S3 Pro, 1 WS                       |
|       | <b>5588100</b> | cablabel S3 Pro, 5 WS                       |
|       | <b>5588101</b> | cablabel S3 Pro, 10 WS                      |
|       | <b>5588150</b> | cablabel S3 Pro, 1 add. licence             |
|       | <b>5588151</b> | cablabel S3 Pro, 4 add. licences            |
|       | <b>5588152</b> | cablabel S3 Pro, 9 add. licences            |
|       | <b>5588002</b> | cablabel S3 Print, 1 WS                     |
|       | <b>5588105</b> | cablabel S3 Print, 5 WS                     |
|       | <b>5588106</b> | cablabel S3 Print, 10 WS                    |
|       | <b>5588155</b> | cablabel S3 Print, 1 add. licence           |
|       | <b>5588156</b> | cablabel S3 Print, 4 add. licenses          |
|       | <b>5588157</b> | cablabel S3 Print, 9 add. licenses          |
|       | in preparation | cablabel S3 Print Server                    |
| 11.10 | <b>9008486</b> | Programming manual EN,<br>printed copy      |

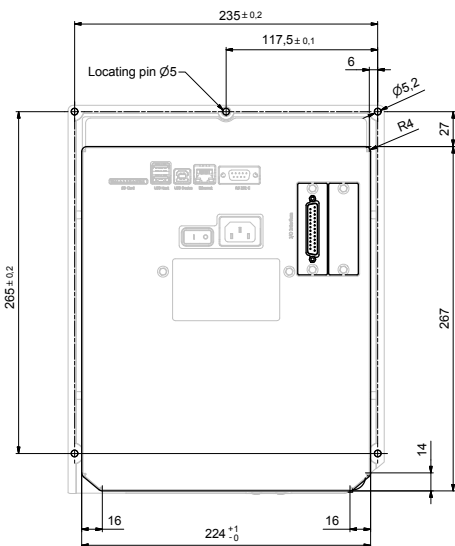
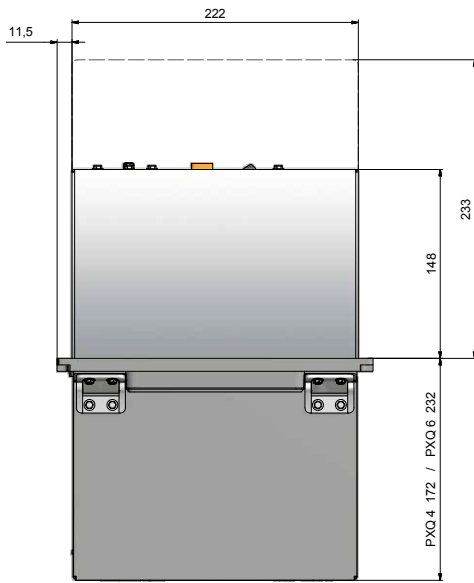
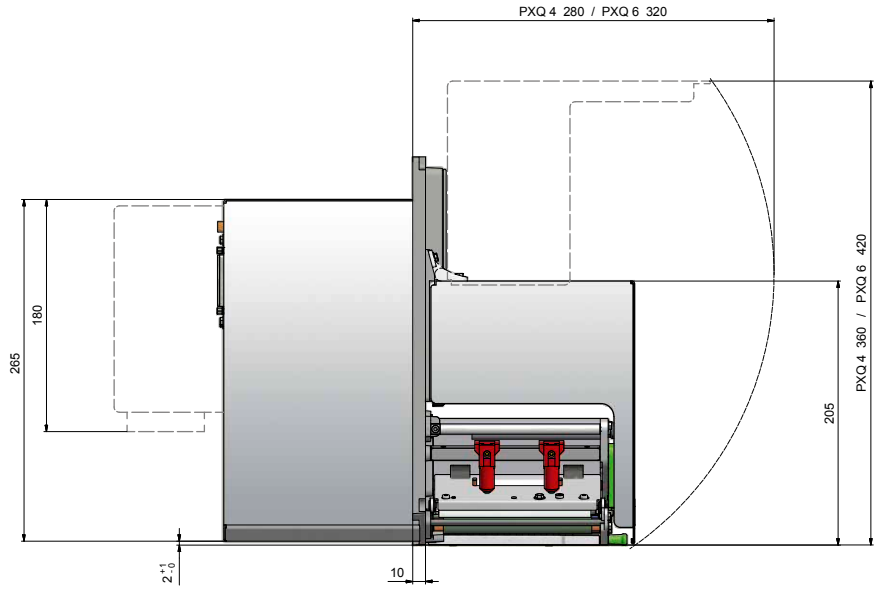
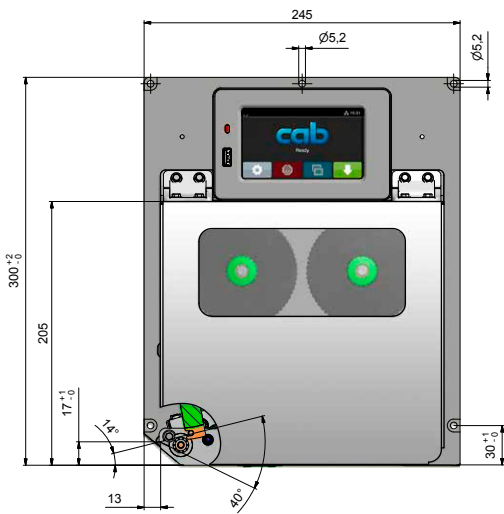
## Wear parts

| Pos.   | Part no.           | Designation       | dpi |
|--|--------------------|-------------------|-----|
|  | <b>5977382.001</b> | Print head 4.3    | 200 |
|  | <b>5977383.001</b> | Print head 4.3    | 300 |
|  | <b>5977444.001</b> | Print head 4      | 300 |
|  | <b>5977380.001</b> | Print head 4      | 600 |
|  | <b>5977386.001</b> | Print head 6.3    | 200 |
|  | <b>5977387.001</b> | Print head 6.3    | 300 |
|  | <b>5954180.001</b> | Print roller DR4  |     |
|  | <b>5954245.001</b> | Print rollerr DR6 |     |

## User languages

| Language               | Assembly instructions | Control panel | Windows driver | Service manual | cablabel S3 |
|------------------------|-----------------------|---------------|----------------|----------------|-------------|
| <b>European Union</b>  |                       |               |                |                |             |
| Bulgarian              |                       | X             | X              |                | X           |
| Danish                 | X                     | X             | X              |                |             |
| German                 | X                     | X             | X              | X              | X           |
| Estonian               |                       | X             | X              |                |             |
| Finnish                |                       | X             | X              |                |             |
| French                 | X                     | X             | X              |                | X           |
| Greek                  | X                     | X             | X              |                |             |
| Italian                | X                     | X             | X              |                | X           |
| English                | X                     | X             | X              | X              | X           |
| Croatian               |                       | X             | X              |                |             |
| Latvian                |                       | X             | X              |                |             |
| Lithuanian             | X                     | X             | X              |                |             |
| Dutch                  | X                     | X             | X              |                |             |
| Polish                 |                       | X             | X              |                | X           |
| Portuguese             |                       | X             | X              |                |             |
| Romanian               |                       | X             | X              |                |             |
| Swedish                |                       | X             | X              |                |             |
| Slovak                 | X                     | X             | X              |                |             |
| Slovenian              |                       | X             | X              |                |             |
| Spanish                |                       | X             | X              |                | X           |
| Czech                  | X                     | X             | X              |                | X           |
| Hungarian              | X                     | X             | X              |                |             |
| <b>Europe (Non-EU)</b> |                       |               |                |                |             |
| Macedonian             |                       | X             | X              |                |             |
| Norwegian              | X                     | X             | X              |                |             |
| Russian                | X                     | X             | X              |                | X           |
| Serbian                |                       | X             | X              |                |             |
| Turkish                |                       | X             | X              |                |             |
| <b>Asia</b>            |                       |               |                |                |             |
| Chinese (simplified)   |                       | X             | X              |                | X           |
| Chinese (traditional)  |                       | X             | X              |                | X           |
| Japanese               |                       |               | X              |                |             |
| Korean                 |                       |               | X              |                | X           |
| Thai                   |                       | x             | X              |                |             |
| <b>Middle East</b>     |                       |               |                |                |             |
| Arabian                |                       | X             |                |                |             |
| Persian                |                       | X             |                |                |             |

# Dimensions



| Print module weights | PX Q4.3 | PX Q4 | PX Q6.3 |
|----------------------|---------|-------|---------|
| kg                   | 11.5    | 11.5  | 12      |

# Overview of cab products

Label printers  
**MACH1, MACH2**



Label printers  
**EOS 2**



Label printers  
**EOS 5**



Label printers  
**MACH 4S**



Label printers  
**SQUIX 2**



Label printers  
**SQUIX 4**



Label printers  
**SQUIX 6.3**



Label printers  
**SQUIX 8.3**



Label printers  
**XD Q double-sided**



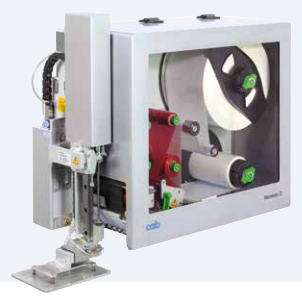
Label printers  
**XC Q two-colored**



Print and apply systems  
**HERMES Q**



Print and apply systems  
**Hermes C two-colored**



Tube labeling systems  
**AXON 1**



Print modules  
**PX Q**



Labels and ribbons



Label software  
**cablabel S3**



Label dispensers  
**HS, VS**



Labeling heads  
**IXOR**



Marking lasers  
**XENO 4**



Laser marking systems



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Phone +49 721 6626 0  
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**cab Technologies S.à.r.l.**  
Niedermodern  
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[www.cab.de/fr](http://www.cab.de/fr)

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[www.cab.de/us](http://www.cab.de/us)

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**cab Technology Co., Ltd.**  
Taipei  
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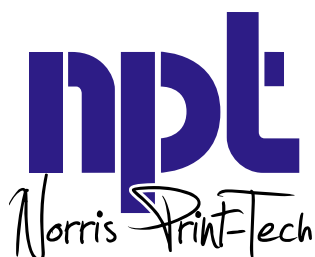
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