cab®
product marking

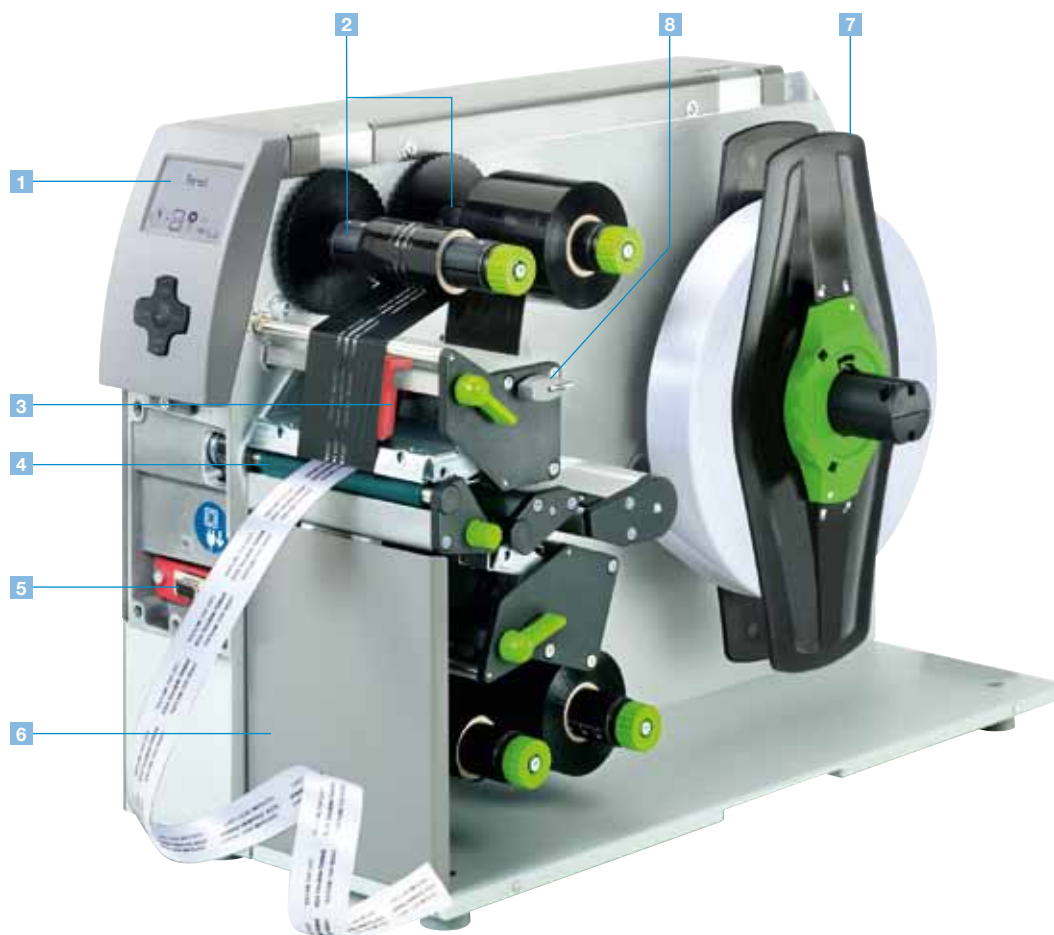# XD4 Label Printer.

Technical Data.

For double-sided printing with centered material guide

› Two stacked printing units for simultaneous printing of front and back.
› No adjustment of the printhead for different widths of material.
› For continuous or prefabricated materials such as paper, cardboard, textiles and plastics.

› The gap height at the material sensor for flat tubes and plastic tapes is up to 4 mm.
› The print speed for difficult printable materials is set to between 30 and 125 mm/sec.
› Operation and software are compatible with the A+ series.

Label printer XD4M with centred material guide

1 Big graphic display
White backlight for optimum readability.

2 Ribbon holder
Three-part tightening axles enable quick and easy ribbon exchange.

3 Straightforward adjustment
The printhead is pressed down with two sliding toggles. The materials are center aligned. There is no need of printhead adjustments for different material widths.

4 Material guide
Precise printing as the material guide is located directly behind the print roller. The width is adjusted using a spindle.

5 Peripheral connection
Add-on modules such as cutters, external rewinders, present sensors and applicators are easy to connect via the USB peripheral interface. All peripherals are connected to the printer in seconds using two pins and fixed in place with a screw.

6 Solid metal housing
Made of die-cast aluminum.
All components are mounted on it.

7 Roll holder
Available for core diameters from 38 mm. (We provide adapters for core diamters wider than 76 mm for improved label winding). The spring-mounted margin stop ensures constant tension during feeding, thus ensuring a highly precise imprint.

8 Internal rewinder
The three-part tightening axles ensure the easy rewinding and removing of labels or liners with or without paper core.

9 Only one tool for all maintenance tasks
For exchanging wear parts and connecting peripherals, the Allen key is located ready to hand at the printer.
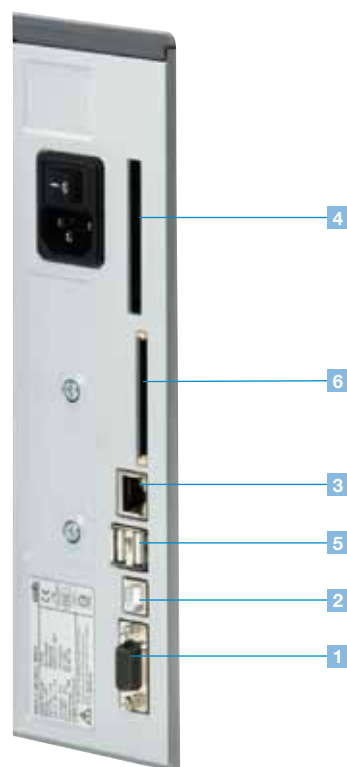
Technical details.

1 RS232C interface without function.

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.

Option

› 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.

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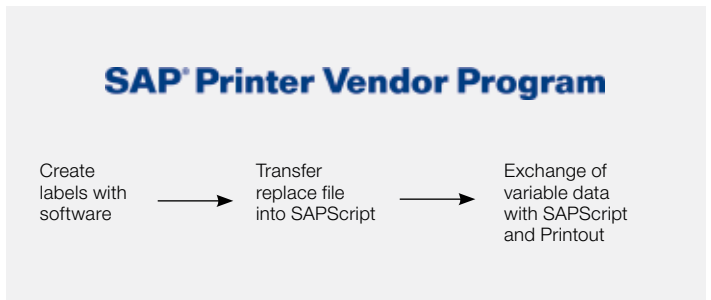
J	**Job start**
H 100	**Speed (100 mm/s)**
O R	**Orientation rotated by 180°**
S l1;0,0,68,70,100	**Size of label (100x68 mm, gap 2 mm)**
T 10, 10,0,5,pt20;sample	**Text object/font: Swiss bold, 20 pt**
B 10,20,0,EAN-13,SC2,401234512345	**Barcode EAN 13, size SC 2**
G 8,3.5,0;R:30,9,0.3;0.3	**Graphic,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

SAP® Printer Vendor Program

Create labels with software → Transfer replace file into SAPScript → Exchange of variable data with SAPScript and Printout
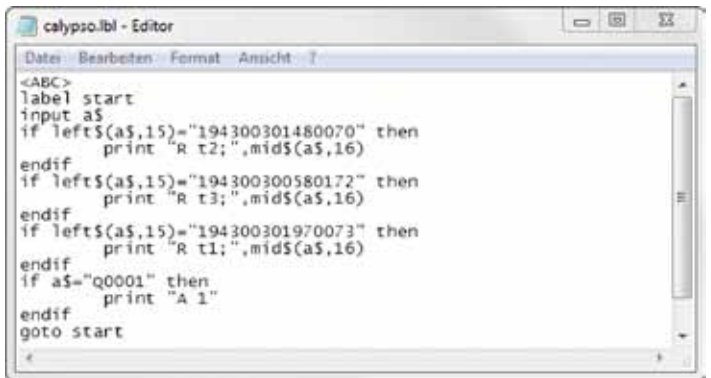
abc – Basic Compiler

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.
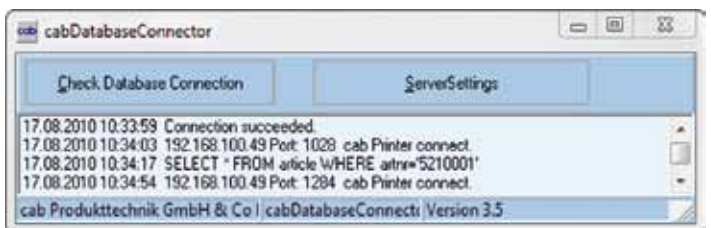
Example of use:
Connection to a balance

```
calypso.lbl - Editor
Datei  Bearbeiten  Format  Ansicht  ?
<ABC>
label start
input a$
if left$(a$,15)="194300301480070" then
        print "R t2;",mid$(a$,16)
endif
if left$(a$,15)="194300300580172" then
        print "R t3;",mid$(a$,16)
endif
if left$(a$,15)="194300301970073" then
        print "R t1;",mid$(a$,16)
endif
if a$="Q0001" then
        print "A 1"
endif
goto start
```

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.

```
cab cabDatabaseConnector
    Check Database Connection          ServerSettings
17.08.2010 10:33:59  Connection succeeded.
17.08.2010 10:34:03  192.168.100.49 Port: 1028  cab Printer connect.
17.08.2010 10:34:17  SELECT * FROM article WHERE artnr='5210001'
17.08.2010 10:34:54  192.168.100.49 Port: 1284  cab Printer connect.
cab Produkttechnik GmbH & Co | cabDatabaseConnect| Version 3.5
```
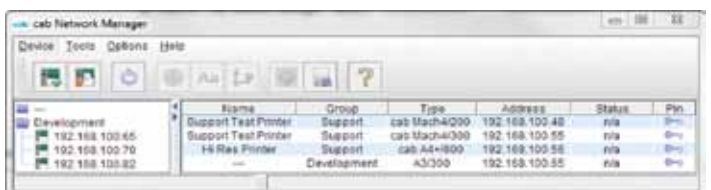
Printer monitoring with Intranet and Internet

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.
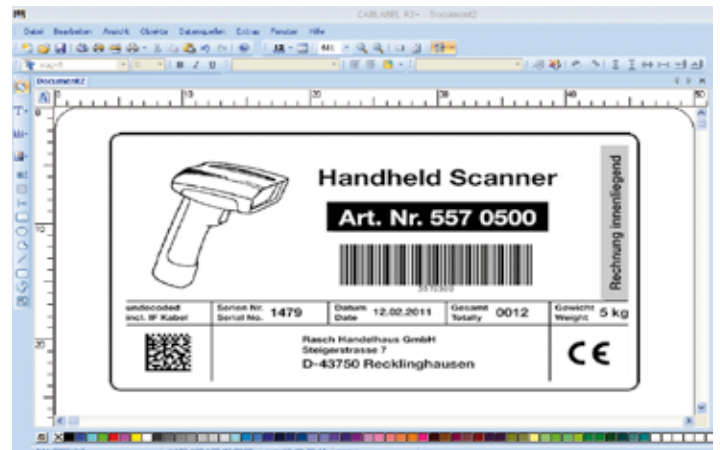
Microsoft® is a registered trademark of Microsoft Corporation.

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.

Technical data.

Label printer		XD4M / 300
Printhead	Printing method	Thermal transfer
	Print resolution dpi	300
	Print speed up to mm/s	30, 40, 50, 75, 100, 125
	Print width up to mm	105,6
Material	Labels, continuous rolls or fan-folded	Paper, cardboard, textiles, plastics such as PET, PE, PP, PVC, PU, acrylate, PI
	Thickness mm / weight g/m^2	0.055 – 0.8 / 60 – 300
	Width: Continuous material[1] mm	10 – 110
	Shrinkable tubing mm	3.5 – 110
	Height[1] up to mm	2000
	Media roll Total diameter up to mm	300
	Core diameter mm	38 – 100
	Winding direction	Outside or inside
Ribbon	Ink	Outside or inside
	Roll diameter up to mm	72
	Core diameter mm	25
	Ribbon length variable up to m	360
	Width[2] up to mm	114
Printer dimensions	Height x Depth mm	395 x 554
	Width mm	248
	Weight kg	21
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 from the center to the left mm	0 – 53
Electronics	Processor high speed 32 Bit ColdFire/clock rate MHz	266
	RAM MB	64
	Memory IFFS MB Flash	8
	Slot for CompactFlash Type I memory card	■
	Slot for wireless LAN card	■
	Battery buffer for	Real-time clock, printout of time and date. Data storage on shut-down
	Warning signal	Acoustic signal in case of error
Interfaces	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	■
	Peripheral connection	■
	WLAN card 802.11 b/g WEP / WPA PSK (TKIP)	□
	2x USB master for	External operation panel, keyboard, scanner or service key, USB flash drive
Operating data	Power supply	100 – 240 V ~ 50 / 60 Hz, PFC
	Power consumption	Max. 300 W
	Temperature / humidity: Operation	+5 – 40°C / 10 – 85% not condensing
	Storage	+0 – 60°C / 20 – 85% not condensing
	Transport	-25 – 60°C / 20 – 85% not condensing
	Approvals	CE, FCC class A, CB, CCC, UL

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

With innovative technology for better climate protection
Energy saving – Environmentally friendly

Technical data.

Label printer		XD4M / 300	
Operation panel	Buttons/LED display	Pause, Feed, Cancel, Menu, Enter, 4 x Cursor	
	LCD graphic display	Width 60 mm, height 40 mm, text 4 lines, ca. 20 characters per line	
Settings		Time, date, digital or analog clock 25 language settings System settings, print parameters, interfaces, security	
Monitoring	Stop printing if:	End of ribbon End of labels Printhead open	
	On the display	Data reception Used memory Clock Input buffer WLAN field intensity Temperature of printhead Date sheet Remaining quantity of ribbon Ethernet status Access to memory card abc Debug	
Test routines	System diagnosis	When switched on with testing of printhead	
	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 settings, 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 Interleaved 2 / 5 Code 39 Full ASCII Ident- and lead code of Deutsche Post AG Code 128 A, B, C Codabar EAN 8, 13 JAN 8, 13 EAN / UCC 128 MSI EAN / UPC Appendix 2 Plessey EAN / UPC Appendix 5 Postnet FIM RSS 14 HIBC 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/en/xd4

Scan this QR code with your smartphone
and learn more about XD4.

Accessories.

Cutter

The cutter is used to cut paper, self-adhesive labels, cardboard, textiles, plastics or heat shrink tubes.

Perforation cutter and cutter

The perforation cutter also enables the perforation of the material for manual separation

Stacker with cutter

The printed materials are cut and collected with the stacker.
The print job stops when the maximum pile height is reached.

Restrictions may apply to the use of stiff or curved materials. We recommend the testing of such materials at cab.

Storage table label width x height

The storage table and protective cover are adjusted to the label size and must be ordered separately.
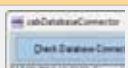
Base frame A4 / XD

With the base frame, the devices can be arranged on the table in any order.

	Cutter CU4	Perforation cutter and cutter PCU4	Stacker with cutter ST4 / M
Material width up to mm	110	85	20 – 100
Weight of material gr/m² / cardboard	60 – 500	60 – 300	60 – 300
Material thickness mm	0.05 – 0.8	0.05 – 0.8	0.05 – 0.8
Cutting length mm	> 5	> 5	20 – 150
Gap height up to mm	2.5	4.5	1.2
Cuts/min	120	Cutting 120 / Perforating 150	120
Stop print job if:	Final position not reached	Final position not reached	Final position not reached, cover open, height of pile is reached
		Perforating	**Piling**
		Web width mm 0.5 Web distances mm 2.5 or 10	Height of pile up to mm 140 Further heights on request

Delivery program.

Part no.	Hardware	dpi
5959640	Label printer XD4M / 300	

Scope of delivery	
	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.	Expendable parts	
5954072.001	Printhead 4 / 300	
5954180.001	Print roller DR4	

Part no.	Accessories	
5948000	Cutter	CU4
5960050.351	Perforation cutter	PCU4 / 2.5
5960050.352	Perforation cutter	PCU4 / 10
5541313	Stacker with cutter ST4 / M	
55xxxxx	Storage table ST4 / M, label B x H	
5959920	Base frame XD	
5901630	Compact keyboard USB, Cherry G84-4100	
5561043	Memory card CompactFlash Type I	

Part no.	Interfaces
5561041	WLAN card 802.11 b / g

Part no.	Connection cable
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

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

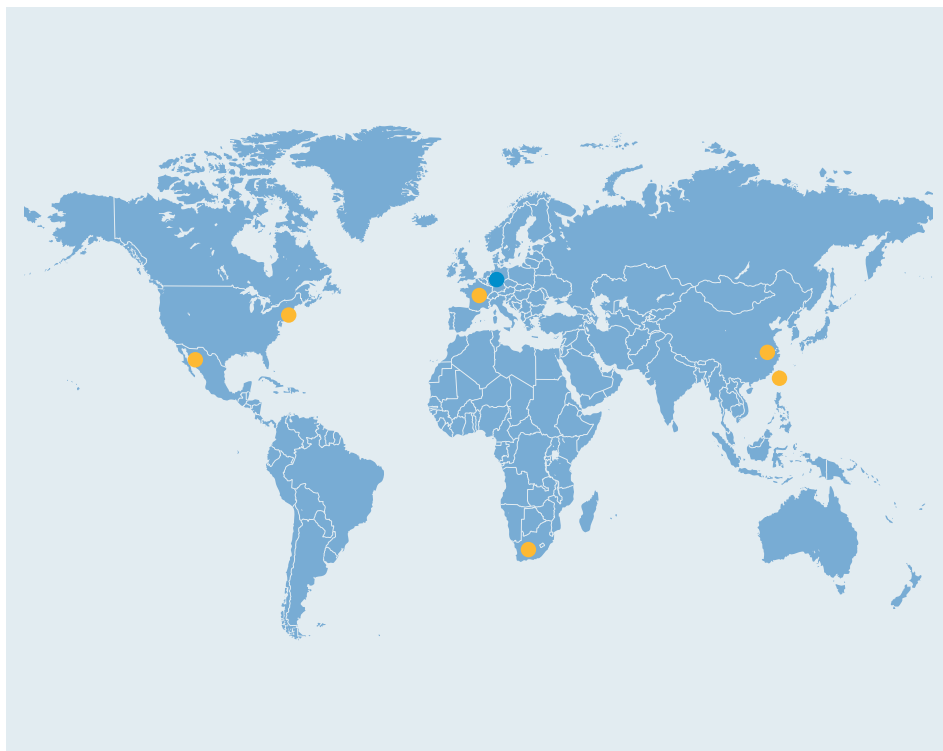Laser safety housing

Label software

Label dispenser HS/VS

Labels / ribbons

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