



cab devices and systems

Products need labeling

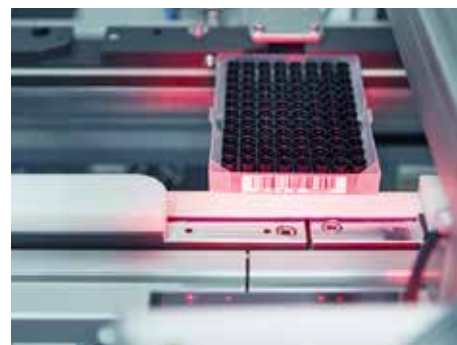


## For any requirement a proper solution

Since more than 40 years cab develops and manufactures solutions and a large amount of accessories for product marking. The product range includes label printers, print & apply systems, label dispensers and marking laser systems. In addition, cab provides ribbons and labels for the perfect imprint.

## PRODUCTS NEED LABELING

In the automotive sector, labeling ensures traceability of components to the smallest screw. In logistics, it guarantees scheduled delivery. On electrical devices, typeplates refer to performance data and use. Pharmacy sees labeling prevent from errors relevant to health, in chemistry it points out to risks associated with the handling of a product - multi-colored and without any barrier as regards language. On food, labeling informs about ingredients and on textiles about its best possible care.



## FOR THE CUSTOMER'S BENEFIT

When it comes to using the devices, cab customers expect both a long service life and 100 per cent availability. All the printing and labeling processes have to be precise and reliable. Intuitive operability is a further criterion especially with alternating staff. On this basis, cab continuously develops ideas and assigns new technologies to real applications.

*88 per cent of all the customers steadily rely on cab solutions - many of them for 20 years or more.*

Long before Advanced Manufacturing and the Internet of Things became evident, cab devices did far more than just printing on a label. The products' architecture has always been designed according to easy operation, integration in automated production lines as well as reliability. The interfaces and protocols of cab's current printer generation enable bi-directional interaction with master networks, production planning or PLC.



# Shaping innovation together

## MADE IN GERMANY

As an owner-operated family company cab offers customer focus and economic continuity.

Foresight, ideas, added by curiosity and joy in its own products and their further development have always been driving forces in the company.

Local subsidiaries in Germany, France, USA, Mexico, South Africa and Asia form the basis to meet the individual markets in the best possible way.

cab headquarters in Karlsruhe, Germany:  
Product Development and Engineering,  
International Sales, Marketing, Administration

## COMPANY FACTS AND FIGURES

- founded 1975
- nine sites in seven countries
- 350 employees
- 820 distribution partners worldwide
- Production and distribution of more than 30,000 devices every year
- 78 million Euros group turnover in fiscal year 2016
- Industry leader in automated and high-precision labeling



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





**KLAUS BARDUTZKY**  
Managing Director and company founder

**ALEXANDER BARDUTZKY**  
2nd generation Managing Director





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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.

For current data see website [www.cab.de/en](http://www.cab.de/en)

# Label printers MACH1, MACH2



**MACH1** with control buttons and LED signal                      **MACH2** with colored LCD display and navigator pad

## 4“ desktop printers in proven technology

With the MACH1 and MACH2 cab completes its printer range in the lower price segment.

The devices ideally fit with small to medium duty applications in thermal transfer and direct thermal printing.

MACH1 is provided with control buttons and a LED signal, while MACH2 has a colored LCD display and a navigator pad.

■ Standard    □ Option

Label printer		MACH1		MACH2	
<b>Print head</b>	Printing method	Thermal transfer, thermal direct			
	Printable resolution      dpi	203	300	203	300
	Print speed                  up to mm/s	127	102	177	127
	Print width                  up to mm	108	105.7	108	105.7
<b>Labels</b>	Roll outside diameter    up to mm	127			
	Width                          mm	25 - 112			
	Height                        mm	4 - 1,727	4 - 762	4 - 1,727	4 - 762
<b>Ribbon</b>	Ink side	outside or inside			
	Variable length            up to m	300			
<b>Printer sizes and weights</b>	Width x Height x Depth   mm	210 x 186 x 280			
	Weight                        kg	2.7		3	
<b>Electronics</b>	Data storage                MB	16			
	Main storage SDRAM      MB	8			
<b>Interfaces</b>	RS232-C	■		■	
	USB for PC	■		■	
	Ethernet	■		■	
	USB host	-		■	

The device can be opened up widely to insert the ribbon and the label roll.



For further information see [www.cab.de/en/mach1-2](http://www.cab.de/en/mach1-2)

# Label printers EOS1, EOS4



**EOS1** for label rolls up to diameter 152 mm

**EOS4** for label rolls up to diameter 203 mm

## Compact printers providing many features of large industrial printers

The EOS combine all the functions of a solid label printer with highest ease of operation.

EOS1 is the compact one requiring little space, EOS4 processes label rolls up to diameter 203 mm.

■ Standard □ Option

Label printer		EOS1		EOS4	
Print head	Printing method	Thermal transfer, thermal direct			
	Printable resolution dpi	203	300	203	300
	Print speed up to mm/s	125			
	Print width up to mm	108	105.7	108	105.7
Labels	Roll outside diameter up to mm	152		203	
	Width mm	single lane 10 - 116, multi lane 5 - 116			
	Height mm	5 - 1,000			
Ribbon	Ink side	outside or inside			
	Variable length up to m	360			
Printer sizes and weights	Width x Height x Depth mm	253 x 189 x 322		264 x 245 x 412	
	Weight kg	4		5	
Electronics	Processor clock rate MHz	400			
	Data storage MB	16			
	Main storage RAM MB	64			
Interfaces	USB for PC	■			
	Ethernet	■			
	Periphery	■			
	USB host	■			

The EOS can be supplied with the battery pack provided by cab - wherever labels are needed but no socket for power connection is available.



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



# Label printers MACH 4S



**MACH 4S** to insert consumables from top in the device.

## Toploaders to insert consumables from the top

The MACH 4S provide all features of a high class industrial printer with a wide application range. Labels and ribbons can be easily inserted from the top.

The devices offer a large colored touch display. Self-explanatory symbols allow intuitive and easy operation.

The centered material guide eliminates the need for adjustments and ribbon folding.

■ Standard □ Option

Label printer		MACH 4S			
<b>Print head</b>	Thermal transfer	■			
	Thermal direct	■			
	Printable resolution	dpi	203	300	600
	Print speed	up to mm/s	250	250	150
	Print width	up to mm	108.4		
<b>Labels</b>	Roll outside diameter	up to mm	205		
	Width	mm	6 - 116		
	Height	mm	Basic version 5 <sup>1)</sup> - 2,000, peel-off version 20 - 200		
<b>Ribbon</b>	Ink side		outside or inside		
	Variable length	up to m	360		
<b>Printer sizes and weights</b>	Width x Height x Depth	mm	240 x 317 x 435		
	Weight	kg	6		
<b>Electronics</b>	Processor clock rate	MHz	800		
	Data storage	MB	50		
	Main storage RAM	MB	256		
<b>Interfaces</b>	RS232-C		■		
	USB for PC		■		
	Ethernet		■		
	USB host		■		

<sup>1)</sup> From 12 mm in case of a printer version with a cutter



Printer version with a tear-off edge

Printer version with peel-off function

Printer version with a cutter



For further information see [www.cab.de/en/mach4s](http://www.cab.de/en/mach4s)

# Label printers SQUIX 2, SQUIX 4, SQUIX 6



**Material guide  
left-aligned**



**SQUIX** label printers with left-aligned material guide

## Flexible printers for industrial applications

The SQUIX are the further development of the successful printer series A+. They represent innovative technology, accuracy of impression, fast printing and highest quality standards.

Their development is foremost focused on simple and convenient operation coupled with high reliability.

All materials wound on rolls resp. fanfold can be printed.

■ Standard □ Option

Label printer		SQUIX 2		SQUIX 4			SQUIX 6	
<b>Print head</b>	Thermal transfer	■						
	Thermal direct	□	-	■	■	-	■	
	Printable resolution dpi	300	600	203	300	600	203	300
	Print speed up to mm/s	250	150	250	300	150	250	
	Print width up to mm	56.9		104	108.4	105.7	168	162.6
<b>Labels</b>	Roll outside diameter with core diameter mm	205 / 38,1 - 76						
	Width mm	4 - 63		20 - 116			46 - 176	
	Height from mm without label backfeed	4		6			6	
<b>Ribbon</b>	Ink side	outside or inside						
	Variable length up to m	450						
<b>Printer sizes and weights</b>	Width x Height x Depth mm	200 x 288 x 460		252 x 288 x 460			312 x 288 x 460	
	Weight kg	9		10			14	
<b>Electronics</b>	Processor clock rate MHz	800						
	Data storage MB	50						
	Main storage RAM MB	256						
<b>Interfaces</b>	RS232-C, USB for PC, Ethernet, Periphery, USB host, WLAN	■						
	Digital I/O	Peel-off version ■, basic version □						



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



**Customized handling**

Labels can either be cut or perforated. Various peel-off adapters enable either automatic or manual dispensing. The labels can also be rewound for further processing.

For operation in production lines various applicators are provided that allow semi-automatic printing and applying.

**Reliability**

Due to comprehensive peripheral equipment the printers fully tackle any task, allowing to demonstrate their reliability in continuous operation in any working environment.



RFID is an option with 4" and 6" devices



Tester for linear and 2D barcodes



Cutter and cutter tray



Internal rewinder



External rewinder



Applicators to be integrated in production lines



Demand module for packaging in motion



# Label printers **SQUIX 4 M, SQUIX 4 MT**



## Material guide centered



## SQUIX label printers with centered material guide

### M series - precise and versatile

For printing on all materials that are wound on rolls or reels or fanfold - especially very small labels or slim continuous materials such as pressed shrink tubes.

### MT series - textile printers

It is also possible to print on labels or continuous materials that are wound on rolls or reels.

### Valid for both printer series:

As regards the label width, no adjustment of the plungers is needed. Adapted print rollers are provided for slim materials.

■ Standard □ Option

Label printer		SQUIX 4 M			SQUIX 4 MT	
<b>Print head</b>	Thermal transfer	■				
	Thermal direct	■	■	-	■	-
	Printable resolution dpi	203	300	600	300	600
	Print speed up to mm/s	250	300	150	300	150
	Print width up to mm	104	108.4	105.7	108.4	105.7
<b>Labels</b>	Roll, reel outside diameter mm with core diameter	205 / 38.1 - 76 180 / 100			205 / 38.1 - 76 180 / 100	
	Width mm	4 - 110			4 - 110	
	Height from mm without label backfeed	3			3	
<b>Ribbon</b>	Ink side	outside or inside				
	Variable length up to m	450			450	
<b>Printer sizes and weights</b>	Width x Height x Depth mm	252 x 288 x 460			252 x 288 x 460	
	Weight kg	10			10	
<b>Electronics</b>	Processor clock rate MHz	800			800	
	Data storage MB	50			50	
	Main storage RAM MB	256			256	
<b>Interfaces</b>	RS232-C, USB for PC, Ethernet, Periphery, USB host, WLAN	■			■	
	Digital I/O	□			□	



SQUIX 4 M with a stacker and cutter



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

# Label printers A8+



**A8+ for pallet and barrel labeling**

## 8" printers for wide label applications

The print mechanics and chassis of SQUIX and A+ printers match in terms of shape and function.

The highspeed processor ensures fast processing of a print job and immediate label output.

■ Standard □ Option

Label printer		A8+
<b>Print head</b>	Thermal transfer	■
	Thermal direct	■
	Printable resolution	300 dpi
	Print speed	up to 150 mm/s
	Print width	up to 216 mm
<b>Labels</b>	Roll outside diameter	up to 205 mm
	Width	46 - 220 mm
	Height without label backfeed	from 10 mm
<b>Ribbon</b>	Ink side	outside or inside
	Variable length	up to 360 m
<b>Printer sizes and weight</b>	Width x Height x Depth	352 x 274 x 446 mm
	Weight	15 kg
<b>Electronics</b>	Processor clock rate	266 MHz
	Data storage	8 MB
	Main storage RAM	64 MB
<b>Interfaces</b>	Centronics	□
	RS232-C	■
	USB for PC	■
	Ethernet	■
	RS422 / RS485	□
	Periphery	■
	USB host	■
	WLAN	□
Digital I/O	-	



For further information see [www.cab.de/en/a8plus](http://www.cab.de/en/a8plus)

# Label printers XD4T



**XD4T** for double-sided printing also on textile materials

## Textile printer XD4T

The XD4T prints on both sides of a textile tape, cardboard labels, pressed tubes, continuous or ready-for-use, as well as on continuous plastic, paper or cardboard materials:

- No print head adjustment for different material widths
- Print rollers for narrow and slim materials

■ Standard □ Option

Label printer		XD4T
<b>Print head</b>	Printing method	Thermal transfer
	Printable resolution	300 dpi
	Print speed	125 up to mm/s
	Print width	105,6 up to mm
<b>Labels</b>	Roll outside diameter	300 up to mm
	Width	10 - 110 mm
	Height without label backfeed	20 from mm
<b>Ribbon</b>	Ink side	outside or inside
	Variable length	360 up to m
<b>Printer sizes and weight</b>	Width x Height x Depth	248 x 395 x 554 mm
<b>Electronics</b>	Weight	21 kg
	Processor clock rate	266 MHz
	Data storage	8 MB
	Main storage RAM	64 MB
<b>Interfaces</b>	RS232-C	■
	USB for PC	■
	Ethernet	■
	Periphery	■
	USB host	■
	WLAN	□
	Digital I/O	-



XD4T with a stacker and cutter



For further information see [www.cab.de/en/xd4t](http://www.cab.de/en/xd4t)



# Label printers XC4, XC6



**XC4, XC6 for two-color printing up to printhead width 162.6 mm**

## Printing two colors in one operation

In order to simultaneously print with two colors in one label, the XC have two thermal transfer units arranged in-line:

- Meets the conditions for the Classification and Labeling Inventory according to GHS
- For large label rolls to diameter 300 mm
- Provides ribbon saving function at one print head

■ Standard □ Option

Label printer		XC4	XC6
<b>Print head</b>	Printing method	Thermal transfer	
	Printable resolution dpi	300	
	Print speed up to mm/s	125	
	Print width up to mm	105.6	162.6
<b>Labels</b>	Roll outside diameter up to mm	300	
	Width mm	20 - 116	46 - 176
	Height mm	20 - 2,000	20 - 1,500
<b>Ribbon</b>	Ink side	outside or inside	
	Variable length up to m	360	
<b>Printer sizes and weights</b>	Width x Height x Depth mm	248 x 395 x 554	358 x 395 x 554
	Weight kg	22	24
<b>Electronics</b>	Processor clock rate MHz	266	
	Data storage MB	8	
	Main storage RAM MB	64	
<b>Interfaces</b>	USB for PC	■	
	Ethernet	■	
	Periphery	■	
	USB host	■	
	WLAN	□	



XC6 with a cutter



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

*we identify more*

## Consistent know-how, high level vertical integration

All mechanical and plastic components used in cab devices and systems are manufactured in-house at the Sömmerda site. Facilities, machinery and equipment are always using the latest technology.

Substantial equipment provides the preconditions to economically manufacture even complex marking systems that set demanding requirements on production processes. The competencies for the whole process chain of electronics, mechanics and software are provided within cab.



For further information see  
<https://we-identify-more.com/en>







# Print and apply systems **Hermes+**, **Hermes C**



**Hermes+ with stroke applicator 4114** **Hermes C with stroke applicator 4136**

## Hermes+

Hermes+ has been designed for automatic printing and applying in production lines.



Dispensing to the left



Dispensing to the right

## Hermes C

Hermes C is for printing and applying with two colors in one operation. It has been developed and optimized especially for applications compliant to the Classification Inventory according to GHS.




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

■ Standard □ Option

Print and apply system		Hermes+ 2		Hermes+ 4			Hermes+ 6		Hermes C 6L
<b>Print head</b>	Thermal transfer	■		■			■		■
	Thermal direct	-		■			■		-
	Printable resolution	300	600	203	300	600	203	300	300
	Print speed	150	100	250		100	200		125
	Print width	54.2	57	104	108.4	105.6	168		162.6
<b>Labels</b>	Roll outside diameter	up to 305							
	Width	4 - 58		10 - 114			50 - 174		46 - 176
	Height	4 - 200		8 - 320			25 - 320		20 - 356
<b>Ribbon</b>	Ink side	outside or inside							
	Variable length	up to 500			500			450	
<b>Device sizes and weights</b>	Width x Height x Depth	207 x 538 x 518		260 x 538 x 518			320 x 538 x 518		320 x 550 x 630
	Weight	15		16			20		30
<b>Electronics</b>	Processor clock rate	266							
	Data storage	8							
	Main storage RAM	64							
<b>Interfaces</b>	Centronics	□							
	RS232-C	■							
	USB for PC	■							
	Ethernet	■							
	USB master	■							
	RS422 / RS485	□							
	Digital I/O	■							
	Applicator	■							
	Warning light	■							
	E-stop	■							
	Main valve for air pressure supply	■							

## Applicators for product marking with Hermes+



3214 **Swing applicator**      4114/4116 **Stroke applicators**      4214 **Stroke turn applicator**      4414 **Stroke applicator**      4514 **Swing stroke applicator**      4712 **Flag applicator**

Labels may be applied from all sides. Depending from the type of applicator, the product is either in motion or not in motion during labeling.

## Applicators for package marking with Hermes+



3014/3016 **Front side applicators**      4014/4016 **Stroke applicators**      4614 **Stroke blow applicator**      5114 **Demand module**      5314/5316 and 5414/5416 **Vacuum belt applicators**      6014 **Air jet box**

Labels may be applied from all sides. Depending from the type of pad, the packaging / product is in motion or not in motion during labeling.

## Applicators for Hermes C



4126C / 4136C **Stroke applicators**  
Labels may be applied from all sides. Depending from the type of pad, the product is in motion or not in motion during labeling.

**Transfer modules for stroke applicators**

- Tamp pad**  
To press labels on flat surfaces
- Tamp pad spring-mounted**  
To apply labels even on surfaces up to approx. 8° inclination
- Roll-on pad**  
To roll labels on flat surfaces in motion

5326C / 5426C **Vacuum belt applicators**  
For labeling on packaging or products in motion.

# Labeling heads IXOR



IXOR is driven by a high-torque servo motor.

## Highly performant devices to be integrated into labeling machines

54 mm chassis depth and a modular construction kit perfectly allow IXOR to be integrated into labeling machines or attached to conveyors in a production line via a wide range of accessories such as mounting equipment.

A large-scale modular system of rewinders, unwinders and peel edges enable to configure the labeling head according to any customer specification.

Wide voltage input allows IXOR to be linked to all common power supplies. By means of the LAN and the serial interface, IXOR can be easily connected to existent control units. As regards service purposes such as firmware updates, reading out formats and diagnostics, IXOR comes standard with WLAN.

■ Standard □ Option

Labeling head		IXOR			
<b>Basic unit</b>	Construction width mm	124	186	248	310
<b>Power data</b>	Label web speed up to m/min	50, 100, 150, 200 - depending from type			
	Performance up to labels/min	2,400			
<b>Labels</b>	Roll outside diameter up to mm	310 / 410			410
	Width up to mm	120	182	244	306
	Length mm	5 - 6,000			
<b>Device sizes and weights</b>	Width x Height with supply roll 310 mm mm	600 x 600			-
	Width x Height with supply roll 410 mm mm	680 x 700			925 x 825
	Depth mm	266	328	390	452
	Weight kg	14	14.5	15	32
<b>Interfaces</b>	Analog	■			
	Periphery	■			
	WLAN	■			
	Digital I/O	■			
	End of label web sensor	■			
	Start and stop sensor	■			
	Product speed synchronization	■			
	Serial	□			
	LAN	□			
Fieldbus <sup>1)</sup>	□				

<sup>1)</sup> on request

## Customized configuration

Every IXOR application follows individual demands. To evaluate all your requirements and apply them to the specifications of IXOR, cab has set up its own contact and sales department. Please contact our specialist staff at [labeling@cab.de](mailto:labeling@cab.de)

## IXOR types and assembly examples



### Labeling head 124 L

Label web width 124 mm  
Dispensing to the left  
Unwinder: D310 V 124 L

### Vertical assembly



### Labeling head 124 R

Label web width 124 mm  
Dispensing to the right  
Unwinder: D310 V 124 R

### Vertical assembly



### Labeling head 124 L

Label web width 124 mm  
Dispensing to the left  
Unwinder: D410 V 124 L

### Vertical assembly



### Labeling head 186 L

Label web width 186 mm  
Dispensing to the left  
Unwinder: D410 H 186 L

### Horizontal assembly



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



# Print modules PX4, PX6



**PX4** for a large number of applications                      **PX6** for Odette and UCC labels

## Fully automatic printing and applying in industrial applications

Perfect performance, high reliability, comfortable operation and little maintenance downtimes - the PX can be integrated in any mounting orientation and solves even complex marking applications.

In case of a repair, components and units are easy to replace.

The footprint of the device is screw compatible with other manufacturers.

■ Standard    □ Option

Print module		PX4			PX6	
<b>Print head</b>	Printing method	Thermal transfer, thermal direct				
	Printable resolution      dpi	203	300	600	203	300
	Print speed                  up to mm/s	300	250	100	200	
	Print width                  up to mm	104	105.6		168	162.6
<b>Labels</b>	Width                          mm	10 - 116			50 - 174	
	Height without backfeed from mm	6			12	
<b>Ribbons</b>	Ink side	outside or inside				
	Variable length            up to m	600				
<b>Electronics</b>	Processor clock rate      MHz	266				
	Data storage                MB	8				
	Main storage RAM        MB	64				
<b>Interfaces</b>	Centronics	□				
	RS232-C	■				
	USB for PC	■				
	Ethernet	■				
	USB host	■				
	RS422 / RS485	□				
	Wireless Bridge	□				
Digital I/O	■					



Dispensing to the left                      Dispensing to the right



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

# Label dispensers HS, VS



**HS60+** for horizontal dispensing      **VS120** for vertical dispensing      **VS180+** for wide labels up to 180 mm

## Dispensing labels - automatic or on request

With the HS and VS all label sizes can be easily dispensed. Labels may be punched or cut without space in between. Any outside shape, square or round, can be processed. Even transparent material can be dispensed:

- With horizontal dispensers (HS) the labels are peeled off in upward direction from their bottom edge and stuck to the product.
- With vertical dispensers (VS) the labels are peeled off in forward direction from their upper edge and stuck to the product via the shortest path.

“+” models have an operation panel added.

■ Standard    □ Option

Label dispenser		HS	VS	HS+, VS+	
	Materials	Paper, textile, plastics on roll, punched or die cut, Leporello as an option			
	Feed rate	up to mm/s	200	100 / 200	
<b>Rewinder</b>	Carrier material outside diameter	up to mm 155			
<b>Label sensor</b>	Scanning	Label front edge			
	Distance to locating edge	mm	5 - 55		
	Height pre-dispense	mm	4 - 18		
<b>Connectors</b>	Peel-off on request via external signal			■	
	Power socket for non-heating apparatus	Power supply			
	Power switch	ON, OFF			
Device specific		HS60, VS60	HS120, VS120	HS180+, VS180+	
<b>Labels</b>	Roll outside diameter	up to mm 200			
	Width <sup>1)</sup>	mm	8 - 65	20 - 120	80 - 180
	Height one wide	mm	5 - 300	8 - 600	20 - 600
	Height multi wide	mm	5 - 110	8 - 110	20 - 110
<b>Device sizes and weights</b>	Width x Height x Depth	mm	180 x 250 x 360	230 x 250 x 360	300 x 250 x 360
	Weight	kg	3.3	3.6	4

<sup>1)</sup> carrier material included



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

# Marking laser systems FL+



FL+20 with scan head

## Durable marking of metal and plastics

Marking is possible with stationary metal or plastic products in Medtech, aerospace, electronics and in the automotive industries.

FL+ are diode-pumped and air-cooled. They offer a high beam quality and pulse peak power.

FL+ consist of two units: the control unit with the laser source and the scan head

The laser sources provide 50 W maximum output power.

■ Standard □ Option

Marking laser system		FL+10	FL+20	FL+30	FL+50	
<b>Laser source</b>	cw output power	up to W	10	20	30	50
	Pulse energy	mJ	0.5	1		
	Wave length	nm	1,064			
	Beam quality M <sup>2</sup>		< 1.8			
	Pulse width	ns	90 - 120	80 - 120		
	Pulse frequency	kHz	20 - 80	2 - 200		
	Connecting line	m	4.5	2.5		
<b>Scan head</b>	Mounting orientation		horizontal, vertical			
	Marking speed	mm/s	approx. 5,000			
<b>Pilot laser</b>	Wave length	nm	650			
	cw output power	mW	< 1			
<b>Electronics</b>	Processor clock rate	MHz	600			
	Data storage	MB	512			
	Main storage RAM	MB	256			
<b>Laser safety class EN60825-1</b>	Laser source		Class 4			
	Pilot laser		Class 2			
<b>Interfaces</b>	RS232-C		■			
	Ethernet		■			
	Digital I/O		■			
	Remote		■			
	E-stop		■			
<b>Rack 4RU 19"</b>						
<b>Device sizes and weights</b>	Control unit	mm	420 x 178 x 420			
	Width x Height x Depth					
	Control unit weight	kg	16			
	Scan head	mm	170 x 110 x 330			
	Width x Height x Depth					
Scan head weight	kg	7				



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

# Periphery samples for marking laser systems FL+



**LSG+100E** for the marking of serial parts      **LM+** for the marking of labels made of laser markable foil

## Laser safety housing LSG+100E

The LSG+100E is the industrial solution for marking serial parts with the FL+. The solid metal design besides a large work area provides enough space to integrate the laser source and an industrial PC within the 19" assembly frame.

The operation door is electronically opened and closed.

## Laser label marker LM+

The LM+ allows to precisely mark labels of different sizes directly from the roll and cut them without the need of additional tools.

After the marking, the labels made of laser markable foil can either be separated with a cutter or rewound with an external rewinder.

■ Standard    □ Option

Laser safety housing		LSG+100E 230 V	LSG+100E 120 V
	Work area	980 x 460 x 980	
	Width x Height x Depth	mm	
	Traversing speed	up to mm/s	
	Positional accuracy	mm	
<b>Device sizes and weight</b>	Width x Height x Depth	1,000 x 2,280 x 1,120	
	Weight	kg	
<b>Interfaces</b>	Digital I/O	■	
	Remote	■	
	E-stop	■	
	Step motor Z axis, X axis, rotary axis	■	
	Extraction and filter device	■	
Laser label marker		LM+160.1	LM+254.1
	Work area	160 x 5 x 190	
	Width x Height x Depth	mm	
	Transport speed	mm/s	
	Positional accuracy	mm	
<b>Labels</b>	Roll outside diameter	up to mm	
	Width	mm	
	Height	up to mm	
<b>Device sizes and weights</b>	Width x Height x Depth	440 x 520 x 802	
	Weight	kg	
<b>Interfaces</b>	RS232-C	■	
	E-stop FL+	■	
	E-stop external	■	
	Cutter	■	



Typeplates made of aluminum



Code traceability in sterilization



Size allocation in Medtech



Ident clips made of plastic



# Marking laser systems XENO 1



**XENO 1** marking laser system “out of the box”

## Easy and fast marking of single workpieces and series

XENO 1 is a desktop device easy to handle and intuitively operable. At the same time it provides the features and functionality of a premium system. The laser sources provide 20 or 30 W maximum output power.

XENO 1 completes the range of cab marking laser systems in the lower price segment.

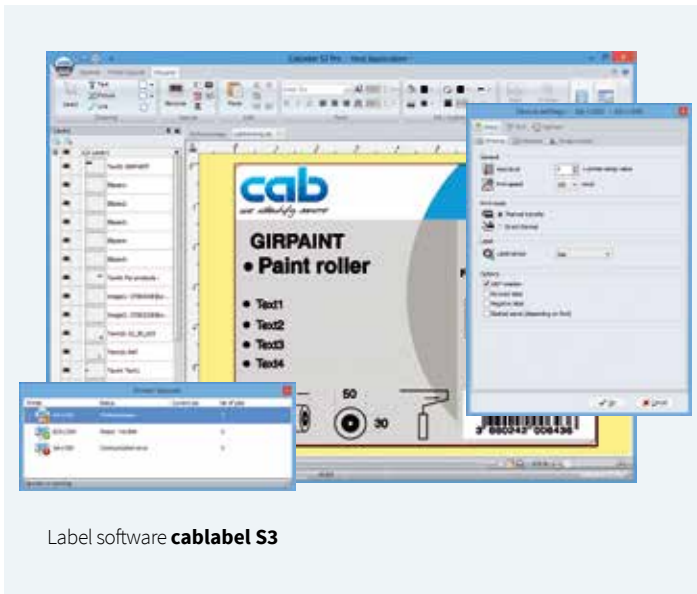
■ Standard □ Option

Marking laser system		XENO 1	
<b>Laser source</b>	cw output power	up to W	20      30
	Pulse energy	mJ	1
	Wave length	nm	1,064
	Beam quality M <sup>2</sup>		< 1.6
	Pulse width	ns	120
	Pulse frequency	kHz	20 - 60
<b>Pilot laser / focus finder</b>	Wave length	nm	650
	cw output power	mW	< 0.4
	Work area	mm	500 x 200 (100) x 250
	Width x Height x Depth		
	Traversing speed	mm/s	20
	Positional accuracy	mm	0.1
	Laser safety class		Class 1
<b>Interfaces</b>	USB host		■
	Ethernet		■
	Extraction and filter device		■
	RS232-C		□
	Digital I/O		□
<b>Device sizes and weight</b>	Width x Height x Depth	mm	580 x 660 x 700
	Weight	approx. kg	50



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

## Software for cab devices



Label software **cablabel S3**



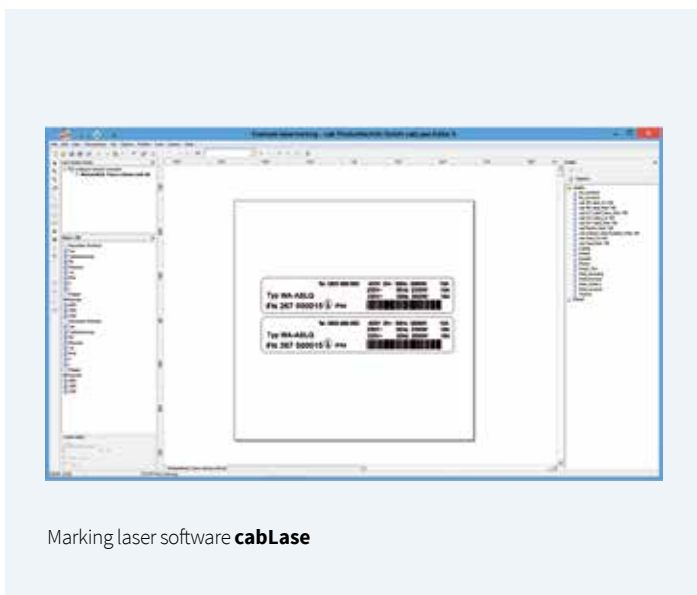
### Designing, printing, administrating with cablabel S3

The cablabel S3 software opens up the full potential of cab devices. First of all the label must be designed. Only when it comes to printing it has to be decided whether the label shall be processed on a label printer, a print and apply or marking laser system.

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)



Marking laser software **cabLase**



### Designing, controlling, monitoring with cabLase

cab marking lasers have installed cabLase Editor 5. It offers the key features

- graphic design of layouts,
- control of marking,
- monitoring the marking process.

Further software features are

- support of marking without a PC,
- remote control,
- remote API interface for integration in manufacturing processes,
- integrability in MES and ERP platforms.



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

## Stand-alone operation of cab printers

This operating mode is the printer's ability to select and print labels even when it is not connected to a host system.

The label has to be designed with a software such as cablabel S3 or by direct programming with a text editor on a PC. Label formats, texts, graphics as well as database contents are stored on a memory card, a USB memory stick or in the internal IFFS memory.

Only variable data are sent to the printer via a keyboard, a barcode scanner, scales or other systems. With the Database Connector, these data are recalled from the host and printed.



## Precise printing with **cab labels**



**cab labels** are custom made from more than 400 materials - plain or pre-printed.

### Good reasons to choose **cab labels**

The surfaces of cab labels are optimized for high image fidelity in thermal transfer printing. The roll and core diameters as well as the winding are tailored specifically to cab printers. Three samples of stock materials:



#### **Paper white - slightly glossy**

Applications are address labeling as well as the marking of product and goods in general in industry, logistics, trading or services.

This material offers high whiteness combined with a permanent adhesive.



#### **Polyester white - matt**

Applications are with customized stock materials resp. storage locations, goods on consignment, outdoor and production areas as well as potential hazards.

This material is highly resistant to tearing, oils and extreme temperatures, repelling dirt and water.



#### **Polyester silver - matt**

Applications are with printers having a high printable resolution: e. g. product type-plates or indicating labels when labeling devices indoor and outdoor

This material convinces with a strong adhesive power on smooth surfaces and high resistance to extreme temperatures.



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

# High-quality printing with **cab ribbons**



**cab ribbons** have a special back coating to avoid static electrification and better dissipate residual heat.

## Good reasons to choose **cab ribbons**

Whether narrow or wide labels have to be applied, if it is for product or typeplate marking - cab provides more than 20 types of ribbons for any demand. Tailored specifically for cab printers, these ribbons offer a consistent high quality.

### Wax ribbons

Fitting with fast and economical printing on vellum or coated paper, wax ribbons produce high-contrast, sharp and clear imprints with a high density. Recommended if wipe resistance is not a top priority.

### Resin/wax ribbons

Resin/wax ribbons provide a higher abrasion and scratch resistance than pure wax ribbons while offering the same density. Recommended for a bunch of applications with chromated or coated papers as well as plastics.

### Resin ribbons

Resin ribbons are highly resistant to scratching, extreme temperatures and dissolvers. They are therefore primarily used with plastic materials, even with coated surfaces. Ribbons withstanding washing and ironing are also available.

### Colored ribbons on request

Colored cab ribbons in pure wax, resin/wax or pure resin qualities exhibit the same characteristics as the black ribbons. Golden or silver wax ribbons are specifically recommended for high-quality decorative labels.



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



# At home in any industry

A quarter of a million cab devices and systems are in continuous operation all over the world. They are in use in the automotive, chemical, pharmaceutical and textile industries, in electronics and medtech, transport and logistics as well as in retail and wholesale trading and the services sector.



### Applications

Informational labels, warning labels, inventory, product labels, logging, labels for certification or testing, patient admission, pricing, storage location marking, shelf marking, address labels, shipping labels, incoming goods, tickets, typeplate marking, warranty labels, cable marking, tube marking, barrel labels, encoding, container labels, spare parts marking resp. identification

### Customers

cab devices are operated by global players as well as by small and medium-sized companies.



„We set milestones in the development and manufacturing of devices and systems for product marking.“

*Roman Schnider  
Head of Software Development*



# Services and Training

## Services

Well-trained cab service engineers worldwide support in the maintenance and repair of the devices.

Send your printer to a cab service center or a service partner selected by us. Your device will be checked and repaired within few workdays. If requested, a loan device will be offered.

You prefer maintenance and repair on-site in your company? Then make an appointment with our Services Department:

Phone **+49 721 6626 300**, Email: [service.de@cab.de](mailto:service.de@cab.de)

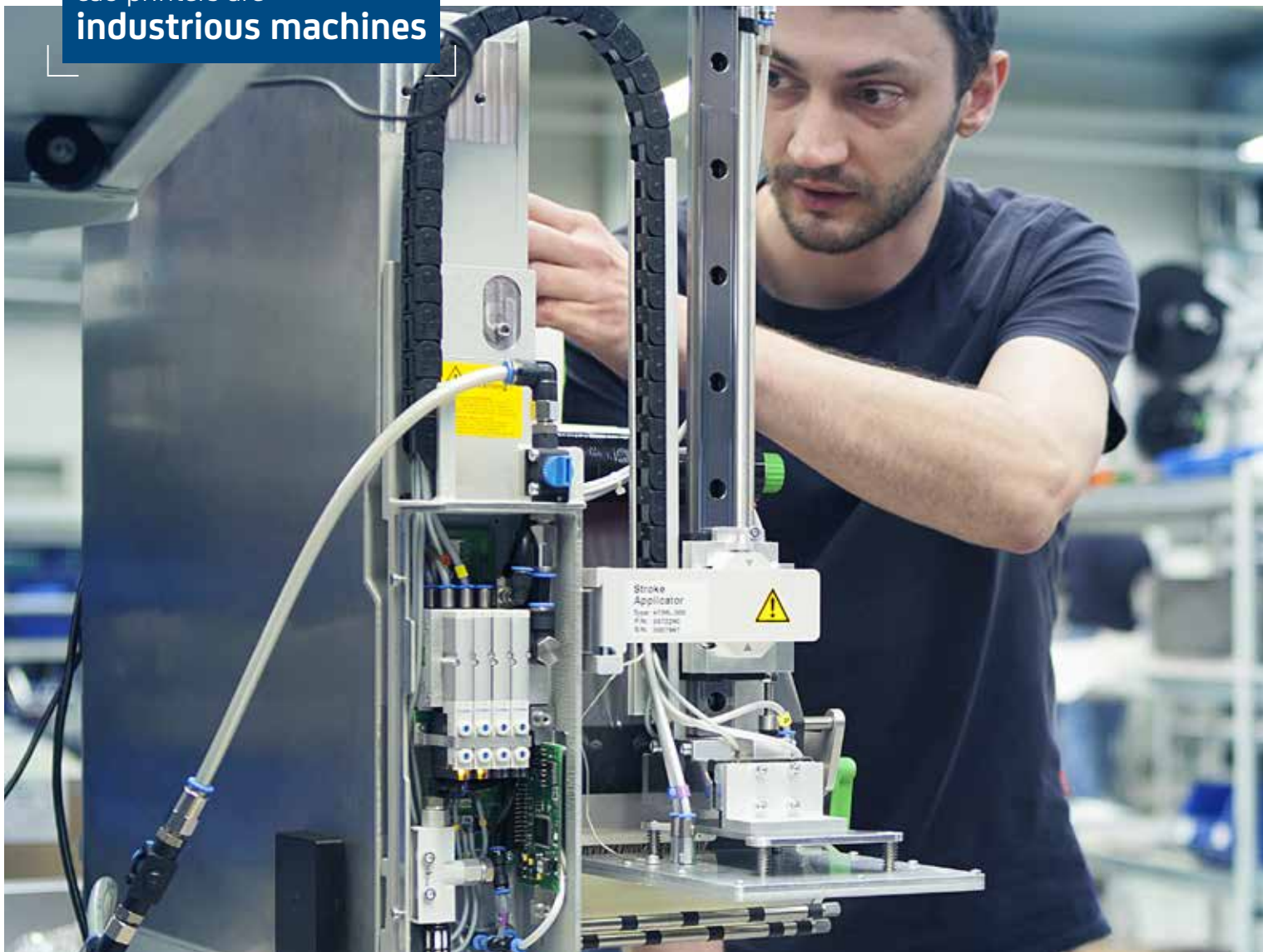
## Training

Enhance your know-how on cab devices with regard to an effective use, service and repair.

In Karlsruhe we offer trainings on the handling of the devices, label design, software, printer drivers, programming, database access as well as on how to integrate in networks or superior ERP systems. We gladly send you detailed information on all our current training offers on request.

Individually we offer trainings according to your specific demands – in Karlsruhe or on-site in your company.

cab printers are  
**industrious machines**





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