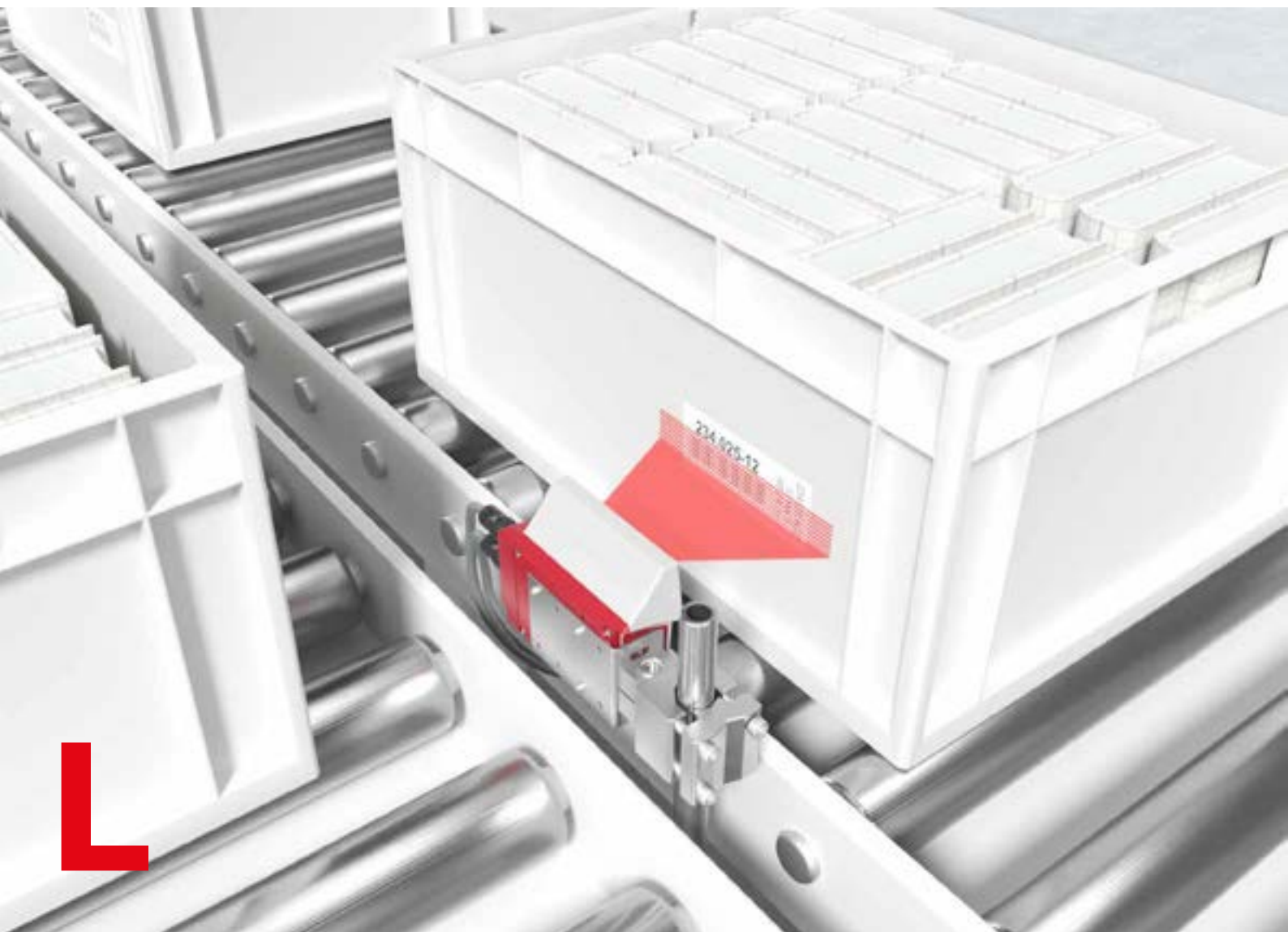


Identification

Reliably detected: automatic bar code identification for continuous traceability

In many areas of production and logistics, goods and materials are labeled with bar codes or 2D-codes. They are used for identification in the automation process and simultaneously ensure the traceability of the production and packaging process of every single product.

We offer various technologies for reading these codes: stationary laser scanners in line or raster scanner versions, bar code readers with integrated heating for low-temperature applications, camera-based 2D-code readers as well as mobile hand-held scanners for bar codes, 2D-codes and DPM codes.





Our bar code readers: Proven technology and a wide range of equipment variants

For gapless product traceability, automatic identification of 1D-codes is essential. The BCL 300i stationary bar code reader is used primarily for the identification of bar codes on containers and packages.

With the innovative code reconstruction technology, even soiled or damaged codes can be reliably detected, no-reads minimized and system availability significantly increased.

Through the modular design with many equipment options, the BCL 300i can be adapted flexibly and optimally to the specific application.

BCL 300i

- Modular connection technology through plug-gable connection hoods
- PROFINET, Ethernet/IP or EtherCAT
- Variants as line scanners, raster scanners, deflecting and oscillating mirrors available
- Code reconstruction technology (CRT) for reliable identification of damaged codes
- Optionally with display and heating



Stationary bar code readers



CR 50, CR 55
Miniature scanner
CE cULus



CR 100
Miniature scanner
CE cULus

Technical data	Reading distance (dependent on version)	40 mm ... 250 mm	15 mm ... 72 mm
	Modulus size	0.1 mm ... 0.5 mm	0.15 mm ... 0.5 mm
	Scanning rate	330 scans/s	700 scans/s
	Reading method	Line scanner	Line scanner Line scanner with deflecting mirror
	Switching outputs	1 Piece(s)	1 Piece(s)
	Switching inputs		1 Piece(s)
	Selectable inputs/outputs		
	Interface	RS 232 USB	RS 232
	Configuration/parametering	Software	
	Supply voltage U _B	4.5 V DC ... 5.5 V DC	4.9 V DC ... 5.4 V DC
	Degree of protection	IP 54	IP 40
	Ambient temperature, operation (< 0°C with heating possible)	0 ... 40 °C 0 ... 50 °C	0 ... 45 °C
	Housing	Metal Plastic	Metal
Accessories	MA 200i connection unit		
	MA 8 connection unit		
	Mounting devices		
Features	AutoConfig		
	AutoReflAct		
	Alignment mode		X
	LED indicator		X
	Reference code comparison		



BCL 8
Miniature scanner

CE UK CA eUL CDRH

BCL 92, BCL 95
Miniature scanner

CE UK CA eUL CDRH

BCL 148
Bar code readers for laboratory automation

CE UK CA eUL CDRH

25 mm ... 160 mm	25 mm ... 275 mm	30 mm ... 310 mm
0.12 mm ... 0.5 mm	0.15 mm ... 0.5 mm	0.127 mm ... 0.5 mm
500 scans/s ... 600 scans/s	600 scans/s	750 scans/s
Line scanner	Line scanner	Line scanner
	2 Piece(s)	
	2 Piece(s)	1 Piece(s)
1 Piece(s)		
RS 232	RS 232	RS 232 RS 485
4.75 V DC ... 5.5 V DC	4.75 V DC ... 30 V DC	18 V DC ... 30 V DC
IP 67	IP 54	IP 65
0 ... 40 °C	5 ... 40 °C	5 ... 40 °C
Metal	Metal	Metal
CANopen DeviceNet EtherCAT EtherNet IP EtherNet TCP/IP PROFIBUS PROFINET RT UDP		
RS 485		
BT 8		
X	X	
X		
X	X	
X	X	
X	X	

Stationary bar code readers



BCL 200i
Compact scanner
CE UK CA CDRH



BCL 300i
Compact scanner
CE UK CA CDRH

Technical data	Reading distance (dependent on version)	40 mm ... 255 mm	20 mm ... 700 mm
	Modulus size	0.2 mm ... 0.5 mm	0.127 mm ... 0.8 mm
	Scanning rate	1,000 scans/s	1,000 scans/s
	Reading method	Line scanner with deflecting mirror Raster scanner with deflecting mirror	Line scanner Line scanner with deflecting mirror Oscillating-mirror scanner Raster scanner Raster scanner with deflecting mirror
	Switching outputs	1 Piece(s)	
	Switching inputs	1 Piece(s)	
	Selectable inputs/outputs		2 Piece(s)
	Interface	Ethernet EtherNet IP PROFINET	EtherCAT Ethernet EtherNet IP MultiNet Plus OPC-UA PROFIBUS DP PROFINET RS 232 RS 422 RS 485
	Configuration/parametering	Via web browser	Via web browser
	Supply voltage U _B	18 V DC ... 30 V DC	18 V DC ... 30 V DC
	Degree of protection	IP 65	IP 65
Accessories	Ambient temperature, operation (< 0°C with heating possible)	0 ... 40 °C	-35 ... 40 °C 0 ... 40 °C
	Housing	Metal	Metal
Accessories	MA 200i connection unit		CANopen DeviceNet
	MA 900 connection unit		
	Mounting devices	BT 56 BT 300-1 BT 300W	BT 56 BT 59 BT 300 BT 300W
Features	AutoConfig	X	X
	AutoControl	X	X
	AutoReflAct	X	X
	Code fragment technology	X	X
	Alignment mode	X	X
	LED indicator	X	X
	Reference code comparison	X	X
	Heating		X

**BCL 500i**

Large reading distance

CE UK CDRH

BCL 600i

Large reading distance

CE UK CDRH

BCL 900i

Large reading distance

CE UK CDRH

200 mm ... 2,400 mm	400 mm ... 1,450 mm	450 mm ... 1,700 mm
0,25 mm ... 1 mm	0.25 mm ... 0.5 mm	0.25 mm ... 0.5 mm
1,000 scans/s	800 scans/s ... 1,000 scans/s	1,000 scans/s
Line scanner Oscillating-mirror scanner	Line scanner Oscillating-mirror scanner	Line scanner
		2 Piece(s)
		3 Piece(s)
4 Piece(s)	4 Piece(s)	
Ethernet EtherNet IP MultiNet Plus PROFIBUS DP PROFINET RS 232 RS 422 RS 485	Ethernet PROFIBUS DP PROFINET RS 232 RS 422 RS 485	Ethernet RS 232 RS 422
Via web browser	Via web browser	Via web browser
10 V DC ... 30 V DC	10 V DC ... 30 V DC	10 V DC ... 30 V DC
IP 65	IP 65	IP 65
-35 ... 40 °C 0 ... 40 °C	-35 ... 40 °C 0 ... 40 °C	0 ... 50 °C
Metal	Metal	Metal
CANopen DeviceNet EtherCAT	CANopen DeviceNet EtherCAT	CANopen DeviceNet EtherCAT PROFIBUS PROFINET RT
		EtherNet IP EtherNet TCP/IP RS 232 RS 422 UDP
BT 56 BT 59	BT 56 BT 59	BT 900
X	X	X
X	X	
X	X	
X	X	X
X	X	X
X	X	X
X	X	
X	X	