

CLV632-2120 CLV63x

FIXED MOUNT BARCODE SCANNERS

SICKSensor Intelligence.



Ordering information

Туре	part no.
CLV632-2120	1041993

Other models and accessories → www.sick.com/CLV63x



Detailed technical data

Features

Version	Short Range
Connection type	Ethernet
Reading field	Side (105°)
Sensor type	Line scanner
Optical focus	Fixed focus
Light source	Light spot, laser, Visible, Red, 655 nm
Light spot	Circular
Laser class	2, complies with 21 CFR 1040.10 except for the conformance according to "Laser Notice No. 56" from May 8, 2019 (EN 60825-1:2014+A11:2021, IEC 60825-1:2014)
Aperture angle	≤ 50°
Reading distance	44 mm 256 mm ¹⁾
Scanning frequency	400 Hz 1,200 Hz
Code resolution	0.2 mm 0.5 mm

¹⁾ For details see reading field diagram.

Mechanics/electronics

Connection type	$2\mathrm{x}\mathrm{M}12$ cylindrical connectors (12-pin male connector, 4-pin female connector) on swivel connector
Supply voltage	18 V DC 30 V DC
Power consumption	5 W

 $^{^{1)}}$ Swivel connector is 15 mm longer.

²⁾ At 25 °C.

Housing material	Aluminum die cast
Housing color	Light blue (RAL 5012)
Window material	Glass
Enclosure rating	IP65 (EN 60529)
Protection class	III (EN 61140)
Weight	270 g, without connecting cable
Dimensions (L x W x H)	80 mm x 96 mm x 38 mm ¹⁾
MTBF	100,000 h
MTTF	40,000 h (Laser diode) ²⁾

 $^{^{1)}}$ Swivel connector is 15 mm longer.

Performance

Readable code structures	1D codes
Bar code types	All current code types, Code 39, Code 128, Code 93, Codabar, GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Telepen, MSI/Plessey
Code printing process	Label (printed codes)
Print ratio	2:1 3:1
No. of codes per scan	1 20 (Standard decoder) 1 6 (SMART decoder)
No. of codes per reading interval	1 50 (auto-discriminating)
No. of characters per reading interval	5,000 500 (for multiplexer function in CAN operation)
No. of multiple readings	199

Interfaces

Ethernet		✓, TCP/IP
	Function	Data interface (read result output), Service interface
Dat	a transmission rate	10/100 MBit/s
PROFINET		√
	Function	PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2)
Dat	a transmission rate	10/100 MBit/s
EtherNet/IP™		✓
Dat	a transmission rate	10/100 MBit/s
EtherCAT [®]		✓
Type of	fieldbus integration	Optional over external fieldbus module CDF600
Serial		✓ , RS-232, RS-422, RS-485
	Function	Data interface (read result output), Service interface
Dat	a transmission rate	2,400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
CAN		√
	Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server)
Dat	a transmission rate	20 kbit/s 1 Mbit/s
CANopen		√
Dat	a transmission rate	20 kbit/s 1 Mbit/s

²⁾ At 25 °C.

PROFIBUS DP	✓	
Type of fieldbus integration	Optional over external fieldbus module CDF600-2	
Digital inputs 3 ("Sensor 1", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420		
Digital outputs 2 (Via optional CMC600 parameter memory in CDB620/CDM420)		
Reading pulse	Digital inputs, non-powered, serial interface, auto pulse, CAN	
Optical indicators	6 LEDs (Ready, Result, laser, Data, CAN, LNK TX, Bar graph for displaying the reading rate percentage (10 LEDs))	
Acoustic indicators	Beeper/buzzer (can be switched off, can be allocated as a result indication function)	
Control elements	2 buttons (choose and start/stop functions)	
Configuration software	SOPAS ET	
Memory card	MicroSD memory card (flash card), optional	

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-3 (2001-10) / EN 61000-6-2:2005
Vibration resistance	EN 60068-2-6 (1995)
Shock resistance	EN 60068-2-27 (1993)
Ambient operating temperature	0 °C +40 °C
Storage temperature	-20 °C +70 °C
Permissible relative humidity	90 %, Non-condensing
Ambient light immunity	2,000 lx, on barcode
Bar code print contrast (PCS)	≥ 60 %

Certificates

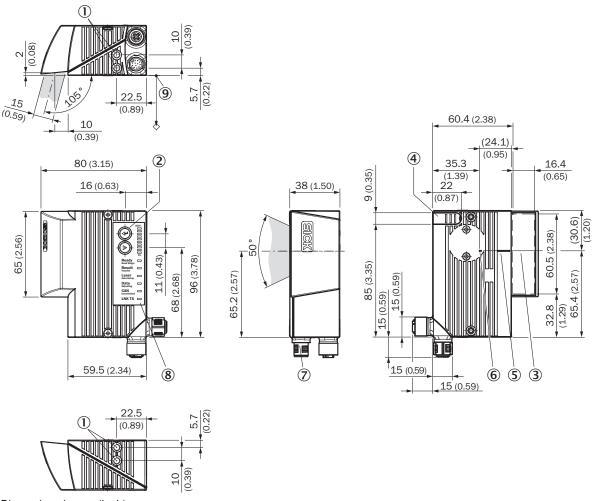
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	√
China-RoHS	✓
cULus certificate	√
KC Mark certificate	✓
Ethercat certificate	✓
Profinet certificate	✓
Laser safety (IEC 60825-1) declaration of manufacturer	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓
4Dpro	✓

Classifications

ECLASS 5.0	27280102
ECLASS 5.1.4	27280102
ECLASS 6.0	27280102
ECLASS 6.2	27280102
ECLASS 7.0	27280102
ECLASS 8.0	27280102
ECLASS 8.1	27280102

ECLASS 9.0	27280102
ECLASS 10.0	27280102
ECLASS 11.0	27280102
ECLASS 12.0	27280102
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	43211701

Dimensional drawing CLV63x/64x Ethernet, side



Dimensions in mm (inch)

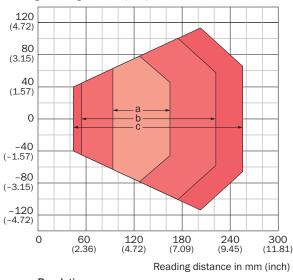
- ① blind hole thread M5, 5 mm deep (2 x), for mounting
- ② Function button (2 x)
- 3 Reading field
- (4) cover for the microSD memory card
- ⑤ central position of the deflected laser beam in the V-shaped aperture angle
- ⑥ internal impact point: rotation point of the variable direction laser beam

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- ⑦ M12 round connectors (1 x 12-pin or 1 x 17-pin male connector, A-coded, 1 x 4-pin female connector, D-coded) with swivel connector
- ® LED status indicator (6x) and bar graph
- (9) reference point for reading distance (from housing edge to object)

Reading field diagram





Resolution



b: 0.35 mm (13.8 mil)

c: 0.50 mm (19.7 mil)

Recommended accessories

Other models and accessories → www.sick.com/CLV63x

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	Description: Hanger-shaped mounting bracket Items supplied: Mounting hardware included	Mounting bracket	2042800	
integration modules and adapters				
Walter W. S. Company	Description: External parameter memory for integration in CDB620/CDB650/CDM42x	CMC600-101	1042259	
Storage media				
	Description: microSD memory card with 1 GB for industrial use	microSD memory card	4051366	

	Brief description	Туре	part no.
Junction boxes			
		CDB620-001	1042256
connectors and cables			
8 8	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 2 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020P- N1MRJA4	2106182

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