

CLV632-0120

CLV63x

FIXED MOUNT BARCODE SCANNERS





Ordering information

Туре	Part no.
CLV632-0120	1041989

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



Detailed technical data

Features

Version	Short Range
Connection type	Ethernet
Reading field	Front
Sensor type	Line scanner
Optical focus	Fixed focus
Light source	Light spot, laser, Visible, Red, 655 nm
Light spot	Circular
Laser class	2 (IEC 60825-1:2014, EN 60825-1:2014)
Aperture angle	≤ 50°
Reading distance	60 mm 285 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	2xM12 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
Housing	Aluminum die cast
Housing color	Light blue (RAL 5012)
Window material	Glass
Enclosure rating	IP65 (EN 60529)
Protection class	III (EN 61140)
Weight	250 g, without connecting cable

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

²⁾ At 25 °C.

Dimensions (L x W x H)	61 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 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

Type of fieldbus integration Optional over external fieldbus module CDF600-2 Function Function Function Data interface (read result output), Service interface PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2) Data interface (read result output), Service interface PROFINET Dual Port (optional via external connection module CDF600-2) Data interface (read result output), Service interface SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server) Data transmission rate 10/100 MBit/s 10/100 MBit/s 10/100 MBit/s 2.400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232) 20 kbit/s 1 Mbit/s 20 kbit/s	Ethernet	✓, TCP/IP, RS-232, RS-422, RS-485
PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2) Data interface (read result output), Service interface SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server) 10/100 MBit/s 10/100 MBit/s 10/100 MBit/s 10/100 MBit/s 2,400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232) 20 kbit/s 1 Mbit/s 21 kBaud, AUX: 57.6 kBaud (RS-232) 22 kBaud, AUX: 57.6 kBaud (RS-232) 23 kBaud, AUX: 57.6 kBaud (RS-232) 24 kBaud, AUX: 57.6 kBaud (RS-232) 25 kBaud, AUX: 57.6 kBaud (RS-232) 26 kBaud, AUX: 57.6 kBaud (RS-232) 27 kBaud, AUX: 57.6 kBaud (RS-232) 28 kBaud, AUX: 57.6 kBaud (RS-232) 29 kBaud, AUX: 57.6 kBaud (RS-232) 20 kBaud, AUX: 57.6 kBaud (RS-232) 2	Type of fieldbus integration	·
10/100 MBit/s 10/100 MBit/s 10/100 MBit/s 2,400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232) 20 kbit/s 1 Mbit/s 20 kbit/s 1 Mbit/s 20 kbit/s 1 Mbit/s 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 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	Function	PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2) Data interface (read result output), Service interface
Digital outputs 2 (Via optional CMC600 parameter memory in CDB620/CDM420) Reading pulse Digital inputs 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	Data transmission rate	10/100 MBit/s 10/100 MBit/s 2,400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232) 20 kbit/s 1 Mbit/s
Reading pulse Digital inputs 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	Digital inputs	3 ("Sensor 1", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
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	Digital outputs	2 (Via optional CMC600 parameter memory in CDB620/CDM420)
centage (10 LEDs)) Acoustic indicators Beeper/buzzer (can be switched off, can be allocated as a result indication function) Control elements Configuration software SOPAS ET	Reading pulse	Digital inputs
Control elements 2 buttons (choose and start/stop functions) Configuration software SOPAS ET	Optical indicators	
Configuration software SOPAS ET	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)
Memory card (flash card), optional	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

²⁾ At 25 °C.

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FIXED MOUNT BARCODE SCANNERS

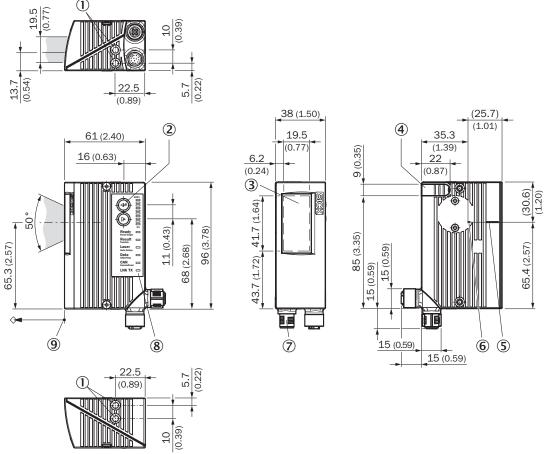
Permissible relative humidity	90 %, Non-condensing
Ambient light immunity	2,000 lx, on barcode
Bar code print contrast (PCS)	≥ 60 %

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 (Dimensions in mm (inch))

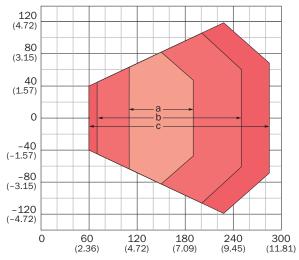
CLV63x/64x/65x, JEF3xx, JEF5xx, Ethernet, front



- 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
- ① 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
- Reference point for reading distance (from housing edge to object)

Reading field diagram

Reading field height in mm (inch)



Reading distance in mm (inch)

For devices with plastic reading window, the depth of field is reduced by approx. 10 %.

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.	
Cloning modu	Cloning modules			
10 10 10 10 10 10 10 10 10 10 10 10 10 1	External parameter memory for integration in CDB620/CDB650/CDM42x	CMC600-101	1042259	
Storage media	a			
	microSD memory card with 1 GB for industrial use	microSD memory card	4051366	
Mounting bra	ckets and plates			
	Hanger-shaped mounting bracket, mounting hardware included	Mounting bracket	2042800	
Plug connecto	Plug connectors and cables			
88	 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, PROFINET, shielded Application: Drag chain operation, Zones with oils and lubricants 	YM2D24- 020PN1MRJA4	2106182	

	Brief description	Туре	Part no.
Modules			
	 Sub product family: CDB620 Supported products: CLV61x - CLV65x, Lector62x, RFH6xx, RFU62x Brief description: Small connection module for one sensor, 4 cable glands, base for CMC600 	CDB620-001	1042256

Recommended services

Additional services → www.sick.com/CLV63x

	Туре	Part no.
Performance check		
 Product area: Fixed mount barcode scanners Range of services: Inspection of defined functions, e.g., reading performance Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses. Duration: Additional work will be invoiced separately 	Performance check CLV4xx/CLV6xx	1682028
Commissioning		
 Product area: Fixed mount barcode scanners Range of services: Inspection of connection, fine adjustment, optimization of parameters of SICK product as well as tests, Setup of previously defined functions of reading configuration, code configuration, data processing and network, interfaces or inputs and outputs Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses. Duration: Additional work will be invoiced separately 	Commissioning CLV61x CLV64x	1681925
Extended warranty		
 Product area: Identification solutions, machine vision, Detection and ranging solutions, safety camera sensors, Safety laser scanners, Safety radar sensors Range of services: The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery). Duration: Five-year warranty from delivery date. 	Extended warranty for a total of five years from delivery date	1680671

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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