

# CLV631-0000F0

CLV63x

**FIXED MOUNT BAR CODE SCANNERS** 





# Ordering information

Туре	Part no.
CLV631-0000F0	1050778

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



## Detailed technical data

#### **Features**

Version	Mid Range
Connection type	Cable
Reading field	Front
Scanning method	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°
Scanning frequency	400 Hz 1,200 Hz
Code resolution	0.25 mm 0.5 mm
Reading distance	90 mm 450 mm <sup>1)</sup>
Heating	✓

 $<sup>^{1)}\,\</sup>mbox{For details see}$  reading field diagram.

# Mechanics/electronics

Connection type	1 x 15-pin D-Sub HD male connector (0.9 m) 1 x cable, open-ended, 3-wire (2 m)
Supply voltage	≤ 24 V DC, ± 10 %
Power consumption	40 W
Housing	Aluminum die cast
Housing color	Light blue (RAL 5012)
Front screen	Glass
Enclosure rating	IP65 (EN 60529)
Protection class	III (EN 61140)
Weight	520 g, with connecting cable

Dimensions (L x W x H)	61 mm x 96 mm x 50 mm
MTBF	100,000 h

## 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
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

PROFINET		✓
	Type of fieldbus integration	Optional over external fieldbus module CDF600-2
	Function	PROFINET Single Port, PROFINET Dual Port
EtherCAT		✓
	Type of fieldbus integration	Optional over external fieldbus module CDF600
Serial		<b>√</b> , RS-232, RS-422, RS-485
	Function	Host, AUX
	Data transmission rate	2,400 Baud 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
CAN		<b>√</b>
	Function	SICK CAN sensor network CSN (master/slave, multiplexer/server)
	Data transmission rate	20 kbit/s 1 Mbit/s
CANopen		<b>√</b>
	Data transmission rate	20 kbit/s 1 Mbit/s
PROFIBUS DP		<b>√</b>
	Type of fieldbus integration	Optional over external fieldbus module CDF600-2
DeviceNet™		<b>√</b>
	Type of fieldbus integration	Optional, over external connection module CDM + CMF
Digital inputs		4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/ CDM420)
Digital outputs		4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 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	s	Beeper/buzzer (can be switched off, can be allocated as a result indication function)
Control elements		2 buttons (choose and start/stop functions)
Configuration soft	ware	SOPAS ET

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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)
Ambient operating temperature	-35 °C +35 °C
Storage temperature	-20 °C +70 °C
Permissible relative humidity	90 %, Non-condensing
Ambient light immunity	2,000 lx, on bar code
Bar code print contrast (PCS)	≥ 60 %
General notes	
Note on use	For Ethernet connection please use an Ethernet version of CLV6xx
Classifications	
ECI@ss 5.0	27280102
ECI@ss 5.1.4	27280102
ECI@ss 6.0	27280102
ECI@ss 6.2	27280102
ECI@ss 7.0	27280102
ECI@ss 8.0	27280102
ECI@ss 8.1	27280102

27280102

27280102

27280102

EC002550

EC002550

EC002550

43211701

ECI@ss 9.0

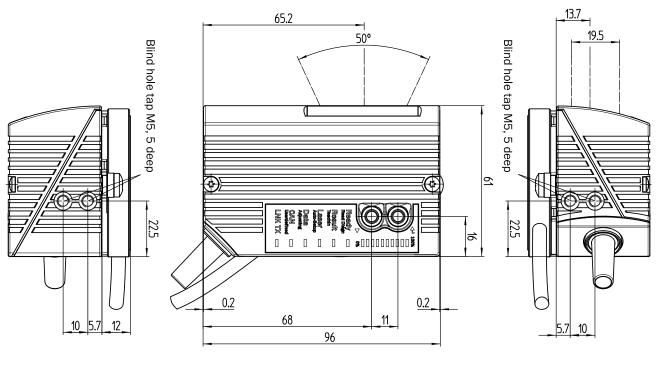
ECI@ss 10.0

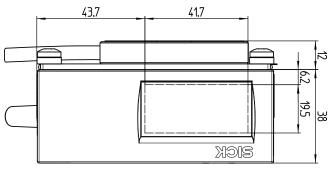
ECI@ss 11.0

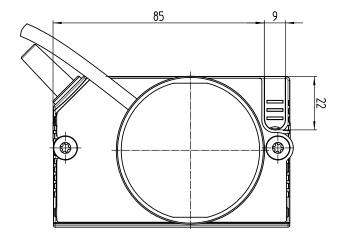
**ETIM 5.0** 

**ETIM 6.0** 

# Dimensional drawing (Dimensions in mm (inch))

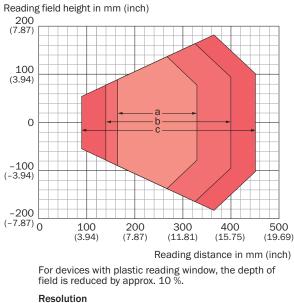






nm	inch
0.2	0.008
5	0.19
5.7	0.23
5.2	0.24
9	0.35
10	0.39
11	0.43
12	0.47
13.7	0.54
16	0.63
19.5	0.77
22	0.87
22.5	0.89
38	1.50
41.7	1.64
13.7	1.72
31	2.40
35.2	2.57
38	2.68
35	3.35
96	3.78
	l

# Reading field diagram



#### Resolution

a: 0.25 mm (9.8 mil)

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 brackets and plates				
	Hanger-shaped mounting bracket, thermally isolated for use with heating devices, mounting hardware included	Mounting bracket	2050705	
Cloning modu	le			
Maria Maria	External parameter memory for integration in CDB620/CDB650/CDM42x	CMC600-101	1042259	
Modules				
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256	
	Modular connection module for one sensor	CDM420-0001	1025362	
Electronic modules				
	Additional board for connecting a bar code scanner with heater in combination with CDM-420	Additional board	2055071	

	Brief description	Туре	Part no.
Storage media			
	microSD memory card with 1 GB for industrial use	microSD memory card	4051366

## Recommended services

Additional services → www.sick.com/CLV63x

	Туре	Part no.
Performance check		
<ul> <li>Product area: Fixed mount bar code scanners</li> <li>Range of services: Inspection of defined functions, e.g., reading performance</li> <li>Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>Duration: Additional work will be invoiced separately</li> </ul>	Performance check CLV4xx/CLV6xx	1682028
Product, system, and software training		
<ul> <li>Range of services: SICK offers training courses for numerous target groups ranging from basic to expert levels, Training format and location can be worked out in collaboration with SICK</li> </ul>	Training for the CLV6 series	1612231
Warranty extensions		
<ul> <li>Product area: Identification solutions, machine vision, Distance sensors, Detection and ranging solutions</li> <li>Range of services: The services correspond to the scope of the statutory manufacturer warranty (SICK general terms and conditions of purchase)</li> <li>Duration: Five-year warranty from delivery date.</li> </ul>	Extended warranty for a total of five years from delivery date	1680671
Commissioning		
<ul> <li>Product area: Fixed mount bar code scanners</li> <li>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</li> <li>Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>Duration: Additional work will be invoiced separately</li> </ul>	Commissioning CLV61x CLV64x	1681925

# 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."

# **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

