



# CLV610-C1900S01

CLV61x

**FIXED MOUNT BAR CODE SCANNERS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
CLV610-C1900S01	1062864

Other models and accessories → [www.sick.com/CLV61x](http://www.sick.com/CLV61x)



### Detailed technical data

#### Features

<b>Version</b>	Mid Range
<b>Connection type</b>	Cable
<b>Reading field</b>	Front
<b>Scanner design</b>	Raster scanner
<b>Optical focus</b>	Fixed focus
<b>Light source</b>	
	Light spot
	Laser, Visible, Red, 655 nm
<b>Laser class</b>	2 (IEC 60825-1:2014, EN 60825-1:2014)
<b>Aperture angle</b>	≤ 50°
<b>Scanning frequency</b>	400 Hz ... 1,000 Hz
<b>Code resolution</b>	0.2 mm ... 1 mm
<b>Reading distance</b>	60 mm ... 365 mm <sup>1)</sup>
<b>Raster height, number of lines, at distance</b>	15 mm, 8, 200 mm

<sup>1)</sup> For details see reading field diagram.

#### Mechanics/electronics

<b>Electrical connection</b>	1 x 15-pin D-Sub HD male connector (0.26 m)
<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	2.8 W
<b>Housing</b>	Aluminum die cast
<b>Housing color</b>	Light blue (RAL 5012)
<b>Front screen</b>	Glass
<b>Enclosure rating</b>	IP65 (DIN 40 050)
<b>Protection class</b>	III (VDE 0106/IEC 1010-1)

<b>Weight</b>	265 g, with connecting cable
<b>Dimensions (L x W x H)</b>	61 mm x 66 mm x 38 mm
<b>MTBF</b>	40,000 h

## Performance

<b>Readable code structures</b>	1D codes
<b>Bar code types</b>	All current code types, Code 39, Code 128, Code 93, Codabar, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode
<b>Print ratio</b>	2:1 ... 3:1
<b>No. of codes per scan</b>	1 ... 10 (Standard decoder) 1 ... 6 (SMART620)
<b>No. of codes per reading interval</b>	1 ... 50 (auto-discriminating)
<b>No. of characters per reading interval</b>	1,500 500 (for multiplexer function in CAN operation)
<b>No. of multiple readings</b>	1 ... 99

## Interfaces

<b>Serial</b>	✓, RS-232
Function	Host, AUX
Data transmission rate	2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud
<b>CAN</b>	✓
Function	SICK CAN sensor network CSN (master/slave, multiplexer/server)
Data transmission rate	20 kbit/s ... 1 Mbit/s
<b>Digital inputs</b>	4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Digital outputs</b>	4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Reading pulse</b>	Digital inputs, non-powered, serial interface, auto pulse, CAN
<b>Optical indicators</b>	1 RGB LED (multifunctional)
<b>Acoustic indicators</b>	Beeper/buzzer (can be switched off, can be allocated as a result indication function)
<b>Configuration software</b>	SOPAS ET

## Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-4 (2007-01) + A1 (2011) / EN 61000-6-2:2005-08
<b>Vibration resistance</b>	EN 60068-2-6:2008-02
<b>Ambient operating temperature</b>	0 °C ... +40 °C
<b>Storage temperature</b>	-20 °C ... +70 °C
<b>Permissible relative humidity</b>	90 %, Non-condensing
<b>Ambient light immunity</b>	2,000 lx, on bar code
<b>Bar code print contrast (PCS)</b>	≥ 60 %

## General notes

<b>Items supplied</b>	Single scanner
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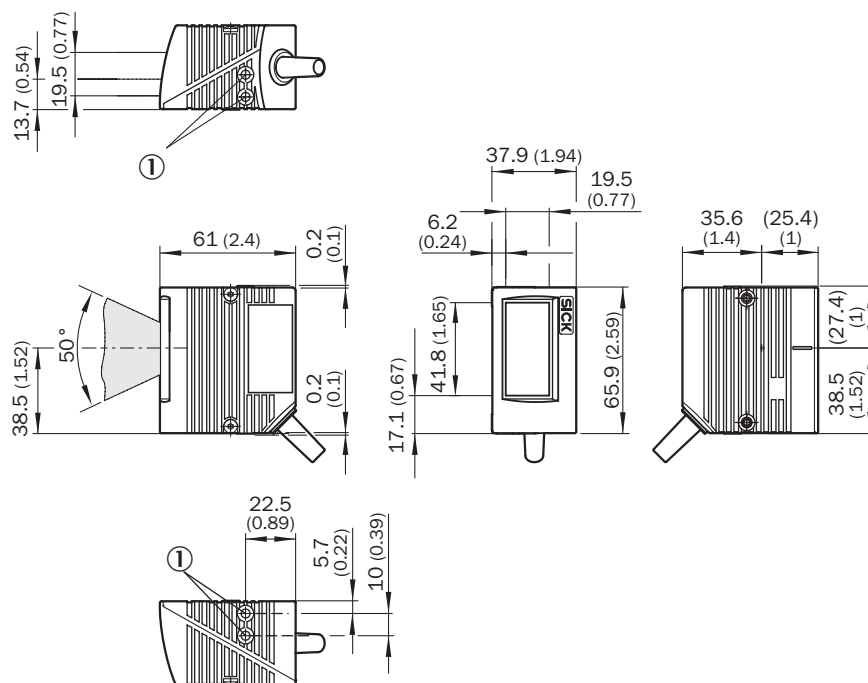
## Classifications

<b>ECl@ss 5.0</b>	27280102
<b>ECl@ss 5.1.4</b>	27280102
<b>ECl@ss 6.0</b>	27280102

<b>ECl@ss 6.2</b>	27280102
<b>ECl@ss 7.0</b>	27280102
<b>ECl@ss 8.0</b>	27280102
<b>ECl@ss 8.1</b>	27280102
<b>ECl@ss 9.0</b>	27280102
<b>ECl@ss 10.0</b>	27280102
<b>ECl@ss 11.0</b>	27280102
<b>ETIM 5.0</b>	EC002550
<b>ETIM 6.0</b>	EC002550
<b>ETIM 7.0</b>	EC002550
<b>UNSPSC 16.0901</b>	43211701

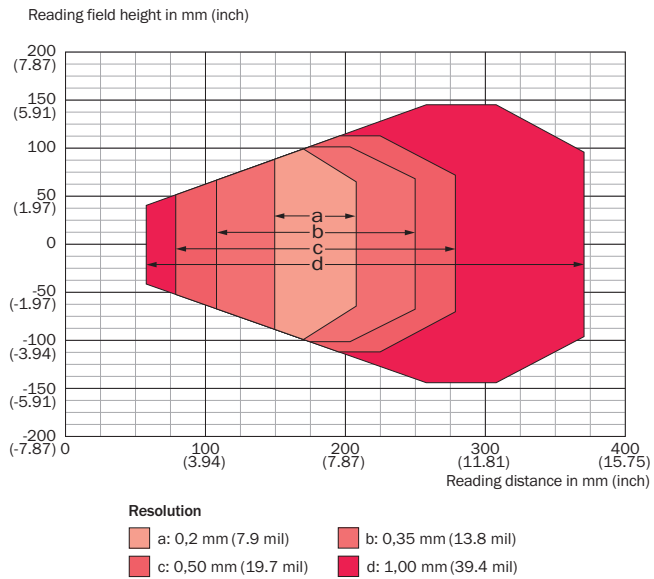
### Dimensional drawing (Dimensions in mm (inch))

CLV61x Standard, front






① Blind hole thread M5, 5 mm deep (2 x), for mounting

## Reading field diagram



## Recommended accessories

Other models and accessories → [www.sick.com/CLV61x](http://www.sick.com/CLV61x)

	Brief description	Type	Part no.
Mounting brackets and plates			
	Bracket with adapter board	Mounting bracket	2042902
Modules and gateways			
	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

## Recommended services

Additional services → [www.sick.com/CLV61x](http://www.sick.com/CLV61x)

	Type	Part no.
<b>Warranty extensions</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Identification solutions, machine vision, Distance sensors, Detection and ranging solutions</li> <li>• <b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms and conditions of purchase)</li> <li>• <b>Duration:</b> Five-year warranty from delivery date.</li> </ul>	Extended warranty for a total of five years from delivery date	1680671
<b>Performance check</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Fixed mount bar code scanners</li> <li>• <b>Range of services:</b> Inspection of defined functions, e.g., reading performance</li> <li>• <b>Travel expenses:</b> The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>• <b>Duration:</b> Additional work will be invoiced separately</li> </ul>	Performance check CLV4xx/CLV6xx	1682028
<b>Product, system and software training</b>		
<ul style="list-style-type: none"> <li>• <b>Range of services:</b> 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> <li>• <b>Duration:</b> The fixed price includes the specific training services agreed upon, the fixed price includes the work time required for the training services and depends on the range of services, Additional work will be invoiced separately</li> </ul>	Training for the CLV6 series	1612231
<b>Commissioning</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Fixed mount bar code scanners</li> <li>• <b>Range of services:</b> Inspection of connection, fine adjustment, optimization of parameters of SICK product as well as verification tests, Setup of previously defined functions of reading configuration, code configuration, data processing and network, interfaces or inputs and outputs</li> <li>• <b>Travel expenses:</b> The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>• <b>Duration:</b> 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](http://www.sick.com)