Product data sheet



CLV610-C1000

CLV61x

FIXED MOUNT BARCODE SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
CLV610-C1000	1062846

Other models and accessories ➜ www.sick.com/CLV61x

Detailed technical data

Features

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

[1] For details see reading field diagram.

Mechanics/electronics

Connection type	1 x 15-pin D-Sub HD male connector (0.9 m)
Supply voltage	10 V DC ... 30 V DC
Power consumption	2.8 W
Housing	Aluminum die cast
Housing color	Light blue (RAL 5012)
Window material	Glass
Enclosure rating	IP65 (DIN 40 050)
Protection class	III (VDE 0106/IEC 1010-1)

Weight	265 g, with connecting cable
Dimensions (L x W x H)	61 mm x 66 mm x 38 mm

Safety-related parameters

MTBF	100,000 h
MTTF	40,000 h (Laser diode) [1]

[1] At 25 °C.

Performance

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

Interfaces

Serial	✓, RS-232
Function	Host, AUX
Data transmission rate	2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud
CAN	✓
Function	SICK CAN sensor network CSN (master/slave, multiplexer/server)
Data transmission rate	20 kbit/s ... 1 Mbit/s
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	1 RGB LED (multifunctional)
Acoustic indicators	Beeper/buzzer (can be switched off, can be allocated as a result indication function)
Configuration software	SOPAS ET

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-4 (2007-01) + A1 (2011) / EN 61000-6-2:2005-08
Vibration resistance	EN 60068-2-6:2008-02
Shock resistance	EN 60068-2-27:2009-05
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 %

General notes

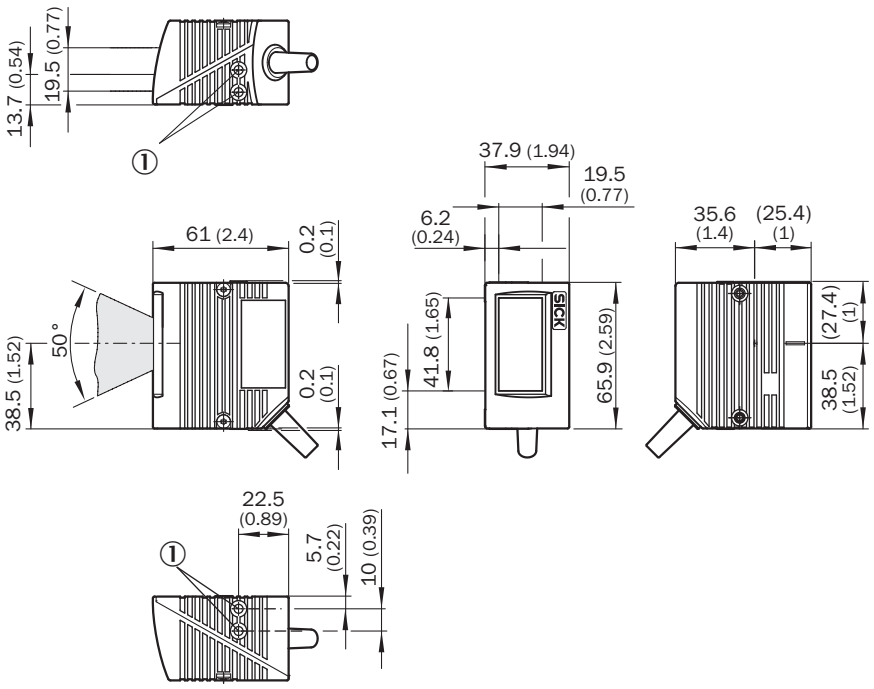
Items supplied	Single scanner

Classifications

eCl@ss 5.0	27280102
eCl@ss 5.1.4	27280102
eCl@ss 6.0	27280102
eCl@ss 6.2	27280102
eCl@ss 7.0	27280102
eCl@ss 8.0	27280102
eCl@ss 8.1	27280102
eCl@ss 9.0	27280102
eCl@ss 10.0	27280102
eCl@ss 11.0	27280102
eCl@ss 12.0	27280102
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	43211701

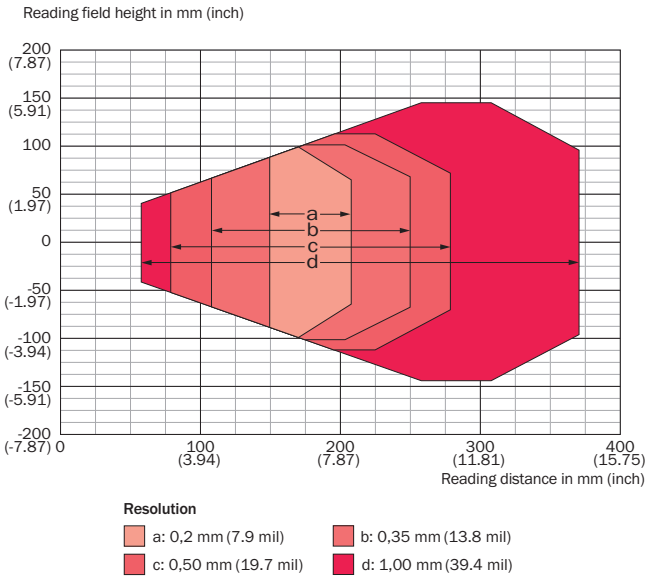
Dimensional drawing (Dimensions in mm (inch))

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

	Brief description	Type	Part no.
Cloning module			
	External parameter memory for integration in CDB620/CDB650/CDM42x	CMC600-101	1042259
Mounting brackets and plates			
	Bracket with adapter board	Mounting bracket	2042902
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/CLV61x

	Type	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, Distance sensors, Detection and ranging solutions • **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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com