



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, 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	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 material	Aluminum die cast
Housing color	Light blue (RAL 5012)
Window material	Glass
Enclosure rating	IP65 (DIN 40 050)

¹⁾ At 25 °C.

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
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	Data interface (read result output), Service interface
Data transmission rate	2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud
CAN	✓
Function	SICK CAN sensor network CSN (CAN controller/CAN device, 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
-----------------------	----------------

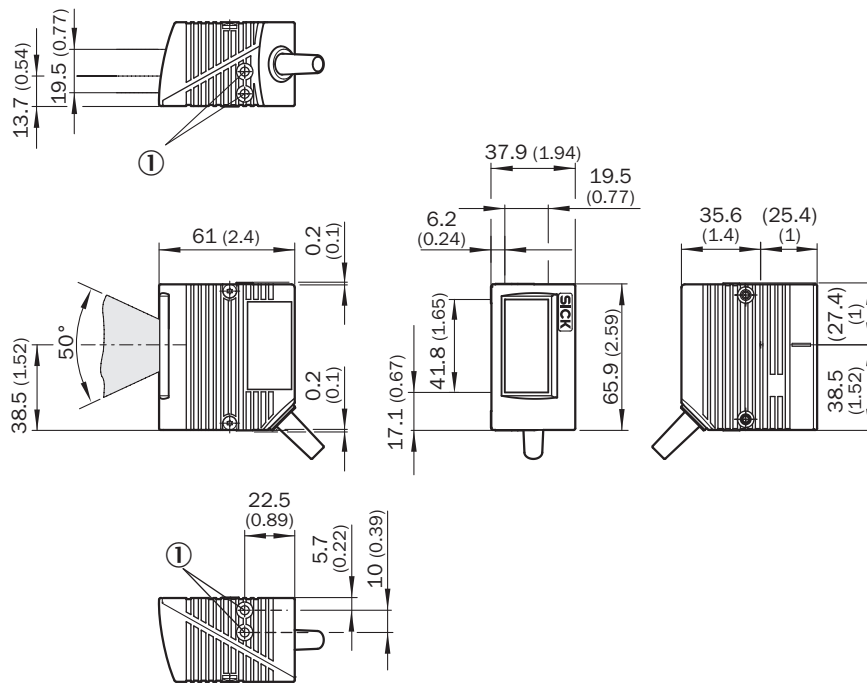
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
KC Mark certificate	✓
Profinet certificate	✓
BIS registration	✓
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 CLV61x Standard, front

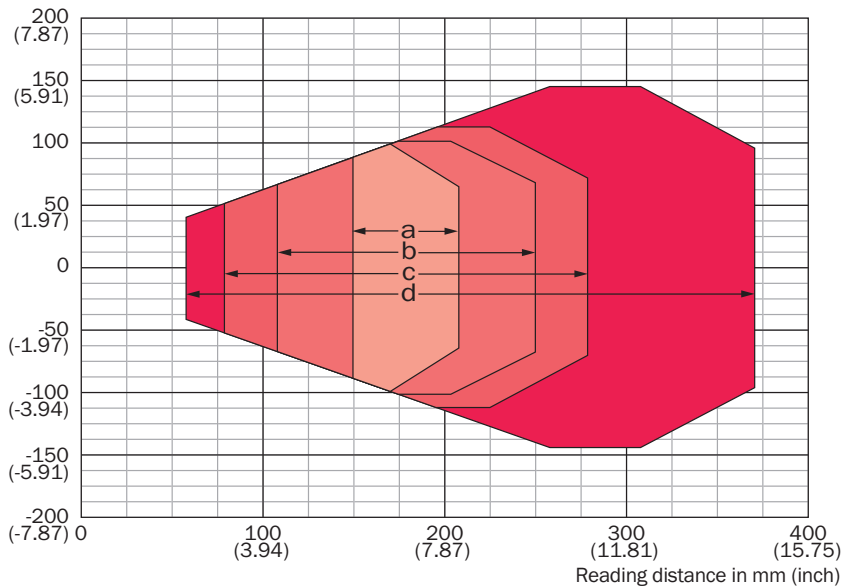


Dimensions in mm (inch)

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

Reading field diagram

Reading field height in mm (inch)

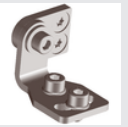


Resolution

a: 0,2 mm (7.9 mil)	b: 0,35 mm (13.8 mil)
c: 0,50 mm (19.7 mil)	d: 1,00 mm (39.4 mil)

Recommended accessories

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

	Brief description	Type	part no.
Junction boxes			
		CDB620-001	1042256
integration modules and adapters			
	Description: External parameter memory for integration in CDB620/CDB650/CDM42x	CMC600-101	1042259
Mounting systems			
	Description: Bracket with adapter board	Mounting bracket	2042902

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