



# CLV610-C3000

CLV61x

**BAR CODE SCANNERS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
CLV610-C3000	1071609

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>	Side (105°)
<b>Scanner design</b>	Raster scanner
<b>Focus</b>	Fixed focus
<b>Light source</b>	Visible red light (655 nm)
<b>MTBF</b>	40,000 h
<b>Laser class</b>	2 (EN 60825-1 (2008-05), IEC 60825-1 : 2007-03, Ed. 2.0)
<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>	45 mm ... 345 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.

#### Performance

<b>Bar code types</b>	All current code types, Code 39, Code 128, Code 93, Codabar, UPC / GTIN / EAN, Interleaved 2 of 5
<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 (Master/Slave, Multiplexer/Server)
Data transmission rate	20 kbit/s ... 1 Mbit/s
<b>Switching inputs</b>	4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Switching outputs</b>	4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Reading pulse</b>	Switching 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

## Mechanics/electronics

<b>Electrical connection</b>	1 x 15-pin D-Sub HD male connector (0.9 m)
<b>Operating 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>	295 g, with connecting cable
<b>Dimensions (L x W x H)</b>	80 mm x 66 mm x 38 mm

## 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>Shock resistance</b>	EN 60068-2-27 (2009-05)
<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

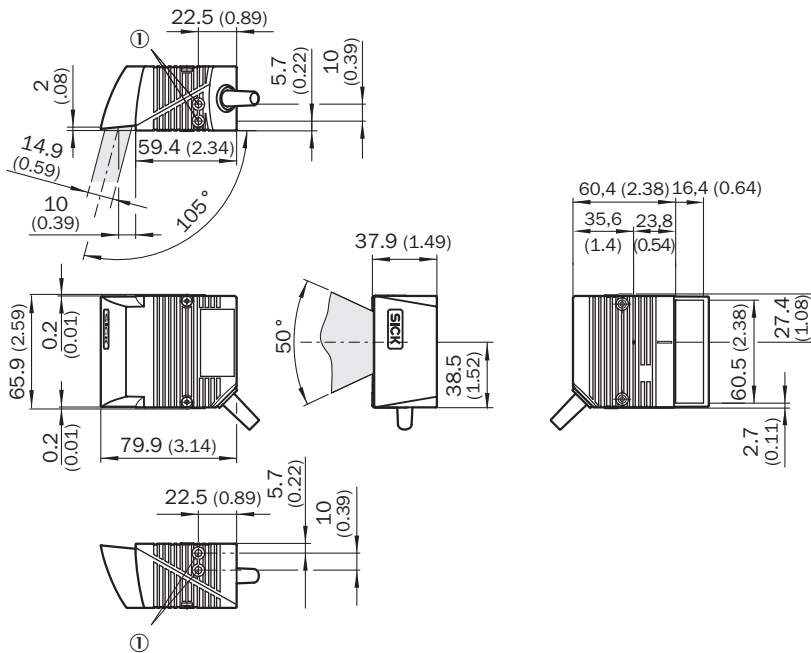
<b>Items supplied</b>	Single scanner
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## Classifications

<b>ECI@ss 5.0</b>	27280102
<b>ECI@ss 5.1.4</b>	27280102
<b>ECI@ss 6.0</b>	27280102
<b>ECI@ss 6.2</b>	27280102

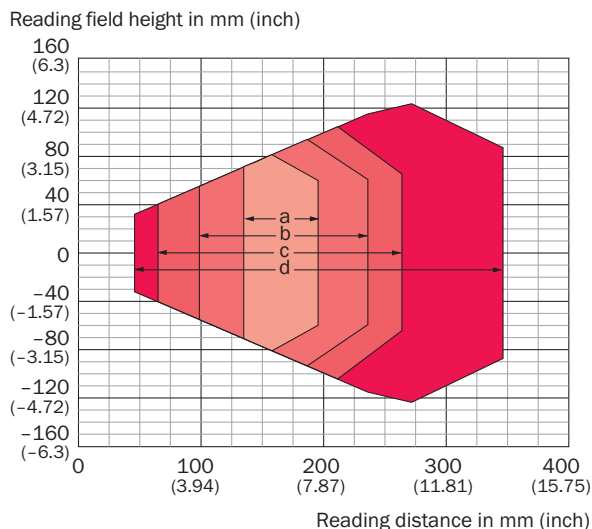
<b>ECl@ss 7.0</b>	27280102
<b>ECl@ss 8.0</b>	27280102
<b>ECl@ss 8.1</b>	27280102
<b>ECl@ss 9.0</b>	27280102
<b>ETIM 5.0</b>	EC002550
<b>ETIM 6.0</b>	EC002550
<b>UNSPSC 16.0901</b>	43211701

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



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

### Reading field diagram





**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](http://www.sick.com/CLV61x)

	Brief description	Type	Part no.
<b>Mounting brackets and plates</b>			
	Bracket with adapter board	Mounting bracket	2042902
<b>Modules</b>			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Modular connection module for one sensor	CDM420-0001	1025362
<b>Plug connectors and cables</b>			
	Head A: female connector, D-Sub, 9-pin, straight Head B: female connector, D-Sub, 9-pin, straight Cable: serial, unshielded, 3 m For PC connection	Data connection cable (RS-232) to PC	2014054

## 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)