



# CLV612-C3000

CLV61x

**FIXED MOUNT BARCODE SCANNERS**

**SICK**  
Sensor Intelligence.



### Ordering information

| Type         | part no. |
|--------------|----------|
| CLV612-C3000 | 1062862  |

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



### Detailed technical data

#### Features

|                                                    |                                                                                                                                                             |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Version</b>                                     | Short Range                                                                                                                                                 |
| <b>Connection type</b>                             | Cable                                                                                                                                                       |
| <b>Reading field</b>                               | Side (105°)                                                                                                                                                 |
| <b>Sensor type</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, 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) |
| <b>Aperture angle</b>                              | ≤ 50°                                                                                                                                                       |
| <b>Reading distance</b>                            | 28 mm ... 78 mm <sup>1)</sup>                                                                                                                               |
| <b>Scanning frequency</b>                          | 400 Hz ... 1,000 Hz                                                                                                                                         |
| <b>Code resolution</b>                             | 0.1 mm ... 0.2 mm                                                                                                                                           |
| <b>Raster height, number of lines, at distance</b> | 15 mm, 8, 185 mm                                                                                                                                            |

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

#### Mechanics/electronics

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Connection type</b>   | 1 x 15-pin D-Sub HD male connector (0.9 m) |
| <b>Supply voltage</b>    | 10 V DC ... 30 V DC                        |
| <b>Power consumption</b> | 2.8 W                                      |
| <b>Housing material</b>  | Aluminum die cast                          |
| <b>Housing color</b>     | Light blue (RAL 5012)                      |
| <b>Window material</b>   | Glass                                      |

<sup>1)</sup> At 25 °C.

|                               |                                      |
|-------------------------------|--------------------------------------|
| <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                |
| <b>MTBF</b>                   | 100,000 h                            |
| <b>MTTF</b>                   | 40,000 h (Laser diode) <sup>1)</sup> |

<sup>1)</sup> At 25 °C.

## 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>Code printing process</b>                  | Label (printed codes)                                                                                         |
| <b>Print ratio</b>                            | 2:1 ... 3:1                                                                                                   |
| <b>No. of codes per scan</b>                  | 1 ... 10 (Standard decoder)<br>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<br>500 (for multiplexer function in CAN operation)                                                      |
| <b>No. of multiple readings</b>               | 1 ... 99                                                                                                      |

## Interfaces

|                               |                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------|
| <b>Serial</b>                 | ✓, RS-232                                                                                    |
| Function                      | Data interface (read result output), Service interface                                       |
| Data transmission rate        | 2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud                                                  |
| <b>CAN</b>                    | ✓                                                                                            |
| Function                      | SICK CAN sensor network CSN (CAN controller/CAN device, 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>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 barcode                                      |
| <b>Bar code print contrast (PCS)</b>       | ≥ 60 %                                                    |

## General notes

|                       |                |
|-----------------------|----------------|
| <b>Items supplied</b> | Single scanner |
|-----------------------|----------------|

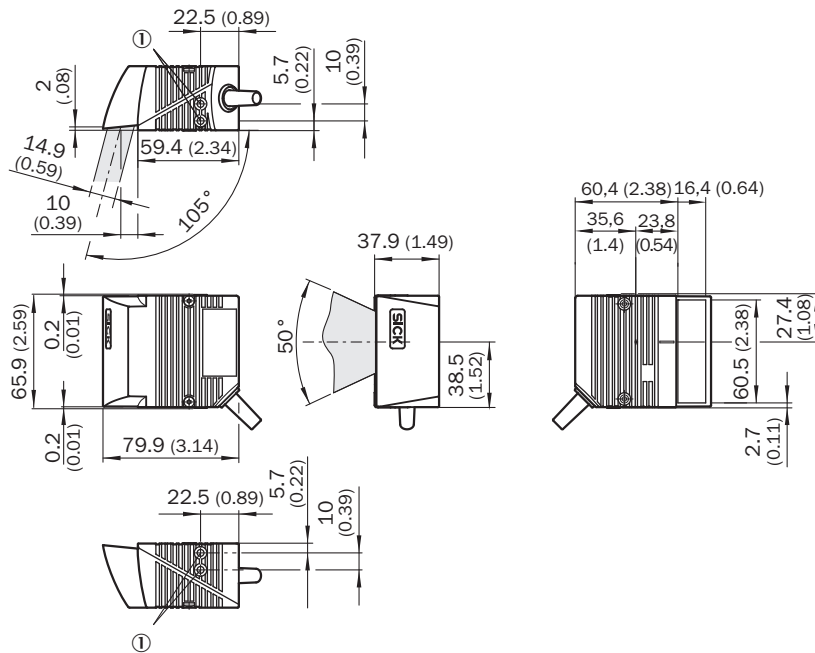
## Certificates

|                                                                              |   |
|------------------------------------------------------------------------------|---|
| <b>EU declaration of conformity</b>                                          | ✓ |
| <b>UK declaration of conformity</b>                                          | ✓ |
| <b>ACMA declaration of conformity</b>                                        | ✓ |
| <b>China RoHS</b>                                                            | ✓ |
| <b>Profinet certificate</b>                                                  | ✓ |
| <b>BIS registration</b>                                                      | ✓ |
| <b>Laser safety (IEC 60825-1) declaration of manufacturer</b>                | ✓ |
| <b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b> | ✓ |
| <b>4Dpro</b>                                                                 | ✓ |

## Classifications

|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27280102 |
| <b>ECLASS 5.1.4</b>   | 27280102 |
| <b>ECLASS 6.0</b>     | 27280102 |
| <b>ECLASS 6.2</b>     | 27280102 |
| <b>ECLASS 7.0</b>     | 27280102 |
| <b>ECLASS 8.0</b>     | 27280102 |
| <b>ECLASS 8.1</b>     | 27280102 |
| <b>ECLASS 9.0</b>     | 27280102 |
| <b>ECLASS 10.0</b>    | 27280102 |
| <b>ECLASS 11.0</b>    | 27280102 |
| <b>ECLASS 12.0</b>    | 27280102 |
| <b>ETIM 5.0</b>       | EC002550 |
| <b>ETIM 6.0</b>       | EC002550 |
| <b>ETIM 7.0</b>       | EC002550 |
| <b>ETIM 8.0</b>       | EC002550 |
| <b>UNSPSC 16.0901</b> | 43211701 |

## Dimensional drawing

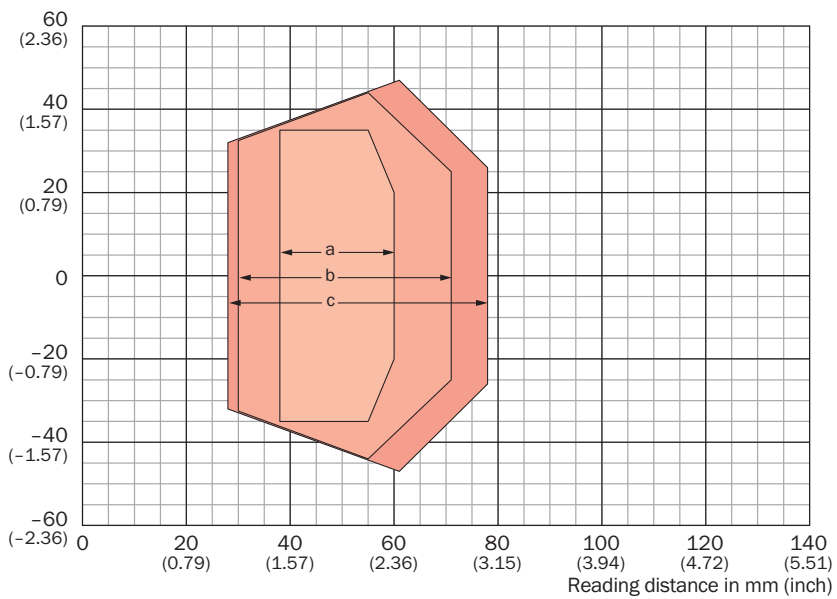


Dimensions in mm (inch)

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

## Reading field diagram

Reading field height in mm (inch)



### Resolution

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| a: 0.10 mm<br>(3.94 mil) | b: 0.15 mm<br>(5.91 mil) | c: 0.20 mm<br>(7.87 mil) |
|--------------------------|--------------------------|--------------------------|

### Recommended accessories

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

|                                                                                   | Brief description                                                                                                                       | Type             | part no. |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|
| Junction boxes                                                                    |                                                                                                                                         |                  |          |
|  |                                                                                                                                         | CDB620-001       | 1042256  |
| integration modules and adapters                                                  |                                                                                                                                         |                  |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> External parameter memory for integration in CDB620/CDB650/CDM42x</li> </ul> | CMC600-101       | 1042259  |
| Mounting systems                                                                  |                                                                                                                                         |                  |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Bracket with adapter board</li> </ul>                                        | 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](http://www.sick.com)