



# CLV620-0830

CLV62x

FIXED MOUNT BARCODE SCANNERS

**SICK**  
Sensor Intelligence.



### Ordering information

| Type        | part no. |
|-------------|----------|
| CLV620-0830 | 1050940  |

Other models and accessories → [www.sick.com/CLV62x](http://www.sick.com/CLV62x)



### Detailed technical data

#### Features

|                           |   |
|---------------------------|---|
| <b>Version</b>            | Mid Range   |
| <b>Connection type</b>    | Ethernet  |
| <b>Reading field</b>      | Front   |
| <b>Sensor type</b>        | Line 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>   | 60 mm ... 365 mm <sup>1)</sup>  |
| <b>Scanning frequency</b> | 400 Hz ... 1,200 Hz   |
| <b>Code resolution</b>    | 0.2 mm ... 1 mm   |

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

#### Mechanics/electronics

|                          |  |
|--------------------------|--|
| <b>Connection type</b>   | 2 x M12 cylindrical connectors (1 x 17-pin male connector, 4-pin female connector) on swivel connector |
| <b>Supply voltage</b>    | 10 V DC ... 30 V DC  |
| <b>Power consumption</b> | 4.5 W  |

<sup>1)</sup> Swivel connector is 15 mm longer.

<sup>2)</sup> At 25 °C.

|                               |                                      |
|-------------------------------|--------------------------------------|
| <b>Housing material</b>       | Aluminum die cast                    |
| <b>Housing color</b>          | Light blue (RAL 5012)                |
| <b>Window material</b>        | Glass                                |
| <b>Enclosure rating</b>       | IP65 (DIN 40 050)                    |
| <b>Protection class</b>       | III (VDE 0106/IEC 1010-1)            |
| <b>Weight</b>                 | 205 g, without connecting cable      |
| <b>Dimensions (L x W x H)</b> | 61 mm x 66 mm x 38 mm <sup>1)</sup>  |
| <b>MTBF</b>                   | 100,000 h                            |
| <b>MTTF</b>                   | 40,000 h (Laser diode) <sup>2)</sup> |

<sup>1)</sup> Swivel connector is 15 mm longer.

<sup>2)</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, GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Telepen, MSI/Plessey |
| <b>Code printing process</b>                  | Label (printed codes)   |
| <b>Print ratio</b>                            | 2:1 ... 3:1   |
| <b>No. of codes per scan</b>                  | 1 ... 20 (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>Ethernet</b>              | ✓ , TCP/IP  |
| Function                     | Data interface (read result output), Service interface                                      |
| Data transmission rate       | 10/100 MBit/s   |
| <b>PROFINET</b>              | ✓   |
| Function                     | PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2) |
| Data transmission rate       | 10/100 MBit/s   |
| <b>EtherNet/IP™</b>          | ✓   |
| Data transmission rate       | 10/100 MBit/s   |
| <b>EtherCAT®</b>             | ✓   |
| Type of fieldbus integration | Optional over external fieldbus module CDF600   |
| <b>Serial</b>                | ✓ , RS-232, RS-422, RS-485  |
| Function                     | Data interface (read result output), Service interface                                      |
| Data transmission rate       | 2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)  |
| <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>CANopen</b>               | ✓   |
| Data transmission rate       | 20 kbit/s ... 1 Mbit/s  |

|                               |  |
|-------------------------------|--|
| <b>PROFIBUS DP</b>            | ✓  |
| Type of fieldbus integration  | Optional over external fieldbus module CDF600-2  |
| <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>     | 6 LEDs (Ready, Result, laser, Data, CAN, LNK TX)   |
| <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 61000-6-3 (2001-10) / EN 61000-6-2:2005 |
| <b>Vibration resistance</b>                | EN 60068-2-6 (1995)                        |
| <b>Shock resistance</b>                    | EN 60068-2-27 (1993)                       |
| <b>Ambient operating temperature</b>       | 0 °C ... +40 °C                            |
| <b>Storage temperature</b>                 | -20 °C ... +70 °C                          |
| <b>Relative humidity</b>                   | 90 %, Non-condensing                       |
| <b>Ambient light immunity</b>              | 2,000 lx, on barcode                       |
| <b>Bar code print contrast (PCS)</b>       | ≥ 60 %                                     |

#### Certificates

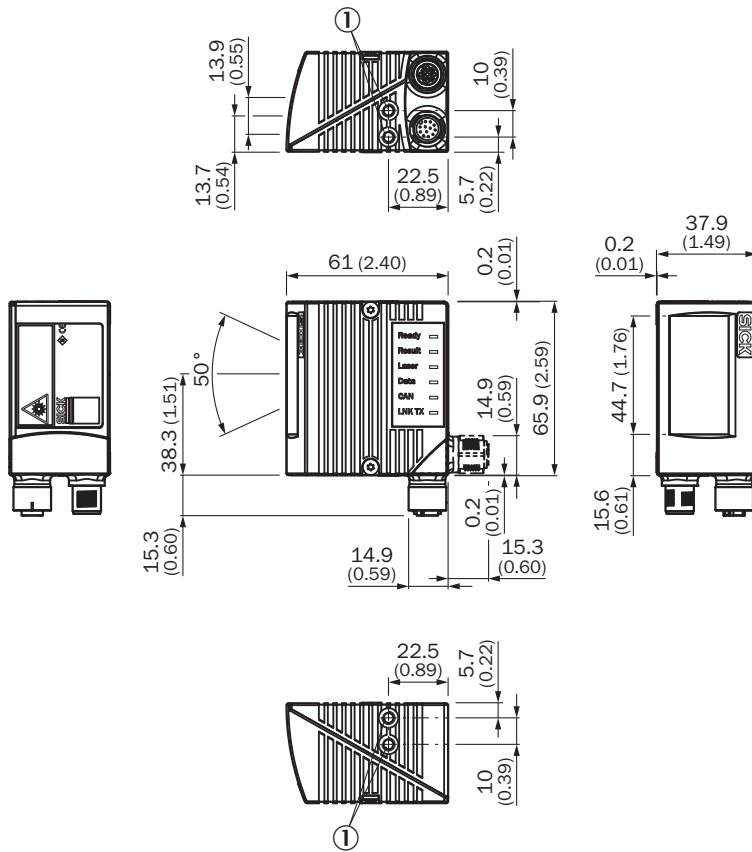
|  |   |
|--|---|
| <b>EU declaration of conformity</b>  | ✓ |
| <b>UK declaration of conformity</b>  | ✓ |
| <b>ACMA declaration of conformity</b>  | ✓ |
| <b>China RoHS</b>  | ✓ |
| <b>cULus certificate</b>   | ✓ |
| <b>Ethercat certificate</b>  | ✓ |
| <b>Profinet certificate</b>  | ✓ |
| <b>BIS registration</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 |

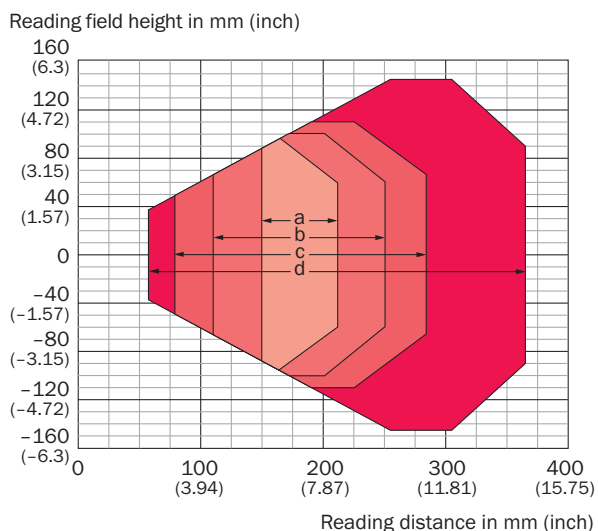
Dimensional drawing CLV62x Ethernet, front



Dimensions in mm (inch)

① M5

## Reading field diagram






For devices with plastic reading window, the depth of field is reduced by approx. 10 %.






### 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/CLV62x](http://www.sick.com/CLV62x)

|   | Brief description   | Type             | part no. |
|---|---|------------------|----------|
| <b>Integration modules and adapters</b>   |   |                  |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> External parameter memory for integration in CDB620/CDB650/CDM42x</li> </ul> | CMC600-101       | 1042259  |
| <b>Mounting systems</b>   |   |                  |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Bracket with adapter board</li> </ul>  | Mounting bracket | 2042902  |
| <b>Junction boxes</b>   |   |                  |          |
|  |   | CDB620-001       | 1042256  |

|   | Brief description   | Type                | part no. |
|---|---|---------------------|----------|
| connectors and cables   |   |                     |          |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li>• <b>Signal type:</b> Ethernet, PROFINET</li> <li>• <b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Ethernet, shielded, PROFINET</li> <li>• <b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>          | YM2D24-020P-N1MRJA4 | 2106182  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Signal type:</b> Ethernet, PROFINET</li> <li>• <b>Cable:</b> 3 m, 4-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Ethernet, shielded, PROFINET</li> <li>• <b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>  | YM2D24-030P-N1M2D24 | 2113266  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Signal type:</b> Ethernet, PROFINET</li> <li>• <b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Ethernet, shielded, PROFINET</li> <li>• <b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>  | YM2D24-020P-N1M2D24 | 2106159  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Signal type:</b> Ethernet, PROFINET</li> <li>• <b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Ethernet, shielded, PROFINET</li> <li>• <b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>  | YM2D24-050P-N1M2D24 | 2106160  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li>• <b>Signal type:</b> Ethernet, PROFINET</li> <li>• <b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Ethernet, shielded, PROFINET</li> <li>• <b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul> | YM2D24-100P-N1M2D24 | 2106161  |

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