



## Bar code scanners CLV62x / CLV621 / Long Range

CLV621-3120



**Model Name** > [CLV621-3120](#)  
**Part No.** > [1041791](#)

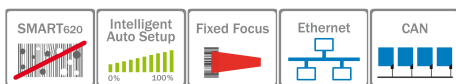


#### At a glance

- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- SMART620 code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Advanced, easy-to-use SOPAS configuration software
- High scanning frequency of up to 1,200 Hz
- Small housing
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet
- IP 65 rated

#### Your benefits

- High read rate on damaged and obscured codes using SMART620 code recognition technology
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- No supplementary Ethernet gateway required with Ethernet models - lowers costs
- The CLV62x scanner can be used as a multiplexer in any CAN scanner network from SICK - no supplementary multiplexer necessary
- Real-time decoding at very high speeds
- Small size and simple setup enables fast installation, even in compact machines



#### Features

|                                              |                             |
|----------------------------------------------|-----------------------------|
| Version:                                     | Long Range                  |
| Connection type:                             | Ethernet                    |
| Reading field:                               | Side (105 °)                |
| Scanner design:                              | Raster scanner              |
| Focus:                                       | Fixed focus                 |
| Light source:                                | Visible red light (655 nm)  |
| MTBF:                                        | 40,000 h                    |
| Laser class:                                 | 2 (EN 60825-1 (A2:2001-03)) |
| Field of view:                               | ≤ 50 °                      |
| Code resolution:                             | 0.35 mm ... 1 mm            |
| Reading distance (at code resolution):       | 60 mm ... 730 mm (1 mm)     |
| Raster height, number of lines, at distance: | 15 mm, 8, 185 mm            |

Scanning frequency: 400 Hz ... 1,200 Hz

## Performance

|                                         |                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Bar code types:                         | Interleaved 2 of 5, All current code types, Codabar, Code 128, Code 39, Code 93, GS1 DataBar, GS1-128/EAN 128, Pharmacode, UPC/GTIN/EAN |
| Print ratio:                            | 2:1 ... 3:1                                                                                                                             |
| No. of codes per scan:                  | 1 ... 20 (Standard decoder), 1 ... 6 (SMART620)                                                                                         |
| No. of codes per reading interval:      | 1 ... 50 (auto-discriminating)                                                                                                          |
| No. of characters per reading interval: | 5,000, 500 (for multiplexer function in CAN operation)                                                                                  |
| No. of multiple readings:               | 1 ... 99                                                                                                                                |

## Interfaces

|                                                       |                                                                                              |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Serial (RS-232, RS-422/485):                          | ✓                                                                                            |
| Remark (Serial (RS-232, RS-422/485)):                 | AUX (only RS-232)                                                                            |
| Function (Serial (RS-232, RS-422/485)):               | Host, AUX                                                                                    |
| Data transmission rate (Serial (RS-232, RS-422/485)): | 2,400 Baud ... 115 kBaud, AUX: 57.6 kBaud                                                    |
| Ethernet:                                             | ✓                                                                                            |
| Function (Ethernet):                                  | Host, AUX                                                                                    |
| Protocol (Ethernet):                                  | TCP/IP, EtherNet/IP, PROFINET, EtherCAT (optional via external connection module CDF600-2)   |
| Data transmission rate (Ethernet):                    | 10/100 Mbit                                                                                  |
| CAN bus:                                              | ✓                                                                                            |
| Function (CAN bus):                                   | SICK CAN sensor network (Master/Slave, Multiplexer/Server)                                   |
| Protocol (CAN bus):                                   | CANopen, CSN (SICK CAN Sensor Network)                                                       |
| Data transmission rate (CAN bus):                     | 20 kbit/s ... 1 Mbit/s                                                                       |
| PROFIBUS DP:                                          | ✓                                                                                            |
| Remark (PROFIBUS DP):                                 | Optional via external connection module (CDF)                                                |
| DeviceNet:                                            | ✓                                                                                            |
| Remark (DeviceNet):                                   | Optional via external connection module (CDM + CMF)                                          |
| Connector:                                            | Pivotable                                                                                    |
| Switching inputs:                                     | 3 ("Sensor 1", 2 inputs via optional CMC600 in CDB620/CDM420)                                |
| Switching outputs:                                    | 2 (via CMC600 in CDB620/CDM420)                                                              |
| Reading pulse:                                        | Auto pulse, CAN, Non-powered, Switching inputs, Serial interface                             |
| Optical indicators:                                   | 6 LEDs (Ready, Result, laser, Data, CAN, LNK TX)                                             |
| Acoustic indicators:                                  | Beeper/buzzer (can be switched off, can be allocated as a result status indication function) |

## Mechanics/electronics

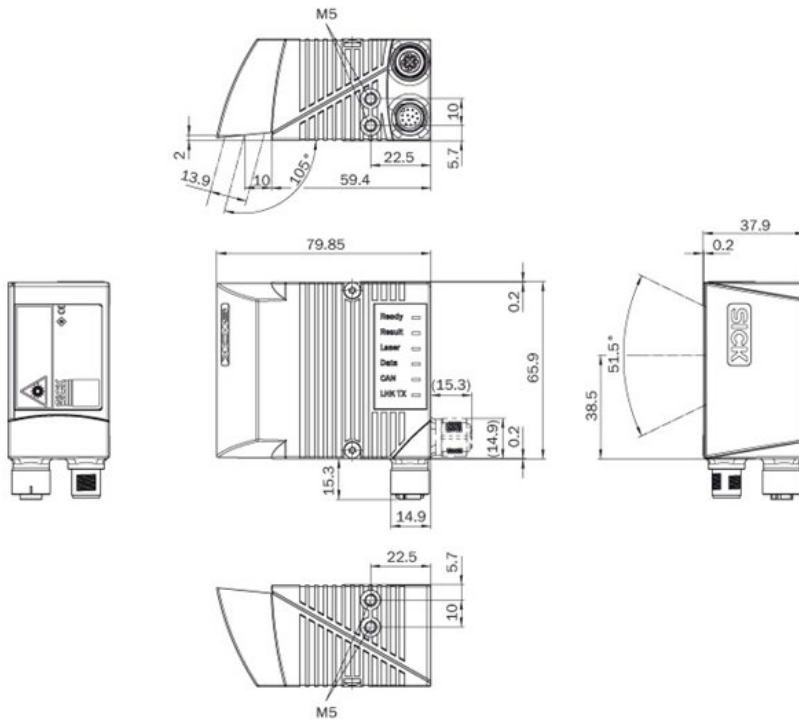
|                        |                                                                              |
|------------------------|------------------------------------------------------------------------------|
| Electrical connection: | 2 M12 cylindrical connectors (12-pin plug, 4-pin socket) on swivel connector |
| Operating voltage:     | 10 V DC ... 30 V DC                                                          |
| Power consumption:     | 4.5 W                                                                        |
| Housing:               | Die-cast aluminum                                                            |
| Housing color:         | Light blue (RAL 5012)                                                        |
| Enclosure rating:      | IP 65 (DIN 40 050)                                                           |
| Protection class:      | III (VDE 0106/IEC 1010-1)                                                    |
| Weight:                | 230 g, without connecting cable                                              |
| Dimensions:            | 80 mm x 66 mm x 38 mm <sup>1)</sup>                                          |

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

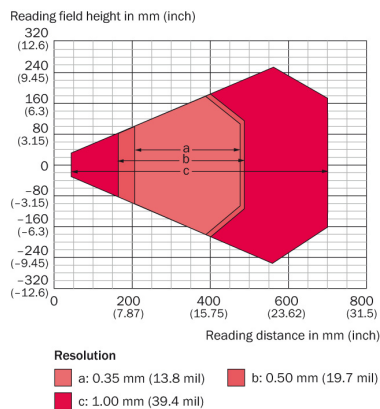
## Ambient data

|                                      |                                           |
|--------------------------------------|-------------------------------------------|
| Electromagnetic compatibility (EMC): | EN 61000-6-3 (2001-10), EN 61000-6-2:2005 |
| Vibration resistance:                | (EN 60068-2-6 (1995))                     |
| Shock resistance:                    | (EN 60068-2-27 (1993))                    |
| Ambient operating temperature:       | 0 °C ... 40 °C                            |
| Storage temperature:                 | -20 °C ... 70 °C                          |
| Permissible relative humidity:       | 90 %, non-condensing                      |
| Ambient light safety:                | 2,000 lx, on bar code                     |
| Bar code print contrast (PCS):       | ≥ 60 %                                    |

## Dimensional drawing



## Reading field diagram



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)