



## Bar code scanners CLV62x / CLV620 / Mid Range

CLV620-1831S01



**Model Name** > [CLV620-1831S01](#)  
**Part No.** > [1067933](#)



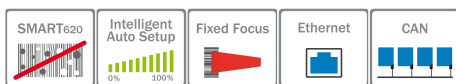
*Illustration may differ*

#### 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 or IP 69K rated (depending on type)

#### 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:                                     | Mid Range                      |
| Electrical connection:                       | Ethernet                       |
| Reading field:                               | Front                          |
| 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:                             | 0.2 mm ... 1 mm                |
| Reading distance:                            | 63 mm ... 347 mm <sup>1)</sup> |
| Raster height, number of lines, at distance: | 15 mm, 8, 200 mm               |

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

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

## 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, MSI/Plessey, Pharmacode, Telepen, 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: | 1,500, 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 Baud, AUX: 57.6 kBaud                                                                                                                        |
| Ethernet:                                             | ✓                                                                                                                                                               |
| Function (Ethernet):                                  | Host, AUX                                                                                                                                                       |
| Protocol (Ethernet):                                  | TCP/IP, EtherNet/IP, PROFINET, PROFINET Dual Port (optional via external connection module CDF600-2), EtherCAT (optional via external connection module CDF600) |
| 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 (CDF600-2)                                                                                                              |
| DeviceNet:                                            | ✓                                                                                                                                                               |
| Remark (DeviceNet):                                   | Optional via external connection module (CDM + CMF)                                                                                                             |
| Switching inputs:                                     | 4 ("Sensor 1", "Sensor 2", 2 inputs via optional CMC600 in CDB650)                                                                                              |
| Switching outputs:                                    | 4 ("Result 1", "Result 2", 2 via CMC600 in CDB650)                                                                                                              |
| Reading pulse:                                        | Auto pulse, CAN, Switching inputs, Serial interface                                                                                                             |
| Configuration software:                               | SOPAS ET                                                                                                                                                        |

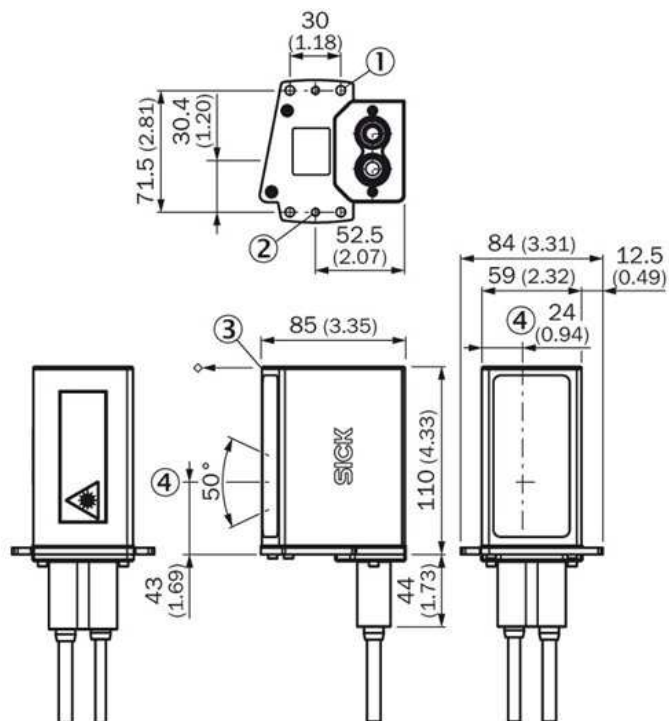
## Mechanics/electronics

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| Electrical connection: | 2 x M12 cylindrical connectors (1 x 17-pin male connector, 4-pin female connector) |
| Operating voltage:     | 10 V DC ... 30 V DC                                                                |
| Power consumption:     | 4.5 W                                                                              |
| Housing:               | Stainless steel                                                                    |
| Housing color:         | Stainless steel (unpainted)                                                        |
| Front screen:          | Plastic                                                                            |
| Enclosure rating:      | IP 69K (DIN 40 050, part 9)                                                        |
| Protection class:      | III (VDE 0106/IEC 1010-1)                                                          |
| Weight:                | 854 g, without connecting cable                                                    |
| Dimensions:            | 85 mm x 154 mm x 84 mm                                                             |

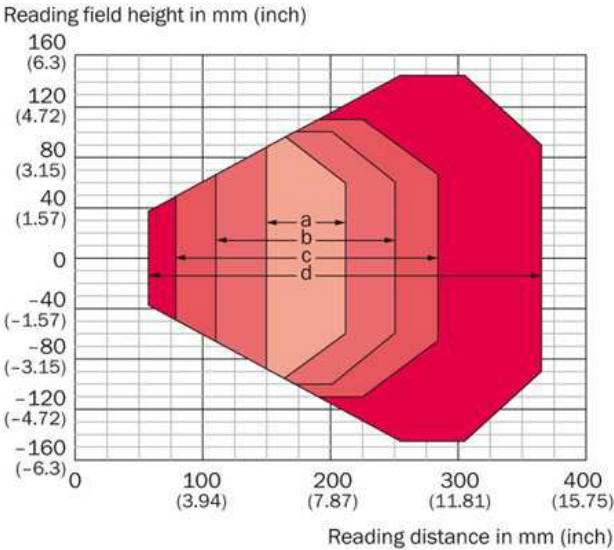
## Ambient data

|                                      |                                          |
|--------------------------------------|------------------------------------------|
| 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                     |
| Bar code print contrast (PCS):       | ≥ 60 %                                   |
| Ambient light immunity:              | 2,000 lx, on bar code                    |

## Dimensional drawing



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) |

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