



Bar code scanners  
CLV42x / CLV420 / Mid Range

CLV420-0010



**Model Name** > [CLV420-0010](#)  
**Part No.** > [1022031](#)



**At a glance**

- Easy to configure
- Small housing
- Standard, long-range and high-density versions available
- Front or side reading window versions
- CAN bus compatible
- High scanning frequency of up to 1,200 Hz
- Compatible with optional fieldbus gateways

**Your benefits**

- Accurate code identification even at high speeds
- Easily integrated into a variety of networks, providing flexibility
- Small size and simple setup enables fast installation, even in compact machines
- A variety of diagnostic options ensures easy access for configuration and troubleshooting
- Excellent price/performance ratio
- Parameter cloning plug ensures very short MTTR

**The product has been discontinued. Please contact your SICK sales representative for more information about a replacement product.**



**Features**

Version:	Mid Range
Connection type:	Standard
Reading field:	Front
Scanner design:	Line scanner
Focus:	Fixed focus
Light source:	Visible red light
MTBF:	20,000 h
Laser class:	2 (DIN EN 60825-1)
Field of view:	≤ 50 °
Code resolution:	0.2 mm ... 1 mm
Reading distance:	60 mm ... 365 mm <sup>1)</sup>
Scanning frequency:	400 Hz ... 1,200 Hz

1) For details see reading field diagram

## Performance

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Bar code types:	Interleaved 2 of 5, All current code types, Codabar, Code 128, Code 39, Code 93, GS1-128/EAN 128, Pharmacode, UPC/GTIN/EAN
Print ratio:	2:1 ... 3:1
No. of codes per scan:	1 ... 3
No. of codes per reading interval:	1 ... 10 (auto-discriminating)
No. of characters per reading interval:	100
No. of multiple readings:	1 ... 99

## Interfaces

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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)):	300 Baud ... 57,600 Baud, AUX: 9,600 Baud
Ethernet:	✓
Remark (Ethernet):	Optional via external connection module (CDM + CMF)
CAN bus:	✓
Function (CAN bus):	SICK CAN sensor network (Master/Slave, Multiplexer)
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 (CDM + CMF)
EtherCAT:	-
DeviceNet:	✓
Remark (DeviceNet):	Optional via external connection module (CDM + CMF)
Switching inputs:	2 ("Sensor 1", "Sensor 2")
Switching outputs:	2 ("Result 1", "Result 2")
Reading pulse:	Non-powered, Reflector polling, "Sensor 1" switching input, Serial interface
Optical indicators:	4 LEDs (function indicator)
Acoustic indicators:	Beeper/buzzer (can be switched off, can be allocated as a result indication function)

## Mechanics/electronics

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Electrical connection:	1 x 15-pin D-Sub HD male connector (0.9 m)
Operating voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Power consumption:	3.5 W
Housing:	Die-cast zinc, does not contain paint wetting impairment substances
Housing color:	Light blue (RAL 5012)
Enclosure rating:	IP 65 (DIN 40 050)
Protection class:	III (VDE 0106)
Weight:	250 g, with connecting cable
Dimensions:	59 mm x 62.7 mm x 35.2 mm

1) UL certified for use with a Class 2 mains supply unit (checked to UL 1310)

## Ambient data

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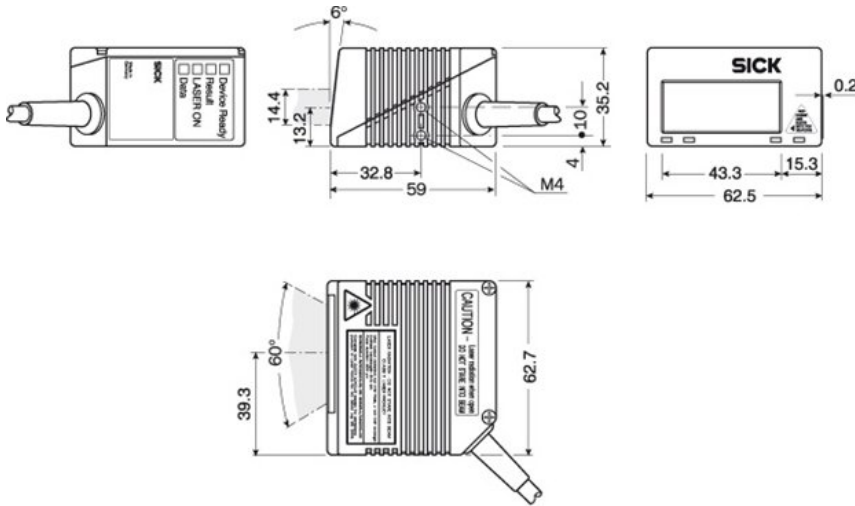
Electromagnetic compatibility (EMC):	EN 61000-6-2/EN 55011
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Vibration resistance:	IEC 68-2-6 Test FC
Shock resistance:	IEC 68-2-27 Test EA
Ambient operating temperature:	0 °C ... +40 °C
Storage temperature:	-20 °C ... +70 °C
Permissible relative humidity:	± 90 %, non-condensing
Ambient light safety:	2,000 lx, on bar code
Bar code print contrast (PCS):	≥ 60 %

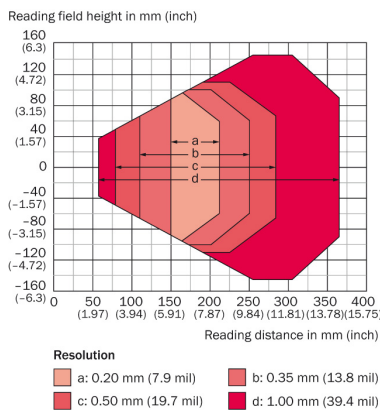
**General notes**

Life cycle phase: Available until September 30th, 2013

**Dimensional drawing**



**Reading field diagram**



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