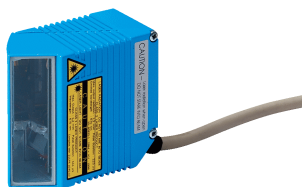


# CLV421-2010

CLV42x

**BAR CODE SCANNERS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
CLV421-2010	1022617

Other models and accessories → [www.sick.de/CLV42x](http://www.sick.de/CLV42x)



### Detailed technical data

#### Features

<b>Version</b>	Long Range
<b>Connection type</b>	Standard
<b>Reading field</b>	Side (105°)
<b>Scanner design</b>	Line scanner
<b>Focus</b>	Fixed focus
<b>Light source</b>	Visible red light
<b>MTBF</b>	20,000 h
<b>Laser class</b>	2 (DIN EN 60825-1)
<b>Aperture angle</b>	≤ 50°
<b>Scanning frequency</b>	400 Hz ... 1,200 Hz
<b>Code resolution</b>	0.35 mm ... 1 mm
<b>Reading distance</b>	60 mm ... 730 mm <sup>1)</sup>

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

#### Performance

<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
<b>Print ratio</b>	2:1 ... 3:1
<b>No. of codes per scan</b>	1 ... 3
<b>No. of codes per reading interval</b>	1 ... 10 (auto-discriminating)
<b>No. of characters per reading interval</b>	100
<b>No. of multiple readings</b>	1 ... 99

#### Interfaces

<b>Serial (RS-232, RS-422/-485)</b>	Function	✓, AUX (only RS-232)
	Data transmission rate	Host, AUX
		300 Baud ... 57,600 Baud, AUX: 9,600 baud
<b>Ethernet</b>		✓, optional via external connection module (CDM + CMF)
<b>CAN bus</b>		✓
	Function	SICK CAN sensor network (Master/Slave, Multiplexer)
	Data transmission rate	20 kbit/s ... 1 Mbit/s
	Protocol	CANopen, CSN (SICK CAN Sensor Network)

<b>PROFIBUS DP</b>	✓, optional via external connection module (CDM + CMF)
<b>DeviceNet</b>	✓, optional via external connection module (CDM + CMF)
<b>Switching inputs</b>	2 ("Sensor 1", "Sensor 2")
<b>Switching outputs</b>	2 ("Result 1", "Result 2")
<b>Reading pulse</b>	Reflector polling, Switching input "Sensor 1", non-powered, serial interface
<b>Optical indicators</b>	4 LEDs (function indicator)
<b>Acoustic indicators</b>	Beeper/buzzer (can be switched off, can be allocated as a result indication function)

#### Mechanics/electronics

<b>Electrical connection</b>	1 x 15-pin D-Sub HD male connector (0.9 m)
<b>Operating voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Power consumption</b>	3.5 W
<b>Housing</b>	Die-cast zinc, does not contain paint wetting impairment substances
<b>Housing color</b>	Light blue (RAL 5012)
<b>Enclosure rating</b>	IP 65 (DIN 40 050)
<b>Protection class</b>	III (VDE 0106, IEC 1010-1)
<b>Weight</b>	320 g, with connecting cable
<b>Dimensions (L x W x H)</b>	72 mm x 62.7 mm x 35.2 mm

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

#### Ambient data

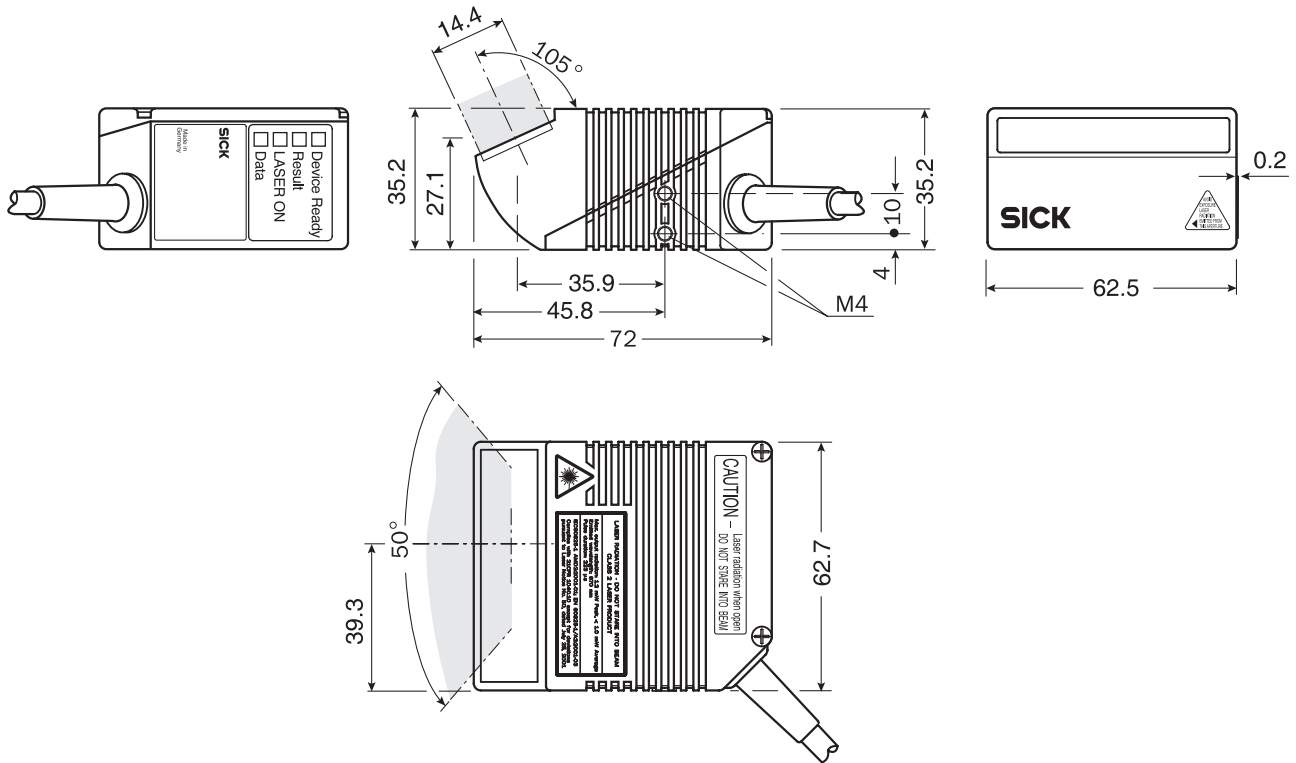
<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 / EN 55011
<b>Vibration resistance</b>	IEC 68-2-6 Test FC
<b>Shock resistance</b>	IEC 68-2-27 Test EA
<b>Ambient operating temperature</b>	0 °C ... +40 °C
<b>Storage temperature</b>	-20 °C ... +70 °C
<b>Permissible relative humidity</b>	± 90 %,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

#### General notes

<b>Life cycle phase</b>	Discontinued
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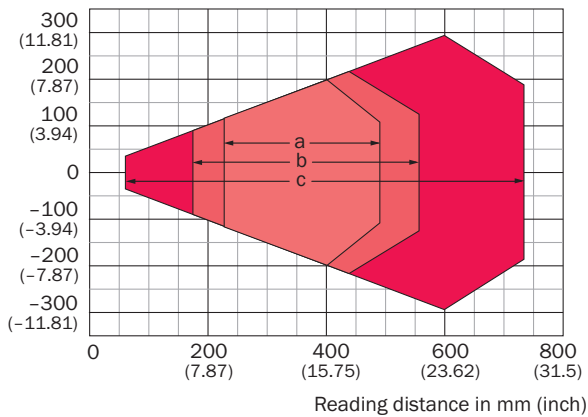
### Dimensional drawing (Dimensions in mm (inch))

CLV41x/42x side



### Reading field diagram

Reading field height in mm (inch)




#### Resolution

- a: 0.35 mm (13.8 mil)
- b: 0.50 mm (19.7 mil)
- c: 1.00 mm (39.4 mil)

## Recommended accessories

Other models and accessories → [www.sick.de/CLV42x](http://www.sick.de/CLV42x)

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, small, mounting hardware included	Mounting bracket	2020077
Modules			
	Modular connection module for one sensor	CDM420-0001	1025362

## 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)