



Bar code scanners  
CLV49x / CLV490-0/1 / Standard Density

CLV490-0010



**Model Name** > **CLV490-0010**  
**Part No.** > **1016958**



**At a glance**

- Real-time auto focus function
- Different versions ensure coverage for a variety of module widths
- Label tilt from -45° to +45°
- Smallest housing with auto focus and reading range up to 2.2 m
- External parameter cloning plug
- An oscillating mirror scanner is also available to cover larger reading areas
- Optional internal heater
- High scanning frequency of up to 1,200 Hz

**Your benefits**

- No supplementary components necessary for changing focus position, reducing costs
- Real-time auto focus provides the best coverage of applications with a large depth of field - even for small code heights
- External parameter cloning plug ensures very short MTTR
- SMART-enhanced read rates enable better performance with damaged or poorly printed codes



**Features**

Version:	Standard Density
Connection type:	Standard
Reading field:	Front
Scanner design:	Line scanner
Focus:	Auto focus (alternative: dynamic focus control)
Light source:	Visible red light (650 nm)
MTBF:	80,000 h
Laser class:	2 (DIN EN 60825-1)
Field of view:	≤ 60 °
Scanning frequency:	600 Hz ... 1,200 Hz
Code resolution:	0.25 mm ... 1 mm
Reading distance (at code resolution):	500 mm ... 2,100 mm (0.5 mm)
No. of distance configurations:	8
Focus adjustment time:	≤ 20 ms
Focus trigger source:	data interface, Switching inputs "IN 0 ... IN 4", timer
Switch on delay:	35 ... 40 min at -35 °C and 24 V DC

## Performance

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Bar code types:	Interleaved 2 of 5, all current code types, Codabar, Code 128, Code 39, Code 93, EAN, EAN 128, UPC
Print ratio:	2:1 ... 3:1
No. of codes per scan:	1 ... 12 (Standard decoder) 1 ... 6 (SMART decoder)
No. of codes per reading interval:	1 ... 50 (auto-discriminating)
No. of characters per reading interval:	600
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):	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:	-
Remark (PROFIBUS):	optional via external connection module (CDM + CMF)
PROFINET:	-
DeviceNet:	-
Remark (DeviceNet):	optional via external connection module (CDM + CMF)
Switching inputs:	6 (Sensor, IN 0 ... IN 4)
Switching outputs:	4 ("Result 1" ... "Result 4")
Reading pulse:	data interface, non-powered, OTS (Omni tracking), "Sensor 4" switching input (+ "IN 4")
Optical indicators:	4 LEDs (function indicator)

## Mechanics/electronics

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Electrical connection:	1 x 15-pin D-Sub HD device plug 1 x 15-pin D-Sub HD device socket
Operating voltage:	18 V DC ... 30 V DC
Power consumption:	16 W
Housing:	Die-cast aluminum, no materials containing silicone on outside
Housing color:	light blue (RAL 5012)
Enclosure rating:	IP 65 (DIN 40 050)
Protection class:	III (VDE 0106)
Weight:	1,500 g
Dimensions:	117 mm x 117 mm x 94 mm

## Ambient data

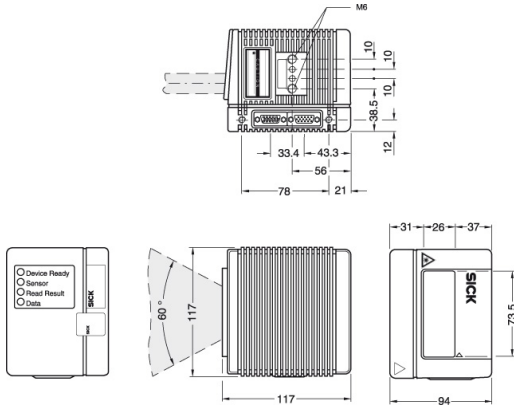
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Electromagnetic compatibility (EMC):	EN 61000-6-2 (2001-10)/EN 61000-6-3 (2001-10)/EN 61000-6-3/A11 (2004-07)
Vibration resistance:	EN 60068-2-6 (1995)
Shock resistance:	EN 60068-2-27 (1993)
Ambient operating temperature:	0 °C ... 40 °C
Storage temperature:	-20 °C ... 70 °C

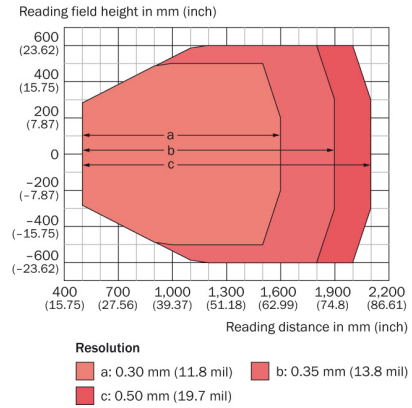
Permissible relative humidity:  
 Ambient light safety:

± 90 %, non-condensing  
 2,000 lx, on bar code

**Dimensional drawing**



**Reading field diagram**



**Australia**

Phone +61 3 9497 4100  
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(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

**Ceská Republika**

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

**China**

Phone +852-2763 6966  
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 +972-4-999-0590  
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

**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

**Slovenija**

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

**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 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)