



Bar code scanners CLV49x / CLV490-2/3 / High Density

CLV490-2010



SICK
Sensor Intelligence.

Model Name > [CLV490-2010](#)
Part No. > [1019311](#)



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

The product is currently being phased out and can be ordered until September 30, 2014. A replacement product can be found under "Replacement Products"



Features

Version:	High Density
Connection type:	Standard
Reading field:	Front
Scanner design:	Line scanner
Focus:	Auto focus (alternative: dynamic focus control)
No. of distance configurations:	8
Focus adjustment time:	≤ 20 ms
Focus trigger source:	Data interface, Switching inputs "IN 0 ... IN 4", Timer
Light source:	Visible red light (650 nm)
MTBF:	80,000 h
Laser class:	2 (DIN EN 60825-1)
Field of view:	≤ 60 °

Code resolution:	0.17 mm ... 0.4 mm
Reading distance (at code resolution):	400 mm ... 1,600 mm (0.3 mm)
Switch on delay:	35 ... 40 min at -35 °C and 24 V DC
Scanning frequency:	600 Hz ... 1,200 Hz

Performance

Bar code types:	Interleaved 2 of 5, All current code types, Codabar, Code 128, Code 39, Code 93, GS1-128/EAN 128, UPC/GTIN/EAN
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

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:	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

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

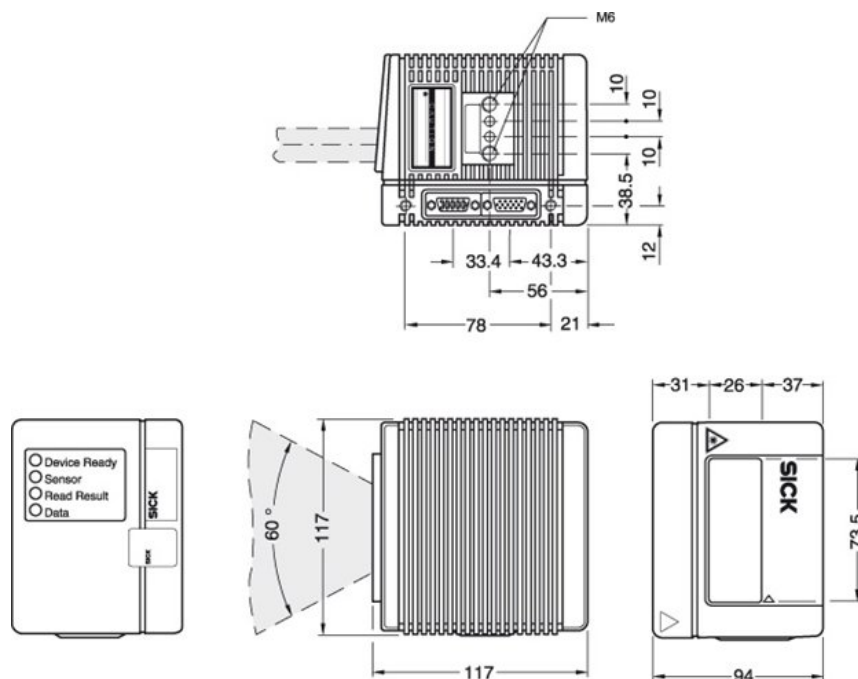
Electromagnetic compatibility (EMC):	(EN 61000-6-2 (2001-10)) (EN 61000-6-3 (2001-10)) (EN 61000-6-3/A11 (2004-07))
--------------------------------------	--

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:	± 90 %, non-condensing
Ambient light safety:	2,000 lx, on bar code

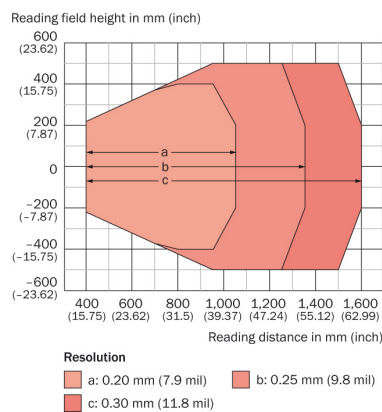
General notes

Life cycle phase: Available until September 30th, 2014

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