



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

CLV490-3011



Model Name > [CLV490-3011](#)
Part No. > [1019314](#)



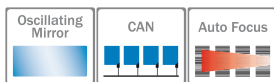
At a glance

- 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. Please contact your SICK sales representative for more information about a replacement product.



Features

Version:	High Density
Connection type:	Standard
Reading field:	Oscillating mirror
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:	≤ 50 °
Code resolution:	0.17 mm ... 0.4 mm
Reading distance (at code resolution):	400 mm ... 1,600 mm (0.3 mm)
Oscillating mirror functions:	Fixed (adjustable position), One shot, Oscillating (variable or fixed amplitude)
Oscillation frequency:	0.5 Hz ... 4 Hz
Angle of deflection:	-20 ° ... 20 ° (can be adjusted via software)
Heating:	Yes
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:	≤ -10 %, ≤ 24 V DC ≥ 20 %
Power consumption:	100 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:	2,200 g

183 mm x 127.5 mm x 97.5 mm

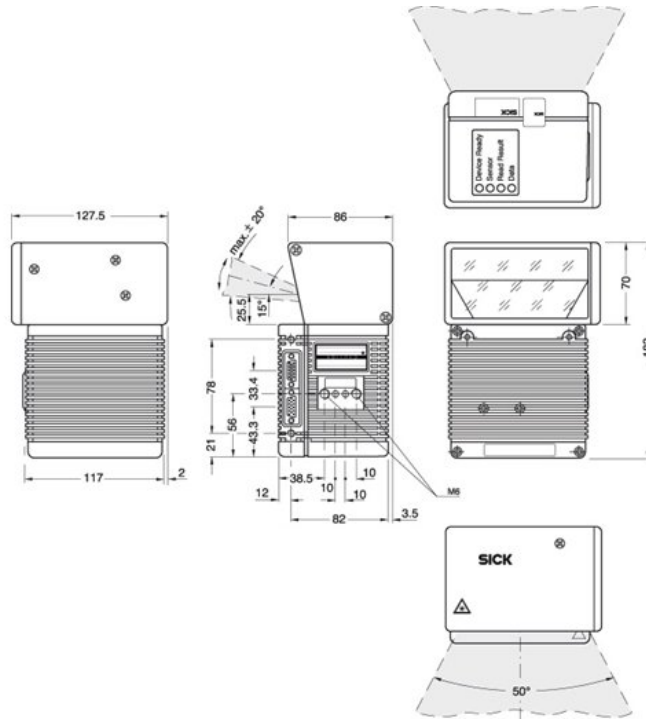
Ambient data

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:	-35 °C ... 35 °C
Storage temperature:	-20 °C ... 70 °C
Permissible relative humidity:	± 90 %, non-condensing
Ambient light safety:	2,000 lx, on bar code

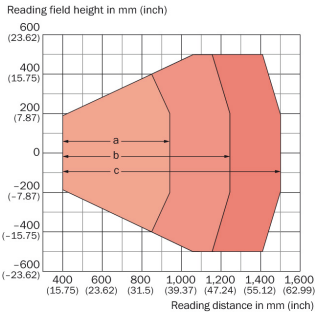
General notes

Life cycle phase: Available until September 30th, 2014

Dimensional drawing



Reading field diagram



- Resolution
- a: 0.20 mm (7.9 mil)
 - b: 0.25 mm (9.8 mil)
 - c: 0.30 mm (11.8 mil)

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