



Bar code scanners  
CLX49x / CLX490 / Standard Density

CLX490-0010



**Model Name** > [CLX490-0010](#)  
**Part No.** > [1019318](#)



**At a glance**

- Real-time auto focus function
- Independent of tilt (omni-directional bar code reading)
- Reliable code detection in real time due to SMART technology
- Smallest housing with auto focus and reading range up to 2.2 m
- External parameter cloning plug
- High scanning frequency of up to 1,200 Hz
- Large depth of field
- Optional internal heater

**Your benefits**

- No additional controller needed in stand-alone applications to cover small object gaps, reducing costs
- No supplementary components necessary for changing focus position, reducing costs
- Can be used in omni portal systems as additional side scanners
- SMART-enhanced read rates enable better performance with damaged or poorly printed codes
- External parameter cloning plug ensures very short MTTR



**Features**

Version:	Standard Density
Connection type:	Standard
Reading field:	Front
Scanner design:	X scanner (2 lines offset from each other at a 90° angle)
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:	0.3 mm ... 1 mm
Reading distance (at code resolution):	500 mm ... 1,750 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

## 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):	10 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 (EN 60529 (1991-10))
Protection class:	III (EN 61140 (2002-03))
Weight:	2,000 g
Dimensions:	208 mm x 152.6 mm x 175.5 mm

## Ambient data

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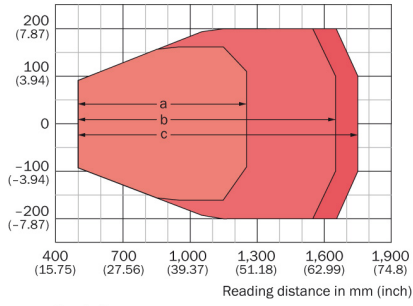
Electromagnetic compatibility (EMC):	EN 61000-6-2 (2001-10)/EN 61000-6-3 (2001-10)/EN 61000-6-3/A11 (2004-07)
Vibration resistance:	EN 60068-2-6 (1995)
Shock resistance:	EN 60068-2-27 (1993)
Ambient operating temperature:	0 °C ... 40 °C
Storage temperature:	-20 °C ... 70 °C

Permissible relative humidity:  
Ambient light safety:  
Bar code print contrast (PCS):

90 %, non-condensing  
2,000 lx, on bar code  
≥ 60 %

## Reading field diagram

Reading field height in mm (inch)



### Resolution

a: 0.30 mm (11.8 mil)    b: 0.35 mm (13.8 mil)  
c: 0.50 mm (19.7 mil)

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