



Bar code scanners  
CLV44x / CLV442 / High Density

CLV442-0010



**Model Name** > [CLV442-0010](#)  
**Part No.** > [1017595](#)



**At a glance**

- Dynamic focus control in real time
- Reliable code recognition in real time using SMART technology
- Immune to ambient light
- Auto setup ensures automatic optimizing of reading performance
- Reflector polling provides automatic triggering
- Profile programming included
- Adjustable scanning frequency up to 800 scans per second

**Your benefits**

- SMART-enhanced read rates enable better performance with damaged or poorly printed codes
- Reliably reads bar codes with up to 30 degrees of tilt, increasing throughput
- Dynamic focus control allows the scanner to accommodate a large depth of field by dynamically adjusting the focus to the object distance
- No additional trigger light switch necessary due to the reflector polling function, reducing costs
- Easy to configure
- Short commissioning time
- Reliable operation
- Small size and simple setup enables fast installation, even in compact machines
- Parameter cloning plug ensures very short MTTR

**Note: The product is currently being phased out and can be ordered until September 30, 2013. A replacement product can be found under "Replacement Products"**



**Features**

Version:	High Density
Connection type:	Standard
Reading field:	Front
Scanner design:	Line scanner
Focus:	Dynamic focus control
Light source:	Visible red light (650 nm)
MTBF:	20,000 h

Laser class:	2 (DIN EN 60825-1)
Field of view:	≤ 50 °
Scanning frequency:	300 Hz ... 800 Hz
Code resolution:	0.15 mm ... 0.25 mm
Reading distance (at code resolution):	30 mm ... 335 mm (0.25 mm)
No. of distance configurations:	8
Focus adjustment time:	≤ 50 ms
Focus trigger source:	Switching input "Sensor 2", serial interface, 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 ... 20 (Standard decoder) 1 ... 6 (SMART decoder)
No. of codes per reading interval:	1 ... 50 (auto-discriminating)
No. of characters per reading interval:	500
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:	2 ("Sensor 1", "Sensor 2")
Switching outputs:	2 ("Result 1", "Result 2")
Reading pulse:	non-powered, Reflector polling, "Sensor 1" switching input, serial interface
Optical indicators:	4 LEDs (function indicator)
Acoustic indicators:	Beeper/buzzer (can be switched off, can be allocated as a result status indication function)

## Mechanics/electronics

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Electrical connection:	1 15-pin D-Sub HD plug (0.9 m)
Operating voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Power consumption:	5 W
Housing:	Die-cast zinc, does not contain paint wetting impairment substances
Housing color:	light blue (RAL 5012)
Enclosure rating:	IP 65 (EN 60529 (1991-10))
Protection class:	III (EN 61140 (2002-03))
Weight:	480 g, with connecting cable
Dimensions:	90 mm x 60 mm x 35.7 mm

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

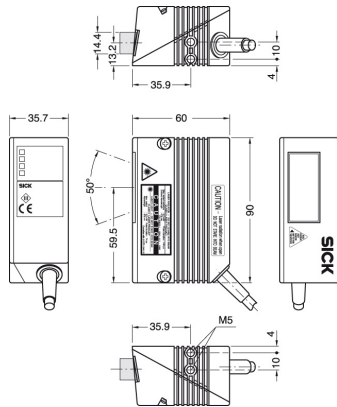
### Ambient data

Electromagnetic compatibility (EMC):	EN 61000-6-2 (2001-10)/EN 61000-6-4 (2001-10)
Vibration resistance:	IEC 60068-2-27 (1993)
Shock resistance:	IEC 600682-6 (1995)
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
Bar code print contrast (PCS):	≥ 60 %

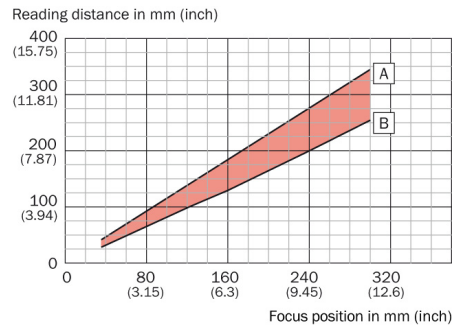
### General notes

Life cycle phase: phased out

### Dimensional drawing



### Reading field diagram



Resolution 0.25 mm (9.8 mil)

- A max. reading distance (aperture angle 25°)
- B min. reading distance (aperture angle 25°)

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