



Bar code scanners
CLV43x / CLV431 / Mid Range

CLV431-1010



Model Name > [CLV431-1010](#)
Part No. > [1016679](#)



At a glance

- 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
- No additional trigger light switch necessary due to the reflector polling function, reducing costs
- Extremely easy to configure, shortening commissioning time
- Reliable operation
- Small size and simple setup enables fast installation, even in compact machines
- Parameter cloning plug ensures very short MTTR

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:	Mid Range
Connection type:	Standard
Reading field:	Front
Scanner design:	Raster scanner
Focus:	Fixed focus
Light source:	Visible red light (650 nm)
MTBF:	20,000 h
Laser class:	2 (DIN EN 60825-1)
Field of view:	≤ 50 °
Code resolution:	0.25 mm ... 0.5 mm
Reading distance (at code resolution):	90 mm ... 430 mm (0.5 mm)
Raster height, number of lines, at distance:	15 mm, 8, 200 mm

Scanning frequency: 300 Hz ... 800 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 ... 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

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): 10 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: 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

Electrical connection: 1 15-pin D-Sub HD plug (0.9 m)

Operating voltage: 10 V DC ... 30 V DC ¹⁾

Power consumption: 4 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: 420 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))

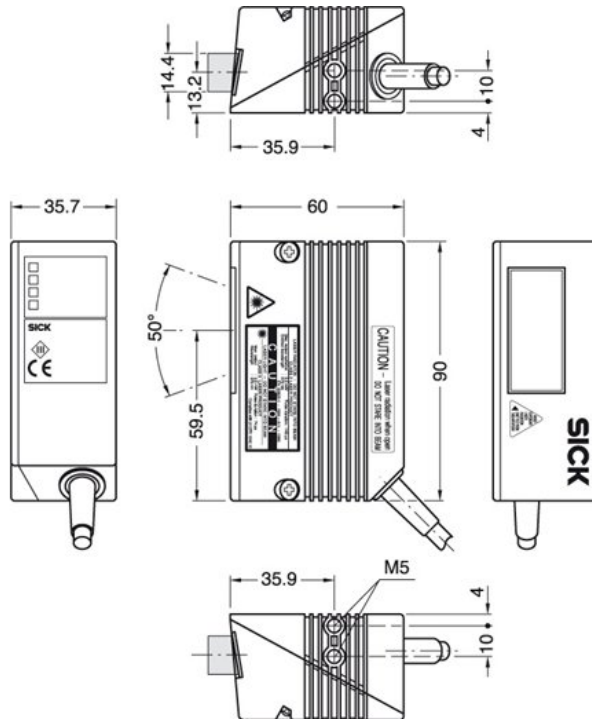
Shock resistance: (IEC 600682-6 (1995))

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 %

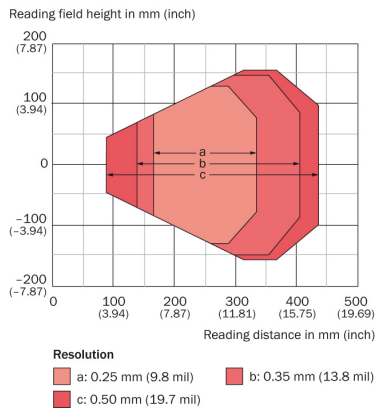
General notes

Life cycle phase: Available until September 30th, 2013

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