



Bar code scanners
CLV45x / CLV450 / Standard Density

CLV450-0010



Model Name > [CLV450-0010](#)
Part No. > [1018556](#)



At a glance

- Dynamic focus control in real time
- Immune to ambient light
- Large reading distance of up to 1.6 m
- Auto setup ensures automatic optimizing of reading performance
- CAN bus compatible
- High read rates, even with damaged, rotated, or dirty bar codes
- Adjustable scanning frequency up to 1,000 scans per second

Your benefits

- Reliable bar code identification across large reading distances
- Dynamic focus control allows the scanner to accommodate a large depth of field by dynamically adjusting the focus to the object distance
- Small size and simple setup enables fast installation, even in compact machines
- Extremely easy to configure, shortening commissioning time
- Short commissioning time
- Reliable operation
- 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: | Standard 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: | 400 Hz ... 1,000 Hz |

| | |
|--|---|
| Code resolution: | 0.25 mm ... 1 mm |
| Reading distance (at code resolution): | 125 mm ... 1,600 mm (1 mm) |
| No. of distance configurations: | 8 |
| Focus adjustment time: | ≤ 50 ms |
| Focus trigger source: | Switching input "Sensor 2", serial interface, timer |

Performance

| | |
|---|--|
| 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

| | |
|---|--|
| 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, "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: | 6 W |
| Housing: | Die-cast zinc, does not contain paint wetting impairment substances |
| Housing color: | light blue (RAL 5012) |
| Enclosure rating: | IP 65 (DIN 40 050) |
| Protection class: | III (VDE 0106) |
| Weight: | 530 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)

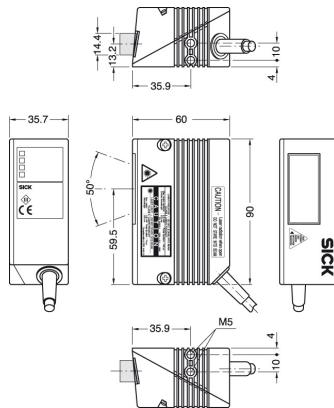
Ambient data

| | |
|--------------------------------------|--|
| Electromagnetic compatibility (EMC): | EN 61000-6-4/EN 61000-6-1/EN 61000-6-2 |
| Vibration resistance: | IEC 68-2-6 Test FC |
| Shock resistance: | IEC 68-2-27 Test EA |
| 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 |

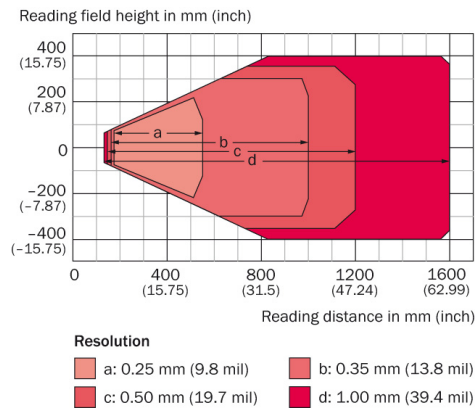
General notes

| | |
|-------------------|------------|
| Life cycle phase: | phased out |
|-------------------|------------|

Dimensional drawing



Reading field diagram



Australia

Phone +61 3 9497 4100
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(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +852-2763 6966
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 +972-4-999-0590
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

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

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

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 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