



Bar code scanners
CLV49x / CLV490-0/1 / Standard Density

CLV490-1010



Model Name > **CLV490-1010**
Part No. > **1016959**

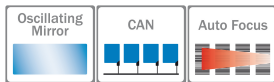


At a glance

- 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



Features

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|--|--|
| Version: | Standard Density |
| Connection type: | Standard |
| Reading field: | Oscillating mirror |
| Scanner design: | Line scanner |
| 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: | ≤ 50 ° |
| Scanning frequency: | 600 Hz ... 1,200 Hz |
| Code resolution: | 0.25 mm ... 1 mm |
| Reading distance (at code resolution): | 500 mm ... 2,100 mm (0.5 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) |
| 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): | 20 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

| | |
|------------------------|--|
| 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: | 18 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 |
| Dimensions: | 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:

0 °C ... 40 °C

Storage temperature:

-20 °C ... 70 °C

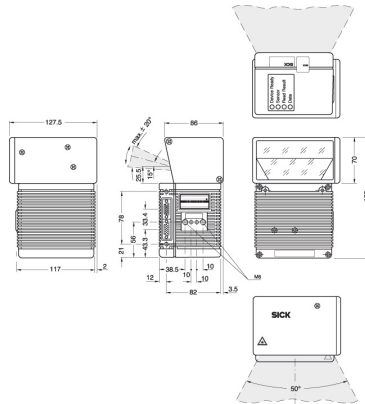
Permissible relative humidity:

± 90 %, non-condensing

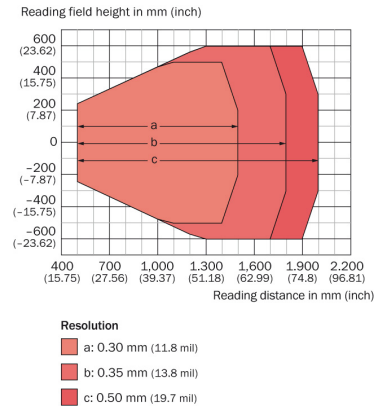
Ambient light safety:

2,000 lx, on bar code

Dimensional drawing



Reading field diagram



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