ONLINE DATA SHEET
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Bar code scanners
CLV62x / CLV620 / Mid Range

CLV620-1000

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Sensor Intelligence.

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Model Name > CLV620-1000
Part No. > 1041548

At a glance

- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- SMART620 code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Advanced, easy-to-use SOPAS configuration software
- High scanning frequency of up to 1,200 Hz
- Small housing
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet
- IP 65 or IP 69K rated (depending on type)

Your benefits

- High read rate on damaged and obscured codes using SMART620 code recognition technology
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- No supplementary Ethernet gateway required with Ethernet models - lowers costs
- The CLV62x scanner can be used as a multiplexer in any CAN scanner network from SICK - no supplementary multiplexer necessary
- Real-time decoding at very high speeds
- Small size and simple setup enables fast installation, even in compact machines

Features

Version:	Mid Range
Connection type:	Cable
Reading field:	Front
Scanner design:	Raster scanner
Focus:	Fixed focus
Light source:	Visible red light (655 nm)
MTBF:	40,000 h
Laser class:	2 (EN 60825-1 (A2:2001-03))
Aperture angle:	≤ 50 °
Code resolution:	0.2 mm ... 1 mm
Reading distance:	60 mm ... 365 mm [1)]
Raster height, number of lines, at distance:	15 mm, 8, 200 mm

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Scanning frequency:	400 Hz ... 1,200 Hz

[1] For details see reading field diagram

Performance

Bar code types:	Interleaved 2 of 5, All current code types, Codabar, Code 128, Code 39, Code 93, GS1 DataBar, GS1-128/EAN 128, MSI/Plessey, Pharmacode, Telepen, UPC/GTIN/EAN
Print ratio:	2:1 ... 3:1
No. of codes per scan:	1 ... 20 (Standard decoder), 1 ... 6 (SMART620)
No. of codes per reading interval:	1 ... 50 (auto-discriminating)
No. of characters per reading interval:	1,500, 500 (for multiplexer function in CAN operation)
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)):	2,400 Baud ... 115 kBaud, AUX: 57.6 kBaud
Ethernet:	-
Protocol (Ethernet):	PROFINET Dual Port (optional via external connection module CDF600-2), EtherCAT (optional via external connection module CDF600)
CAN bus:	✓
Function (CAN bus):	SICK CAN sensor network (Master/Slave, Multiplexer/Server)
Protocol (CAN bus):	CANopen, CSN (SICK CAN Sensor Network)
Data transmission rate (CAN bus):	20 kbit/s ... 1 Mbit/s
PROFIBUS DP:	✓
Remark (PROFIBUS DP):	Optional via external connection module (CDF600-2)
DeviceNet:	✓
Remark (DeviceNet):	Optional via external connection module (CDM + CMF)
Switching inputs:	4 (“Sensor 1”, “Sensor 2”, 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
Switching outputs:	4 (“Result 1”, “Result 2”, 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
Reading pulse:	Auto pulse, CAN, Non-powered, Switching inputs, Serial interface
Optical indicators:	6 LEDs (Ready, Result, laser, Data, CAN, LNK TX)
Acoustic indicators:	Beeper/buzzer (can be switched off, can be allocated as a result indication function)
Configuration software:	SOPAS ET

Mechanics/electronics

Electrical connection:	1 x 15-pin D-Sub HD male connector (0.9 m)
Operating voltage:	10 V DC ... 30 V DC
Power consumption:	4.5 W
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Front screen:	Glass
Enclosure rating:	IP 65 (DIN 40 050)
Protection class:	III (VDE 0106/IEC 1010-1)
Weight:	225 g, with connecting cable
Dimensions:	61 mm x 66 mm x 38 mm

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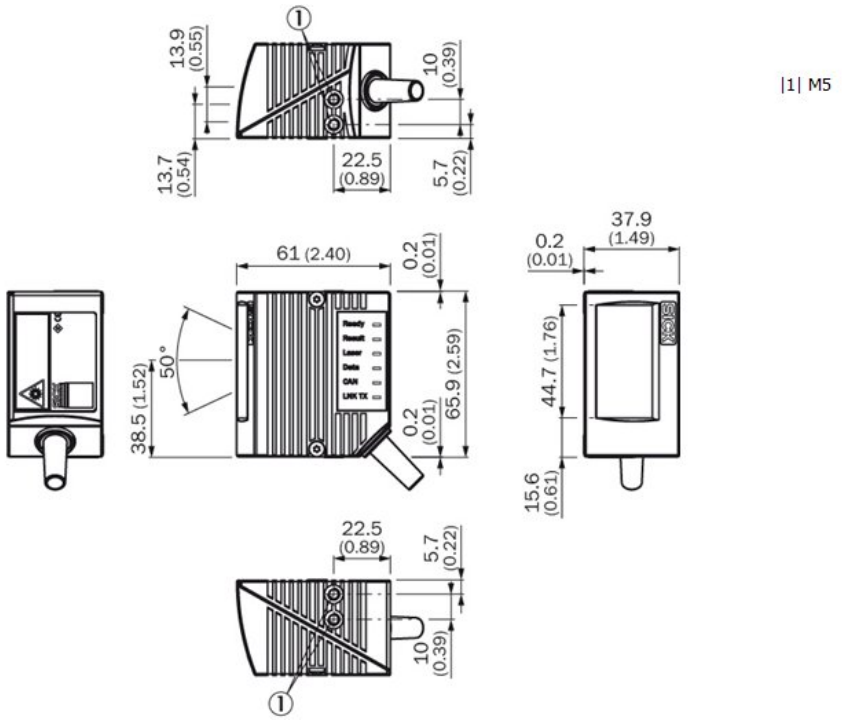
Ambient data

Electromagnetic compatibility (EMC):	EN 61000-6-3 (2001-10)/EN 61000-6-2:2005
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
Bar code print contrast (PCS):	≥ 60 %
Ambient light immunity:	2,000 lx, on bar code

General notes

Note on use:	For Ethernet connection please use an Ethernet version of CLV6xx

Dimensional drawing



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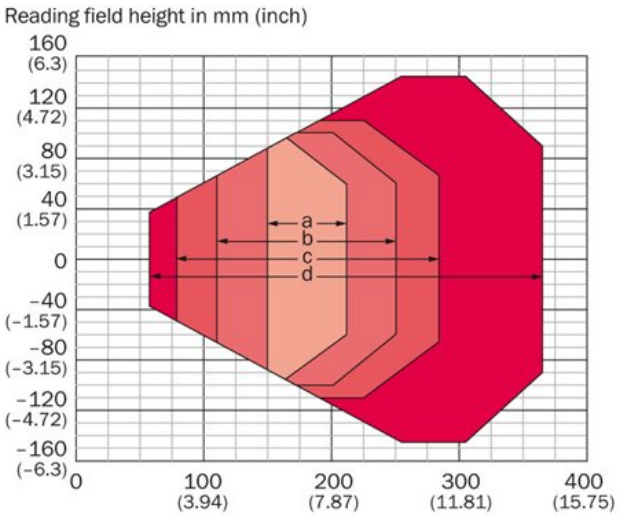
Reading field diagram



For devices with plastic reading window, the depth of field is reduced by approx. 10 %.

Resolution

- a: 0.2 mm (7.9 mil)
- b: 0.35 mm (13.8 mil)
- c: 0.50 mm (19.7 mil)
- d: 1.00 mm (39.4 mil)

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