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DATA SHEET

CLV620-0831S01

CLV62x
Fixed mount barcode scanners

SICK Sensor Intelligence



Illustration may differ

FIXED MOUNT BARCODE SCANNERS

CLV620-0831S01

ORDERING INFORMATION

Type	part no.
CLV620-0831S01	1066374

Further device versions and accessories at www.sick.com/CLV62x

DETAILED TECHNICAL DATA

FEATURES

Version	Mid Range
Connection type	Ethernet
Reading field	Front
Sensor type	Line scanner
Optical focus	Fixed focus
Light source	Light spot, laser, Visible, Red, 655 nm
Laser class	2, complies with 21 CFR 1040.10 except for the conformance according to “Laser Notice No. 56” from May 8, 2019 (EN 60825-1:2014+A11:2021, IEC 60825-1:2014)
Aperture angle	≤ 50°
Reading distance	63 mm ... 347 mm [1]
Scanning frequency	400 Hz ... 1,200 Hz
Code resolution	0.2 mm ... 1 mm

[1] For details see reading field diagram.

MECHANICS/ELECTRONICS

Connection type	2 x M12 cylindrical connectors (1 x 17-pin male connector, 4-pin female connector)
Supply voltage	10 V DC ... 30 V DC
Power consumption	4.5 W
Housing material	Stainless steel
Housing color	Stainless steel (unpainted)
Window material	Plastic
Enclosure rating	IP69K (DIN 40 050, part 9)
Protection class	III (VDE 0106/IEC 1010-1)
Weight	+ 854 g, without connecting cable
Dimensions (L x W x H)	85 mm x 154 mm x 84 mm

[1] At 25 °C.

MTBF	100,000 h
MTTF	40,000 h (Laser diode) [1]

[1] At 25 °C.

PERFORMANCE

Readable code structures	1D codes
Bar code types	All current code types, Code 39, Code 128, Code 93, Codabar, GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Telepen, MSI/Plessey
Code printing process	Label (printed codes)
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

Ethernet	✓, TCP/IP
Function	Data interface (read result output), Service interface
Data transmission rate	10/100 MBit/s
PROFINET	✓
Function	PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2)
Data transmission rate	10/100 MBit/s
EtherNet/IP™	✓
Data transmission rate	10/100 MBit/s
EtherCAT®	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600
Serial	✓, RS-232, RS-422, RS-485
Function	Data interface (read result output), Service interface
Data transmission rate	2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
CAN	✓
Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server)
Data transmission rate	20 kbit/s ... 1 Mbit/s
CANopen	✓
Data transmission rate	20 kbit/s ... 1 Mbit/s
PROFIBUS DP	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600-2
Digital inputs	4 (“Sensor 1”, “Sensor 2”, 2 inputs via optional CMC600 in CDB650)
Digital outputs	4 (“Result 1”, “Result 2”, 2 via optional CMC600 parameter memory in CDB650)
Reading pulse	Digital inputs, serial interface, auto pulse, CAN
Configuration software	SOPAS ET

AMBIENT DATA

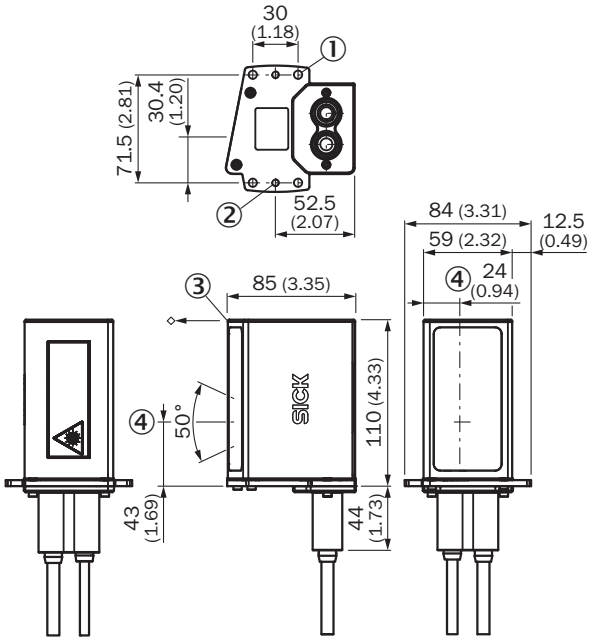
Electromagnetic compatibility (EMC)	EN 61000-6-3 (2001-10) / EN 61000-6-2:2005
Vibration resistance	EN 60068-2-6 (1995)
Shock resistance	EN 60068-2-27 (1993)
Ambient operating temperature	0 °C ... +40 °C
Storage temperature	–20 °C ... +70 °C
Relative humidity	90 %, Non-condensing
Ambient light immunity	2,000 lx, on barcode

Bar code print contrast (PCS)	≥ 60 %

CERTIFICATES

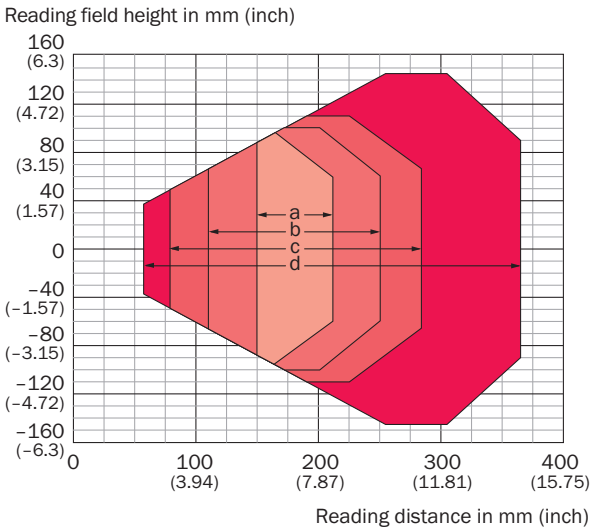
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
Ethercat certificate	✓
Profinet certificate	✓
Laser safety (IEC 60825-1) declaration of manufacturer	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING



Dimensions in mm (inch)
① mounting holes, , Ø 5.5 mm (4 x)
② threaded holes, M5 (2 x)
③ reference point for reading distance (from housing edge to object)
④ position light emission

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)

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1066374

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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