



CLV451-6010

CLV45x

BAR CODE SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
CLV451-6010	1019524

Other models and accessories → www.sick.de/CLV45x



Detailed technical data

Features

Version	Low Density
Connection type	Standard
Reading field	Oscillating mirror
Scanner design	Line scanner
Focus	Dynamic focus control
No. of distance configurations	≤ 8
Focus adjustment time	≤ 50 ms
Focus trigger source	Switching input "Sensor 2" / serial interface / timer
Light source	Visible red light (650 nm)
MTBF	20,000 h
Laser class	2 (DIN EN 60825-1)
Aperture angle	≤ 50°
Scanning frequency	400 Hz ... 1,000 Hz
Code resolution	0.5 mm
Reading distance	150 mm ... 780 mm ¹⁾
Oscillating mirror functions	Fixed (adjustable position), oscillating (variable or fixed amplitude), one shot
Oscillation frequency	0.5 Hz ... 4 Hz
Angle of deflection	-20° ... 20° (can be adjusted via software)

¹⁾ For details see reading field diagram.

Performance

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
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)	✓, AUX (only RS-232)
Function	Host, AUX
Data transmission rate	300 Baud ... 57,600 Baud, AUX: 9,600 baud
Ethernet	✓, optional via external connection module (CDM + CMF)
CAN bus	✓
Function	SICK CAN sensor network (Master/Slave, Multiplexer)
Data transmission rate	10 kbit/s ... 1 Mbit/s
Protocol	CANopen, CSN (SICK CAN Sensor Network)
PROFIBUS DP	✓, optional via external connection module (CDM + CMF)
DeviceNet	✓, optional via external connection module (CDM + CMF)
Switching inputs	2 ("Sensor 1", "Sensor 2")
Switching outputs	2 ("Result 1", "Result 2")
Reading pulse	Switching input "Sensor 1", non-powered, serial interface
Optical indicators	4 LEDs (function indicator)
Acoustic indicators	Beeper/buzzer (can be switched off, can be allocated as a result indication function)

Mechanics/electronics

Electrical connection	1 x 15-pin D-Sub HD male connector (0.9 m)
Operating voltage	10 V DC ... 30 V DC ¹⁾
Power consumption	7.2 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, IEC 1010-1)
Weight	700 g, with connecting cable
Dimensions (L x W x H)	99.8 mm x 90 mm x 37.8 mm

¹⁾ UL certified for use with a Class 2 mains supply unit (checked to UL 1310)

Ambient data

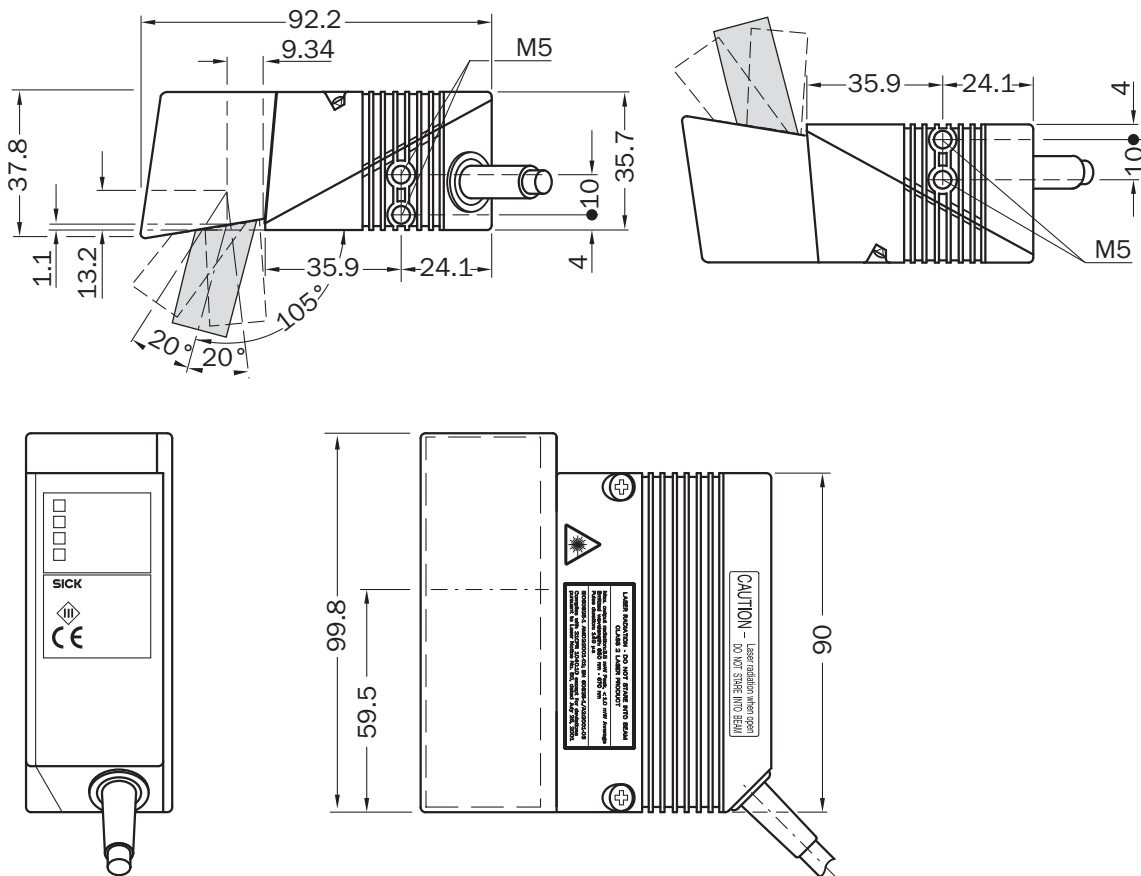
Electromagnetic compatibility (EMC)	EN 61000-6-4 EN 61000-6-1 EN 61000-6-2
Vibration resistance	IEC 68-2-6 Test FC
Shock resistance	IEC 68-2-27 Test EA
Ambient operating temperature	0 °C ... +40 °C
Storage temperature	-20 °C ... +70 °C
Permissible relative humidity	± 90 %, Non-condensing
Ambient light immunity	2,000 lx, on bar code

General notes

Life cycle phase	Discontinued
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Dimensional drawing (Dimensions in mm (inch))

CLV43x/44x/45x oscillating mirror



Recommended accessories

Other models and accessories → www.sick.de/CLV45x

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, U-shaped, mounting hardware included	Mounting bracket	2022564
Modules			
	Modular connection module for one sensor	CDM420-0001	1025362

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com