Product overview

CLV63x

1D code identification using a scanner for harsh environments and HACCP applications

SICK
Sensor Intelligence.

Advantages

One fixed mount barcode scanner, many applications

The application possibilities for fixed mount barcode scanners are manifold. It's good when the devices are designed to withstand a wide range of ambient conditions. The CLV63x is reliable even in sub-zero temperatures or in wet environments. With the oval light spot, it can reliably read even challenging codes such as DPM codes.

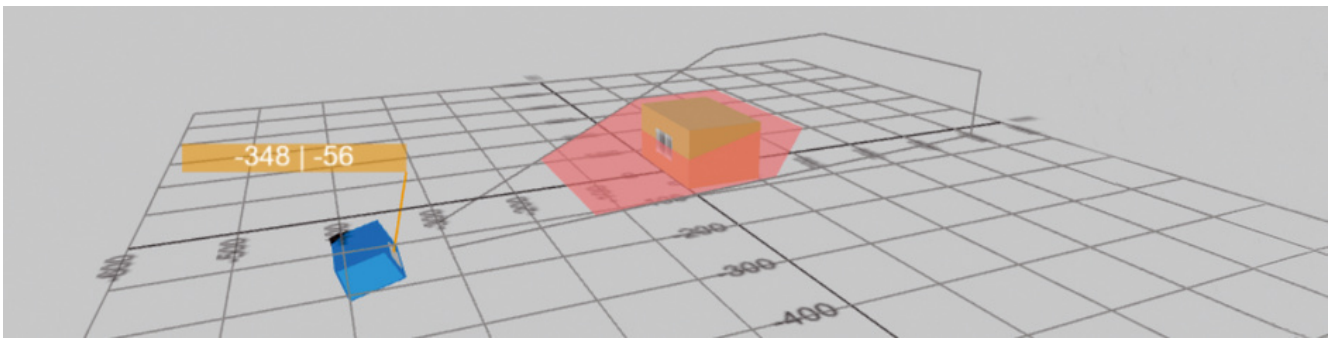
Withstands fluctuating ambient temperatures
Depending on the device variant, the CLV63x is equipped with surface-mounted heating in order to work reliably even in deep-freeze environments down to –35 °C. Thanks to the intelligent controller, the fixed mount barcode scanner can take advantage of cheaper night electricity rates.

Reliable reading of tricky barcodes
The oval light spot provides high reading performance where code reading is complex, such as with large distortions, low-contrast printing, fuzzy edges, or direct part marking (DPM) on rough or textured surfaces such as with inkjet printing.

Steadfast in harsh environments
Cleaning processes at high temperatures, with high-pressure jets or aggressive cleaning products are part of everyday life in the food industry. The IP69K device variants of the CLV63x with Inox stainless-steel housing, integrated plastic viewing window and Ecolab-certified cables easily withstand these conditions.

Shatterproof HACCP plastic viewing window
The HACCP (Hazard Analysis and Critical Control Points) standard requires a hazard analysis and identification of critical control points in the food industry. As this also includes components made of glass, the CLV63x is available with a shatterproof plastic viewing window as an option.

Flexible use thanks to outstanding device features for demanding environments



Virtual product demo before purchase? SICK makes it possible.

Bring our products to life: Our reading field visualization tools can be used to visualize all CLV63x device variants. Select your device parameters and use our tool to find out which product variant is the best one for your device. Uncertainty when selecting products is a thing of the past.

Use product visualization to help you select the exact right product before you buy.

SICK LifeTime Services

From consulting to modernization: SICK LifeTime Services increase the productivity of plants and machines, improve the safety of your employees, and provide a solid foundation for sustainable business operations. As a solution provider, SICK works with you to manage the holistic implementation of projects relating to industrial automation, safety and digitalization.

Comprehensive industry know-how and more than 75 years of practical experience create ideas and provide knowledge for your solutions. Find out more

Technical data overview

Optical focus	Fixed focus
Aperture angle	≤ 50°
Scanning frequency	400 Hz ... 1,200 Hz
Code resolution	0.2 mm ... 1 mm (depends on variant)
Reading distance	44 mm ... 735 mm (depends on variant)
PROFINET	✓, optional over external fieldbus module / ✓ (depends on variant)
EtherCAT	✓, optional over external fieldbus module
Serial	✓, RS-232, RS-422, RS-485
CAN	✓
CANopen	✓
PROFIBUS DP	✓, optional over external fieldbus module
Ethernet	✓, TCP/IP
EtherNet/IP™	✓
Weight	250 g ... 1,230 g (depends on variant)

Product description

The CLV63x product family consists of compact, powerful fixed mount barcode scanners which were designed for a wide range of applications.
The CLV63x combines a high reading performance with the improved SMART code reconstruction system: A reading algorithm that can accurately detect barcodes even if they are damaged or partially covered.
Integrated function buttons and a built-in LED bar graph enable the device to be commissioned quickly, the reading diagnosis to be started easily, and a matchcode to be taught in without a PC. The parameterization of the scanner can be saved externally via a microSD memory card.
A variety of reading distances can be covered by long-, mid- and short-range variants. All variants such as line or grid scanners, side light emission and oscillating mirrors as well as Ethernet versions are available.

At a glance

- Integrated function buttons, e. g., for starting auto setup or reading quality evaluation
- Integrated LED bar graph
- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP on board. No additional Ethernet gateway required (for “Ethernet” connection type)
- Enhanced SMART 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
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet

Your benefits

- Intelligent auto setup and multi-function pushbuttons save time during commissioning
- Easily execute firmware updates using the microSD memory card: no need for a PC
- Enhanced SMART technology reads damaged and partially obscured codes, increasing read rates
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- Real-time code identification even at very high conveyor speeds
- Increased scanning reliability due to high-performance computing power and high scanning frequency

Fields of application

- Warehouse conveyor technology: picking station, identification of secondary packaging, pallet foot identification
- Consumer goods industry: serialization and package content monitoring
- Aggregation of food and pharmaceutical packaging
- Food and beverage: identification in washdown zones

Ordering information

Other models and accessories ➜ www.sick.com/CLV63x

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP
- **Enclosure rating:** IP65

Max. reading distance	Code resolution	Sensor type	Window material	Cold storage applications	Type	Part no.
≤ 245 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	–	CLV632-6000	1041996
≤ 256 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	✓	CLV632-2000F0	1059976
				–	CLV632-2000	1041992
		Raster scanner	Glass	✓	CLV632-3000F0	1056858
				–	CLV632-3000	1041994
≤ 285 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	–	CLV632-0000	1041988
		Raster scanner	Glass	–	CLV632-1000	1041990
≤ 397 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	–	CLV631-6000	1041986
≤ 412 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	–	CLV631-2000	1041982
		Raster scanner	Glass	–	CLV631-3000	1041984
≤ 450 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	✓	CLV631-0000F0	1050778
				–	CLV631-0000	1041978
		Raster scanner	Glass	–	CLV631-1000	1041980
≤ 659 mm	0.35 mm ... 1 mm	Line scanner	Glass	✓	CLV630-6000F0	1053927
				–	CLV630-6000	1041976
≤ 683 mm	0.35 mm ... 1 mm	Line scanner	Glass	–	CLV630-2000	1041972
		Raster scanner	Glass	–	CLV630-3000	1041974
≤ 735 mm	0.35 mm ... 1 mm	Line scanner	Glass	✓	CLV630-0000F0	1051733
				–	CLV630-0000	1040706
		Raster scanner	Glass	✓	CLV630-1000F0	1051734
				–	CLV630-1000	1041970
			Plastic	–	CLV630-1001	1046493

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Inkjet (directly marked codes)
- **Communication interface:** PROFINET, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP
- **Code resolution:** 0.35 mm ... 1 mm
- **Window material:** plastic
- **Enclosure rating:** IP65

Max. reading distance	Sensor type	Type	Part no.
≤ 659 mm	Line scanner	CLV630-6001S01	1049008
≤ 735 mm	Line scanner	CLV630-0001S01	1049006
	Raster scanner	CLV630-1001S01	1049007

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant single port (12-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP
- **Enclosure rating:** IP65

Max. reading distance	Code resolution	Sensor type	Window material	Cold storage applications	Type	Part no.
≤ 245 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	–	CLV632-6120	1041997
			Plastic	–	CLV632-6121	1046368
≤ 256 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	–	CLV632-2120	1041993
		Raster scanner	Glass	–	CLV632-3120	1041995
			Plastic	–	CLV632-3121	1077806
≤ 285 mm	0.2 mm ... 0.5 mm	Line scanner	Glass	–	CLV632-0120	1041989
			Plastic	–	CLV632-0121	1047280
		Raster scanner	Glass	✓	CLV632-1120F0	1059813
				–	CLV632-1120	1041991
			Plastic	–	CLV632-1121	1047281
≤ 397 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	✓	CLV631-6120F0	1065606
				–	CLV631-6120	1041987
			Plastic	–	CLV631-6121	1053805
≤ 412 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	–	CLV631-2120	1041983
		Raster scanner	Glass	–	CLV631-3120	1041985
≤ 450 mm	0.25 mm ... 0.5 mm	Line scanner	Glass	✓	CLV631-0120F0	1051861
				–	CLV631-0120	1041979
		Raster scanner	Glass	–	CLV631-1120	1041981
≤ 659 mm	0.35 mm ... 1 mm	Line scanner	Glass	✓	CLV630-6120F0	1051864
				–	CLV630-6120	1041977
			Plastic	–	CLV630-6121	1047279
≤ 683 mm	0.35 mm ... 1 mm	Line scanner	Glass	–	CLV630-2120	1041973
		Raster scanner	Glass	–	CLV630-3120	1041975

Max. reading distance	Code resolution	Sensor type	Window material	Cold storage applications	Type	Part no.
≤ 735 mm	0.35 mm ... 1 mm	Line scanner	Glass	✓	CLV630-0120F0	1063470
				–	CLV630-0120	1041969
			Plastic	–	CLV630-0121	1047278
		Raster scanner	Glass	✓	CLV630-1120F0	1061765
				–	CLV630-1120	1041971
			Plastic	–	CLV630-1121	1046959

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant single port (12-pin)
- **Code printing process:** Inkjet (directly marked codes)
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP
- **Code resolution:** 0.35 mm ... 1 mm
- **Window material:** plastic
- **Enclosure rating:** IP65

Max. reading distance	Sensor type	Type	Part no.
≤ 659 mm	Line scanner	CLV630-6121S01	1066154
≤ 735 mm	Line scanner	CLV630-0121S01	1048440
	Raster scanner	CLV630-1121S01	1048439

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant single port (17-pin)
- **Code printing process:** Inkjet (directly marked codes)
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 735 mm	0.35 mm ... 1 mm	Raster scanner	Plastic	IP65	CLV630-1831S01	1056132

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant single port (17-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen, PROFIBUS DP
- **Window material:** plastic

Max. reading distance	Code resolution	Sensor type	Enclosure rating	Type	Part no.
≤ 256 mm	0.2 mm ... 0.5 mm	Line scanner	IP65	CLV632-2831	1060304
≤ 270 mm	0.2 mm ... 0.5 mm	Raster scanner	IP69K	CLV632-1831S01	1062530
≤ 377 mm	0.25 mm ... 0.5 mm	Line scanner	IP69K	CLV631-6831S01	1062136
≤ 430 mm	0.25 mm ... 0.5 mm	Line scanner	IP69K	CLV631-0831S01	1062070
≤ 718 mm	0.35 mm ... 1 mm	Line scanner	IP69K	CLV630-0831S01	1068600

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.”

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Contacts and other locations –www.sick.com