



## CLV61x

1D code identification with easy to integrate IO-Link or dual port scanner

**SICK**  
Sensor Intelligence.

## Advantages



### Flexible and reliable

The strengths of the CLV61x are clear to see: A compact housing with flexible connection options to all common fieldbus and industrial Ethernet interfaces. This also facilitates the connection of sensors that trigger reading processes, such as photoelectric sensors.



#### Space is tight? No problem.

The smaller the installation space, the greater the challenge for the fixed mount barcode scanner. The compact device design of the CLV61x allows for easy installation even where space is tight.



#### Communication via tried and tested interfaces

The CLV61x covers all common interfaces and therefore offers a high degree of flexibility for integration into the control environment. Not only line but also ring topologies can be easily created without major cabling effort. The latter operate redundantly and ensure high system availability. Depending on the variant, the CLV61x has integrated communication interfaces or external interfaces by means of a connection module.

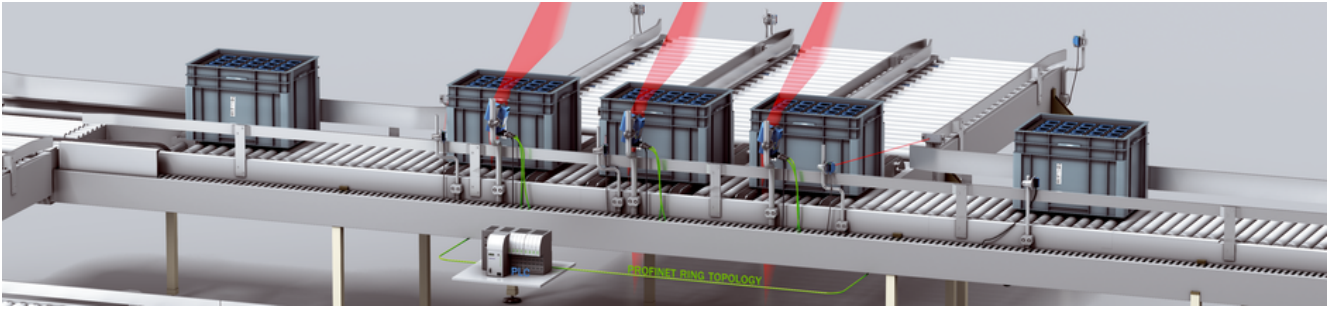


#### Reliable performance even for difficult barcodes

With the SMART620 code reconstruction, even damaged, contaminated and partially obscured barcodes can be reliably read. Even codes that are twisted by up to 30° can be precisely detected.

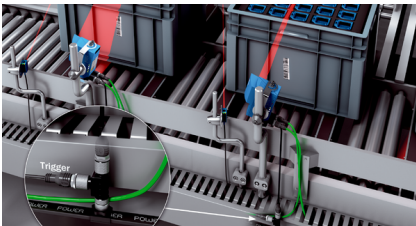


**Compact, flexible, and reliable: The CLV61x impresses with excellent reading performance and a large working range, even with tight installation spaces and short reading distances.**



## Sophisticated concepts for challenging reading conditions

The demands on machine design are increasing in intralogistics. Tight space, difficult access to the installed devices or large fluctuations in temperature – the CLV61x provides solutions to all of these challenges.



### Without additional cabling: The power and trigger concept (ASi PWR)

The CLV61x with dual port can use existing ASi cables for the voltage supply. This reduces the cabling effort enormously. Since no external connection module is required, this concept saves time as well as costs for acquisition and operation.



### Withstands fluctuating ambient temperatures

Depending on the device variant, the CLV61x is equipped with integrated heating in order to work reliably even in deep-freeze environments down to  $-35\text{ }^{\circ}\text{C}$ . The fixed mount barcode scanner requires neither additional installation space nor extra cabling to connect the heating.

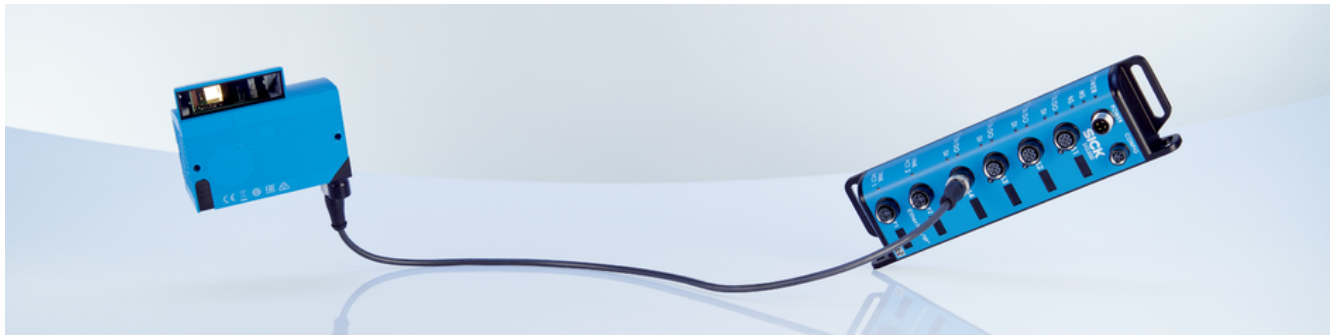


### Swivel connector for simple handling

The swivel connector of the CLV61x with dual port enables flexible alignment of the sensor, thus facilitating mounting and integration into a network even under very difficult installation conditions.



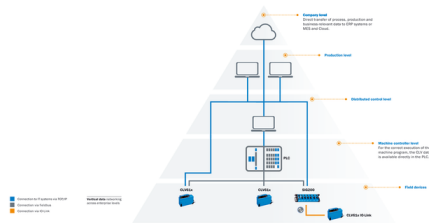
**Flexible and intelligent solutions in response to increasing requirements in intralogistics**



## IO-Link

SICK is a co-founder of IO-Link and offers a very broad range of IO-Link products. Together with many other sensors and actuators, identification solutions from SICK use IO-Link interfaces to generate and receive data and information that go beyond conventional switching signals or measured process parameters. Here you will learn how you can use different sensors combined with the IO-Link Master.

### Your advantages at a glance



#### Increases system productivity

Integration of the sensors at the fieldbus level enables continuous communication up to the cloud. It also allows sensor data to be stored centrally and called up as needed, which is a good basis for increasing system productivity.



#### Fast commissioning by means of an integrated trigger

The direct connection of a trigger sensor enables quick and easy commissioning.



#### Quick and easy device replacement

Easy device exchange due to automated device identification: When using IO-Link devices in connection with the IO-Link Master, device parameters can be transmitted to replacement devices quickly and easily. Specially trained staff, additional tools or instructions are not required.



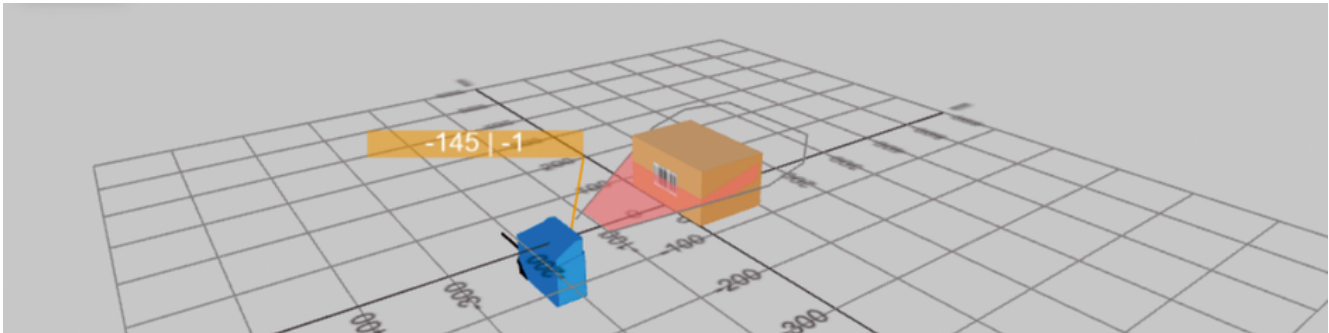
#### Wide range of solutions

The range of solutions from SICK includes many different devices with IO-Link. This enables a uniform communication infrastructure. In addition to the sensors, IO-Link Masters and other software from SICK also play a key role.



**With point-to-point communication protocols, IO-Link ensures seamless sensor integration into automation networks. This creates the basis for data transparency down to the lowest field level. This opens up new ap-**

proaches for digitalization. The data obtained helps to increase flexibility, reliability and efficiency and makes it possible to reduce costs in your plant.



### 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 CLV61x 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.



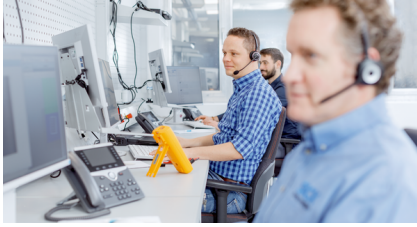
Use product visualization to help you select the exact right product before you buy.

### SICK LifeTime Services

SICK's services increase machine and plant productivity, enhance the safety of people all over the world, provide a solid foundation for a sustainable business operation, and protect investment goods. In addition to its usual consulting services, SICK provides direct on-site support during the conceptual design and commissioning phases as well as during operation.

The range of services not only covers aspects like maintenance and inspection, but also includes performance checks as well as upgrades and retrofits. Modular or customized service contracts extend the service life of plants and therefore increase their availability. If faults occur or limit values are exceeded, these are detected at all times by the corresponding sensors and systems.





### **Consulting and design**

Application-specific advice on the product, its integration and the application itself.



### **commissioning and maintenance**

Application-optimized and sustainable – thanks to professional commissioning and maintenance by a trained SICK service technician.



### **service contracts**

Extended warranty, SICK Remote Service, 24-hour helpdesk, maintenance, availability guarantees and other modular components can be individually combined on request.



## Technical data overview

<b>Optical focus</b>	Fixed focus
<b>Aperture angle</b>	≤ 50°
<b>Scanning frequency</b>	400 Hz ... 1,000 Hz
<b>Code resolution</b>	0.1 mm ... 1 mm (depending on type)
<b>Reading distance</b>	25 mm ... 705 mm (depending on type)
<b>Serial</b>	✓, RS-232
<b>CAN</b>	✓
<b>PROFINET</b>	✓, optional over external fieldbus module / ✓ (depending on type)
<b>PROFIBUS DP</b>	✓, optional over external fieldbus module
<b>EtherCAT</b>	✓, optional over external fieldbus module / ✓ (depending on type)
<b>IO-Link</b>	✓, V1.1
<b>USB</b>	✓
<b>Weight</b>	260 g ... 345.8 g (depending on type)

## Product description

The CLV61x fixed mount barcode scanner impresses with its compact design and can be easily integrated even where space is tight. The versatile communication interfaces enable use of scanners in countless applications. For example, the integrated CAN bus networks several fixed mount barcode scanners into one system. In intralogistics, the CLV61x is always the right choice, either in the dual-port type with two integrated PROFINET connections or with corresponding connection technology such as the Connection Device Fieldbus fieldbus module or an IO-Link master. Different product variants ensure flexible connection to all common fieldbus and industrial Ethernet interfaces. This means the CLV61x can be configured directly from the control environment.

## At a glance

- Reading field and rugged design ideal for intralogistics applications
- Flexible interface concept: CANopen, SICK CAN sensor network, serial, PROFIBUS DP, PROFINET, EtherCAT, IO-Link
- SICK CAN sensor network for networking multiple fixed mount barcode scanners or multiplexers/servers
- Connection option for trigger sensors in IO-Link devices

## Your benefits

- The right scanner variant of the CLV61x for each application
- An optimized reading field for container identification on a conveyor belt, in combination with the intuitive SOPAS user interface, enables quick and easy integration into your conveyor system
- Compact design enables installation even in applications with limited space
- Less programming time required for the control system, since data can be transmitted to the control system in the desired format
- Depending on the variant, CLV61x fixed mount barcode scanners can be used as multiplexers in any SICK CAN sensor network, so additional multiplexers are not required
- The optional configuration cloning module in combination with the quick-release mounting bracket enables very fast replacement time in the event of a fault

## Fields of application

- Storage and conveyor technology: container identification, positioning and compartment identification, pallet identification, cold storage
- Food and beverage: legibility checking of barcodes directly after printing, barcode identification in packaging and secondary packaging processes
- Medical technology: clinical analysis

## Ordering information

Other models and accessories → [www.sick.com/CLV61x](http://www.sick.com/CLV61x)

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** Serial, CAN
- **Window material:** Glass
- **Enclosure rating:** IP65

Max. reading distance	Code resolution	Sensor type	Type	Part no.
≤ 78 mm	0.1 mm ... 0.2 mm	Line scanner	CLV612-C2000	1066272
		Raster scanner	CLV612-C3000	1062862
≤ 93 mm	0.1 mm ... 0.2 mm	Line scanner	CLV612-C0000	1066271
		Raster scanner	CLV612-C1000	1062861
≤ 345 mm	0.2 mm ... 1 mm	Raster scanner	CLV610-C3000	1071609
≤ 365 mm	0.2 mm ... 1 mm	Line scanner	CLV610-C0000	1057125
		Raster scanner	CLV610-C1000	1062846
			CLV610-C1900S01	1062864

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET, Serial, CAN, PROFIBUS DP, EtherCAT®
- **Max. reading distance:** ≤ 330 mm
- **Code resolution:** 0.35 mm ... 0.5 mm
- **Window material:** Glass
- **Enclosure rating:** IP65

Sensor type	Type	Part no.
Line scanner	CLV615-F2000	1058334
	CLV615-F2000 CDF600-2100 Kit PROFIBUS DP	1061528
	CLV615-F2000 CDF600-2103 Kit PROFIBUS DP	1061529
Raster scanner	CLV615-F3000	1068240

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant single port (5-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** IO-Link, USB
- **Window material:** Glass
- **Enclosure rating:** IP65

Max. reading distance	Code resolution	Sensor type	Type	Part no.
≤ 330 mm	0.35 mm ... 0.5 mm	Line scanner	CLV615-I2150	1118927
		Raster scanner	CLV615-I3150	1143676
≤ 683 mm	0.35 mm ... 1 mm	Line scanner	CLV618-I2150	1142815



- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant dual port (4-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET, USB
- **Max. reading distance:** ≤ 330 mm
- **Code resolution:** 0.35 mm ... 0.5 mm
- **Sensor type:** Line scanner
- **Window material:** Glass
- **Enclosure rating:** IP65

Cold storage applications	Type	Part no.
✓	CLV615-D2410FO	1078175
-	CLV615-D2410	1068608

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant dual port (5-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET, USB

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 330 mm	0.35 mm ... 0.5 mm	Line scanner	Glass	IP65	CLV615-D2520	1075150

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant dual port (5-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 330 mm	0.35 mm ... 0.5 mm	Line scanner	Glass	IP65	CLV615-D2540	1091389

- **Optical focus:** Fixed focus
- **Type:** Rotary angle variant dual port (5-pin)
- **Code printing process:** Label (printed codes)
- **Communication interface:** EtherCAT<sup>®</sup>, USB

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 330 mm	0.35 mm ... 0.5 mm	Line scanner	Glass	IP65	CLV615-Dxxxx	On request

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET, USB
- **Code resolution:** 0.35 mm ... 1 mm
- **Window material:** Glass
- **Enclosure rating:** IP65

Max. reading distance	Sensor type	Type	Part no.
≤ 683 mm	Line scanner	CLV618-D2410	1073188
		CLV618-D2520	1078582
≤ 705 mm	Raster scanner	CLV618-D1520	1075152

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** PROFINET

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 683 mm	0.35 mm ... 1 mm	Line scanner	Glass	IP65	CLV618-D2540	1091390

- **Optical focus:** Fixed focus
- **Type:** Cable connection variant
- **Code printing process:** Label (printed codes)
- **Communication interface:** EtherCAT®, USB

Max. reading distance	Code resolution	Sensor type	Window material	Enclosure rating	Type	Part no.
≤ 683 mm	0.35 mm ... 1 mm	Line scanner	Glass	IP65	CLV618-Dxxxx	On request

## 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](http://www.sick.com)