

OPS

A CLEAR EDGE FOR YOUR LOGISTICS

Track and trace systems

SICK
Sensor Intelligence.

TECHNOLOGY THAT GROWS WITH YOU – FOR THE LATEST LOGISTICS REQUIREMENTS

The OPS (omni-portal system) track and trace systems from SICK optimize logistics processes all around the world a thousand times over. The modular bar code reading system can adapt to your application and to the latest logistics requirements. This technologically optimized complete system for identifying bar and reading codes on goods and products is a flexible high-end solution – and always features the latest generation of scanners. Using individual scanners makes it possible to optimize the configuration for your application.

Complete solution in every respect

SICK is one of the only manufacturers to offer a complete system solution: from the electronics to the evaluation software, commissioning, and worldwide service. We can also support you with project planning and the engineering of your system if you wish.

Systematically well thought out

We can provide you with software and hardware from a single source, plus engineering support as an extra service. All project workflows are certified in accordance with ISO 9001. Your project will be looked after by a member of staff who will be available for the entire duration of the project.





Benefits your customers will thank you for

The modular concept makes it possible to optimize the configuration for your application. Furthermore, storable parameters in the cloning plug the quick-clamp mechanism make it easy to replace individual devices. Thanks to the SMART code detection technology,

the system is even able to detect bar codes that are dirty or difficult to read. The use of high-end laser scanners with real-time auto-focus function, without additional components to detect the object distance, ensures outstanding performance, high system throughput, and cost-effectiveness. Various bus connection modules can

also be integrated for communication and integration into an automation network both now and in the future.



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Product description

The modular design concept of the OPS (omni portal system) track and trace system allows you to make customizations to suit your omnidirectional reading requirements. The system features high-performance laser scanners and a real-time auto-focus function with a

high depth of field and narrow modular widths. SMART+ code detection technology delivers a high degree of operational reliability. The system includes a tracking module to accurately assign the bar code to the correct parcel when the gaps between parcels are very small.

At a glance

- Maximum read rates and encoder performance thanks SMART+ decoder
- Integrated interface for SICK diagnostics software
- Can be connected to all other SICK system solutions for automated identification (= modular system approach)
- 6-side read capability
- Start-stop or tracking operation

Your benefits

- Flexible high-end solution
- Complete, turnkey system
- Cables, cloning plugs, and brackets for a simple and complete omni system
- Low operating expenditure costs thanks to ultimate MTBF (mean time between failures)



Additional information

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→ www.sick.com/OPS

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Detailed technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

General notes

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
Items supplied	Sensors Controller unit Mounting material Frame	CLV650 bar code scanner System-dependent for line scanner or line scanner with oscillating mirror (2 x) Double mounting bracket CDM420-0004 connection module Mounting materials Trigger photoelectric sensor Serial configuration cable Connection cable for bar code scanner to connection module (2 x) MicroSD card, already in scanner (2 x)	CLV69x bar code scanner System-dependent for line scanner or line scanner with oscillating mirror (2 x) Cloning plug for CLV69x bar code scanner (2 x) Bracket, system-dependent for line scanner or line scanner with oscillating mirror CDM420-0007 connection module Connection cable for bar code scanner to connection module (2 x)
Usage	Retail and warehousing Courier, express, parcel and postal		

Features

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
Controller	MSC800	-	
Covered conveyor width	Unlimited, typically up to 1,600 mm	500 mm	800 mm / 500 mm (depending on type)
Focus	Auto focus		
Laser class	2 (IEC 60825-1 (2007-3)) 1 (IEC 60825-1 (2007-6))	2 (EN 60825-1 (A2:2001-03), IEC 60825-1: 2007-03, Ed. 2.0)	2 (IEC 60825-1 (2007-3)) 1 (IEC 60825-1 (2007-6))
Heating	Optional		
MTBF	100,000 h	40,000 h	100,000 h
MTTR	5 min		
Applications	Simple OMNI applications Sorting processes Revenue recovery Goods receipt		
Field of application	Indoor		
Scanner design	Application-specific	Line scanner / Line scanner with oscillating mirror (depending on type)	
Conveyor type	Belt strap Tray sorter Roller conveyor Crossbelt Pallet		
Number of main components	Laser scanner: 1 ... 32 Control unit: 1	Laser scanner: 2	

Performance

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
Transport speed	0.1 m/s ... 2.5 m/s, Depending on code height		
Minimum object distance	50 mm		
Number of codes per reading interval	Max. 300, depending on conveyor speed	1 ... 50	
Number of codes per scan	1 ... 20, Standard decoder 1 ... 6, SMART decoder		
1D code types	All current code types	-	

Interfaces

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x	
Serial (RS-232, RS-422/-485)	✓ (4)	✓		
	Function	Host AUX		
	Data transmission rate	300 Baud ... 500 kBaud	Host: 300 baud ... 500 kBaud, AUX: 57.6 kBaud fixed	
Ethernet	✓ (3)	✓, Depending on the cloning plug used		
	Function	Host AUX		
	Data transmission rate	10 MBit/s / 100 MBit/s	10/100 MBit/s	
	Protocol	TCP/IP FTP Ethernet/IP Half/full-duplex	TCP/IP	
CAN bus	✓ (2)	SICK CAN sensor network (master/slave)		
	Function	SICK CAN sensor network	SICK CAN sensor network (master/slave)	
	Data transmission rate	-	20 kbit/s ... 1 Mbit/s	
	Protocol	CSN (SICK CAN Sensor Network)		
PROFIBUS DP	✓	-		
	Data transmission rate	12 MBaud	-	
Digital switching inputs	✓ (14), PNP, configurable, short-circuit proof			
Digital outputs	✓ (4), potential-free			
Relay outputs	✓ (2)			
	Electrical connection	Cable gland	-	
USB	✓	-		
	Electrical connection	Micro USB female connector, type B	-	
Optical indicators	6, LEDs, Ready, Result, laser, Data, CAN, LNK TX, bar graph display of percentage read rates (10 LEDs)			

Mechanics/electronics

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
Dimensions, system (L x W x H)	1,100 mm x 1,280 mm x 1,745 mm (Minimum, maximum dimensions depending on reading field width and reading field height)	1,100 mm x 1,280 mm x 1,745 mm	
Connection modules	CDF600 for PROFINET	CDM420-0004	CDM420-0007
Frame	Standard Customized		

Ambient data

	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
Ambient temperature operation	0 °C ... +40 °C -35 °C ... +35 °C, With heating	0 °C ... +40 °C	0 °C ... +40 °C -35 °C ... +35 °C, With heating
Ambient storage temperature	-20 °C ... +70 °C		

Ordering information

OPS Customized

Sensor resolution	Scanner design	Type	Part no.
Application-specific	Application-specific	OPS Customized	On request

Twinhead CLV65x

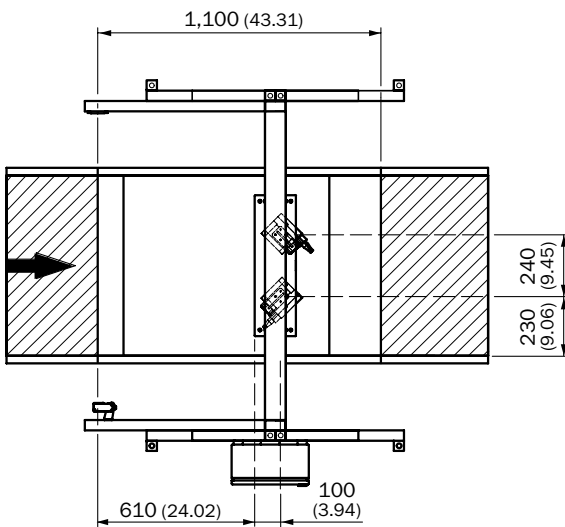
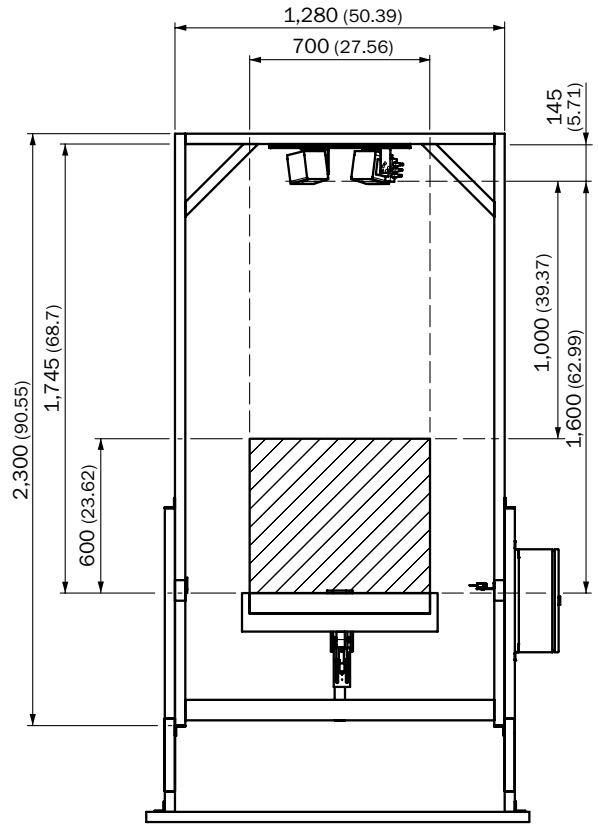
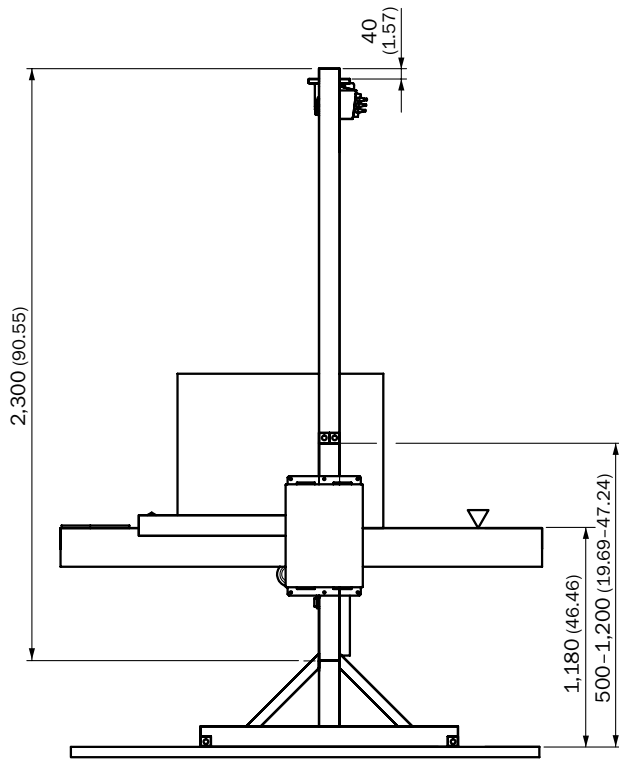
Scanner design	Type	Part no.
Line scanner	Twinhead CLV650	1056482
Line scanner with oscillating mirror	Twinhead CLV650	1061634

Twinhead CLV69x

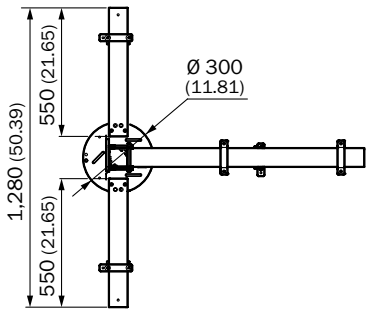
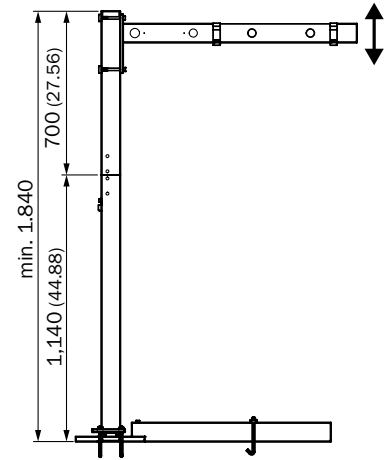
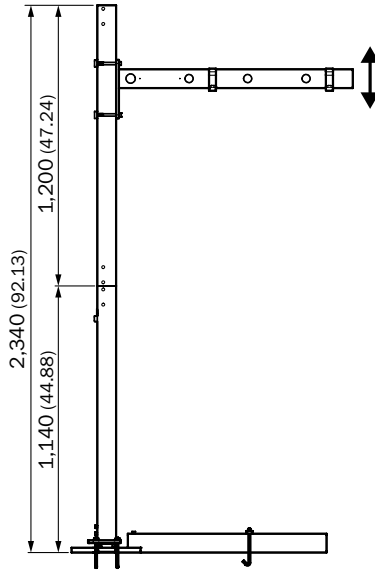
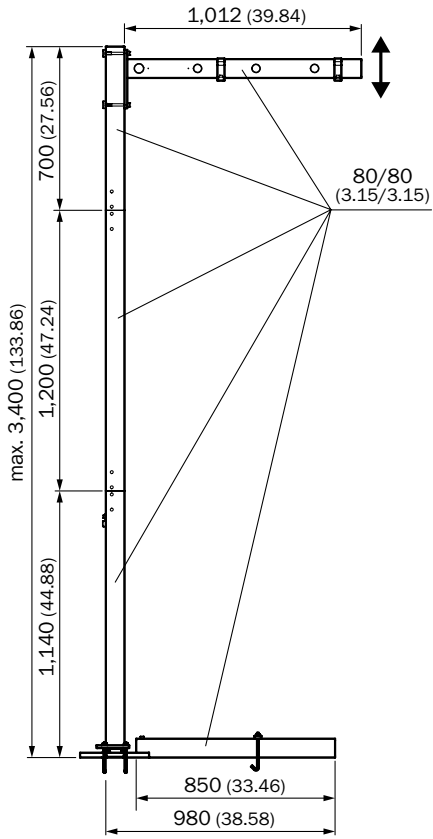
Scanner design	Type	Part no.
Line scanner	Twinhead CLV690	1061479
Line scanner with oscillating mirror	Twinhead CLV690	1061480
Line scanner	Twinhead CLV691	1061481
Line scanner with oscillating mirror	Twinhead CLV691	1061482
Line scanner	Twinhead CLV692	1061483
Line scanner with oscillating mirror	Twinhead CLV692	1061484

Dimensional drawings (Dimensions in mm (inch))

OPS Customized (minimum dimensions)




Twinhead CLV65x and Twinhead CLV69x



Accessories



Reflectors and optics

Mirror adapters



Figure	Brief description	Type	Part no.	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
	External mirror hood (0°) for shortening the reading distance when used between two conveyors located next to each other	Mirror hood	2074535	●	-	-

Further accessories


Hardware

Figure	Type	Part no.	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
	IP camera	6048278	●	-	-
	IP camera dome	6055384	●	-	-

Sets and kits

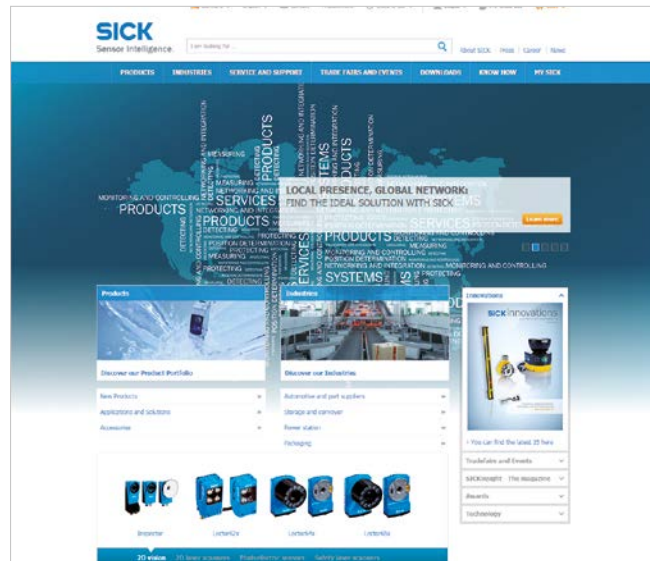
Figure	Brief description	Type	Part no.	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
	DFS60B shaft encoder kit includes incremental encoder with collet and 10 m cable	DFS60B shaft encoder kit	2087288	●	-	-
	DFV60 measuring wheel encoder kit includes incremental encoder, mounting kit, and 10 m cable	DFV60 measuring wheel encoder kit	2058475	●	-	-

Signal and status indicators

Figure	Brief description	Type	Part no.	OPS Customized	Twinhead CLV65x	Twinhead CLV69x
	Tower light red, yellow, green, 24 V, incl. mounting and 10 m connection cable	Signal lamps	2069155	●	-	-

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SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 7,400 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, we are always close to our customers. 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 various 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 round out 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:

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

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