IDENTIFICATION SOLUTIONS

PRODUCTS AT A GLANCE

Image-based code readers, bar code scanners, RFID, hand-held scanners, connectivity

SICK
Sensor Intelligence.

ONE PARTNER – THREE DIMENSIONS

RFID, laser-based bar code scanners, and image-based code readers: To provide genuinely efficient solutions for identification tasks, you need more than just one type of technology. With SICK you have the choice: For decades, SICK has been a pioneer in vision solutions, a market leader in industrial code reading, and an innovator of RFID technology. Whether used individually or combined in an application – SICK employs three technologies to provide reliable and efficient solutions to your identification tasks. And, one thing's for certain – your requirements come first.
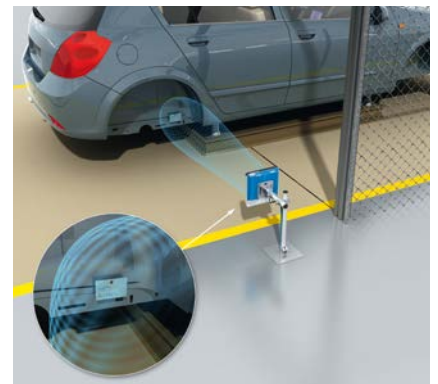
We offer the right solution for every requirement: image-based code readers, laser-based bar code scanners, and RFID technology.

➜ www.sick.com/more-than-a-vision

As a global company, we are at your side. Our services comprise accurate analysis of your requirements, technical and systems expertise, strong products, and comprehensive local support – wherever you are in the world.

As the market leader in automated identification, SICK can advise you on finding the right technology for your application. Whether laser, camera, or RFID: All three technologies can be combined in one system if required. You can obtain complete system solutions and customized combinations direct from SICK. What's more, you can combine our identification technologies and enhance them with additional sensors from our extensive SICK portfolio – providing you with a customized solution from a single source. And what if your requirements change? No problem. Thanks to their modular architecture, our systems are flexible and can be expanded and adapted to any new task.

The best solution is always individually and precisely tailored to your requirements. With SICK, your visions become reality.

YOUR ADVANTAGE: THREE TECHNOLOGIES FOR ANY APPLICATION

RFID

- Reliable identification of concealed or contaminated objects, as no visual contact with the RFID tag is necessary
- Identification of large objects with undefined tag position due to large reading distances and reading field widths
- Reads and writes data
- High level of counterfeit protection and data protection due to encrypted data transmission
- Industry-4.0-ready MQTT, OPC UA, HTTPS, …)

➜ www.sick.com/RFID

Image-based code readers   1D 2D OCR

- Flexible reading of various code types, regardless of the code alignment (360°)
- Monitoring of code qualities to optimize processes by using code analytics in the device
- Subsequent image analysis as images of identified objects are stored
- Reading, evaluation, and analysis of severely damaged codes due to corrective image processing algorithms

➜ www.sick.com/image-based_code_readers

Laser-based bar code scanners   1D

- Code identification at various distances and with different object sizes due to a large depth of field with just one device
- A single device also provides coverage of wide reading areas due to a large aperture angle
- High read stability even in varying ambient light due to outstanding ambient light immunity
- Low commissioning costs as auto-focus function means setup couldn't be simpler

➜ www.sick.com/Bar_code_scanners

4D*pro* – ONE CONCEPT FOR ALL TECHNOLOGIES

To provide you with the flexibility you need, SICK has developed a concept enabling you to interchange and network our identification sensors across all the different technologies. Whichever solution you choose, you can be sure of a flexible future with the 4Dpro platform from SICK:

- Standardized connectivity and cloning function for flexible device replacement
- Low level of training required thanks to standardized configuration software and user interface
- Standardized accessories concept for a compact choice of components

➜ www.sick.com/4Dpro

SERVICES, SYSTEMS, AND TAILORED SOLUTIONS

Three visions – one guarantee

Based on over 70 years of practical experience, SICK offers standardized services for a fixed price, such as regular performance checks to prevent unwanted downtime. Professional commissioning and maintenance of devices ensures optimum performance. With an extended warranty, customers can even secure their investment for up to five years. Customer-specific services such as pre-configuration, upgrades, engineering, and training complete the service portfolio.
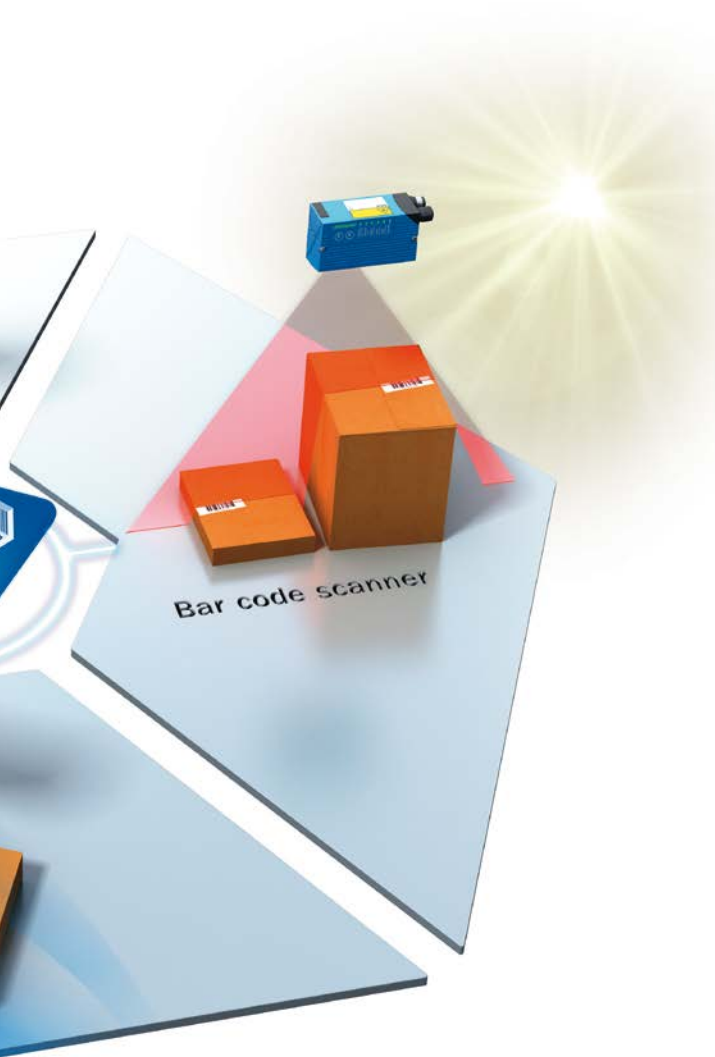
Three visions – one system

Thanks to their modular architecture, sensor systems from SICK can be expanded flexibly and adapted to your requirements. Whether laser, camera, or RFID: All three technologies can be brought together in one system solution if required. In such cases, the customer interface is completely independent of the technology used. This means that various reading tasks and optical identification procedures can be completed with one system. These include top reading with image-based code readers, side reading with a laser scanner and sensors from the Lector® series, or the ability to detect totes and perform optical identification at the same time with the aid of RFID.

Tailored sensor functions with SICK AppSpace

Finding an identification solution that's tailored to your requirements – sounds time-consuming and difficult, or even impossible, doesn't it? Not if you decide on the SICK AppSpace eco-system, which can even be combined with your application as an option. Here, application developers define the solution themselves: Intelligent software tools, high-performance programmable devices, and a dynamic developer community create a solid foundation for designing customized sensor solutions. This enables completely new and adaptive solutions for automation applications.
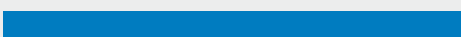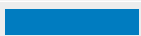
➜ www.sick.com/SICK_AppSpace
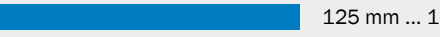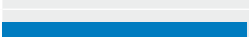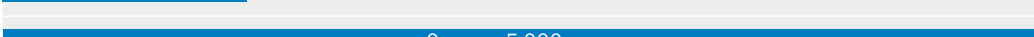
Product	4Dpro	Connectivity				Focussing				Supported code type				
		CDB	CDM	CDF600	CDF600-2	Fixed focus	Adjustable focus	Dynamic focus control	Auto focus	1D code	Stacked code	2D code	OCR	RFID tags
Image-based code readers														
Lector62x	■	■	■	■	■		■		■ 2), 3)	■	■	■	■ 2)	
Lector63x	■	■	■		■		■			■	■	■	■ 2)	
Lector64x	■	■	■		■		■			■	■	■	■ 2)	
Lector65x	■	■	■		■		■	■ 2)	■ 2), 3)	■	■	■	■ 2)	
ICR80x		■				■				■	■	■	■	
ICR88x								■		■	■	■	■	
ICR89x								■		■	■	■	■	
Bar code scanners														
CLV60x						■				■				
CLV61x	■	■	■ 2)	■ 2)	■ 2)	■				■				
CLV61x Dual Port	■					■				■				
CLV62x	■	■	■ 2)	■ 2)	■ 2)	■				■				
CLV63x	■	■	■ 2)	■ 2)	■ 2)	■				■				
CLV64x	■	■	■ 2)	■ 2)	■ 2)			■		■				
CLV65x	■	■	■ 2)	■ 2)	■ 2)			■	■	■				
CLV69x	■	■	■ 2)	■ 2)	■ 2)			■	■	■				
RFID														
RFH6xx	■	■	■	■	■									■
RFU62x	■	■	■ 2)	■ 2)	■ 2)									■
RFU63x	■	■	■		■									■
RFU65x	■	■	■	■	■									■
Hand-held scanners														
IDM12x	■ 5)	■	■	■	■	■				■	■			
IDM14x	■ 5)	■	■	■	■	■				■	■			
IDM16x	■ 5)	■	■	■	■	■				■	■			
IDM24x	■ 5)	■	■	■	■	■				■	■	■		
IDM26x	■ 5)	■	■	■	■	■				■	■	■		
HW191x	■ 5)	■	■	■	■	■				■	■	■		
HW198x	■ 5)	■	■	■	■				■	■	■	■		

1) For details see reading field diagram online. | 2) Depending on the scanner design. | 3) During teach-in. | 4) Depending on lens and illumination.
5) Configuration of the hand-held scanners via separate codes and software possible.

Reading distance/scanning range [1]	Page
250 mm / 500 mm / 750 mm / 1,000 mm / 1,250 mm / 1,500 mm / 1,750 mm / 2,000 mm / 2,250 mm / 2,500 mm / 2,750 mm / 3,000 mm / 3,250 mm / 3,500 mm / 3,750 mm / 4,000 mm / 5,000 mm / 6,000 mm / 10,000 mm	

30 mm ... 1,500 mm
50 mm ... 2,000 mm
300 mm ... 2,200 mm [4]
300 mm ... 2,200 mm [4]
50 mm ... 330 mm
800 mm ... 1,350 mm
1,400 mm ... 3,300 mm

→ 8

15 mm ... 70 mm
25 mm ... 365 mm [2]
25 mm ... 705 mm [2]
55 mm ... 730 mm [2]
58 mm ... 742 mm [2]
30 mm ... 840 mm [2]
125 mm ... 1,625 mm [2]
400 mm ... 2,200 mm [2]

→ 12

0 mm ... 240 mm
0 mm ... 1,000 mm
0 mm ... 5,000 mm
0 mm ... 5,000 mm

→ 16

0 mm ... 400 mm
20 mm ... 850 mm
20 mm ... 850 mm
30 mm ... 400 mm
30 mm ... 400 mm
15 mm ... 749 mm
0 mm ... 16,000 mm

→ 18

	Lector62x	Lector63x	
	Perfect sight – in any light	Intelligent. Flexible. Intuitive.	

Technical data overview

	Lector62x	Lector63x	
Focus	Adjustable focus (electric) / teach auto focus	Adjustable focus (manually)	
Sensor resolution	752 px x 480 px / 1,280 px x 1,024 px	1,280 px x 1,024 px / 1,600 px x 1,200 px	
Scanning frequency	25 Hz / 60 Hz	≤ 50 Hz	
Reading distance	30 mm ... 1,500 mm	50 mm ... 2,200 mm	
Enclosure rating	IP65 / IP67	IP67	
Exchangeable lens and illumination	–	✔	
EtherCAT®	✔ , optional over external fieldbus module	–	
PROFINET	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	✔ , PROFINET Single Port and PROFINET Dual Port optional over external fieldbus module	
Serial	✔ , RS-232, RS-422	✔ , RS-232, RS-422	
CAN	✔	✔	
CANopen	✔	–	
CAN bus	–	–	
PROFIBUS DP	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	
USB	✔ , AUX (used for parameterization)	✔ , AUX (used for parameterization)	
Ethernet	✔ , TCP/IP	✔ , TCP/IP	
EtherNet/IP™	✔	✔	
DeviceNet™	–	–	
Weight	170 g	430 g ... 590 g	

Your benefits

	Lector62x	Lector63x	
	• Intelligent decoding algorithms for maximum reading performance and high throughput, even with highly reflective or contaminated codes • Variable illumination concept ensures stable reading even in changing light conditions • Maximum reliability on shiny or reflective surfaces thanks to flexible optical accessories • Compact design and swivel connector for easy integration even if installation space is tight • Automated setup wizard with auto focus and aiming laser makes commissioning faster and more cost-effective	• High-resolution sensor and intelligent processing ensure outstanding reading performance, even under difficult reading conditions • Flexible optical design and high-power illumination enable small codes to be read at high speeds or in applications with a large reading distance • Fast, straightforward commissioning thanks to the intuitive user interface; function button for rapid device setup; integrated illumination and aiming laser • Direct results monitoring thanks to acoustic signal and colored feedback spot on the object	

Detailed information	➜ www.sick.com/Lector62x	➜ www.sick.com/Lector63x	

	Lector64x	Lector65x
	High efficiency for code reading applications	Nonstop code reading flexibility
	Adjustable focus (manually)	Adjustable focus (manually) / dynamic focus control
	1,600 px x 1,088 px	2,048 px x 1,088 px / 2,048 px x 2,048 px
	40 Hz	70 Hz / 40 Hz
	300 mm ... 2,200 mm	300 mm ... 2,500 mm
	IP65	IP65
	✔	✔ / –
	–	–
	✔ , PROFINET Single Port, PROFINET Dual Port	✔ , PROFINET Single Port, PROFINET Dual Port
	✔ , RS-232, RS-422	✔ , RS-232, RS-422
	✔	✔
	–	–
	–	–
	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
	✔ , AUX (used for parameterization)	✔ , AUX (used for parameterization)
	✔ , TCP/IP	✔ , TCP/IP
	✔	✔
	–	–
	635 g	635 g / 963 g

- Highly flexible code position, object height, and transport speed due to a large field of view and large depth of field
- Cost-effective, straightforward, modular integration of multiple devices adapted to the width of the conveyor belt
- Minimum training and installation work due to intuitive device equipment that includes function buttons, auto setup, integrated illumination, an aiming laser, an acoustic feedback signal, and a green feedback LED
- Intelligent decoding algorithms ensure maximum reading performance and high package throughput, even with codes that are difficult to read
- SICK 4D*pro* platform facilitates quick and easy integration into numerous industrial networks

→ www.sick.com/Lector64x

- Highly flexible code position, object height, and transport speed due to a large field of view and dynamic focus
- Cost-effective, straightforward, modular integration of multiple devices adapted to the width of the conveyor belt
- Minimum training and installation work due to intuitive device equipment that includes function buttons, auto setup, integrated illumination, an aiming laser, an acoustic feedback signal, and a green feedback LED
- Intelligent decoding algorithms ensure maximum reading performance and high package throughput, even with codes that are difficult to read
- SICK 4D*pro* platform facilitates quick and easy integration into numerous industrial networks

→ www.sick.com/Lector65x

ICR80x

Easy, small and light

Technical data overview

Focus	Fixed focus
Sensor resolution	–
Scanning frequency	–
Reading distance	50 mm ... 330 mm
Enclosure rating	–
Exchangeable lens and illumination	–
EtherCAT®	–
PROFINET	–
Serial	✔ , RS-232 TTL
CAN	✔ , optional over external connection module
CANopen	–
CAN bus	–
PROFIBUS DP	✔ , optional over external fieldbus module
USB	✔ , host and AUX
Ethernet	✔ , TCP/IP, optional over external connection module
EtherNet/IP™	–
DeviceNet™	✔ , optional over external connection module
Weight	37 g

Your benefits

- Fast and reliable 1D and 2D code identification
- Read multiple code types with one device, accommodating future code changes
- Easy and fast installation and configuration
- No moving parts and a large reading field reduce adjustments
- Small size makes it easy to integrate in limited spaces

Detailed information	➜ www.sick.com/ICR80x

	ICR88x	ICR89x
	More compact. More reliable. More brilliant.	Faster. More reliable. More brilliant.
	Dynamic focus control	Dynamic focus control
	8,192 px	8,192 px
	19,100 Hz	19,100 Hz / 30,000 Hz
	800 mm ... 1,350 mm	1,400 mm ... 3,300 mm
	IP64	IP64
	–	–
	–	–
	–	–
	–	–
	✔ , RS-232	✔ , RS-232
	–	–
	–	–
	✔ (2)	✔ (2)
	✔	✔
	✔ (3) , TCP/IP	✔ (3) , TCP/IP
	–	–
	–	–
	28.5 kg	37 kg

ICR88x
- Compact design with no deflector mirror for easy installation
- Dual-line CMOS sensor provides outstanding image quality for the best possible read rates
- Image output option for tracking and analysis software
- Maintenance-free system
- Lower energy consumption due to reduced illumination, integrated decoder, and standby mode
- Easy configuration with the SOPAS engineering tool saves time
- MTTR of under ten minutes and 80,000 h MTBF minimize downtime and ensures high reliability

ICR89x
- Outstanding image quality thanks to a unique dual-line CMOS sensor that provides high read rates and OCR results
- Intelligent decoding algorithms ensure reliable reading performance and high throughput.
- High scanning frequency for high-resolution images (200 dpi) up to a conveyor velocity of 3.8 m/s
- Integrated verifier for efficient analysis of 1D/2D code quality
- High reliability with 80,000 h MTBF
- Short downtime when devices are replaced thanks to the intelligent cloning module
- High-contrast, even with color printing, due to optional blue/white illumination
- Standby mode minimizes energy consumption

➔ www.sick.com/ICR88x

➔ www.sick.com/ICR89x

	CLV60x	CLV61x	
	Reliable reading performance in the smallest of spaces	Reliable Decoding, Simple Integration	

Technical data overview

Focus	Fixed focus	Fixed focus	
Aperture angle	≤ 71°	≤ 50°	
Scanning frequency	750 Hz	400 Hz ... 1,000 Hz	
Code resolution	0.125 mm ... 0.5 mm	0.1 mm ... 1 mm	
Reading distance	15 mm ... 70 mm	25 mm ... 365 mm	
USB	✔ , host and AUX	–	
Serial	✔ , RS-232	✔ , RS-232	
PROFINET	–	✔ , PROFINET Single Port and PROFINET Dual Port optional over external fieldbus module	
CAN	–	✔	
EtherCAT®	–	✔ , optional over external fieldbus module	
CANopen	–	–	
PROFIBUS DP	–	✔, optional over external fieldbus module	
DeviceNet™	–	–	
Ethernet	–	–	
EtherNet/IP™	–	–	
Weight	170 g / 230 g	265 g / 295 g	

Your benefits

	• Minimal space requirements for integration in even the smallest machines • High performance at a cost-efficient price • It's a sound investment thanks to the long-term availability of CMOS technology and proven SICK quality • The optional adaptation to customer requirements saves time and money during commissioning • Easy operation and installation with the SOPAS ET user interface and the ingeniously positioned LED status indicator • RS-232 or USB interface to connect to a control or an industrial computer	• A suitable scanner version for any CLV61x 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 version, the CLV61x bar code scanner can be used as a multiplexer in any SICK CAN sensor network , so additional multiplexers are not required	

| **Detailed information** | ➔ www.sick.com/CLV60x | ➔ www.sick.com/CLV61x | |

	CLV61x Dual Port	CLV62x
	The network professional	Powerful scanner – flexible use
	Fixed focus	Fixed focus
	≤ 50°	≤ 50°
	400 Hz ... 1,000 Hz	400 Hz ... 1,200 Hz
	0.25 mm ... 1 mm	0.15 mm ... 1 mm
	25 mm ... 705 mm	45 mm ... 730 mm
	✔ , AUX	–
	–	✔ , RS-232, RS-422, RS-485
	✔ , PROFINET Single Port, PROFINET Dual Port	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module
	–	✔
	–	✔ , optional over external fieldbus module
	–	✔
	–	✔ , optional over external fieldbus module
	–	✔ , optional over external connection module
	–	✔ , TCP/IP
	–	✔
	290.5 g ... 345.8 g	205 g ... 854 g

• Installed switch for easy installation and implementation of line and ring topologies • Integrated cable for easy voltage supply via flat ribbon cable • Compact housing with swivel connector makes it easier to mount the sensor – even where space is tight • Simple configuration process via additional USB interfaces • Scanner variants with integrated heating and/or hardware input offer the highest level of flexibility for each application • Adaptive temperature regulation for energy-efficient identification in cold storage environments (type-dependent) • Configuration directly into the control environment or the intuitive SOPAS ET user interface enables quick integration into the conveyor system	• High read rate of damaged, dirty, and partially covered bar codes due to enhanced SMART620 code reconstruction • Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format • No supplementary Ethernet gateway required with Ethernet models – lowers costs • The CLV62x scanner can be used as a multiplexer in any CAN scanner network from SICK – no supplementary multiplexer necessary • Real-time code identification even at very high conveyor speeds • Compact design and easy operation enable installation in situations with limited space

➜ www.sick.com/CLV61x_Dual_Port

➜ www.sick.com/CLV62x

	CLV63x	CLV64x	
	Intelligent scanning solution for logistics and automation	Dynamic, multi-functional	
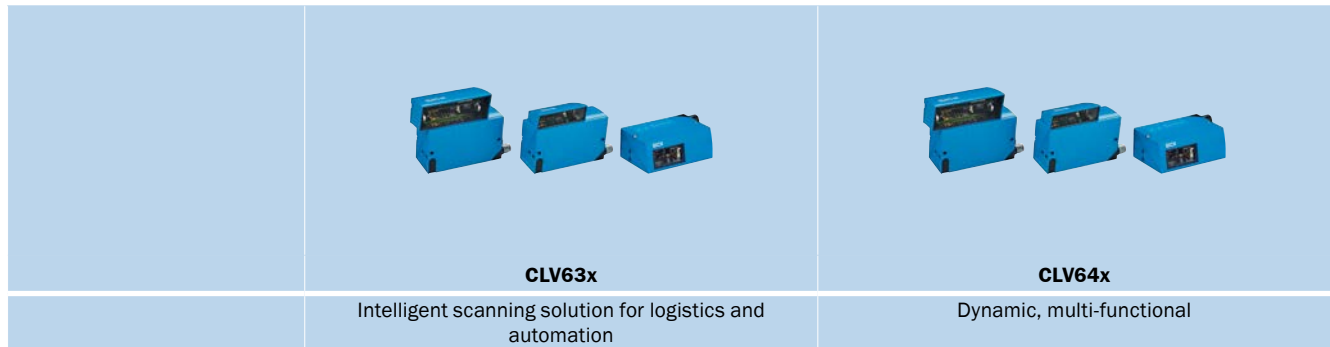
Technical data overview

Focus	Fixed focus	Dynamic focus control	
Aperture angle	≤ 50°	≤ 50°	
Scanning frequency	400 Hz ... 1,200 Hz	400 Hz ... 1,200 Hz	
Code resolution	0.2 mm ... 1 mm	0.15 mm ... 1 mm	
Reading distance	44 mm ... 735 mm	30 mm ... 840 mm	
USB	–	–	
Serial	✔ , RS-232, RS-422, RS-485	✔ , RS-232, RS-422, RS-485	
PROFINET	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	
CAN	✔	✔	
CANopen	✔	✔	
EtherCAT®	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	
PROFIBUS DP	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	
DeviceNet™	✔ , optional over external connection module	✔ , optional over external connection module	
Ethernet	✔ , TCP/IP	✔ , TCP/IP	
EtherNet/IP™	✔	✔	
Weight	250 g ... 1,230 g	250 g ... 1,230 g	

Your benefits

CLV63x	CLV64x
• 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	• Economical, as only one CLV64x is required for all focus positions • Intelligent auto setup and multi-function pushbuttons save time during commissioning • Teach-in of match code possible via the pushbuttons • Easily execute firmware updates using the microSD memory card: no need for a PC • No supplementary Ethernet gateway required with Ethernet models – lowers costs • 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

Detailed information	➜ www.sick.com/CLV63x	➜ www.sick.com/CLV64x

CLV65x	**CLV69x**
Always in auto focus	The highest level of flexibility and power

CLV65x	CLV69x
Auto focus	Auto focus
≤ 50°	≤ 60° / ≤ 50°
600 Hz ... 1,000 Hz	400 Hz ... 1,200 Hz
0.25 mm ... 1 mm	0.17 mm ... 1.2 mm
125 mm ... 1,625 mm	400 mm ... 2,200 mm
–	–
✔ , RS-232, RS-422, RS-485	✔ , RS-232, RS-422, RS-485
✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module
✔	✔
✔	–
✔ , optional over external fieldbus module	–
✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
✔ , optional over external connection module	✔ , optional over external connection module
✔ , TCP/IP	✔ , TCP/IP
✔	✔
250 g ... 520 g	1,500 g / 2,200 g

CLV65x	CLV69x
• Cost-effective, as auto focus means no variants or additional light barriers are required for focus adjustment • 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 • Integrated web server provides remote diagnostics and monitoring; no additional software is required	• Higher reading rate on damaged, heavily contaminated and partially damaged bar codes using the SMART+ algorithm • Increased processing allows for faster and more accurate performance on demanding applications • Fewer costs since no additional Ethernet gateway is required when using the Ethernet clone plug • Time savings during commissioning thanks to integrated buttons and bar graph • Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is delivered in the desired format • Cost savings since standard applications can be implemented without an additional system controller due to integrated tracking

➜ www.sick.com/CLV65x	➜ www.sick.com/CLV69x

	RFH6xx	RFU62x
	Intelligent RFID communication	Short-range ultra high frequency scanner

Technical data overview

Product category	Write/read device with integrated antenna	Write/read device with integrated antenna
Frequency band	HF (13.56 MHz)	UHF (860 MHz ... 960 MHz)
Version	Short Range / Mid Range	Mid Range
Scanning range	≤ 150 mm ≤ 240 mm	≤. 2 m
EtherCAT®	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
CAN	✔	✔
CANopen	✔	✔
Serial	✔ , RS-232, RS-422, RS-485	✔ , RS-232, RS-422, RS-485
PROFINET	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module
PROFIBUS DP	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
Ethernet	✔ , TCP/IP	✔ , TCP/IP
DeviceNet™	✔ , optional available externally	✔ , optional available externally
EtherNet/IP™	✔	✔
USB	–	✔ , AUX
Weight	450 g ... 760 g	780 g

Your benefits

• Reliable identification ensures maximum throughput • Adapts to changing needs, ensures investment over the long term • Simple integration saves installation time • A wide range of functionality ensures flexible solutions • Maintenance-free • Uses same connectivity and configuration software as SICK's bar code scanners and image-based code readers – compatible through standardized 4Dpro platform	• Correct assignment and no overshoot thanks to the well-defined read/write range and intelligent filter functions • Integrated process logic for remote solutions saves additional control and programming effort • Can be easily integrated into industrial networks thanks to 4Dpro compatibility • Firmware upgrades and industry-standard compliance ensure long-term reliability • Minimum changeover times in case of failure thanks to cloning • RFU62x can be mounted to metal directly – no loss of range • Easy operation and installation with SOPAS ET user interface

Detailed information	➜ www.sick.com/RFH6xx	➜ www.sick.com/RFU62x

	RFU63x	RFU65x
	Simple integration – intelligence included	The measuring RFID device with integrated passage and direction detection
	Write/read device with integrated antenna / write/read device without integrated antenna	Write/read device with integrated antenna
	UHF (860 MHz … 960 MHz)	UHF (860 MHz … 960 MHz)
	Long Range	Long Range
	≤. 10 m	≤. 10 m
	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
	✔	✔
	✔	✔
	✔ , RS-232, RS-422, RS-485	✔ , RS-232, RS-422, RS-485
	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module	✔ , PROFINET Single Port, PROFINET Dual Port optional over external fieldbus module
	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
	✔ , TCP/IP	✔ , TCP/IP
	✔ , optional available externally	✔ , optional available externally
	✔	✔
	✔ , AUX	✔ , AUX
	3.5 kg	5.2 kg

RFU63x

- Intelligent technology allows stand-alone usage
- Highest reading/writing performance
- Flexible integration in common industrial fieldbuses via 4D*pro* compatibility
- Less maintenance time due to an integrated cloning back-up system using microSD memory card
- Easily adapts to application requirements via SOPAS parameter setting tool
- Free usable feedback LED quickly provides read results and diagnostic information directly to the user

RFU65x

- UHF RFID transponders demonstrate outstanding reading reliability thanks to correct transponder assignment, including integrated entry detection plus direction output.
- Space-saving, compact device that does not require any additional antennae
- Easy to integrate into industrial fieldbuses with 4D*pro* connectivity
- Fulfills the requirements of the IP67 enclosure rating ("outdoor") and is rugged and durable
- Compatible with other SICK RFID read/write devices, making it highly flexible
- Additional software functions for the device can be programmed in the SICK software environment and integrated into the device

➜ www.sick.com/RFU63x

➜ www.sick.com/RFU65x

	IDM12x	IDM14x	IDM16x	
	The entry level scanner	Versatility made easy – from high density to standard range codes	Industrial mobile reliability	

Technical data overview

Application	General Purpose	General Purpose	Industrial	
Readable code structures	1D, Stacked	1D, Stacked	1D, Stacked	
Code resolution	0.076 mm ... 0.1 mm	≥ 0.076 mm	≥ 0.076 mm	
Reading distance	0 mm ... 400 mm	20 mm ... 850 mm	20 mm ... 850 mm	
Sensor	–	–	–	
Ambient operating temperature	–10 °C ... +50 °C	–10 °C ... +50 °C	–20 °C ... +50 °C	
Enclosure rating	IP41	IP41	IP65 / IP64	
Shock resistance	25 drops from 1.5 m height on concrete	25 drops from 1.8 m height on concrete	50 drops from 2 m height on concrete	
USB	✔	✔	✔	
Serial	✔ , RS-232 TTL	✔ , RS-232 TTL	✔ , RS-232 TTL	
Ethernet	✔ , TCP/IP, optional over external connection module	✔ , TCP/IP, optional over external connection module	✔ , TCP/IP, optional over external connection module	
PROFINET	✔ , PROFINET Dual Port, optional over external fieldbus module	✔ , PROFINET Dual Port, optional over external fieldbus module	✔ , PROFINET Dual Port, optional over external fieldbus module	
EtherCAT®	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	
PROFIBUS DP	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	
DeviceNet™	✔ , Optional, over external connection module	✔ , optional over external connection module	✔ , Optional, over external connection module	
Bluetooth	–	✔	✔	

Your benefits

IDM12x	IDM14x	IDM16x
• Low-cost solution for identifying various code sizes • Designed for contact and close-range detection, providing flexible operation • High degree of user comfort thanks to ergonomic housing, light weight and optional presentation mode	• Reliable identification reduces the need to manually input data • Lightweight, ergonomic design ensures user comfort • Highly dependable thanks compact housing • Easy targeting with highly visible scan line for correct aiming	• Increased productivity and throughput thanks to fast and reliable identification • High reliability thanks to industrial grade and rugged housing • Intuitive good read feedback for noisy industrial environment via vibration, beeper and LED

Detailed information	➜ www.sick.com/IDM12x	➜ www.sick.com/IDM14x	➜ www.sick.com/IDM16x

	IDM24x	IDM26x	HW191x	HW198x
	Convenient and secure identification of 2D codes	2D code identification in harsh environments	Reliable 2D code identification for challenging industrial applications	Industry-grade area-imaging scanner with huge reading distance
	General Purpose	Industrial	Industrial	Industrial
	1D, 2D, Stacked	1D, 2D, Stacked	1D, 2D, Stacked	1D, 2D, Stacked
	≥ 0.07 mm / ≥ 0.13 mm	≥ 0.07 mm / ≥ 0.13 mm	≤ 0.127 mm / ≤ 0.191 mm	≤ 0.05 mm / ≤ 2 mm
	30 mm … 400 mm	30 mm … 400 mm	15 mm … 749 mm	150 mm … 16,000 mm
	1280 x 800 px	1280 x 800 px	838 x 640 px	1280 x 800 px
	–10 °C … +50 °C	–20 °C … +50 °C	–20 °C … +50 °C / –30 °C … +50 °C	–20 °C … +50 °C / –30 °C … +50 °C
	IP42 / IP30	IP65	IP65	IP65 / IP51
	25 drops from 1.8 m height on concrete	50 drops from 2 m height on concrete	50 drops from 2 m height on concrete	50 drops from 2 m height on concrete
	✔	✔	✔	✔
	✔ , RS-232 TRUE	✔ , RS-232 TRUE	✔ , RS-232 TTL	✔ , RS-232 TTL
	✔ , TCP/IP, optional over external connection module	✔ , TCP/IP, optional over external connection module	✔, TCP/IP, optional over external fieldbus module	✔, TCP/IP, optional over external fieldbus module
	✔ , PROFINET Dual Port, optional over external fieldbus module	✔ , PROFINET Dual Port, optional over external fieldbus module	✔ , PROFINET Dual Port, optional over external fieldbus module	✔ , PROFINET Dual Port, optional over external fieldbus module
	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module	✔ , optional over external fieldbus module
	✔ , optional over external connection module	✔ , optional over external connection module	✔ , optional over external connection module	✔ , optional over external connection module
	✔	✔	✔	✔

IDM24x
- Identification of many different 1D, 2D, and stacked codes with a single device
- Quick and accurate identification even of poorly printed bar codes eliminates the need to enter data manually
- Lightweight, ergonomic design ensures user comfort, even in scanning-intensive applications

IDM26x
- Quick and accurate identification even of poorly printed bar codes eliminates the need to enter data manually
- Highly reliable thanks to IP65 industrial enclosure rating and rugged housing
- Easy focusing of bar codes thanks to the clearly visible laser line

HW191x
- Scanning technology optimized specifically for industrial applications with significant scanning requirements and reading distances of up to 75 cm
- Quick and reliable identification even on low-contrast or highly reflective codes and in harsh industrial environments

HW198x
- Improved productivity: Pallets that are far away can be scanned without being moved, resulting in higher productivity
- Unrivaled service life: Enclosure rating IP65, withstands 50 falls on concrete from a height of 2 m and 5,000 impacts (centrifuge test with 1 m drum), even at temperatures as low as -30 °C.

➔ www.sick.com/IDM24x ➔ www.sick.com/IDM26x ➔ www.sick.com/HW191x ➔ www.sick.com/HW198x

	CDB	CDM	
	Simplifies 4D*pro* sensor commissioning	Commissioning sensors the easy way – for more flexibility	

Technical data overview

	CDB	CDM	
Supported products	Lector® series, ICR80x CLV61x-CLV65x, CLV69x RFID write/read device Hand-held scanners	Lector® series CLV61x-CLV65x, CLV69x RFID write/read device Hand-held scanners	
Cloning module support (CMC)	Yes	Yes	
Supports display module (CMD)	No	Yes	
Supports power supply module (CMP)	No	Yes	
Supports fieldbus gateway (CMF)	No	Yes	
Serial	✔ , RS-232, RS-422, RS-485	✔ , RS-232, RS-422, RS-485	
Ethernet	–	✔ , TCP/IP	
CAN	✔	✔	
PROFIBUS DP	–	✔	
PROFINET	–	–	
EtherCAT®	–	–	
DeviceNet™	–	✔	

Your benefits

	CDB	CDM	
	• Compact design fits into small spaces • Two mounting holes for fast, precise installation saves on installation costs • Clearly labeled, easily accessible screw- and spring-loaded terminals save time when connecting to peripherals • Quick, easy configuration with switches reduces installation time • Industrial-standard connection guarantees a reliable application solution • CMC600 parameter cloning module allows rapid exchange and replacement of connected sensors	• Easy connection of the sensor to fieldbus systems • Fast exchange of the sensor through parameter memory CMC • Fast installation and easy networking save time • Simple troubleshooting • Easy diagnosis via optional CMD400 display module	

Detailed information	➔ www.sick.com/CDB	➔ www.sick.com/CDM	

	CDF600-2	CDF600
	Simply easy to connect	Easy EtherCAT connection
	Lector® series CLV61x-CLV65x, CLV69x RFID write/read device Hand-held scanners	Lector62x CLV61x - CLV65x RFH6xx, RFU62x Hand-held scanners
	Integrated	Integrated
	No	No
	No	No
	No	No
	✔ , RS-232	✔ , RS-232
	–	–
	✔	✔
	✔ , DPV0	–
	✔ , PROFINET Single Port, PROFINET Dual Port	–
	–	✔
	–	–

- Sophisticated two-screw system for fast, flexible mounting on all standard profiles
- Choice of different versions for connecting to industrial field buses
- Code switch that is mounted so it is protected against accidental adjustment and is easily accessible from the outside for easy setup of bus address and operating mode without complex software
- Clear status LEDs that are identifiable on two sides from any viewing direction for simple and effective diagnosis (depending on type)
- Fast installation and easy replacement in the system thanks to plug-in connections
- Integrated cloning module for all configurations of the connected sensor enables very fast replacement time in case of faults
- Compact and rugged design with choice of horizontal or vertical cable direction

- A two-screw system makes mounting quick and easy
- Electrical installation is quick since all connections are established with plugs
- Auto detect: Sensor and CDF600 detect each other automatically
- Quick sensor exchange due to integrated parameter memory
- Compact design and easy operation enable installation in situations with limited space
- Easy diagnosis via 6 LEDs

➜ www.sick.com/CDF600-2

➜ www.sick.com/CDF600

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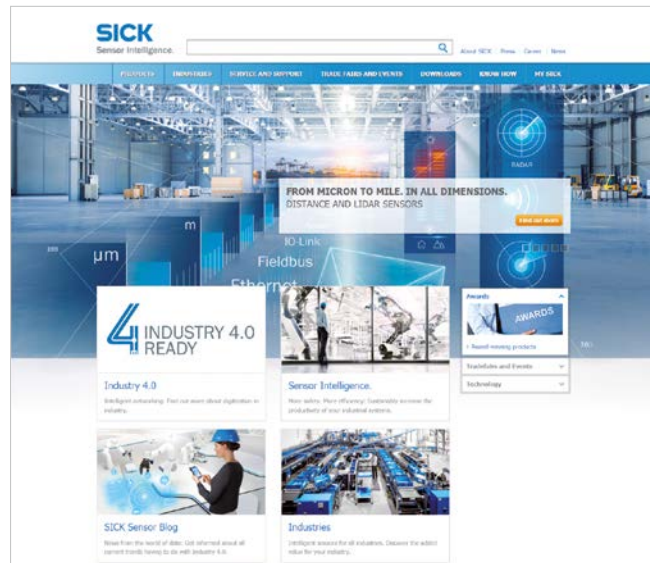
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