PRODUCT OVERVIEW

IDENTIFICATION SOLUTIONS

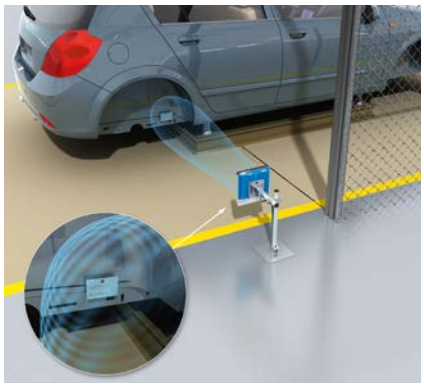
OVERVIEW OF THE PRODUCTS

**Image-based code readers, fixed mount bar code scanners,
RFID mobile hand-held scanners, magnetic-coded identification**

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

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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

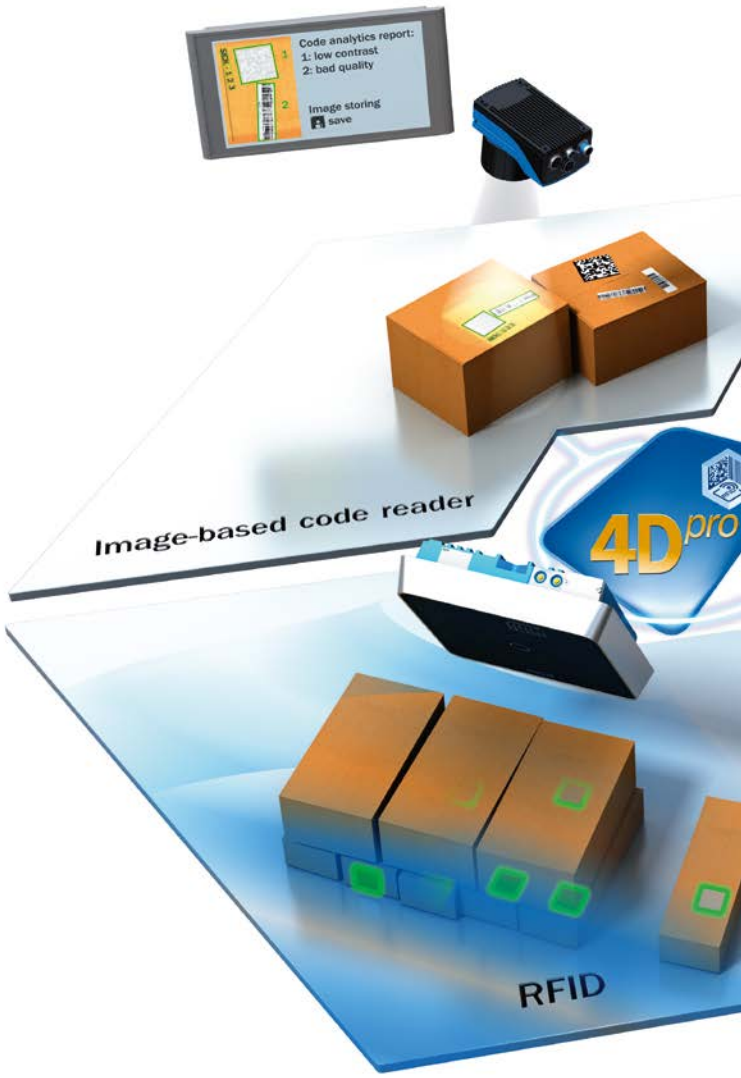
→ www.sick.com/image-based_code_readers

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:

→ www.sick.com/4Dpro

- 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

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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	Supported codes/data cards								Focusing				Interfaces														
													Onboard										Via external CDF600 gateway				
	1D code	Stacked	2D code	Direct-marked codes	Digital watermarks	OCR	RFID transponder	Magnetic-coded tags	Fixed focus	Adjustable focus	Dynamic focus control	Auto focus	Serial / USB	Wireless	PROFINET	PROFINET DUAL PORTS	EtherNet/IP	TCP/IP	CANopen	CAN bus	IO-Link	PROFIBUS	PROFINET	EtherCAT	TCP/IP		
Image-based code readers																											
Lector61x	■	■	■	■ 2)						■	■	■ 2), 3)	■			■		■	■	■	■						
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Fixed mount bar code scanners																											
CLV60x	■								■				■ 2)	■ 2)													
CLV61x	■								■				■ 2)							■ 2)		■ 2)	■ 2)	■ 2)			
CLV61x Dual Port	■								■				■ 2)			■ 2)				■ 2)		■ 2)	■ 2)	■ 2)			
CLV62x	■								■				■ 2)		■ 2)		■ 2)	■ 2)	■ 2)	■ 2)		■ 2)	■ 2)	■ 2)			
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CLV69x	■										■	■	■ 2)				■ 2)	■ 2)		■ 2)		■ 2)	■ 2)				
Mobile hand-held scanners																											
IDM12x	■								■				■	■													
IDM14x	■	■							■				■	■	■							■	■	■	■		
IDM16x	■	■							■				■	■	■							■	■	■	■		
IDM24x	■	■	■						■				■	■	■							■	■	■	■		
IDM26x	■	■	■						■				■	■	■							■	■	■	■		
HW199x	■	■	■		■	■ 2)			■				■	■	■							■	■	■	■		
HW198x	■	■	■									■	■	■	■							■	■	■	■		
ZS36x8 DPM	■	■	■	■					■				■	■	■							■	■	■	■		
RFID																											
RFH5xx							■														■						
RFH6xx							■						■		■		■	■	■	■		■	■	■			
RFU61x							■						■		■		■	■									
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RFU65x							■						■		■		■	■	■	■		■	■	■			
Magnetic-coded identification																											
MIS								■													■						

[1] For details, see the reading field diagram online. | [2] Depends on the product variant. | [3] During teach-in. | [4] For parameterization only.
[5] Depends on the lens and illumination unit. | [6] Depends on the application and the transponder used.

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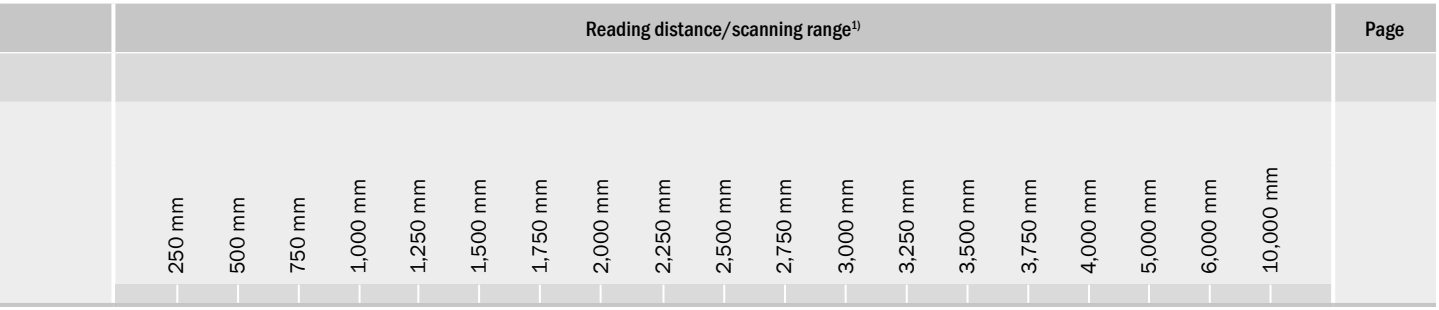
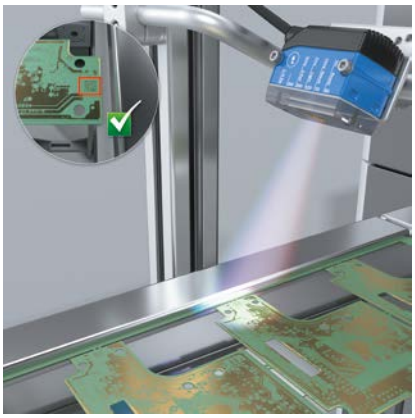


		
	Lector61x	**Lector62x**
	The small device for miniature codes and much more	Perfect vision – in any light
Possible fields of application		
	• Electronics and solar industries: PCB, component and device identification • Consumer goods industry: serialization and package content monitoring • Storage and conveyor systems: tote identification • Automotive industry: production control and traceability of devices	• Automotive industry: production control and traceability of devices • Consumer goods industry: date code inspection, serialization, and package content monitoring • Storage and conveyor systems: tote identification • Electronics and solar industries: PCB, glass, and wafer identification
Example application		
	Electronics	**Automotive and parts suppliers**
		
	Identification of DPM codes on printed circuit boards	Traceability of devices
Detailed information	➜ www.sick.com/Lector61x	➜ www.sick.com/Lector62x

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Lector63x

Intelligent. Flexible. Intuitive.

Lector64x

High efficiency for code reading applications

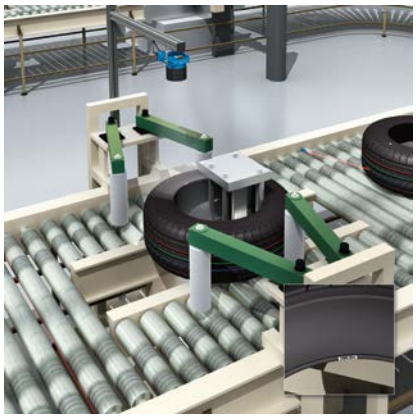
- Presentation camera, manual package sorting
- Automated sorting systems used by courier, express and postal service providers as well as in retail
- Aggregation of food and pharmaceutical packaging
- Track and trace in automated packaging machines
- Scanning from a large distance for traceability in the automotive industry
- Tire identification
- Scanning of small codes in the electronics and solar industry

- Presentation camera, manual package sorting
- Material handling in automated sorting systems used by courier, express and postal service providers as well as in retail
- Tire identification
- Aggregation of food and pharmaceutical packaging
- Identification of codes, tracking of serial numbers and manufacturing dates in pharmaceutical distribution contexts

Courier, express, parcel, and postal

Sorting of small parcels by hand

Tires



Spotting

➜ www.sick.com/Lector63x

➜ www.sick.com/Lector64x

Lector65x

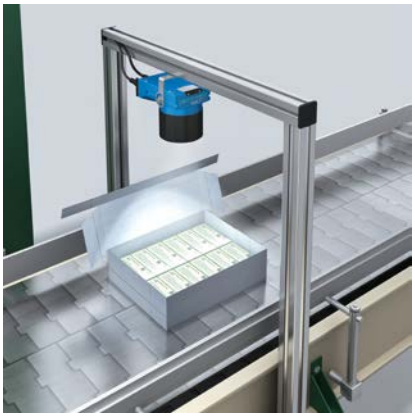
Maximum flexibility with moving belts

Possible fields of application

- Material handling in automated sorting systems used by courier, express and postal service providers as well as in retail
- Presentation camera, manual package sorting
- Tire identification
- Aggregation of food and pharmaceutical packaging
- Identification of codes, tracing of serial numbers and manufacturing dates in the pharmaceutical distribution sector

Example application

Health care manufacturing



Multifunctional code reading

Detailed information ➜ www.sick.com/Lector65x

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Lector65x system

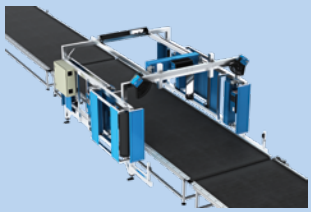
Your objects are always in focus

- Multi-sided, omni-directional code reading on small and medium-sized conveyors
- Courier, express, post and cargo (CEP), retail and warehousing, tire and other industries
- Sorting of bags at airports
- Easy upgrading of laser-based systems to optimize the read rate and reading capabilities of 2D codes
- Reading in Start-Stop operation

Retail and warehousing

Automated parcel identification using image-based code readers

➜ www.sick.com/Lector65x_System



ICR system

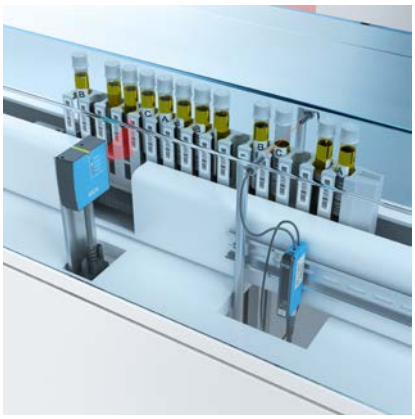
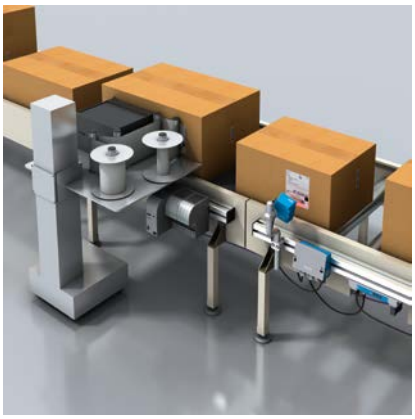
Efficient sorting of objects at the highest conveyor speeds

- Challenging code reading for optimizing sorting processes in the fields of transport and logistics
- Image acquisition and storage for OCR, video coding, archiving and vision applications

Retail and warehousing

Image-based object identification with detection of hazardous material symbols

➜ www.sick.com/ICR_System

		
	CLV60x	**CLV61x**
	Reliable reading performance in the smallest of spaces	Reliable decoding, simple integration
Possible fields of application		
	• Medical technology: clinical analysis • Identification of bar codes immediately after printout • Automated object identification in applications with very little space, such as reading bar codes in rolls of film • OEM applications such as ticket or cash register systems, or integration on a robot arm	• Warehouse conveyor technology: tote identification on conveyors, positioning and storage location identification, pallet identification • Food and beverage: legibility checking of bar codes after printing, bar code identification in packaging and secondary packaging processes • Medical technology: clinical analysis
Example application		
	Health care manufacturing	**Storage and conveyor technology**
		
	Identification of rack codes and level measurement of test tubes in the Single Lane Analyzer	Printing, application and identification of bar codes
Detailed information	➜ www.sick.com/CLV60x	➜ www.sick.com/CLV61x

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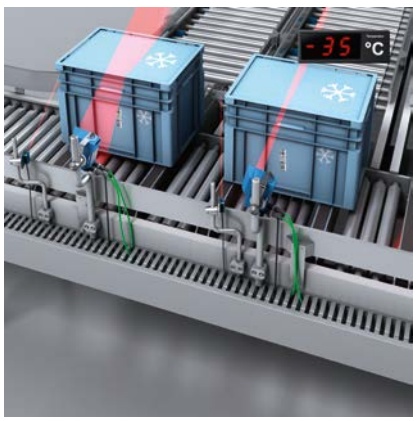
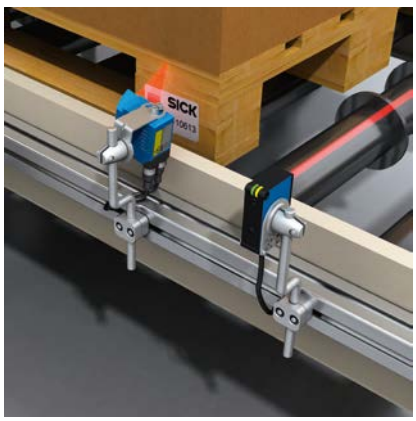
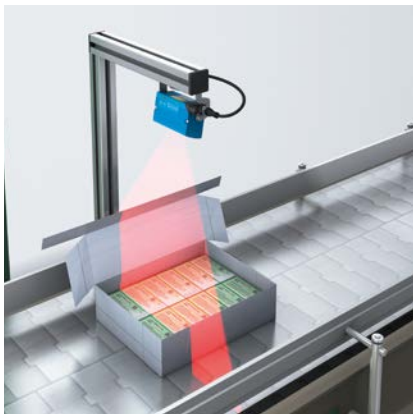
	CLV61x Dual Port	CLV62x
		
	The network professional	Powerful scanner – flexible use
	• Warehouse conveyor technology: container identification, picking station, cold storage	• Warehouse conveyor technology: picking station, container and pallet foot identification • Food and beverage: inspection of bar code for legibility after printing, bar code identification in packaging and secondary packaging processes • Medical technology: clinical analysis • Aggregation of food and pharmaceutical packaging
	Storage and conveyor technology	**Storage and conveyor technology**
		
	Scanning of codes on the sides of containers using bar code scanners, including in deep freeze applications	Identification of bar codes on pallet feet
	→ www.sick.com/CLV61x_Dual_Port	→ www.sick.com/CLV62x

			
	CLV63x	**CLV64x**	
	Intelligent scanning solution for logistics and automation	Dynamic versatility	
Possible 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	• Food, beverages: bar code identification in packaging and repackaging processes and identification in washdown zones • Aggregation of food and pharmaceutical packaging • Warehouse conveyor technology: bar code identification of objects on pallets • Medical technology: clinical analysis • Identification of test tubes in transport racks	
Example application			
	Food and beverage	**Food and beverage**	
			
	Checking of product packagings using bar codes	Reading of bar codes on transport crates	
Detailed information	➜ www.sick.com/CLV63x	➜ www.sick.com/CLV64x	

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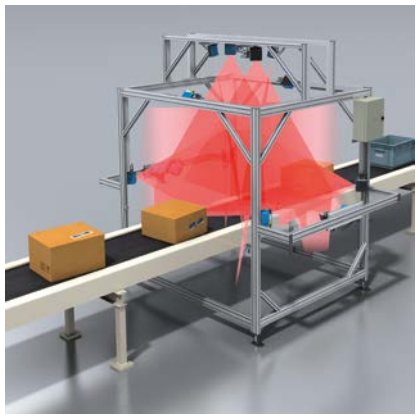
	CLV65x	CLV69x	CLV system
			
	Always in (auto) focus	Flexible and high-performance at the highest level	1D code identification for an optimal object flow
	• CEP industry as well as retail and warehousing: Material handling in automated sorter systems • Airports: independent bag drop by passengers • Warehouse conveyor technology: bar code identification of pallet feet and objects on pallets • Industrial trucks: bar code identification of goods and pallets	• Courier, express, parcel and postal services (CEP) • Airport luggage identification – ALIS applications • OMNI-directional bar code reading • Integration in RFID hybrid systems and high-end camera tunnels • Pallet identification	• 1D code identification in all areas of conveying technology
	Industrial vehicles	**Retail and warehousing**	**Courier, express, parcel, and postal**
			
	Goods identification and traceability with bar code scanners	Identification of loaded pallets using bar codes	Reading of bar codes during receipt and dispatch of shipments
	➜ www.sick.com/CLV65x	➜ www.sick.com/CLV69x	➜ www.sick.com/CLV_System

			
	IDM12x	**IDM14x**	
	The entry-level model	The versatile one	
Possible fields of application			
	• Quick data entry through simple reading of product labels at sales or service points • Time-saving office automation by reading document bar codes for easy archiving of documents	• Manual identification of test tubes in clinical analysis and the pharmaceutical industry • Safe and easy process control and machine setting by reading bar codes on documents or displays	
Example application			
	Retail and warehousing	**Food and beverage**	
			
	Mobile identification of covered or damaged bar codes at service centers	Changeover of machinery to a new product	
Detailed information	➜ www.sick.com/IDM12x	➜ www.sick.com/IDM14x	

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IDM16x

Industrial mobile reliability

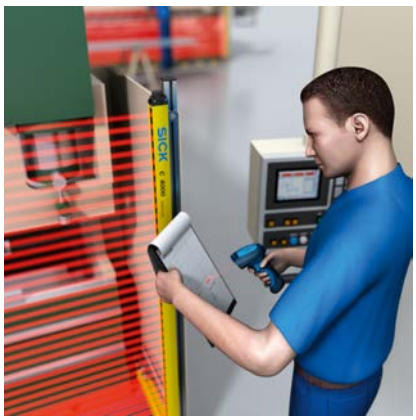
IDM24x

Convenient and secure identification of 2D codes

- Supports manual processes such as incoming goods, order picking or dispatch in warehouses and distribution centers
- Manual scanning for production control and traceability of products or components in the automotive, electronics, solar and consumer goods industries

- Point of sale, service (retail, check-in counters)
- Clinical analysis (identification of test tubes)
- Office environment (document capture)
- Warehouse (document and packet capture)
- Automotive and electronics industry (component identification)

Machine tools



Mobile identification of production data

→ www.sick.com/IDM16x

Electronics

Mobile identification at pick-and-place setup stations

→ www.sick.com/IDM24x

			
	IDM26x	**HW199x**	
	2D-code identification in harsh environments	Reliable 2D code identification for demanding industrial applications	
Possible fields of application			
	• Production control and traceability of products or components in the automotive, electronics, solar and consumer goods industries • Warehouses and distribution centers, e.g., for incoming goods, order picking and dispatch	• Production control and traceability of products or components in the automotive, electronics, solar and consumer goods industries • Warehouses and distribution centers, e.g., for incoming goods, order picking, and dispatch	
Example application			
	Rubber and plastics	**Courier, express, parcel, and postal**	
			
	Mobile material identification	Manual object scans	
Detailed information	➜ www.sick.com/IDM26x	➜ www.sick.com/HW199x	

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HW198x

Industry-grade area-imaging scanner with huge reading distance

ZS36x8 DPM

Reliable DPM code identification for challenging industrial applications

- Manned forklift truck applications: Reading of bar codes from a distance, on pallets in high-bay warehouses or on stacked containers in marshaling yards or ports
- Universal device for all tasks in a distribution center or warehouse

- Automotive industry: Reading of needled or lasered DPM codes, 1D and 2D codes
- Identification of etched DPM codes on glossy surfaces, e.g. devices, gear wheels, rings
- Detection of printed or thermally-coated DPM codes on glossy printed circuit boards and other electronic components

Industrial vehicles

Bar code goods identification in varying load carriers

→ www.sick.com/HW198x

Automotive and parts suppliers

Mobile identification of DPM codes on electronic components

→ www.sick.com/ZS36x8_DPM

			
	RFH5xx	**RFH6xx**	
	Identification in tight spaces in machine and plant engineering	Intelligent identification using RFID	
Possible fields of application			
	• Hanging conveyor for clothes: Identification with RFID • Workpiece carrier in assembly lines: Identification with RFID	• Container identification on conveyor systems in intralogistics processes • Object identification in hanging conveyors • Workpiece carrier detection in production lines • Position determination of automatic guided vehicles by reading out transponders recessed in the ground	
Example application			
	Electronics	**Industrial vehicles**	
			
	Identification of workpiece carriers using RFID	Driver assistance in a narrow aisle warehouse with RFID positioning	
Detailed information	➜ www.sick.com/RFH5xx	➜ www.sick.com/RFH6xx	

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	RFU61x	RFU62x
		
	SMALL-IN-ONE	UHF for small read ranges
	• Workpiece identification on assembly lines • Identification of production material in machines • Charging identification on mobile platforms • Material procurement in E-Kanban • Container identification in conveyor systems	• Workpiece identification on assembly lines • Charging identification on mobile platforms • Identification of production material in machines • Container identification in conveyor systems • Material procurement in E-Kanban
	Automotive and parts suppliers	**Industrial vehicles**
		
	Assembly identification in the production process	Complete tracking of the material flow using an RFID sensor on manned forklift trucks
	➜ www.sick.com/RFU61x	➜ www.sick.com/RFU62x

			
	RFU63x	**RFU65x**	
	Simple integration – intelligence included	The measuring RFID device with integrated passage and direction detection	
Possible fields of application			
	• Identification of bodyparts in the automotive industry • Tracing of transport containers in logistics • Identification of vehicles at tollbooths • Identification of trains and cars in rail transport • Electronic toll collection	• Final assembly and vehicle delivery in the automotive industry • Receiving and outgoing goods doors as well as forklift applications in logistics	
Example application			
	Automotive and parts suppliers	**Automotive and parts suppliers**	
			
	Car body identification	Vehicle track and trace in the production and distribution process	
Detailed information	➜ www.sick.com/RFU63x	➜ www.sick.com/RFU65x	

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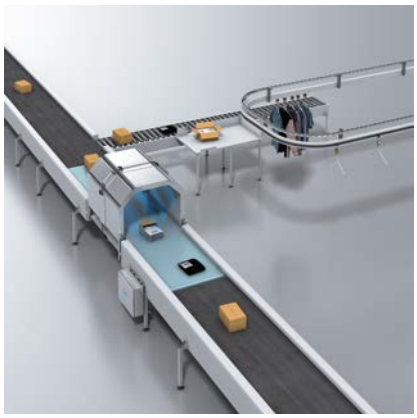
RFID system

Flexible design and high throughput in a single system

- Inspection of incoming and outgoing goods in production logistics
- Bulk and single tag identification in the flow of goods

Retail and warehousing



Automated object identification using RFID during commissioning as well as in goods receipt and goods issue

➜ www.sick.com/RFID_System

MIS

Identification sensor for reading magnetic-coded tags

Possible fields of application

- Easy gripper identification (robotics, handling and assembly, consumer goods industry)
- Easy workpiece carrier identification (electronics and solar industry, handling and assembly)
- Simple tool identification (machine tools)

Example application

Food and beverage

Gripper change during packaging processes

Detailed information → www.sick.com/MIS

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- Availability and delivery times

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Even more value

- Digital Customer Trainings ➜ www.sick.com/c/g300887
- Digital Service Catalog ➜ cloud.sick.com
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SERVICES FOR MACHINES AND PLANTS: SICK LifeTime Services

Our comprehensive and versatile LifeTime Services are the perfect addition to the comprehensive range of products from SICK. The services range from product-independent consulting to traditional product services.

Consulting and design
Safe and professional

Product and system support
Reliable, fast, and on-site

Verification and optimization
Safe and regularly inspected

Upgrade and retrofits
Easy, safe, and economical

Training and education
Practical, focused, and professional

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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 10,400 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, SICK is always close to its 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.

SICK has extensive experience in various industries and understands their processes and requirements. With intelligent sensors, SICK delivers exactly what the 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 SICK a reliable supplier and development partner.

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

That is "Sensor Intelligence."

Worldwide presence:

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Hong Kong, 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.

Detailed addresses and further locations → www.sick.com

SICK
Sensor Intelligence.