



Lector Identification System

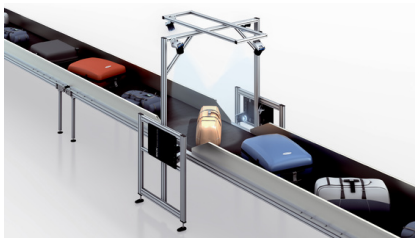
High-speed image-based code reading and assignment for small object gaps

SICK
Sensor Intelligence.

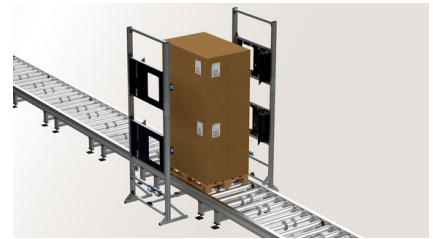
System versions



Logistics Lector Array
Fast code reading in logistics
Selection of logistics system variants



ALIS Lector Array
Reliable baggage identification at airports
Selection of airport system variants



Pallet Lector Array
Reliable pallet identification, even with high loads
View variants

Logistics Lector Array



Camera-based 1D and 2D code reading

Based on the Lector85x, the Logistics Lector Array provides reliable identification even when conveyor-belt speeds are high, gaps between objects are small, and codes are difficult to read. In addition, the system can unambiguously assign the identified code to the object.

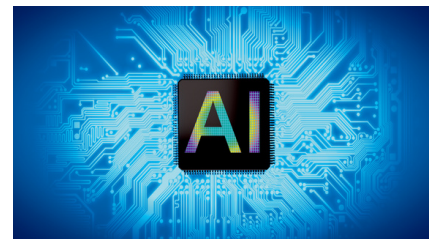
Reliable code identification and unambiguous code-object assignment



The system reliably reads codes even when gaps between objects are as small as 50 mm — and conveyor-belt speeds reach up to 3.5 m/s. This significantly increases output.



The system's 3D software assignment function precisely assigns codes to objects, ensuring each object arrives at its destination. This reduces manual rework and boosts plant productivity.

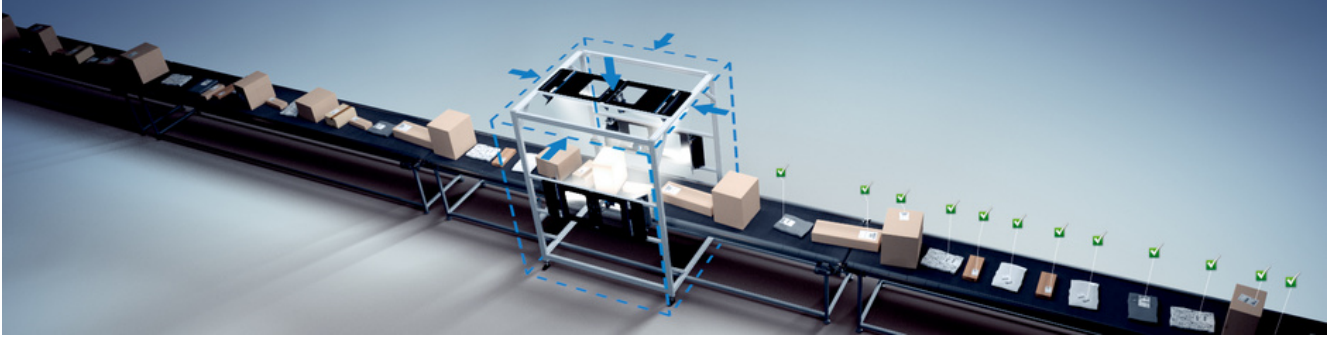


The system features AI-based decoding to provide quick, precise identification of the relevant code region. Using super-resolution, the system recognizes even small or blurred codes.



Powerful camera + AI-based segmentation + 3D software assignment = higher output along with reduced manual post-processing

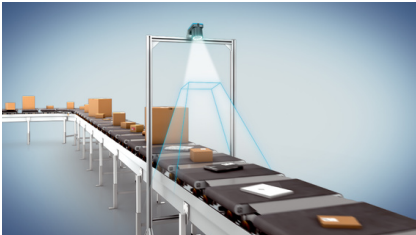
Advantages



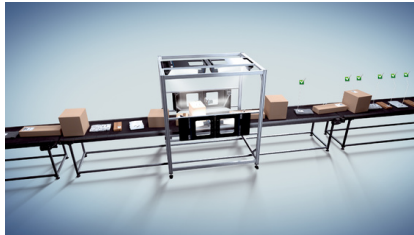
Compact system design

You can flexibly adapt the Logistics Lector Array to the space at your disposal. Various camera options and a wide selection of accessories are available for creating a compact system. You can choose between prefabricated system options and a fully tailored solution to optimally adapt the system to your space requirements.

Flexible adaptation to any environment



Thanks to its large depth of field, the system can identify codes with a small number of cameras even when object sizes differ.



A limited number of cameras, the steep mounting angle, mirror modules and small reading distances enable the compact design of the system.



Quick and easy to integrate into any environment, the Logistics Lector Array is available in several versions as a prefabricated system, including options for reading from one side to six sides.



The Logistics Lector Array with compact system design fits everywhere and can be quickly installed without any additional expert knowledge.



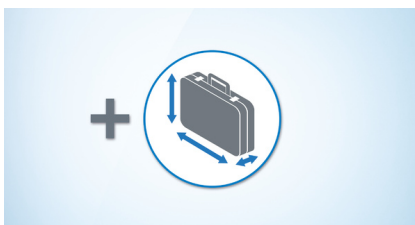
Individually adjustable system

The modular systems allow for customized adaptations so that the different technologies can be easily combined. In addition to code reading, the systems can be expanded to include volume detection. Additional software enables the visualization of baggage data. A redundant system design is also available if required, which maximizes system availability. This means the modular system can be designed to your individual bag reading gate.

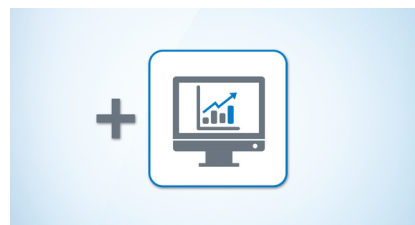
More than simply code reading



Different identification technologies can be combined in one system to create an individualized hybrid solution.



The VMS6200 quickly and efficiently measures bags and determines their exact position.



The Baggage Analytics software provides comprehensive real-time monitoring of system performance and health.



An all-in-one solution from a single source for saving on additional systems for volume measurement or monitoring.

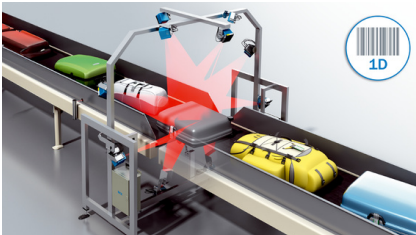
ALIS Lector Array



Airport luggage identification with ATR (Automated Tag Reading)

The ALIS (airport luggage identification system) track and trace systems from SICK, which are specially developed for baggage transport at airports, read 1D codes and RFID transponders and provide high-resolution images for downstream processes (video coding, OCR). Depending on the requirements, the system variants can be equipped and combined with different identification technologies, for instance laser, camera and RFID.

One system. Three technologies. A whole host of options.



ALIS Laser: CLV identification system for airports

Laser-based barcode reading is characterized by cost efficiency and a sturdy construction. Thanks to the real-time autofocus function with a high depth of field, different object sizes and distances are no problem.



ALIS Lector Array: Lector Identification System at airports

The camera-based solution allows for a high read rate, even for heavily damaged and dirty codes. Optional clear text recognition and video coding provide additional reading reliability, for instance if the baggage source message (BSM) is absent.



ALIS RFCS: RF identification system for airports

RFID reading does not need a line of sight to the transponder. Tags from upstream or downstream objects are filtered out using shielding troughs and algorithms.



Reliable code reading and assignment to the correct bag

Pallet Lector Array



Reliable pallet identification – even with high loads thanks to the modular design

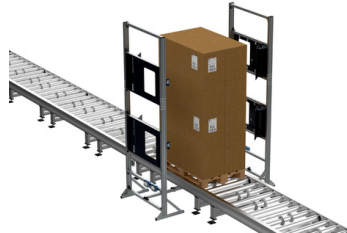
Changing loading heights, varying code positions and tight spaces: The Pallet Lector Array is a very practical solution.

Thanks to 360° readings and intelligently positioned mirrors, the system ensures seamless code detection.



360° capture of 1D and 2D codes

Full coverage, no blind spots, no lost data – even under demanding conditions. The Pallet Lector Array reliably detects SSCCs (Serial Shipping Container Codes) regardless of their position on the pallet – for high reading accuracy and efficient logistics.



High performance with a small footprint

Thanks to the mirror modules, the system requires only a small distance from the conveyor system – for space-saving and high-performance pallet identification.



Modular design and high flexibility – pallet identification even with high loads

Thanks to the flexible, expandable design, the system adapts easily to different loading heights. With the Pallet Base Module, for example, it is possible to record loading heights of up to 1 meter. With the Pallet Expansion Module, the system can already be expanded so that it can detect codes at loading heights of 2 meters or more.



High efficiency, great flexibility and compact design. With the Pallet Lector Array, logistics processes for pallet identification can be optimized and productivity can be increased.



Technical data overview

Industries	Tires CEP and freight
Transport speed	0 m/s ... 3.5 m/s (depends on variant)
Minimum object distance	50 mm / 150 mm (depends on variant)
Code types	1D 2D RFID Tag (depends on variant)

Product description

The Lector Identification System reads codes and assigns them to the associated object. The small, powerful Lector85x matrix camera with its high resolution of 5, 9 or 12 megapixels provides precise read results for almost any object size. It successfully reads codes regardless of the code quality thanks to intelligent, AI-based decoding algorithms. The high processing power also allows fast conveyor belt speeds for greater throughput. Through real time object tracking and three-dimensional software assignment, the Lector Identification System reliably performs the code assignment task even with small object gaps. The system can be extended with additional identification technologies or additional functions such as dimensioning and weight recording.

At a glance

- Several camera variants to choose from: 5, 9 or 12 megapixels
- High illumination intensity
- Large field of view and high depth of field
- Powerful processor
- Decoding algorithms based on artificial intelligence
- Three-dimensional assignment of codes to objects
- Small housing, identical to the predecessor model Lector65x
- 2 x 1-GbE image channel

Your benefits

- Less manual post-processing thanks to high read rate
- High throughput thanks to combination of fast conveyor speeds and small gaps
- Cost-effective solution due to small number of cameras in the system
- Quick and easy commissioning
- Small camera housing and compact system design allows installation even where space is limited
- Easy upgrading and retrofitting of existing laser scanners and Lector65x systems
- Fast image transfer for machine vision applications such as OCR and concurrent image archiving for analysis and process optimization

Fields of application

- Single-side reading or multi-side, omnidirectional code reading and assignment to the object
- Automated object identification for efficient sorting and picking processes
- Easy upgrading of laser-based systems to optimize the read rate and to add a 2D code reading capability

Ordering information

Other models and accessories → www.sick.com/Lector_Identification_System

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