

Airport Luggage Identification System

Making sure your luggage gets there



The most reliable solutions for handling your baggage.

SICK – tailor-made solutions from a single source that save you time and money.

Shorter processing times between check-in, departure, arrival and baggage claim, as well as a reduction in the manual work involved – that is what you would expect from a powerful baggage handling system. This is precisely where airport solutions from SICK come in. SICK is one of the few manufacturers in the world that provides all-in-one solutions, ranging from electronic components, mechanical setup and evaluation software, through to worldwide commissioning services. We can also help you plan and engineer the perfect solution by supporting you in every phase of the project as an experienced partner in our particular area of expertise.



Baggage reclaim area
 Check-in and bag drop

- ③ Early baggage storage④ X-ray machine
- Sorting systemFlight make-up



Bar code reading system

RFID tunnel

Hybrid system

Optimum performance in baggage handling.

Time and space are dominating factors in our lives; this is also the case when it comes to moving luggage worldwide. SICK meets today's baggage handling needs with a modular concept comprised of precise, rapid and reliable solutions.

Customer luggage is identified and tracked, and its volume specified. At the same time, each solution also provides monitoring functions for its specific area.

The modular concept offers

• IATA bar code reading

• RFID tag reading and writing

• Measurement of volume

Intrusion detection

Height detection

Oversize detection

Luggage imaging

Weighing

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Self-service bag drop

Together with SICK, you will be able to provide your customers with a solution that offers the highest level of performance.

SICK sensors solve the tasks at hand, allowing you to deliver a turnkey system.

Your benefits

- Maximum read rates
- · Low operating costs thanks to optimum MTBF
- Single-host interface

SICK offers

- Flexible high-end solutions
- Stand-alone modules
- Integration into the SICK Visualization Platform (SVP)
- Adaptation to any customer layout

ALIS Barcode

Over 20 years of experience and continuous improvement have made SICK solutions the best you can get. We also ensure that

your customers have access to worldwide solution services.

Your benefits

- Maximum read rates
- · Easy to service, with an economical "go green" philosophy
- Easy installation
- Single-host interface

SICK offers

- Flexible high-performance solutions
- Read rates of 98% and higher
- SMART code recognition: high reading performance irrespective of whether the labels are twisted, dirty, or bent
- 100% redundant design
- Integration into the SICK Visualization Platform (SVP)
- Adaptation to any customer layout

ALIS RFID

While new technologies are still in the process of entering the business arena, SICK solutions are already there.

Always ensuring that your customers enjoy safe and smooth system operation.

Your benefits

- · Maximum read rates
- Easy to service and economical
- Easy installation
- Single-host interface •

SICK offers

- · Flexible high-end solutions
- UHF technology
- Read rates of 98% and higher
- Integration into the SICK Visualization Platform (SVP) ٠
- ٠ Adaptation to almost any customer layout

ALIS Hybrid

Experience and know-how: ALIS Hybrid from SICK offers a combination of current and future technologies that transforms airport dynamics.

Currently, no other supplier in the world offers a solution of this kind with proven read rates of 100% in real operation.

Maximum read rates

- Easy to service and economical
- Easy installation
- Single-host interface

SICK offers

- · Flexible high-end solutions
- Read rates of 100%
- Integration into the SICK Visualization Platform (SVP)
- Adaptation to almost any customer layout ٠

ALIS DIM

Do you want to protect your customer's X-ray machines? Would you like to ensure that maximum use is being made of aircraft hold?

ALIS DIM provides all the necessary data on length, width and height, as either a stand-alone solution or integrated into any of the previously mentioned solutions.

Your benefits

- Easy to service and economical •
- Easy installation
- Single-host interface

SICK offers

- Flexible high-end solutions
- Stand-alone solution that can be integrated into any of the other solutions
- Integration into the SICK Vision Platform (SVP)
- Adaptation to almost any customer layout •

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The logic and intelligence behind each solution - MSC

Each solution contains a logical control unit, known as a modular system controller (MSC). The task of the MSC is to collect data from all sensors within the solution, process it, and supply it to the host. It also delivers this information to the SICK monitoring software, ensuring smooth operation throughout the customer's entire location.

Your benefits

- Single-host interface
- Service and maintenance tools integrated into the remote diagnostics tool
- External display for system-relevant information
- · Scanner read rate statistics
- Total read rate statistics
- Daily read rate statistics
- · Result records stored for up to 365 days

SICK offers

- Use of an industrial controller
- All interfaces opto-isolated (HOST, network, digital I/O)
- · Central access to all scanners via controller

SICK Visualization Platform – monitoring of all systems within the network

With the SICK Visualization Platform (SVP), you can view all the performance and status data from your automatic tag reader systems, no matter where you are.

The SVP is a dynamic database used for monitoring, analyzing, and reporting all information, including images gathered from SICK automatic data collection devices. You can use the information provided by the SVP to maximize internal operational efficiency and to improve external processes. Permanent monitoring of system performance means full process transparency in your system, at all times.

Your benefits

- Real-time feedback on system activity, performance and health
- Powerful SQL queries for identifying 'interesting' items such as sideby-side, multi-code, oversized and reading errors caused by low quality codes, etc.
- Transparent documentation allows for feedback loops with customers for improving processes
- Export images, charts and reports to any location in the user's network

Basic features and views

CLV690 Bar code scanner

Туре	CLV690/line scanner
Light source	Laser diode, red light (λ=660nm)
Laser protection class	Class 2 (as per IEC 60825-1 (2007-3))
Reading distance	500 2200 mm (0.5 mm)
Scanning/decoding frequency	400 1200 Hz
Bar code print contrast	≥ 70% (PCS)
Ambient light immunity	2000 lx (on bar-code)
Indicators	6 LED status indicators + LED bar graph
Data interface	Host; AUX (RS232 only), CAN Bus, CAN Bus redundant, Ethernet TCP/IP (depending on cloning plug used)
Data transmission rate	300 Baud 500 kBaud, AUX: 57.6 kBaud
Electrical connections	Depending on cloning plug used
Operation and configuration	SOPAS ET
Switching inputs/outputs	Depending on cloning plug used, max. 6 inputs and 4 outputs
Operating voltage/consumption	DC 18 V 30 V/ type 15 W
Housing	Die-cast aluminum
Enclosure rating/protection class	IP65 (IEC 60259 (1989-11))/III (EN 61140 (2002-03))
EMC test	Electromagnetic interference: EN 61000-6-4:2007-01 Electromagnetic immunity: EN 61000-6-2:2005-08
Vibration test	As per EN 60068-2-6 (2008-02)
Shock test	As per IEC 60086-2-27 (2009-05)
Weight	Approx. 1.5 kg
Dimensions	117 mm x 117 mm x 94 mm
MTBF (Mean Time Between Failures)	100,000 h
MTTR (Mean Time To Replace)	5 min
Push buttons	2

CLV650 Bar code scanner

Туре	CLV650/line scanner
Light source	Laser diode, red light (λ =658 nm)
Laser protection class	Class 2 (as per IEC 60825-1 and EN 60825-1,)
Reading distance	150 1200 mm (0.5 mm)
Scanning/decoding frequency	600 1000 Hz
Bar code print contrast	≥ 60% (PCS)
Ambient light immunity	2000 lx (on bar-code)
Indicators	4 LED status indicators + LED bar graph
Data interface	Host: RS232, RS422/485; Ethernet TCP/IP, Ethernet IP, Profinet, CAN-Bus
Data transmission rate	2.4 115.2 kBaud
Electrical connections	2 x M12 (1 x 17 pin, 1 x Ethernet 4 pin connector)
Operation and configuration	SOPAS ET
Switching inputs/outputs	2 x IN/2 x OUT
Operating voltage/consumption	DC 18 V 30 V/ type 8.5 W
Housing	Die-cast aluminum
Enclosure rating/protection class	IP65 (as per EN 60529)/III (as per EN 61140)
EMC test	Emission: as per EN 61000-6-3 (2007-01); Immunity: as per EN 61000-6-2 (2005-08)
Vibration test	As per EN 60068-2-6 (1995)
Shock test	As per EN 60068-2-27 (1993)
Weight	Approx. 400 g
Dimensions	96mm x 61mm x 38mm
MTBF (Mean Time Between Failures)	40,000 h
MTTR (Mean Time To Replace)	5 min
Push buttons	2

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MSC800 Modular system controller

Туре	MSC800
Function	Tracking controller using CAN-Bus for scanner connection, host communication, monitoring
Interfaces	3x Ethernet 10/100 MBit/s 1x Profibus-DP 12 MBaud 4x serial RS232/422/485 2x CAN/CANopen 1x USB
Parameter cloning function	Mini SD card
Data transmission rate	Ethernet: 10/100 MBps, TCP/IP, FTP, half/full duplex Profibus: 12 MBaud Serial: 0.3 115.2 kBaud CAN: 2x, 20 KBps to 1 MBps, CANopen protocol, CAN-SENSOR network
Protocols	- SICK standard protocol - Siemens, Crisplant, VanDerLande - OCR/VCS interfaces - Customer host interfaces - FTP protocols
Operating voltage	100 264 V AC/50 60 Hz
Power consumption - including scanners - including VMS520 Enclosure rating	Typically 10 W - 18 W with 24 V DC ±10 % - 50 W with 24 V DC ±10 % MSC800-1100: IP65
	MSC800-2100, 2300, 3400, 3600: IP54
Compliance with standards	EN 60439-1 (1999); A1 (2004)/EN 61140 (2002-03); A1 (2006-08)/ EN 61000-6-2 (2001-10), EN 61000-6-4 (2001-10)/IEC 68-2-6, IEC 68-2-27
Dimensions	MSC800-1100: 464 x 300 x 176 MSC800-2100, 2300, 3400, 3600: 525 x 464 x 176
MTBF (Mean Time Between Failures)	80,000 h
MTTR (Mean Time To Replace)	< 5 min (per component)

LMS500 2D laser scanner

Туре	LMS500/line scanner
Light source	Laser diode, infrared (λ =905 nm)
Laser protection class	Class 1 (as per IEC 60825-1 (2007-6)), eye-safe
Reading distance	0 8000 mm
Scanning/decoding frequency	25 100 Hz
Response time	≥ 10 ms
Ambient light immunity	70,000 lx
Indicators	5 LEDs (additional 7-segment display)
Data interface (host)	RS232, RS422; Ethernet, CAN-Bus, USB (AUX)
Data transmission rate	Serial: 9.6 500 kBaud Ethernet: 10/100 Mbit, TCP/IP, OPC CAN-Bus: output extension USB: 9.6 500 kBaud
Electrical connections	1 system plug with screw terminal block
Operation and configuration	Via SOPAS (Windows-based software)/command strings
Switching inputs/outputs	4 x IN/6 x OUT
Operating voltage/consumption	DC 24 V / 22 W
Housing	Die-cast aluminum
Enclosure rating/protection class	IP65 (as per EN 60529)/III (as per EN 60529)
EMC test	EN 61000-6-3 (2001-10), EN 61000-6-2:2005
Vibration test	EN 60068-2-6 (1995-4)
Shock test	EN 60086-2-27 (1993-03)/EN 60086-2-29 (1993-04)
Weight	3.7 kg
Temperature range	0° C +50° C
Dimensions	160 mm x 155 mm x 185 mm
MTBF (Mean Time Between Failures)	80,000 h
MTTR (Mean Time To Replace)	5 min

SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for factory, logistics, and process automation. With more than 6,000 employees and over 40 subsidiaries worldwide, we are always close 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, Belgium/Luxembourg, Brasil, Ceská Republika, Canada, China, Danmark, Deutschland, España, France, Great Britain, India, Israel, Italia, Japan, México, Nederland, Norge, Österreich, Polska, România, Russia, Schweiz, Singapore, Slovenija, South Africa, South Korea, Suomi, Sverige, Taiwan, Türkiye, United Arab Emirates, USA.

Please find detailed addresses and additional representatives and agencies in all major industrial nations at: www.sick.com

