OPERATING INSTRUCTIONS

sensingCam SEC100 / SEC110

Camera for industrial real-time video transmission and recording

SICK
Sensor Intelligence.

Described product

sensingCam SEC100 / SEC110

Manufacturer

SICK AG
Erwin-Sick-Str. 1
79183 Waldkirch
Germany

Legal information

Original document

This document is an original document of SICK AG.

Contents

1 About this document

1.1 Information on the operating instructions

Read these operating instructions carefully before starting any work in order to familiarize yourself with the product and its functions.

The operating instructions are an integral part of the product and should remain accessible to the personnel at all times. When handing this product over to a third party, include these operating instructions.

These operating instructions do not provide information on the handling and safe operation of the machine or system in which the product is integrated. Information on this can be found in the operating instructions for the machine or system.

1.2 Scope

This document applies to the following products:

- sensingCam SEC100 / SEC110

These operating instructions serve to incorporate the product into a customer system. Step-by-step instructions are given for all required actions. These instructions apply to all listed variants of the product. Available variants are listed on the online product page.

www.sick.com/SEC

Commissioning is described using one particular variant as an example.

Simplified product designation in the document: In the following, the cameras are referred to simply as “SEC” or “product”.

1.3 Target group

This document is intended for persons who commission, install, operate and maintain the product.

1.4 Further information

You can find the product page with further information via the SICK Product ID:
pid.sick.com/{P/N}/{S/N}
(see "Product identification via the SICK product ID", page 11).

The following information is available depending on the product:

- This document in all available language versions
- Data sheets
- Other publications
- CAD files and dimensional drawings
- Certificates (e.g., declaration of conformity)
- Software
- Accessories

1.5 Symbols and document conventions

Warnings and other notes

DANGER
Indicates a situation presenting imminent danger, which will lead to death or serious injuries if not prevented.

WARNING
Indicates a situation presenting possible danger, which may lead to death or serious injuries if not prevented.

CAUTION
Indicates a situation presenting possible danger, which may lead to moderate or minor injuries if not prevented.

NOTICE
Indicates a situation presenting possible danger, which may lead to property damage if not prevented.

NOTE
Highlights useful tips and recommendations as well as information for efficient and trouble-free operation.

Instructions to action

► The arrow denotes instructions to action.

1. The sequence of instructions is numbered.
2. Follow the order in which the numbered instructions are given.

✓ The tick denotes the results of an action.

2 Safety information

2.1 Basic safety notes

Please observe the safety notes and the warnings listed here and in other sections of this product documentation to reduce the possibility of risks to health and avoid dangerous situations.

CAUTION
Failure to observe the relevant work safety regulations may lead to physical injury or cause damage to the system.

2.2 Intended use

The SEC is a vision sensor for the industrial real-time transmission of video and capturing of images. The SEC110 can also be used to record event videos. The products are primarily designed for use in industrial and logistics areas, and they meet the requirements for industrial ruggedness, interfaces and data processing

The product must only be used within the limits of the prescribed and specified technical specifications and operating conditions at all times.

Incorrect use, improper modification or manipulation of the product will invalidate any warranty from SICK; in addition, any responsibility and liability of SICK for damage and secondary damage caused by this is excluded.

NOTE
Using the device in residential areas may cause radio interference. It is the responsibility of the operating entity to take appropriate measures (e.g. shielding).

2.3 Improper use

Impermissible use

- As a safety component as defined in the relevant applicable safety standards for machines, e.g. Machinery Directive.

Impermissible ambient conditions

- Precipitation
- Inadequate protection against moisture and contamination
- Explosion-hazardous area
- Corrosive environment

2.4 Cybersecurity

The SEC should only be operated in a network that is protected against unauthorized access.

Overview

To protect against cybersecurity threats, the operator must have a comprehensive cybersecurity concept, which must be continuously monitored and maintained. A suitable concept consists of organizational, technical, procedural, electronic, and physical levels of defense and considers suitable measures for different types of risks. The measures implemented in this product can only support protection against cybersecurity threats if the product is used as part of such a concept.

You will find further information at www.sick.com/psirt, e.g.:

- General information on cybersecurity
- Contact option for reporting vulnerabilities
- Information on known vulnerabilities (security advisories)

Table 1: Network services and ports

Service/protocol	Purpose	Port
Device time	Synchronization with the time server	Port 123
FTP client	Image output to customer server	Port 22, configurable
DHCP client	Automatic network configuration of the interface	Port 67
SSH server	Development access to the operating system	Port 22
RTSP	Livestream	Port 554, configurable
MJPEG	Websocket for Livestream	Port 8888
avahi	Publishing of services	Port 5353
Web server/HTTP	Parameterization via web user interface	Port 80

The ports or services can be partially deactivated or changed in the user interface.

2.5 Qualification of personnel

Any work on the product may only be carried out by personnel qualified and authorized to do so.

Qualified personnel are able to perform tasks assigned to them and can independently recognize and avoid any potential hazards. This requires, for example:

- technical training
- experience
- knowledge of the applicable regulations and standards

3 Transport and storage

3.1 Transport

NOTICE
Damage due to improper transport!

- The product must be packaged with protection against shock and damp.
- Recommendation: Use the original packaging.
- Note the symbols on the packaging.
- Do not remove packaging until immediately before you start mounting.

3.2 Unpacking

- To protect the device against condensation, allow it to equilibrate with the ambient temperature before unpacking if necessary.
- Handle the device with care and protect it from mechanical damage.

3.3 Transport inspection

Immediately upon receipt in incoming goods, check the delivery for completeness and for any damage that may have occurred in transit. In the case of transit damage that is visible externally, proceed as follows:

- Do not accept the delivery or only do so conditionally.
- Note the extent of damage on the transport documents or on the transport company's delivery note.
- File a complaint.

NOTE
Complaints regarding defects should be filed as soon as these are detected. Damage claims are only valid before the applicable complaint deadlines.

3.4 Storage

- Electrical connections are provided with a protective cap.
- Do not store outdoors.
- Store in a place protected from moisture and dust.
- Recommendation: Use the original packaging.
- To allow any residual dampness to evaporate, do not package in airtight containers.
- Do not expose to any aggressive substances.
- Protect from sunlight.
- Avoid mechanical shocks.
- Storage temperature: see "Technical data", page 27.
- Relative humidity see "Technical data", page 27.
- For storage periods of longer than 3 months, check the general condition of all components and packaging on a regular basis.

4 Initial commissioning

NOTE

Below you will find brief instructions for the initial commissioning of the product. Detailed explanations of the points mentioned can be found in the other sections of the operating instructions.

1. Mounting, see "Mounting", page 13
2. Electrical installation, see "Electrical installation", page 17
3. Commissioning, see "Commissioning", page 20

5 Product description

5.1 Scope of delivery

- sensingCam SEC100 / SEC110 in the version ordered
- Safety notes

5.2 Product identification

5.2.1 Product identification via the SICK product ID

SICK product ID

The SICK product ID uniquely identifies the product. It also serves as the address of the web page with information on the product.

The SICK product ID comprises the host name pid.sick.com, the part number (P/N), and the serial number (S/N), each separated by a forward slash.

For many products, the SICK product ID is displayed as text and QR code on the type label and/or on the packaging.

Figure 1: SICK product ID

5.3 Overview of the product

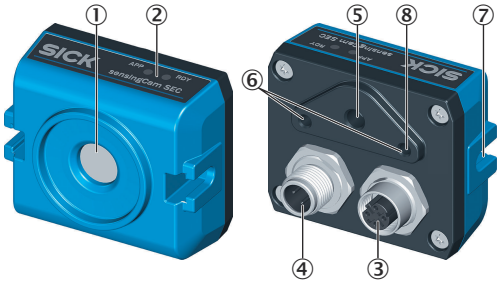


Figure 2: Overview of the product

① Camera with protective glass
② Display elements: Power LED + application LED
③ Ethernet port, M12, 4-pin
④ System connection: voltage supply, trigger I/Os, M12, 4-pin
⑤ $^1/_4$" thread for tripod
⑥ 2x M4 thread for camera mounting
⑦ Slot for camera mounting using sliding nuts
⑧ Earthing thread (M4) for making a functional earth connection

5.3.1 Status indicators

Figure 3: Position and meaning of the LED displays

	LED	Colors	Meaning
①	RDY	Green	Indicator for voltage supply and (optional) Ethernet connection
②	APP	Yellow	Event video or image capture triggered

LED	LED behavior	Meaning
RDY	Flashing green	SEC is connected to voltage supply but not connected to Ethernet
	Green	SEC is connected to voltage supply, connected to Ethernet, and ready for operation
APP	1x yellow flashing	Image capture triggered
	2x yellow flashing	Event video triggered (SEC 110)
	Yellow flashing (10 Hz)	Error message

6 Mounting

6.1 Mounting requirements

- In order to maintain the functional earth, the earthing thread must be used to attach the SEC to grounded metal with a metal screw.
- Take appropriate measures for vibration damping if vibration and shock specifications exceed the values and test conditions specified in the data sheet, see the technical details.

Figure 4: Mounting requirements

① Mounting option 1: Attachment with two M4 screws

② Mounting option 2: Attachment with two sliding nuts

③ Alternative attachment to photo tripod with a $^1/_4$“- 20 UNC screw, maximum screw-in depth: 4 mm from the housing edge, maximum tightening torque: 5 Nm

④ Earthing thread (M4) for making a functional earth connection

6.2 Mounting

6.2.1 Option 1: Attachment with two M4 screws

There are two M4 threads on the back of the SEC. Two M4 screws can be used to mount the camera on a bracket, for instance. Screw the screws no more than 4 mm into the threaded mounting hole. The screw lengths depend on the mounting surface: For instance, screws with a length of 8 mm are enclosed with the mounting kit 2145070.

6.2.2 Option 2: Attachment with two sliding nuts

There is a slot on each side of the SEC. They are used to mount the camera using two M4 (no. 5324897) or M5 (no. 5324896) sliding nuts. The screw must be screwed/turned into the sliding nuts no further than 4 mm and tightened to a maximum of 1.2 Nm, as the product may otherwise be damaged.
An alternative is to attach a hexagon screw in the slot and fasten it from outside with a nut.

6.2.3 Alternative: Attachment to photo tripod with a ¼”- 20 UNC screw

NOTE
Options 1 or 2 are recommended for mounting, especially if the product is exposed to vibration.

There is a ¼" - 20 UNC thread on the back of the SEC. It can be used to attach the camera to a photo tripod with a ¼" - 20 UNC screw. Screw the screw no more than 4 mm into the threaded mounting hole.

6.2.4 Mounting kit from SICK (accessories)

SICK offers mounting kits as accessories for mounting options 1 and 2.

The scope of delivery of the mounting kits includes the required fastening accessories.

Mounting kit for M4 thread (mounting option 1)

Mounting kit (2145070) including screws and washers:

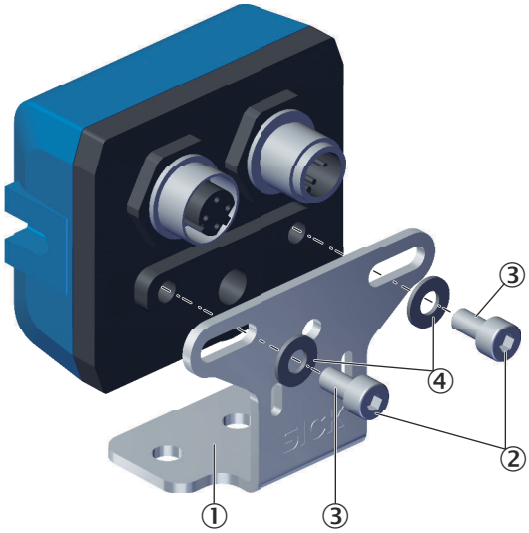


Figure 5: Mounting kit for M4 thread (mounting option 1)

① Mounting bracket
② Maximum tightening torque 1.2 Nm
③ M4 screw (maximum screw depth 4 mm from the housing edge)
④ Washers for M4 screws

Mounting kit for slots (mounting option 2)

Mounting kit (2145053) including mounting bracket, sliding nuts, screws and washers:

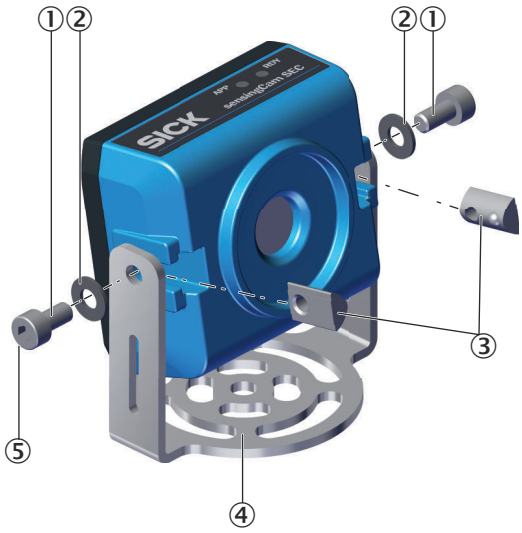


Figure 6: Mounting kit for slots (mounting option 2)

① M4 screw (maximum screw depth 4 mm from the housing edge)
② Washer for M4 screws
③ Sliding nuts
④ Mounting bracket
⑤ Maximum tightening torque 1.2 Nm

6.3 Alignment

Align the SEC100 taking into consideration the field of view and the application circumstances.

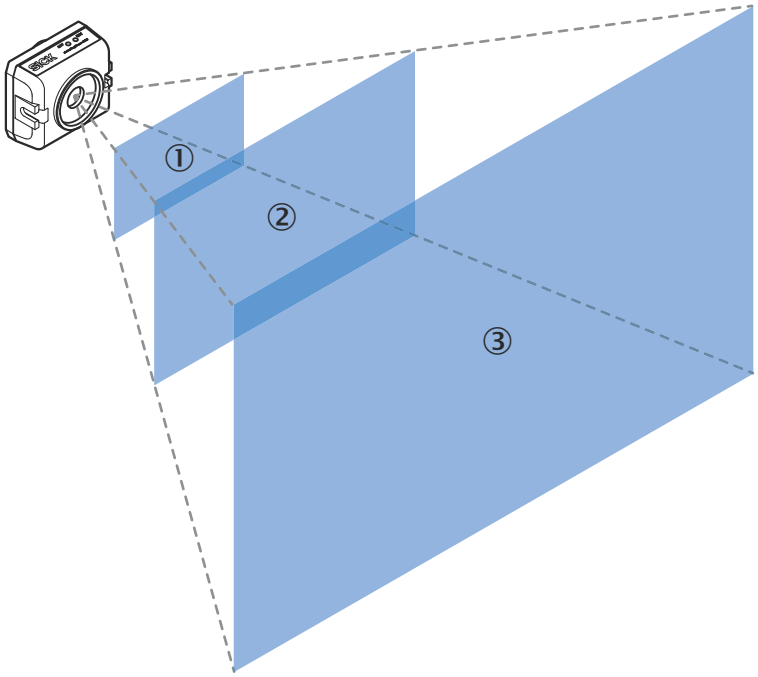


Figure 7: Field of view at different distances from the SEC

① At a distance of 0.3 m, field of view of 0.5 m x 0.3 m

② At a distance of 1 m, field of view of 1.7 m x 1 m

③ At a distance of 4 m, field of view of 7 m x 4 m

Horizontal field of view 82.0°

Vertical field of view 52.0°

Table 2: Alignment

Distance	Horizontal field of view	Vertical field of view
0.30 m	0.50 m	0.30 m
0.50 m	0.90 m	0.50 m
1.00 m	1.70 m	1.00 m
2.00 m	3.50 m	2.00 m
4.00 m	7.00 m	4.00 m
10.00 m	17.50 m	10.00 m

7 Electrical installation

7.1 Notes on electrical installation

WARNING
Risk of injury and damage due to electric current!

As a result of possible equipotential bonding currents between the product and other earthing products in the system, faulty earthing of the product can give rise to the following dangers and faults:

- Metal housings are vulnerable to dangerous electrical voltage.
- Products will behave incorrectly or be destroyed.
- Cable shielding will be damaged by overheating and cause cable fires.

Remedial measures

- Only skilled electricians should be permitted to carry out work on the electrical system.
- If the cable insulation is damaged, disconnect the voltage supply immediately and have the damage repaired.
- Ensure that the ground potential is the same at all grounding points.
- Where local conditions do not meet the requirements for a safe earthing method, take appropriate measures. For example, ensure low-impedance and current-carrying equipotential bonding.

Prerequisites: General

- Connect the connecting cables in a de-energized state. Do not switch on the supply voltage until installation is complete and all connecting cables are connected to the device and controller.
- Conductor cross sections in the supply cable from the power system of the operating entity must be implemented in accordance with the applicable standards.
- In the case of open end cables, make sure that bare wire ends do not touch. Wires must be properly insulated from each other.

Prerequisites: Data cables

- Use shielded data cables with twisted-pair wires.
- Implement proper and complete shielding concept.
- To avoid interference, always use EMC-compliant cables and layouts. This applies, for example, to cables for switched-mode power supplies, motors, clocked drives, and contactors.
- Do not lay cables over long distances in parallel with voltage supply cables and motor cables in cable ducts.

Prerequisites: Voltage supply

- The sensor is a device of protection class III. Only operate the device with safety/protective extra-low voltage (SELV/PELV).
- Ensure the circuits connected to the device meet the requirements of ES1 and max. PS2 in accordance with IEC/UL/EN 62368-1. The Ethernet connection must meet the requirements of ES1 and PS1.
- Required output power of the voltage source: At least 10 W
- The supply cables must be protected with a separate 1 A fuse. Install the fuse in the supply circuit at the start of the supply cable.
- To ensure protection against short-circuits/overload in the customer's supply cables, choose and implement conductor cross sections in accordance with the applicable standards.

7.2 Electrical installation

The product is connected to the peripheral products (any local trigger sensor(s), system controller) via shielded cables. The cable shield – for the data cable, for example – rests against the metal housing of the product. The product can be grounded, for example, through the cable shield or through the earthing thread (M4) (see "Overview of the product", page 11) in the housing. If the peripheral products have metal housings and the cable shields are also in contact with their housings, it is assumed that all products involved in the installation have the same ground potential.

This is achieved by complying with the following conditions:

- Electrical connection of the product grounding connector to a conductive metal surface
- Correct earthing of the products and metal surfaces in the system
- If necessary: Low-impedance and current-carrying equipotential bonding between areas with different ground potentials

7.3 Pinouts

Table 3: System connection for voltage supply and inputs and outputs (IO)

PIN	Signal	Description
1	L+	Supply voltage DC 12 ... 24 V
2	IN	Digital input for external trigger
3	M	Ground
4	ND	Not assigned

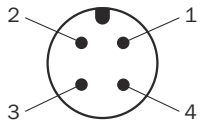
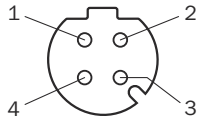


Table 4: Ethernet interface connection

PIN	Signal	Description
1	TD +	Sender +
2	TD -	Sender -
3	RD +	Receiver +
4	RD -	Receiver -



7.4 Connecting supply cable

Connect device to voltage-free connecting cable.

The power supply unit used must have the following properties:

- Supply voltage DC 12...24 V (SELV/PELV acc. to currently applicable standards)
- Power consumption (without load on the outputs) = max. 10 W

To ensure protection against short-circuits/overload in the customer's supply cables, the wire cross-sections used must be appropriately selected and protected.

7.5 Wiring the interfaces

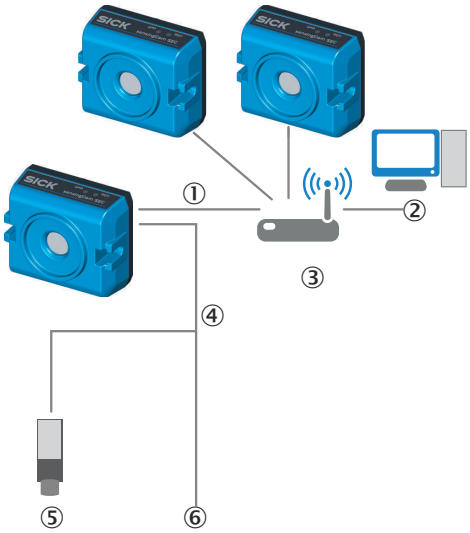
Wiring the digital input

The voltage level at the input controls the corresponding function of the device.

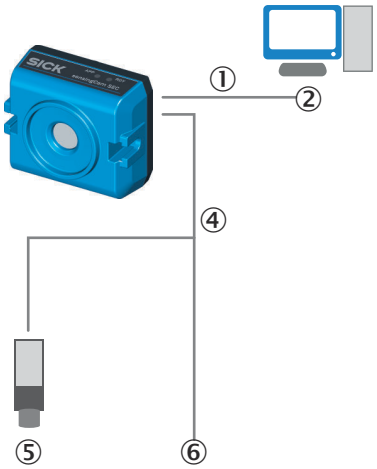
Electrical values:
Level active: 10 V ≤ UIN ≤ UV
Level inactive: UIN ≤ 2 V

8 Commissioning

Option 1



Option 2



① Ethernet
② Computer
③ Router
④ Voltage supply and I/Os
⑤ External trigger (e.g. photoelectric sensor)
⑥ Voltage supply

NOTE
On delivery, DHCP is activated. If no DHCP server is found, the static fallback IP address 192.168.136.100 is used.

Option 1: Establish network connection (with router)

Check the following requirements:

- Voltage supply is connected.
- A DHCP server is active in the network.
- Product is connected to the network via Ethernet.

In this case, the SEC receives an IP address from the DHCP server. Ask your network administrator for these.
You can then access the SEC user interface via **http://<IP address of the camera>**.

Option 2: Establish direct connection between SEC and computer

Check the following requirements:

- Voltage supply is connected.
- Product is connected to the computer via Ethernet.
- Computer and product have different IP addresses.

The SEC is preset to the IP address 192.168.136.100 and the subnet mask 255.255.255.0.
To allow a direct communication between the PC and SEC, the adapter settings of the PC may need to be adjusted so that it is assigned a static IP address in the same subnet. (e.g. 192.168.136.101).

Accessing the SEC via PC

- Open a browser (recommended: Firefox or Chrome) and enter the device IP address (192.168.136.100).
- Log in to Service level using the password “servicelevel” and set a new password.

NOTE

It may be necessary to change the IP address and subnet mask of the PC, see "Option 2: Establish direct connection between SEC and computer", page 20.

9 Operation

9.1 Operation via web interface

The camera has a web-based user interface in which recordings can be viewed and all settings can be edited.

9.1.1 Overview of the user interface and configuration options

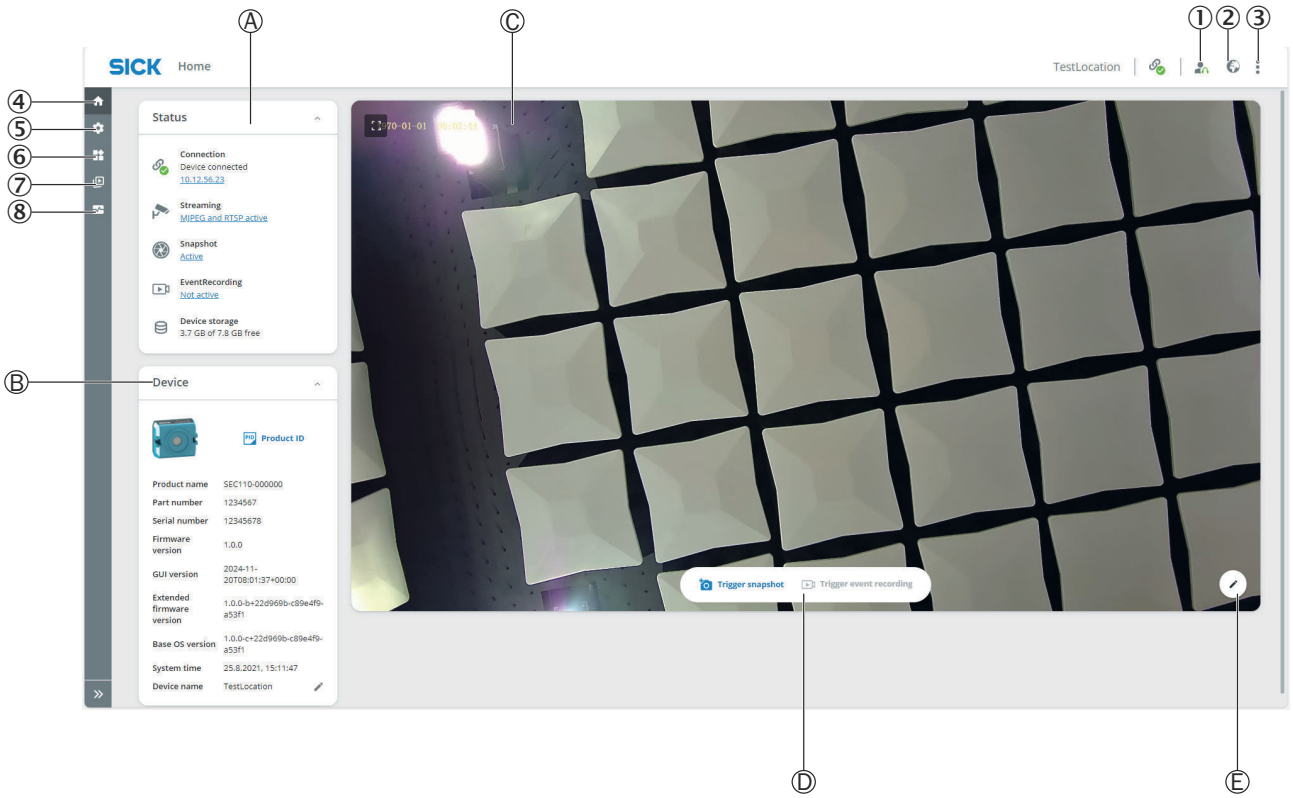


Figure 8: Overview of the user interface and configuration options

① Log-in

② Configurable user interface language

③ Show license information, carry out firmware update, reset to factory settings

④ Home
A - Status of the network connection and the application streaming, image capture and event video recording
B - Device information on the device and system time as well as possibility to set the device name
C - Livestream: Only available if MJPEG Stream is activated
D - Image captures and event video recordings can be triggered here (for SEC110 only)
E - Camera image settings: Rotate camera image and crop image area, sharpness correction,, automatic image adjustment or manual image adjustment via integration time and gain, watermark (e.g. time stamp)

⑤ Device settings: This is where you can configure settings for the date and system time (e.g. connection to NTP time server), FTP Server (upload of captures via ftp or sftp) & Ethernet.

⑥ Applications: This is where you can activate the “Streaming”, “Image captures” and “Event videos” applications (SEC110 only) and configure the associated settings: Streaming:
- Resolution and frame rate of the primary stream and secondary stream
- Activate/deactivate RTSP for the primary and secondary stream
- RTSP compression (h.264 or h.265) and bit rate for the primary and secondary stream
- RTSP path and port for the primary and secondary stream
- Activate MJPEG stream and set the JPEG quality
- Real-time transmission settings: Configure the primary and secondary stream: Frame rate
- Enable RTSP, compression, bit rate, RTS path and port, MJPEG stream, JPEG quality
- Photo capture settings: File format, trigger: signal inversion and delay and watermark, event recording settings (SEC 110): time before and after event, trigger: signal inversion and delay

Image captures
- Activate/deactivate
- File format of the image captures (jpeg or bmp)
- Change file name of the captures (available building blocks: device name, free text, time stamp and serial number).
Additional information: The file name of the captures can also be changed via the REST API.
- Activate/deactivate the digital input as a trigger for image capturing
- Invert the input signal

⑦ Archive: View, download and delete the acquired images and videos

⑧ Diagnostics: Error messages, system information, cybersecurity (overview of open ports and deactivation option), download a diagnostics file

Further information on the configuration options can be found in the help area of the user interface.

9.1.2 Access protection

Three user levels are available:

User	Password	Authorization
Service	**servicelevel**	no restriction
Maintenance	**main**	Cannot change the following settings: - FTP - Ethernet - Time server - Network functions incl. RTSP port
without login	-	Cannot view images in memory. Cannot configure any settings. Can watch livestream (MJPEG) if this is activated.

9.2 REST API interface

The product can be integrated directly into the system using the REST API programming interface. It can also serve as the basis for designing a customized user interface. For an overview of the information that can be read out and the commands that can be run, see www.sick.com.

(In a browser (recommended: Firefox or Chrome), enter the device IP address (192.168.136.100)).

10 Troubleshooting

The Troubleshooting table indicates which measures are to be taken if the product stops working.

Table 5: Troubleshooting

LED/fault pattern	Cause	Measures
LEDs do not light up	No supply voltage	Checking voltage supply
Green RDY LED flashes	No network connection established	Check Ethernet cable
Yellow PWR LED flashes (10 Hz)	Error message	Check cabling Disconnect voltage supply for 10 s
User interface is not accessible	Network configuration faulty	Check device availability on the DHCP server (by network administrator if necessary) Establish direct connection with PC (using fallback IP address 192.168.136.100)

11 Decommissioning

11.1 Disposal

If a device can no longer be used, dispose of it in an environmentally friendly manner in accordance with the applicable country-specific waste disposal regulations. Do not dispose of the product along with household waste.

NOTICE

Danger to the environment due to improper disposal of the device.

Disposing of devices improperly may cause damage to the environment.

Therefore, observe the following information:

- Always observe the national regulations on environmental protection.
- Separate the recyclable materials by type and place them in recycling containers.

12 Technical data

12.1 Technical data

Features

Table 6: Features

Sensor	CMOS Color powerful in low light
Shutter technology	Rolling shutter
Sensor resolution	2,880 px x 1,616 px (5 Mpixel)
Working distance	300 mm ... 10 m
Detection angle	82° x 52°
User memory	6 GB internal memory or FTP upload
Illumination	Without
Lens	Integrated

Livestream

Table 7: Livestream

Video resolution	Full Resolution (2,880 x 1,616 pixels) @ 25 fps Full HD (1,920 x 1,080 pixels) @ 30 fps 720p (1,280 x 720 pixels) @ 30 fps
Video protocol	RTSP, MJPG
Real-time video transmission	Two individually configurable RTSP streams, one MJPEG stream
Video compression	H.264, h.265, Motion JPEG, configurable compression level

Image capture

Table 8: Image capture

Image format	JPEG, BMP
Trigger	Digital input or software trigger via REST API

Event recording (SEC 110)

Table 9: Event recording (SEC 110)

Video format	MP4
Event recording buffer	20 s (at Full HD (1080p) and 30 fps)
Event recording trigger	Digital input or software trigger via REST API

Mechanics/electronics

Table 10: Mechanics/electronics

Dimensions (W x H x D)	57.5 mm x 49 mm x 33.6 mm (without connection)
Housing material	Aluminum, polycarbonate
Front screen material	Glass
Weight	120 g
Mounting	Two threads for M4 screws Two grooves for sliding nuts One ¼" - 20 UNC thread for photo tripod
Supply voltage	12 ... 24 V DC[1] (SELV/PELV acc. to currently applicable standards)

Power consumption	Typical: 2 W Maximum: 10 W
Input level	active: 10 V ≤ UIN ≤ UV inactive: UIN ≤ 2 V
Protection class	III
Enclosure rating	IP65

1) Ensure the circuits connected to the device meet the requirements of ES1 and max. PS2 in accordance with IEC/UL/EN 62368-1. The Ethernet connection must meet the requirements of ES1 and PS1.
Protect the supply circuit with a 1 A fuse.
Nominal 12...24 V DC tolerance +-10%.

Ambient data

Table 11: Ambient data

Ambient temperature, operation	0 °C ... +50 °C, (optimal image quality at +10°... +40 °C)
Permissible relative humidity	≤90%
Storage temperature range	-20...60 °C
Shock resistance	150 m/s^2 EN 60068-2-27
Vibration resistance	EN 60068-2-6, EN 60068-2-64

Interface

Table 12: Interface

Ethernet	✔, TCP/IP
Note	DHCP/static
Data transmission rate	100 Mbit/s, 100Base-TX
Configuration software	Web server integrated

Connection type

Table 13: Connection type

Voltage supply	Plug, M12, 4-pin, A-coded
Ethernet	M12 socket, 4-pin, D-coded

12.2 Dimensional drawing

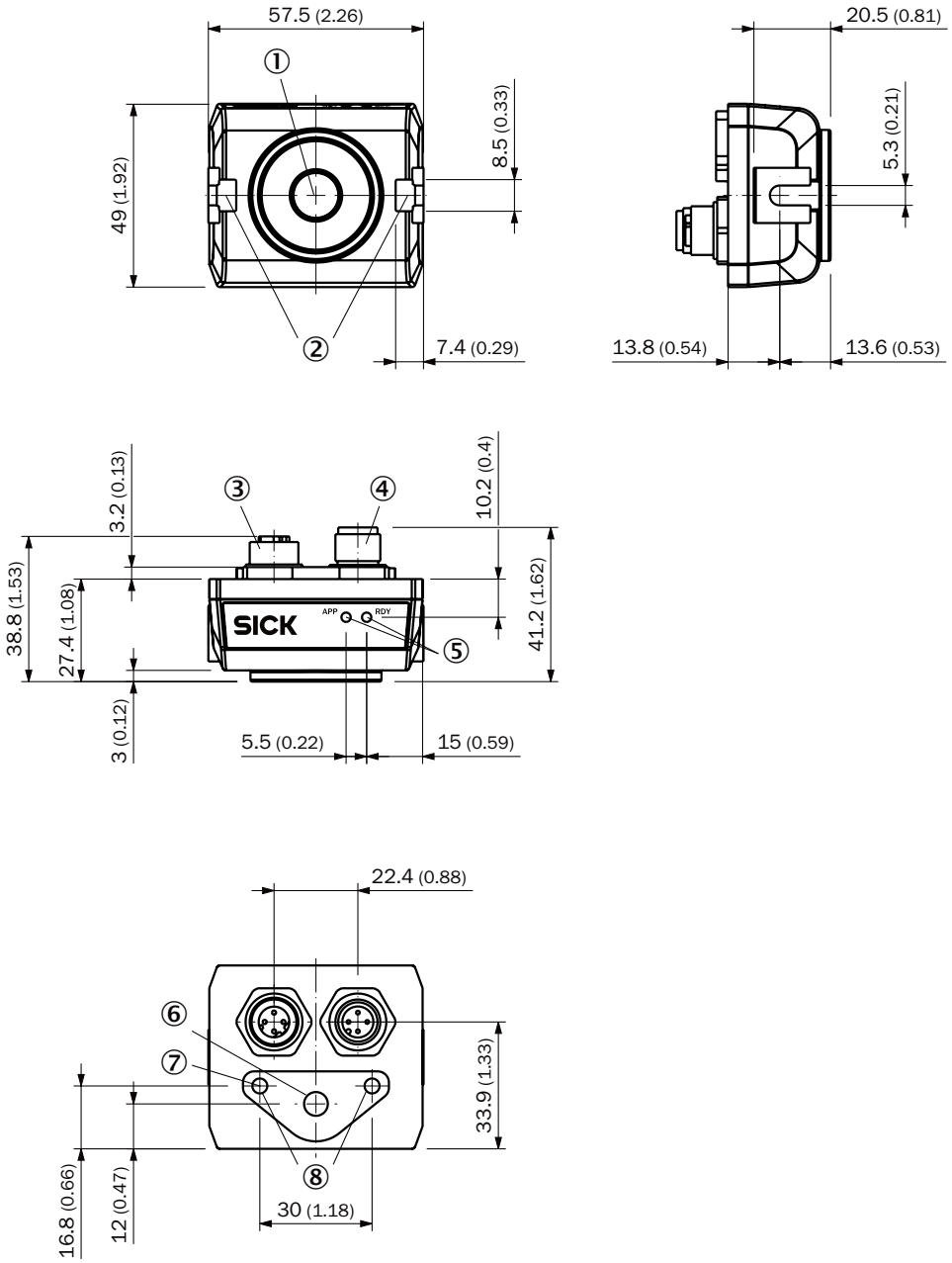


Figure 9: Dimensional drawing

① Camera with protective glass
② Slot for camera mounting using sliding nuts
③ Ethernet port, M12, 4-pin
④ System connection: voltage supply, trigger I/Os, M12, 4-pin
⑤ Display elements: Power LED + application LED
⑥ 1/4" thread for tripod
⑦ Earthing thread (M4) for making a functional earth connection
⑧ 2x M4 thread for camera mounting

13 Annex

13.1 Conformities and certificates

You can obtain declarations of conformity, certificates, and the current operating instructions for the product at www.sick.com. To do so, enter the product part number in the search field (part number: see the entry in the “P/N” or “Ident. no.” field on the type label).

13.2 Licenses

SICK uses open-source software. This software is licensed by the rights holders using the following licenses, among others: The free licenses GNU General Public License (GPL Version2, GPL Version3) and GNU Lesser General Public License (LGPL), the MIT license, zLib license, ISC, FTL, Open SSL license and the licenses derived from the BSD license.

This program is provided for general use, but WITHOUT ANY WARRANTY OF ANY KIND. This warranty disclaimer also extends to the implicit assurance of marketability or suitability of the program for a particular purpose.

More details can be found in the GNU General Public License. For complete license texts, see www.sick.com/licensetexts. Printed copies of the license texts are also available on request.

9408724.1RHN/2025-03-12/en

Australia
Phone +61 (3) 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Austria
Phone +43 (0) 2236 62288-0
E-Mail office@sick.at

Belgium/Luxembourg
Phone +32 (0) 2 466 55 66
E-Mail info@sick.be

Brazil
Phone +55 11 3215-4900
E-Mail comercial@sick.com.br

Canada
Phone +1 905.771.1444
E-Mail cs.canada@sick.com

Czech Republic
Phone +420 234 719 500
E-Mail sick@sick.cz

Chile
Phone +56 (2) 2274 7430
E-Mail chile@sick.com

China
Phone +86 20 2882 3600
E-Mail info.china@sick.net.cn

Denmark
Phone +45 45 82 64 00
E-Mail sick@sick.dk

Finland
Phone +358-9-25 15 800
E-Mail sick@sick.fi

France
Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Germany
Phone +49 (0) 2 11 53 010
E-Mail info@sick.de

Greece
Phone +30 210 6825100
E-Mail office@sick.com.gr

Hong Kong
Phone +852 2153 6300
E-Mail ghk@sick.com.hk

Hungary
Phone +36 1 371 2680
E-Mail ertekesites@sick.hu

India
Phone +91-22-6119 8900
E-Mail info@sick-india.com

Israel
Phone +972 97110 11
E-Mail info@sick-sensors.com

Italy
Phone +39 02 27 43 41
E-Mail info@sick.it

Japan
Phone +81 3 5309 2112
E-Mail support@sick.jp

Malaysia
Phone +603-8080 7425
E-Mail enquiry.my@sick.com

Mexico
Phone +52 (472) 748 9451
E-Mail mexico@sick.com

Netherlands
Phone +31 (0) 30 204 40 00
E-Mail info@sick.nl

New Zealand
Phone +64 9 415 0459
0800 222 278 – tollfree
E-Mail sales@sick.co.nz

Norway
Phone +47 67 81 50 00
E-Mail sick@sick.no

Poland
Phone +48 22 539 41 00
E-Mail info@sick.pl

Romania
Phone +40 356-17 11 20
E-Mail office@sick.ro

Singapore
Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovakia
Phone +421 482 901 201
E-Mail mail@sick-sk.sk

Slovenia
Phone +386 591 78849
E-Mail office@sick.si

South Africa
Phone +27 10 060 0550
E-Mail info@sickautomation.co.za

South Korea
Phone +82 2 786 6321/4
E-Mail infokorea@sick.com

Spain
Phone +34 93 480 31 00
E-Mail info@sick.es

Sweden
Phone +46 10 110 10 00
E-Mail info@sick.se

Switzerland
Phone +41 41 619 29 39
E-Mail contact@sick.ch

Taiwan
Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Thailand
Phone +66 2 645 0009
E-Mail marcom.th@sick.com

Turkey
Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates
Phone +971 (0) 4 88 65 878
E-Mail contact@sick.ae

United Kingdom
Phone +44 (0)17278 31121
E-Mail info@sick.co.uk

USA
Phone +1 800.325.7425
E-Mail info@sick.com

Vietnam
Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Detailed addresses and further locations at **www.sick.com**

SICK AG | Waldkirch | Germany | www.sick.com

SICK
Sensor Intelligence.