Data sheet

SEC100-5C9D1SFZZZZ

sensingCam SEC100

2D MACHINE VISION

SICK
Sensor Intelligence.

Ordering information

Type	part no.
SEC100-5C9D1SFZZZZ	1143217

Other models and accessories ➜ www.sick.com/sensingCam_SEC100

Detailed technical data

Features

Product category	Streaming, flexible
Technology	2D snapshot, streaming
Sensor	CMOS ColorPowerful in low light
Shutter technology	Rolling-Shutter
Sensor resolution	2,880 px x 1,616 px (5 Mpixel)
Working distance	300 mm ... 10,000 mm
Field of view	82° x 52°
Memory	6 GB, internal memory or FTP upload
Lighting	Without
Lens	Integrated
Livestream	
Scan/frame rate	5 fps ... 30 fps
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	
Image format	JPEG, BMP
Trigger	Digital input or software trigger via REST API

Interfaces

REST API	✓
Ethernet	✓ , TCP/IP
Remark	DHCP/static (default: 192.168.136.100)
Data transmission rate	100 Mbit/s, 100Base-TX

Configuration software	Web server integrated

Electronics

Supply voltage	12 V DC ... 24 V DC [1]
Power consumption	Typ. 2 WMax. 10 W
Digital input, level	Active: 10 V ≤ U_{IN} ≤ U_V Inactive: U_{IN} ≤ 2 V
Protection class	III
Enclosure rating	IP65
Pinouts $_{\text{Voltage supply}}$	
– 1	+ (L+)
– 2	$MF_{In/Out}$
– 3	- (M)
– 4	Not connected
Pinouts $_{\text{ETHERNET}}$	
– 1	Tx +
– 2	Tx -
– 3	Rx +
– 4	Rx -

[1] SELV/PELV in acc. with currently applicable standards. 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 V DC ... 24 V DC tolerance ± 10%.

Mechanics

Dimensions (W x H x D)	57.5 mm x 49 mm x 33.6 mm (without connection)
Housing material	Aluminum, polycarbonate
Window material	Glass
Weight	120 g
Mounting	Two threads for M4 screws Two grooves for sliding nuts One ¼'' - 20 UNC thread for photo tripod
Connection type	
Power supply	Plug, M12, 4-pin, A-coded
Ethernet connection	M12 female connector, 4-pin, D-coded

Ambient data

Ambient temperature, operation	0 °C ... +50 °C, Optimal image quality at 10 °C ... +40 °C
Ambient temperature, storage	–20 °C ... +60 °C
Permissible relative humidity	≤ 90 %
Shock resistance	150 m/s² EN 60068-2-27
Vibration resistance	EN 60068-2-6, EN 60068-2-64

Certificates

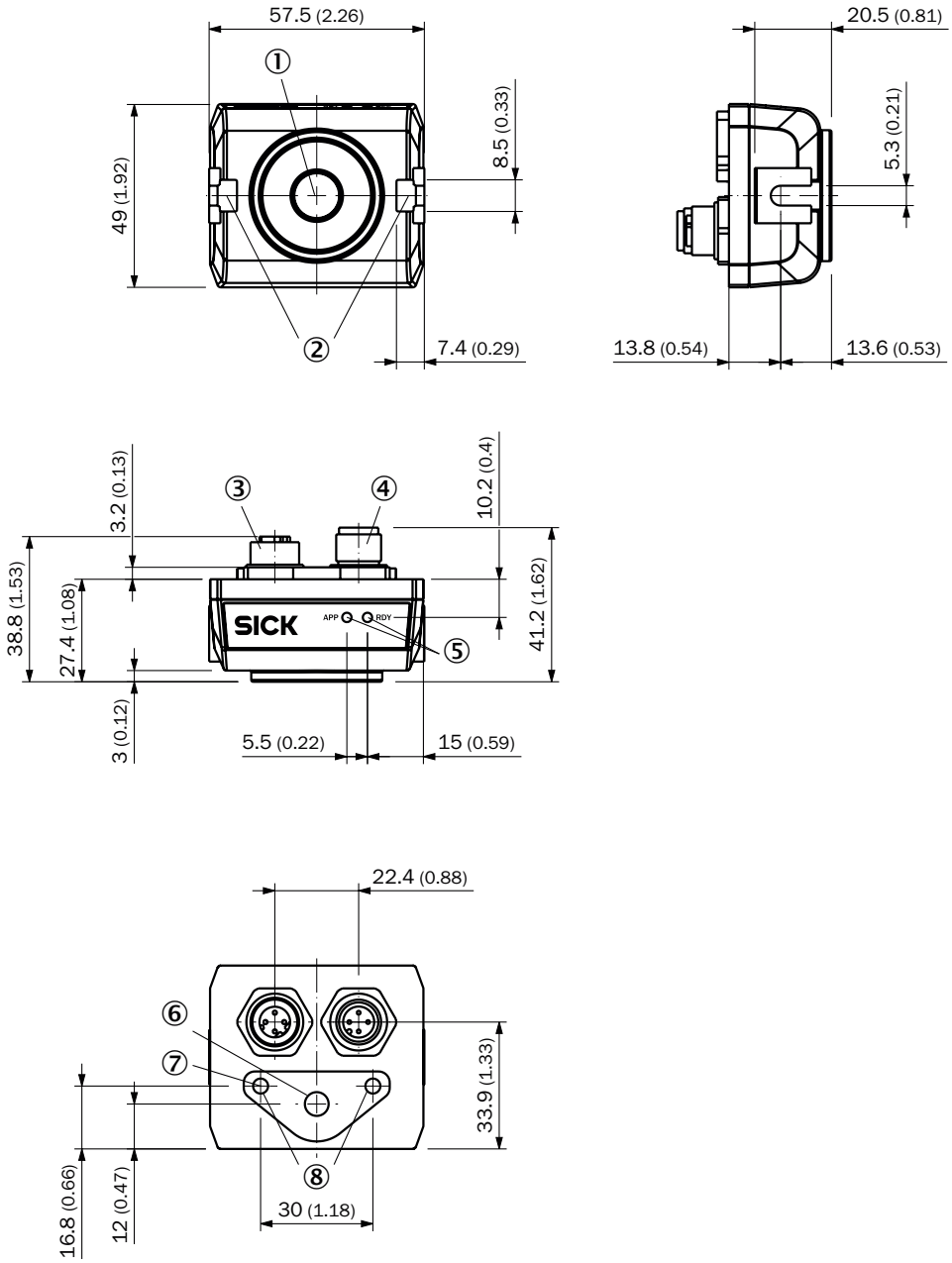
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓

Moroccan declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓

Classifications

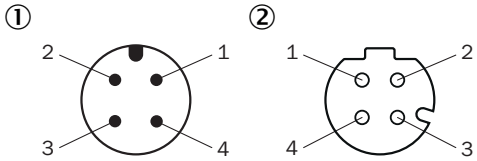
ECLASS 5.0	27310205
ECLASS 5.1.4	27310205
ECLASS 6.0	27310205
ECLASS 6.2	27310205
ECLASS 7.0	27310205
ECLASS 8.0	27310205
ECLASS 8.1	27310205
ECLASS 9.0	27310205
ECLASS 10.0	27310205
ECLASS 11.0	27310205
ECLASS 12.0	27310205
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	43211731

Dimensional drawing, sensor



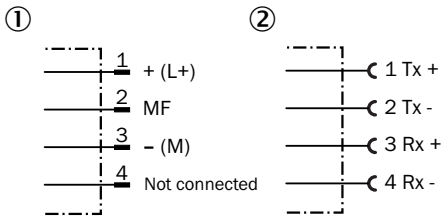
Dimensions in mm (inch)
① Camera with protective glass
② two grooves for sliding nuts
③ Ethernet port: M12 socket, 4-pin, D-coded
④ power supply: plug, M12, 4-pin, A-coded
⑤ Display elements: Power LED + application LED
⑥ one ¼“ - 20 UNC thread for photo tripod
⑦ Earthing thread (M4) for making a functional earth connection
⑧ two threads for M4 screws

pinouts: power supply/Ethernet port



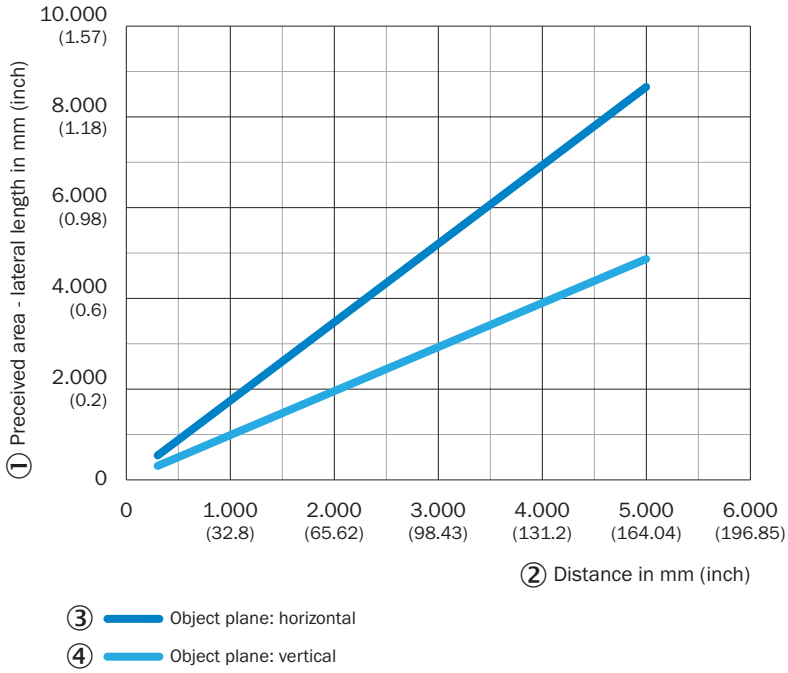
① power supply: plug, M12, 4-pin, A-coded
② Ethernet port: M12 socket, 4-pin, D-coded

connection diagram: power supply/Ethernet port



① power supply: plug, 4-pin
② Ethernet port: socket, 4-pin

Field of view - horizontal/vertical



① Perceived area - lateral length in mm (inch)
② Distance in mm (inch)
③ Object level: horizontal
④ Object level: vertical

Recommended accessories

Other models and accessories ➜ www.sick.com/sensingCam_SEC100

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Sliding nut, M4, short	Sliding nut	5324897
	• **Description:** Sliding nut, M5, short • **Usable for:** Lector62x, EventCam	Sliding nut	5324896
	• **Description:** Mounting set for sensingCam SEC100 consisting of: 1x mounting bracket (U-shaped), 2x M4 screws incl. washers, 2x sliding blocks • **Material:** Steel • **Details:** Steel, zinc coated • **Suitable for:** sensingCam SEC100	BEF-SEC100	2145053
	• **Description:** Mounting set for sensingCam SEC100 consisting of: 1x mounting bracket (L-shaped), 2x M4 screws incl. washers • **Material:** Steel • **Details:** Steel, zinc coated • **Suitable for:** sensingCam SEC100	BEF-SEC100/300	2145070
	• **Description:** Mounting set for sensingCam SEC100 consisting of: 1x mounting bracket (L-shaped), 2x M4 screws incl. washers • **Material:** Steel, metal • **Details:** Zinc plated steel (angle), Zinc die cast (clamping bracket) • **Items supplied:** Universal clamp (5322626), mounting hardware • **Suitable for:** sensingCam SEC100	BEF-KHS-SEC100/300	2147922
connectors and cables			
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 2 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A15-020UB5XLEAX	2095617
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 4-pin, straight • **Signal type:** Ethernet, PROFINET • **Cable:** 5 m, 4-wire, PUR, halogen-free • **Description:** Ethernet, shieldedPROFINET • **Application:** Drag chain operation, Zones with oils and lubricants	YM2D24-050P-N1MRJA4	2106184
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	DOS-1204-G	6007302
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, A-coded • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YF2A14-050VB3M2A14	2096600
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YF2A14-050VB3XLEAX	2096235

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.”

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