



SEC310-A2G99DZ1ZZZ

sensingCam SEC310

2D MACHINE VISION

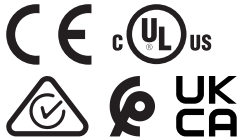
SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|--------------------|----------|
| SEC310-A2G99DZ1ZZZ | 1152623 |

Other models and accessories → www.sick.com/sensingCam_SEC310



Detailed technical data

Features

| | |
|------------------------------|---|
| Product category | Streaming, flexible |
| Technology | 2D snapshot, streaming, event recording |
| Sensor | CMOS monochrome |
| Shutter technology | Global-Shutter |
| Sensor resolution | 1,920 px x 1,080 px (2.1 MP) |
| Working distance | 0.15 m ... 10 m |
| Field of view | 108° x 73° |
| Memory | 4 GB, internal memory or FTP upload |
| Lighting | Not enabled |
| Lens | Integrated |
| Livestream | |
| Scan/frame rate | 1 fps ... 60 fps, Primary stream 1 fps ... 30 fps, Secondary stream |
| Video resolution | Full HD (1,920 x 1,080 pixels) @ 60 fps (primary stream) @ 30 fps (secondary stream) |
| Video protocol | RTSP, MJPG |
| Real-time video transmission | Two individually configurable RTSP streams, one MJPEG stream and two MJPEG streams (WebSocket and HTTP/HTTPS) |
| Video compression | H.264, Add H.265, Motion JPEG, configurable compression level |
| Image capture | |
| Image format | JPEG, BMP |
| Trigger | Digital input or software trigger via REST API, TCP/IP |
| Event recording | |
| Event recording video format | MP4 |

| | |
|--------------------------|---|
| Event recording buffer | 130 s at Full HD (1,920 x 1,080 pixels) @ 60 fps (primary stream) |
| Event recording trigger | Digital input or software trigger via REST API, TCP/IP |
| Event recording duration | Up to 1,200 s |

Interfaces

| | |
|-------------------------------|------------------------------------|
| REST API | ✓ |
| Ethernet | ✓, TCP/IP |
| Remark | DHCP/static (default: 192.168.0.1) |
| Data transmission rate | 1 Gbit/s, 1000Base-TX |
| Configuration software | Web server integrated |

Electronics

| | |
|--|--|
| Supply voltage | 10.8 V DC ... 30 V DC ¹⁾ |
| Power consumption | Typ. 2 W Max. 10 W |
| Digital input, level | Active: $10\text{ V} \leq U_{IN} \leq U_V$ Inactive: $U_{IN} \leq 2\text{ V}$ |
| Protection class | III |
| Enclosure rating | IP65 |
| Connection type | |
| Supply voltage & I/O | Connector M12, 8-pin, A-coded, 321 mm |
| Ethernet interface | M12 female connector, 8-pin, X-coded, 224 mm |
| Pinouts for <small>Supply voltage & I/O</small> | |
| - 1 | Not connected |
| - 2 | + (L+) |
| - 3 | DI |
| - 4 | Not connected |
| - 5 | Not connected |
| - 6 | Not connected |
| - 7 | -(M) |
| - 8 | Not connected |
| Pinouts for <small>Ethernet interface</small> | |
| - 1 | DA+ |
| - 2 | DA- |
| - 3 | DB+ |
| - 4 | DB- |
| - 5 | DD+ |
| - 6 | DD- |
| - 7 | DC- |
| - 8 | DC+ |

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 $\pm 10\%$.

Mechanics

| | |
|-------------------------------|--|
| Dimensions (W x H x D) | 57.5 mm x 57 mm x 38 mm (without connection) |
|-------------------------------|--|

| | |
|-------------------------|--|
| Housing material | Aluminum |
| Window material | Glass |
| Weight | 250 g |
| Mounting | Four threads for M4 screws One slot for sliding nut |

Ambient data

| | |
|---------------------------------------|-----------------------------|
| Ambient temperature, operation | -30 °C ... +50 °C |
| Ambient temperature, storage | -30 °C ... +60 °C |
| Permissible relative humidity | ≤ 70 % |
| Shock resistance | 150 m/s² EN 60068-2-27 |
| Vibration resistance | EN 60068-2-6, EN 60068-2-64 |

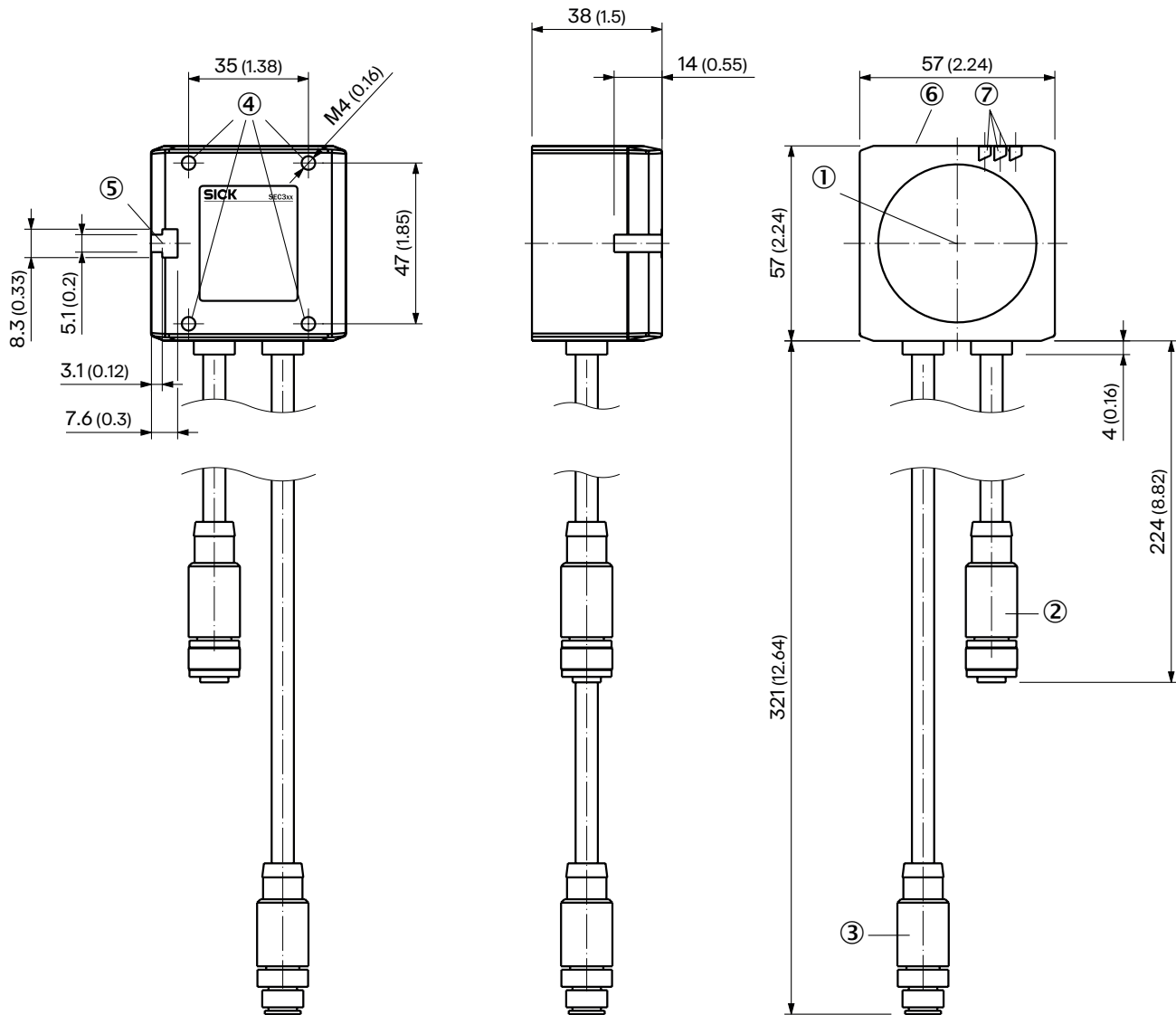
Certificates

| | |
|--|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

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 |

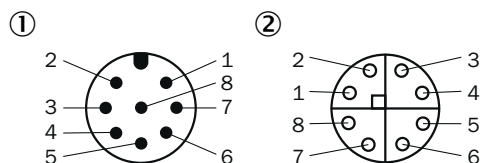
Dimensional drawing, sensor



Dimensions in mm (inch)

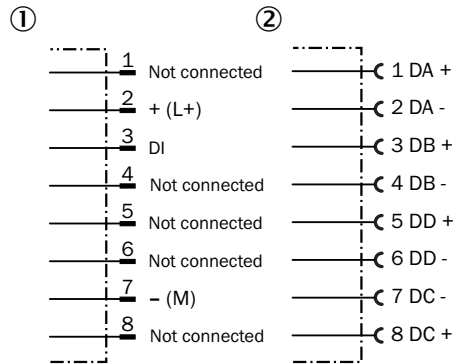
- ① Camera with protective glass
- ② Ethernet interface: socket, M12, 8-pin, X-coded
- ③ supply voltage & I/O: plug, M12, 8-pin, A-coded
- ④ four threads for M4 screws
- ⑤ one slot for sliding nut
- ⑥ display and adjustment elements
- ⑦ Signal and status indicators

Pin assignment: Supply voltage & I/O and Ethernet interface



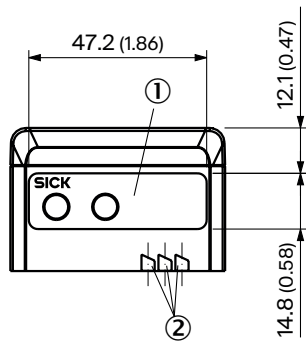
- ① supply voltage & I/O: plug, M12, 8-pin, A-coded
- ② Ethernet interface: socket, M12, 8-pin, X-coded

Connection diagram: Supply voltage & I/O and Ethernet interface



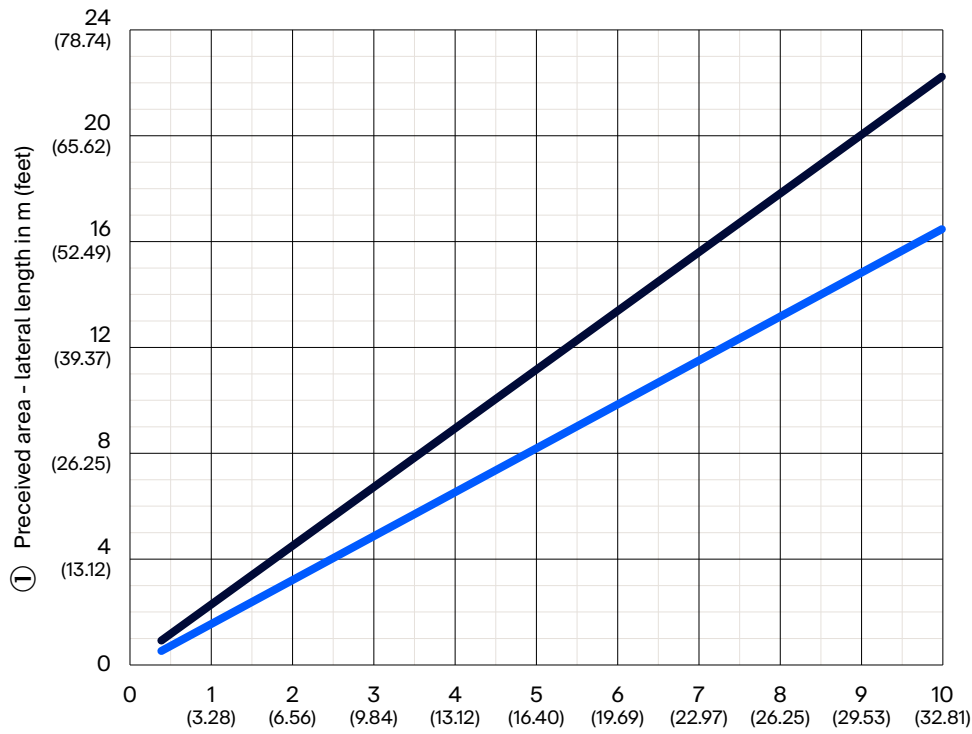
- ① Supply voltage & I/O: plug, 8-pin
- ② Ethernet interface: socket, 8-pin

display and adjustment elements



- ① adjustment element
- ② Signal and status indicators

Field of view - horizontal/vertical



② Distance in m (feet)

③ — Object plane: horizontal

④ — Object plane: 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_SEC310

| | Brief description | Type | part no. |
|---|---|-------------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Sliding nut, M5, short Usable for: Lector62x, EventCam | Sliding nut | 5324896 |
|  | <ul style="list-style-type: none"> Description: Mounting set for sensingCam SEC310 consisting of: 1x mounting bracket (L-shaped), 2x M4 screws incl. washers Material: Steel Details: Steel, zinc coated Suitable for: sensingCam SEC310 | BEF-SEC3XX HOLDER | 2151168 |
|  | <ul style="list-style-type: none"> Description: Bracket with adapter board | Mounting bracket | 2042902 |
|  | <ul style="list-style-type: none"> Description: Mounting set for sensingCam SEC100 consisting of: 1x mounting bracket (L-shaped), 2x M4 screws incl. washers Material: Steel, metal Details: Steel, galvanized (angle), Zinc die cast (clamping bracket) Items supplied: Universal clamp (5322626), mounting hardware Suitable for: sensingCam SEC100 | BEF-KHS-SEC | 2147922 |

| | Brief description | Type | part no. |
|---|--|---------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, M12, 8-pin, straight, X-coded • Signal type: Ethernet, Gigabit Ethernet • Cable: 2 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-020EG1M2X18 | 2106261 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, M12, 8-pin, straight, X-coded • Signal type: Ethernet, Gigabit Ethernet • Cable: 3 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-030EG1M2X18 | 2124545 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, M12, 8-pin, straight, X-coded • Signal type: Ethernet, Gigabit Ethernet • Cable: 5 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-050EG1M2X18 | 2106262 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, M12, 8-pin, straight, X-coded • Signal type: Ethernet, Gigabit Ethernet • Cable: 10 m, 8-wire, CAT6A, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet | YM2X18-100EG1M2X18 | 2095102 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 1 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-010EG1M-RJA8 | 2106257 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 2 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-020EG1M-RJA8 | 2106258 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 3 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-030EG1M-RJA8 | 2145693 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 5 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-050EG1M-RJA8 | 2106259 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 10 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-100EG1M-RJA8 | 2106260 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 8-pin, straight, X-coded • Connection type head B: Male connector, RJ45, 8-pin, straight • Signal type: Ethernet, Gigabit Ethernet • Cable: 0.5 m, 8-wire, PUR, halogen-free • Description: Ethernet, shielded, Gigabit Ethernet • Application: Zones with oils and lubricants | YM2X18-C50EG1MRJA8 | 2106256 |
|  | <ul style="list-style-type: none"> • Description: Sensor/actuator cable, shielded • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Male connector, M12, 8-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 1 m, 8-wire, PUR, halogen-free | YF2A28-010UA6M2A28 | 2096108 |

| | Brief description | Type | part no. |
|--|--|--------------------|----------|
|  | <ul style="list-style-type: none"> Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation Description: Sensor/actuator cable, shielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Male connector, M12, 8-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 2 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A28-020UA6M2A28 | 2096105 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, shielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Male connector, M12, 8-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 3 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A28-030UA6M2A28 | 2145504 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A18-030UA5XLEAX | 2104369 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A18-050UA5XLEAX | 2095653 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A18-100UA5XLEAX | 2095654 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 8-wire, PUR, halogen-free Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF2A18-200UA5XLEAX | 2095680 |

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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