



DATA SHEET

# AS30-EBM534I220C00

AS30  
Array sensors

# SICK

Sensor Intelligence



Illustration may differ

ARRAY SENSORS

AS30-EBM534I220C00

ORDERING INFORMATION

| Type               | part no. |
|--------------------|----------|
| AS30-EBM534I220C00 | 1121311  |

Further device versions and accessories at [www.sick.com/AS30](http://www.sick.com/AS30)



DETAILED TECHNICAL DATA

FEATURES

|                                  |                                  |
|----------------------------------|----------------------------------|
| Sensor principle                 | Proximity system, Reflector mode |
| Functional principle             | Web guiding, positioning         |
| Principle of operation (default) | Web guiding                      |
| Housing design                   | Middle                           |
| Dimensions (W x H x D)           | 31 mm x 62 mm x 52.2 mm          |
| Light source                     | LED, White                       |
| Light spot size                  | 62.5 mm x 13.2 mm                |
| Wave length                      | 400 nm ... 700 nm                |
| Working range                    | 90 mm ... 110 mm                 |
| Measurement range                | 30 mm                            |
| Sensing distance                 | ≤ 100 mm                         |
| Minimum detectable object (MDO)  | 0.5 mm                           |
| Linearity (position value)       | ± 2 %                            |
| Resolution                       | 1 µm                             |
| Repeatability                    | 0.05 mm <sup>1)</sup>            |
| Adjustment                       | IO-Link, Display                 |
| Teach-in mode                    | Edge detection<br>Area detection |
| Output time                      | 1 ms                             |
| Safety-related parameters        |                                  |
|                                  | MTTF <sub>0</sub> 271 years      |

<sup>1)</sup> With respect to sensing distance.

**INTERFACES**

|              |          |
|--------------|----------|
| IO-Link      | ✓        |
| VendorID     | 26       |
| DeviceID HEX | 0x80020B |
| DeviceID DEC | 8389131  |
| Cycle time   | > 1.1 ms |

**ELECTRONICS**

|                                 |                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Supply voltage                  | 18 V ... 30 V                                                                                                       |
| Ripple                          | $\leq 5 \text{ V}^{1)}$                                                                                             |
| Current consumption             | $< 3.1 \text{ W}^{2)}$                                                                                              |
| Initialization time             | 0.48 s                                                                                                              |
| Switching frequency             | 500 Hz                                                                                                              |
| Switching output                | Push-pull: PNP/NPN                                                                                                  |
| Switching output (voltage)      | Push-pull: PNP/NPN HIGH = $U_v - 3 \text{ V}$ /LOW $\leq 3 \text{ V}$                                               |
| Analog output                   | 4 mA ... 20 mA                                                                                                      |
| Resolution of analog output     | 12 bit                                                                                                              |
| Output rate of analog output    | 1 ms                                                                                                                |
| Output current $I_{\text{max}}$ | $< 100 \text{ mA}$                                                                                                  |
| Protection class                | III <sup>3)</sup>                                                                                                   |
| Circuit protection              | $U_v$ connections, reverse polarity protected<br>Output Q short-circuit protected<br>Interference pulse suppression |
| Connection type                 | Plug, M12, 5-pin                                                                                                    |

<sup>1)</sup> May not fall below or exceed  $U_v$  tolerances.

<sup>2)</sup> Without load.

<sup>3)</sup>  $I_N = 2 \text{ A}$ .

**MECHANICS**

|                  |                     |
|------------------|---------------------|
| Housing material | Zinc diecast        |
| Optics material  | Anti-reflex coating |
| Weight           | 250 g               |

**AMBIENT DATA**

|                               |                              |
|-------------------------------|------------------------------|
| Ambient operating temperature | -10 °C ... +55 °C            |
| Ambient temperature, storage  | -25 °C ... +75 °C            |
| Shock load                    | According to IEC 60068       |
| Enclosure rating              | IP67                         |
| UL File No.                   | NRKH.E181493 & NRKH7.E181493 |

**SMART TASK**

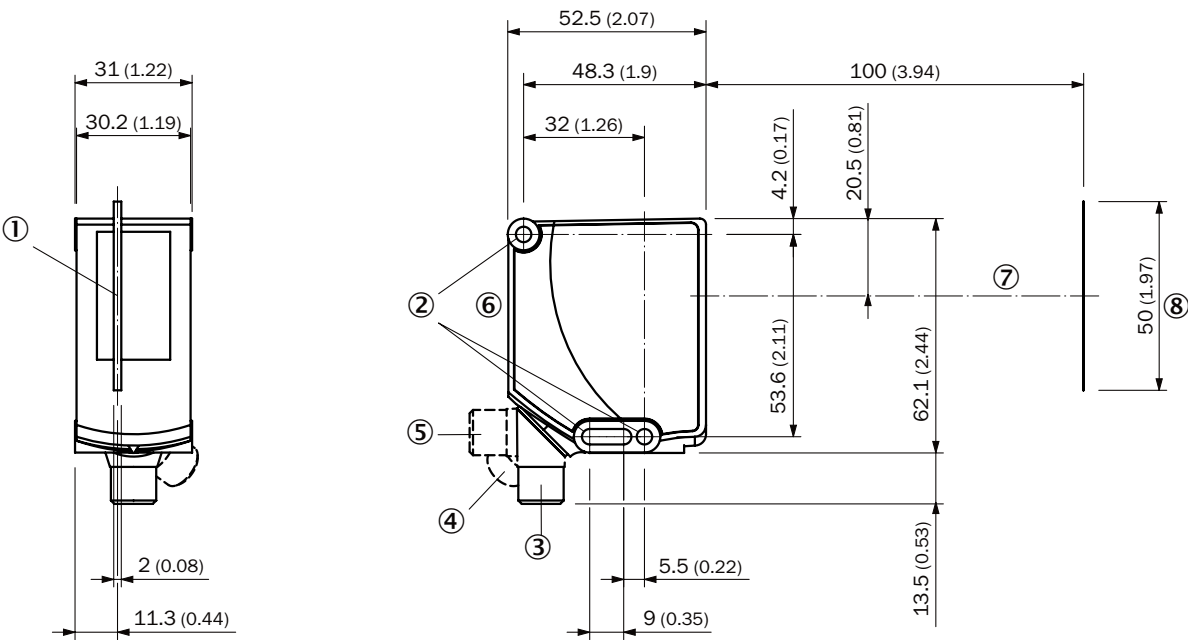
|                  |                                            |
|------------------|--------------------------------------------|
| Smart Task name  | Base logics                                |
| Logic function   | Direct<br>AND<br>OR<br>Window              |
| Switching signal | Switching signal $Q_{L1}$ Switching output |

|                                  |                  |
|----------------------------------|------------------|
| Switching signal Q <sub>L2</sub> | Switching output |
|----------------------------------|------------------|

CERTIFICATES

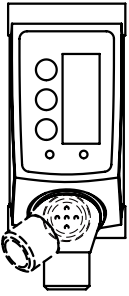
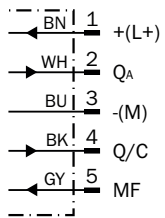
|                                                                       |   |
|-----------------------------------------------------------------------|---|
| EU declaration of conformity                                          | ✓ |
| UK declaration of conformity                                          | ✓ |
| ACMA declaration of conformity                                        | ✓ |
| Moroccan declaration of conformity                                    | ✓ |
| China RoHS                                                            | ✓ |
| China Compulsory Product Certification (CCC) exempt                   | ✓ |
| cULus certificate                                                     | ✓ |
| IO-Link certificate                                                   | ✓ |
| Photobiological safety (IEC EN 62471)                                 | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

DIMENSIONAL DRAWING AS30-XXX53XXXXXXX



Dimensions in mm (inch)

- ① Center field of view
- ② fixing hole
- ③ M12 male connector, delivery state
- ④ M12 male connector, end stop right
- ⑤ M12 male connector, end stop left
- ⑥ display and adjustment elements
- ⑦ Optical axis
- ⑧ Field of view

**DISPLAY AND ADJUSTMENT ELEMENTS****CONNECTION DIAGRAM CD-435**

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at [www.sick.com/1121311](http://www.sick.com/1121311)



SICK AG  
WALDKIRCH  
GERMANY  
SICK.COM

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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