



# AS30-WBM314I220A00

AS30

ARRAY SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

| Type               | Part no. |
|--------------------|----------|
| AS30-WBM314I220A00 | 1095579  |

**Included in delivery:** REF-AX-002 (1)

Other models and accessories → [www.sick.com/AS30](http://www.sick.com/AS30)

### Detailed technical data

#### Features

|   |   |
|---|---|
| <b>Sensor principle</b>                 | Proximity system, Reflector mode                                      |
| <b>Functional principle</b>             | Web guiding, positioning, Width measurement, Center point measurement |
| <b>Principle of operation (default)</b> | Width measurement   |
| <b>Dimensions (W x H x D)</b>           | 31 mm x 62 mm x 52.2 mm   |
| <b>Sensing distance</b>                 | ≤ 25 mm   |
| <b>Housing design</b>                   | Rectangular   |
| <b>Working range</b>                    | 20 mm ... 30 mm   |
| <b>Measurement range</b>                | 30 mm   |
| <b>Minimum detectable object (MDO)</b>  | 0.2 mm  |
| <b>Light source</b>                     | LED, White  |
| <b>Wave length</b>                      | 400 nm ... 700 nm   |
| <b>Light spot size</b>                  | 38.9 mm x 11.1 mm   |
| <b>Reproducibility</b>                  | 0.03 mm <sup>1)</sup>   |
| <b>Linearity (position value)</b>       | ± 2 %   |
| <b>Resolution</b>                       | 1 µm  |
| <b>Adjustment</b>                       | IO-Link<br>Display  |
| <b>Teach-in mode</b>                    | Edge detection<br>Area detection                                      |

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

## Mechanics/electronics

|   |   |
|---|---|
| <b>Supply voltage</b>                             | 18 V ... 30 V   |
| <b>Ripple</b>                                     | $\leq 5 \text{ V}^{1)}$   |
| <b>Current consumption</b>                        | $< 3.1 \text{ W}^{2)}$  |
| <b>Switching frequency</b>                        | 500 Hz  |
| <b>Switching output</b>                           | Push-pull: PNP/NPN  |
| <b>Switching output (voltage)</b>                 | Push-pull: PNP/NPN HIGH = $U_V - 3 \text{ V}$ /LOW $\leq 3 \text{ V}$   |
| <b>Analog output</b>                              | 4 mA ... 20 mA  |
| <b>Resolution of analog output</b>                | 12 bit  |
| <b>Output rate of analog output</b>               | 1 ms  |
| <b>Output current <math>I_{\text{max}}</math></b> | $< 100 \text{ mA}$  |
| <b>Initialization time</b>                        | 0.48 s  |
| <b>Connection type</b>                            | Male connector M12, 5-pin   |
| <b>Protection class</b>                           | III <sup>3)</sup>   |
| <b>Circuit protection</b>                         | $U_V$ connections, reverse polarity protected<br>Output Q short-circuit protected<br>Interference pulse suppression |
| <b>Enclosure rating</b>                           | IP67  |
| <b>Weight</b>                                     | 250 g   |
| <b>Housing material</b>                           | Metal, zinc diecast   |
| <b>Optics material</b>                            | Glass, Anti-reflex coating  |

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

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

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

## Communication interface

|                |          |
|----------------|----------|
| <b>IO-Link</b> | ✓        |
| VendorID       | 26       |
| DeviceID HEX   | 0x800205 |
| DeviceID DEC   | 8389125  |

## Ambient data

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

## Smart Task

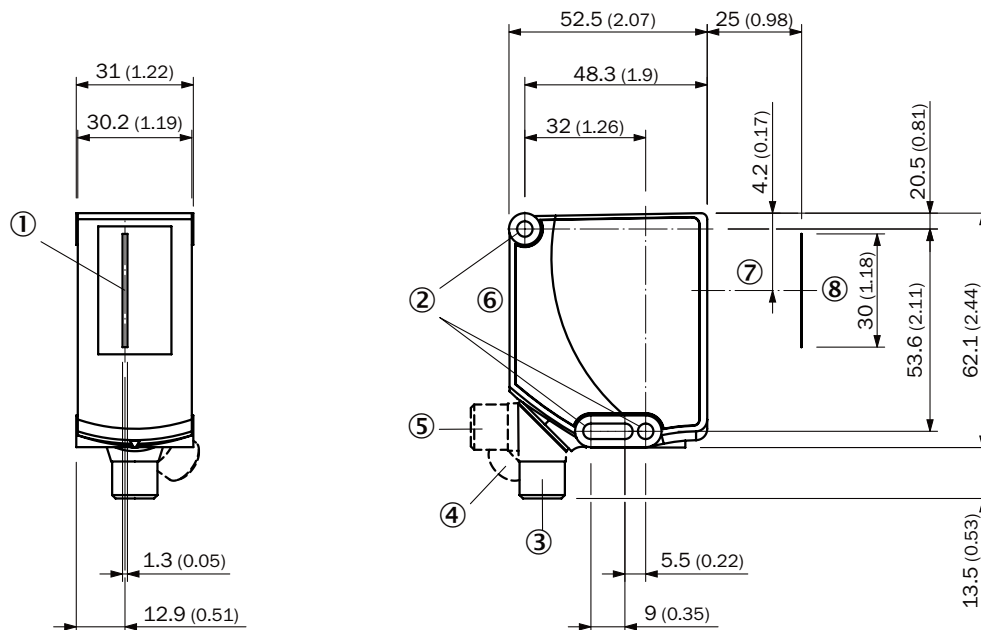
|                                  |                               |
|----------------------------------|-------------------------------|
| <b>Smart Task name</b>           | Base logics                   |
| <b>Logic function</b>            | Direct<br>AND<br>OR<br>Window |
| <b>Switching signal</b>          |                               |
| Switching signal Q <sub>L1</sub> | Switching output              |
| Switching signal Q <sub>L2</sub> | Switching output              |

### Classifications

|                       |          |
|-----------------------|----------|
| <b>eCl@ss 5.0</b>     | 27270906 |
| <b>eCl@ss 5.1.4</b>   | 27270906 |
| <b>eCl@ss 6.0</b>     | 27270906 |
| <b>eCl@ss 6.2</b>     | 27270906 |
| <b>eCl@ss 7.0</b>     | 27270906 |
| <b>eCl@ss 8.0</b>     | 27270906 |
| <b>eCl@ss 8.1</b>     | 27270906 |
| <b>eCl@ss 9.0</b>     | 27270906 |
| <b>eCl@ss 10.0</b>    | 27270906 |
| <b>eCl@ss 11.0</b>    | 27270906 |
| <b>eCl@ss 12.0</b>    | 27270906 |
| <b>ETIM 5.0</b>       | EC001820 |
| <b>ETIM 6.0</b>       | EC001820 |
| <b>ETIM 7.0</b>       | EC001820 |
| <b>ETIM 8.0</b>       | EC001820 |
| <b>UNSPSC 16.0901</b> | 39121528 |

### Dimensional drawing (Dimensions in mm (inch))

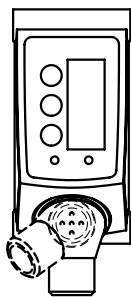
AS30-xxx31xxxxxxx



- 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

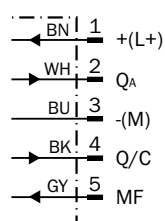
## Adjustments

Display and adjustment elements








## Connection diagram







Cd-435



## Recommended accessories

Other models and accessories → [www.sick.com/AS30](http://www.sick.com/AS30)

|   | Brief description   | Type                           | Part no. |
|---|---|--------------------------------|----------|
| <b>Connection modules</b>   |   |                                |          |
|  | IO-Link V1.1 Class A port, USB2.0 port, optional external power supply 24V / 1A                       | IOLA2US-01101 (SiLink2 Master) | 1061790  |
| <b>Universal bar clamp systems</b>  |   |                                |          |
|  | Plate K for universal clamp bracket, steel, zinc coated, Universal clamp (2022726), mounting hardware | BEF-KHS-K01                    | 2022718  |
|  | Mounting bar, straight, 200 mm, steel, steel, zinc coated, without mounting hardware                  | BEF-MS12G-A                    | 4056054  |
|  | Mounting bar, L-shaped, 150 mm x 150 mm, steel, steel, zinc coated, without mounting hardware         | BEF-MS12LA                     | 4056052  |
| <b>Mounting brackets and plates</b>   |   |                                |          |
|  | Aluminum, mounting hardware for the sensor included   | BEF-AP-AS30                    | 2124602  |

|  | Brief description  | Type                  | Part no. |
|--|--|-----------------------|----------|
| Plug connectors and cables   |  |                       |          |
|   | Head A: female connector, M12, 5-pin, straight, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PVC, unshielded, 5 m  | YF2A15-050VB5XLEAX    | 2096240  |
|   | Head A: male connector, M12, 5-pin, straight<br>Cable: unshielded<br>For field bus technology  | STE-1205-G            | 6022083  |
| Reflectors   |  |                       |          |
|   | Fine triple, planar, suitable for laser sensors, 75 mm x 25 mm, PMMA/ABS, screwable  | PL25FA                | 5340878  |
| Terminal and alignment brackets  |  |                       |          |
|   | Holder for reflector foil (scope of delivery AS30) or accessory reflector. Simply align and set the correct scanning distance., steel, zinc coated, Reflector holder, screw set for AS30 and reflector PL25FA (5340878)  | REFLECTORHOLD-ER SD25 | 2107380  |
| Sensor Integration Gateway   |  |                       |          |
|   | <ul style="list-style-type: none"> <li><b>Further functions:</b> Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li><b>Connection CONFIG:</b> 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li><b>Logic editor:</b> yes</li> <li><b>Communication interface:</b> IO-Link, USB, Ethernet, PROFINET, REST API</li> <li><b>Product category:</b> IO-Link Master</li> </ul> | SIG200-0A0412200      | 1089794  |
|  | <ul style="list-style-type: none"> <li><b>Further functions:</b> Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li><b>Connection CONFIG:</b> 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li><b>Logic editor:</b> yes</li> <li><b>Communication interface:</b> IO-Link, USB, Ethernet, REST API</li> <li><b>Product category:</b> IO-Link Master</li> </ul>           | SIG200-0A0G12200      | 1102605  |

### Recommended services

Additional services → [www.sick.com/AS30](http://www.sick.com/AS30)

|  | Type                   | Part no.   |
|--|------------------------|------------|
| Function Block Factory   |                        |            |
| <ul style="list-style-type: none"> <li><b>Description:</b> The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&amp;R. More information on the FBF can be found &lt;a href="https://fbf.cloud.sick.com target="_blank"&gt; here&lt;/a&gt;.</li> </ul> | Function Block Factory | On request |

## 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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)