



# ISD280-1111S03

ISD280

PRODUCT PORTFOLIO

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
ISD280-1111S03	1027187

Other models and accessories → [www.sick.com/ISD280](http://www.sick.com/ISD280)



### Detailed technical data

#### Performance

<b>Transmission range</b>	0.2 m ... 150 m
<b>Light source</b>	Infrared LED (860 nm)
<b>Typ. light spot size (distance)</b>	1.4 m (at 100 m)
<b>Aperture angle</b>	Ca. ± 0.4°

#### Interfaces

<b>Data transmission rate</b>	1.5 MBaud
<b>Switching output</b>	UV - 2 V: fault-free operation, I <sub>out</sub> = 20 mA
<b>Data interface</b>	RS-422/-485 PROFIBUS DP
<b>Switching input</b>	V <sub>s</sub> : sender deactivated
<b>Signal delay</b>	≤ 2 μs

#### Mechanics/electronics

<b>Supply voltage V<sub>s</sub></b>	DC24 V, +20% / -5% (with heating) DC24 V, ±20 % (without heating)
<b>Housing material</b>	Metal
<b>Connection type</b>	Connector, 3 x M12, 5-pin
<b>Weight</b>	1 kg
<b>Current consumption</b>	Without heating ≤ 0.4 A With heating ≤ 2.5 A
<b>Enclosure rating</b>	IP 54
<b>Protection class</b>	III

#### Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 / EN 61000-6-4
<b>Ambient temperature</b>	Operation without heating: 0 °C ... +40 °C <sup>1)</sup> Operation with heating: -38 °C ... +40 °C Storage: -20 °C ... +70 °C

<sup>1)</sup> 1.5 MBd to max. +40 °C, ≤ 0.5 MBd to max. +55 °C.

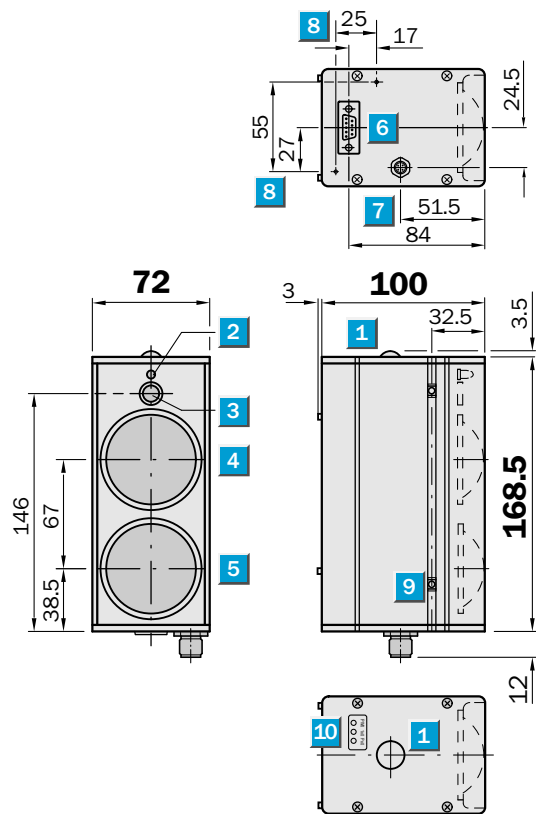
<b>Max. rel. humidity (not condensing)</b>	± 90 %, Non-condensing
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<sup>1)</sup> 1.5 MBd to max. +40 °C, ≤ 0.5 MBd to max. +55 °C.

Classifications

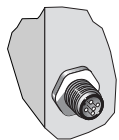
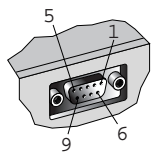
<b>ECI@ss 5.0</b>	19039001
<b>ECI@ss 5.1.4</b>	19039001
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<b>ECI@ss 6.2</b>	19179090
<b>ECI@ss 7.0</b>	19179090
<b>ECI@ss 8.0</b>	19179090
<b>ECI@ss 8.1</b>	19179090
<b>ECI@ss 9.0</b>	19179090
<b>ETIM 5.0</b>	EC000515
<b>ETIM 6.0</b>	EC000515
<b>UNSPSC 16.0901</b>	43201404

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

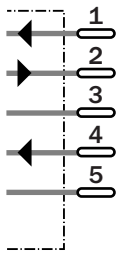
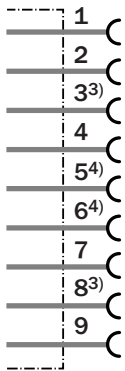


- ① View of optical adjustment aid (cross-line)
- ② LED function indicator "interrupted light beam"
- ③ Light inlet for optical adjustment aid
- ④ Receiver lens
- ⑤ Sender lens
- ⑥ 9-pin D-sub female connector (data interface)
- ⑦ 5-pin M12 round connector (power supply and function interfaces)
- ⑧ M3 threaded mounting hole - 5 mm deep, for plug cover
- ⑨ M5 running nut (in groove), max. screwing depth 10 mm from housing surface
- ⑩ LED function indicators "Power on", "RxD", and "TxD"

### Connection type








Connection diagram



Recommended accessories

Other models and accessories → [www.sick.com/ISD280](http://www.sick.com/ISD280)

	Brief description	Type	Part no.
Device protection (mechanical)			
	Water protection	Cover for male connector	2016130
Terminal and alignment brackets			
	Alignment unit, steel, zinc coated, mounting hardware included	Three-point mounting	5306369
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight, B-coded Head B: - Cable: PROFIBUS DP, shielded	DOS-1205-GQ	6021353
	Head A: connection inlay (male connector), D-Sub-HD, 9-pin, 15-pin Cable: unshielded	D-Sub male connector housing	6009438
	Head A: connection inlay (male connector), D-Sub, 9-pin Head B: - Cable: unshielded	D-Sub plug connector insert	6007336
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: - Cable: PROFIBUS DP, shielded	STE-1205-GQ	6021354
	Head A: male connector, M12, 4-pin, straight, B-coded Cable: PROFIBUS DP, terminal resistor	STE-END-Q	6021156

## 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)