



ISD280-1122S06

ISD280

PRODUCT PORTFOLIO

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|----------------|----------|
| ISD280-1122S06 | 1027639 |

Other models and accessories → www.sick.com/ISD280



Detailed technical data

Performance

| | |
|--|-----------------------|
| Transmission range | 0.2 m ... 150 m |
| Light source | Infrared LED (860 nm) |
| Typ. light spot size (distance) | 1.4 m (at 100 m) |
| Aperture angle | Ca. ± 0.4° |
| Heating | ✓ |

Interfaces

| | |
|-------------------------------|--|
| Data transmission rate | 1.5 MBaud |
| Switching output | UV - 2 V: fault-free operation, I _{out} = 20 mA |
| Data interface | RS-422/-485 PROFIBUS DP |
| Switching input | V _S : sender deactivated |
| Signal delay | ≤ 2 μs |

Mechanics/electronics

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

Ambient data

| | |
|--|---|
| Electromagnetic compatibility (EMC) | EN 61000-6-2 / EN 61000-6-4 |
| Ambient temperature | Operation without heating: 0 °C ... +40 °C ¹⁾ Operation with heating: -38 °C ... +40 °C |

¹⁾ 1.5 MBd to max. +40 °C, ≤ 0.5 MBd to max. +55 °C.

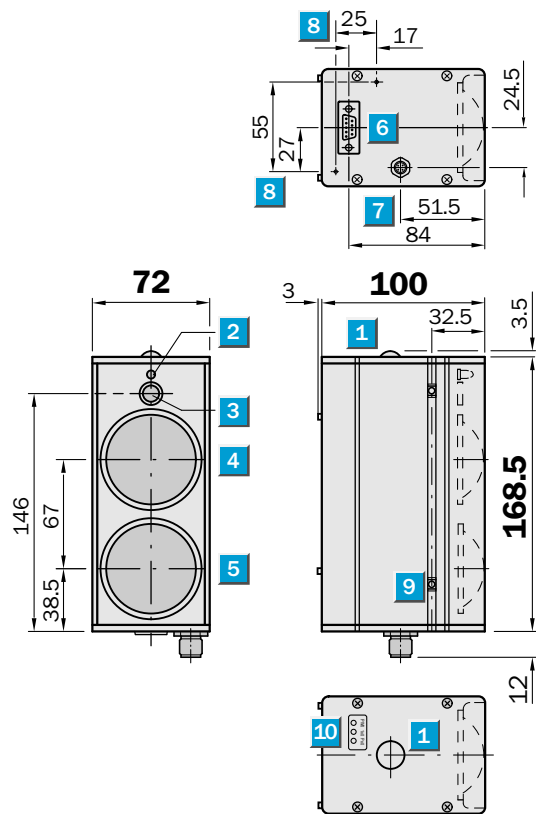
| | |
|--|----------------------------|
| | Storage: -20 °C ... +70 °C |
| Max. rel. humidity (not condensing) | ± 90 %, Non-condensing |

¹⁾ 1.5 MBd to max. +40 °C, <= 0.5 MBd to max. +55 °C.

Classifications

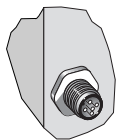
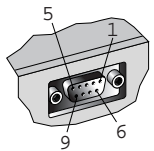
| | |
|-----------------------|----------|
| ECl@ss 5.0 | 19039001 |
| ECl@ss 5.1.4 | 19039001 |
| ECl@ss 6.0 | 19179090 |
| ECl@ss 6.2 | 19179090 |
| ECl@ss 7.0 | 19179090 |
| ECl@ss 8.0 | 19179090 |
| ECl@ss 8.1 | 19179090 |
| ECl@ss 9.0 | 19179090 |
| ETIM 5.0 | EC000515 |
| ETIM 6.0 | EC000515 |
| UNSPSC 16.0901 | 43201404 |

Dimensional drawing (Dimensions in mm (inch))

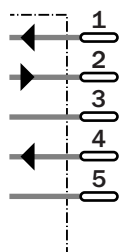
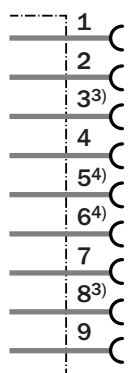


- ① View of optical adjustment aid (cross-line)
- ② LED function indicator "interrupted light beam"
- ③ Light inlet for optical adjustment aid
- ④ Receiver lens
- ⑤ Sender lens
- ⑥ 9-pin D-sub female connector (data interface)
- ⑦ 5-pin M12 round connector (power supply and function interfaces)
- ⑧ M3 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

| | 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:

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