SICK.COM

DATA SHEET

ISD280-1111S03

Optical data transmission

SICK Sensor Intelligence

OPTICAL DATA TRANSMISSION

ISD280-1111S03

ORDERING INFORMATION

Type	part no.
ISD280-1111S03	1027187

Further device versions and accessories at www.sick.com/

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°

INTERFACES

Data transmission rate	1.5 MBaud
Switching output	UV - 2 V: fault-free operation, Iout = 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 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
⑦ (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 TYPE

CONNECTION DIAGRAM

CONNECTION DIAGRAM

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/1027187

SICK AG
WALDKIRCH
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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

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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