

SICK Sensor Intelligence.

OPTICAL DATA TRANSMISSION

OPTICAL DATA TRANSMISSION



Ordering information

Туре	Part no.
ISD400-7222	1065103

Other models and accessories → www.sick.com/ISD400

CE

Detailed technical data

Performance	
Transmission range	0.2 m 150 m
Light source	Laser, red (660 nm) Laser, infrared (785 nm)
Laser class	1M
Typ. light spot size (distance)	1.75 m (at 100 m)
Aperture angle	1° (sender) 1.5° (receiver)
Heating	1
Interfaces	
Data transmission rate	100 Mbit/s
Switching output	HIGH: U _v – 3 V, LOW: < 2 V
Data interface	Ethernet
Switching input	V _s : sender deactivated
Mechanics/electronics	
Supply voltage V _s	DC 18 V 30 V
Power consumption	\leq 30 W ^{1) 2)}
Housing material	AlSi12
Connection type	1 x Ethernet female connector M12, 4-pin, D-coded 1 x power supply male connector M12, 4-pin, A-coded
Weight	Approx. 800 g
Frequency	F2
$^{(1)}$ Without load. $^{(2)}$ At 24 V.	
Ambient data	
Enclosure rating	IP 65
Protection class	III
Electromagnetic compatibility (EMC)	EN 61000-6-2 / EN 61000-6-4 ¹⁾
Ambient temperature operation	-40 °C +55 °C

 $^{\mbox{\sc 1})}$ This is a Class A device. This device can cause radio interference in living quarters.

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Storage temperature	-40 °C +75 °C
Max. rel. humidity (not condensing)	90 %, Non-condensing

 $^{\left(1\right)}$ This is a Class A device. This device can cause radio interference in living quarters.

General notes

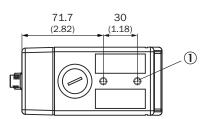
Note

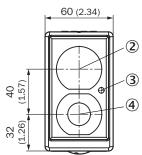
Setting up a data transmission path requires a pair of devices, where one device has frequency F1 (ISD400-7xx1) and the other device has frequency F2 (ISD400-7xx2). A wide variety of Ethernet protocols can be used in protocol-free transmission (e.g., PROFINET, PROFIsafe, Ether-Net/IP, EtherCAT, TCP/IP, etc.).

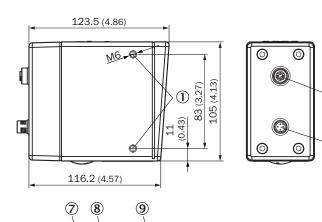
(5)

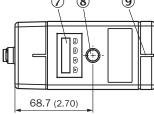
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Dimensional drawing (Dimensions in mm (inch))









- ① Threaded mounting hole M6
- ② Center of optical axis, sender
- ③ Receive indicator
- ④ Center of optical axis, receiver
- ⑤ Ethernet female connector M12, 4-pin, D-coded
- $\textcircled{\sc blue}$ Power supply male connector M12, 4-pin, A-coded
- ⑦ Display with pushbuttons
- ③ Optical adjustment aid
- ③ Alignment sight

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Connection type

Dx100 Ethernet female connector, M12, 4-pin, D-coded



Dx100 PROFIBUS/PROFINET/CANopen/Ethernet/IP, M12 male connector, 4-pin, A-coded

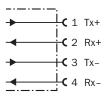


Connection diagram

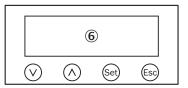
Voltage supply connection diagram



Ethernet M12 female connector, 4-pin



Adjustment possible



⑥ Liquid crystal display with function keys

Recommended accessories

Other models and accessories -> www.sick.com/ISD400

Brief	description	
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Terminal and alignment brackets

Part no.

Туре

OPTICAL DATA TRANSMISSION

Brief description	Туре	Part no.
Alignment unit for DME4000/ISD400, aluminum, anodised	BEF-DME/ISD	2046052

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



Online data sheet

