



# ISD400-7221

ISD400

OPTICAL DATA TRANSMISSION

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
ISD400-7221	1065102

Other models and accessories → [www.sick.com/ISD400](http://www.sick.com/ISD400)



### Detailed technical data

#### Performance

<b>Transmission range</b>	0.2 m ... 150 m
<b>Light source</b>	Laser, red (660 nm) Laser, infrared (785 nm)
<b>Laser class</b>	1M
<b>Typ. light spot size (distance)</b>	1.75 m (at 100 m)
<b>Aperture angle</b>	1° (sender) 1.5° (receiver)
<b>Heating</b>	✓

#### Interfaces

<b>Data transmission rate</b>	100 Mbit/s
<b>Switching output</b>	HIGH: $U_v - 3\text{ V}$ , LOW: $< 2\text{ V}$
<b>Data interface</b>	Ethernet
<b>Switching input</b>	$V_s$ : sender deactivated

#### Mechanics/electronics

<b>Supply voltage <math>V_s</math></b>	DC 18 V ... 30 V
<b>Power consumption</b>	$\leq 30\text{ W}^{1)}$
<b>Housing material</b>	AlSi12
<b>Connection type</b>	1 x Ethernet female connector M12, 4-pin, D-coded 1 x power supply male connector M12, 4-pin, A-coded
<b>Weight</b>	Approx. 800 g
<b>Frequency</b>	F1

<sup>1)</sup> Without load.

#### Ambient data

<b>Enclosure rating</b>	IP 65
<b>Protection class</b>	III
<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 / EN 61000-6-4 <sup>1)</sup>
<b>Ambient temperature operation</b>	-40 °C ... +55 °C
<b>Storage temperature</b>	-40 °C ... +75 °C

<sup>1)</sup> This is a Class A device. This device can cause radio interference in living quarters.

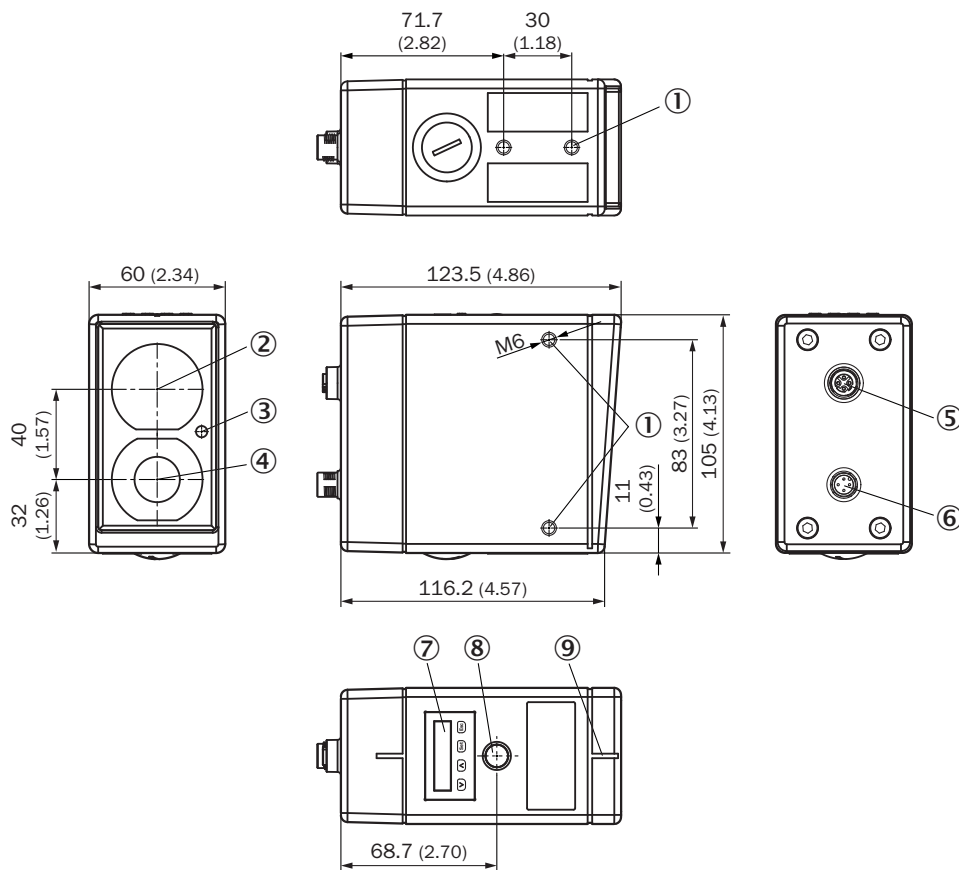
<b>Max. rel. humidity (not condensing)</b>	90 %, Non-condensing
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1) This is a Class A device. This device can cause radio interference in living quarters.

### General notes

<b>Note</b>	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, PROFlsafe, EtherNet/IP, EtherCAT, TCP/IP, etc.).
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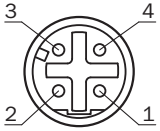
### Dimensional drawing (Dimensions in mm (inch))



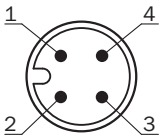
- ① Threaded mounting hole M6
- ② Center of optical axis, sender
- ③ Receive indicator
- ④ Center of optical axis, receiver
- ⑤ Ethernet female connector M12, 4-pin, D-coded
- ⑥ Power supply male connector M12, 4-pin, A-coded
- ⑦ Display with pushbuttons
- ⑧ Optical adjustment aid
- ⑨ Alignment sight

### Connection type

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

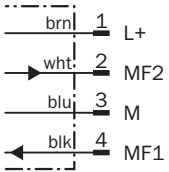


Dx100 PROFIBUS/PROFINET/CANopen/Ethernet/IP, M12 male connector, 4-pin, A-coded

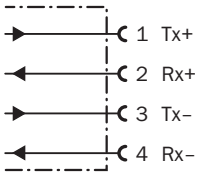


### Connection diagram

Voltage supply connection diagram



Ethernet M12 female connector, 4-pin



### Adjustment possible

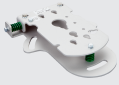


⑥ Liquid crystal display with function keys

### Recommended accessories

Other models and accessories → [www.sick.com/ISD400](http://www.sick.com/ISD400)

	Brief description	Type	Part no.
	Terminal and alignment brackets		

	<b>Brief description</b>	<b>Type</b>	<b>Part no.</b>
	Alignment unit for DME4000/ISD400, aluminum, anodised	BEF-DME/ISD	2046052

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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.

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