



# ISD400-7212

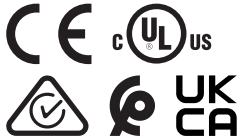
ISD400

OPTICAL DATA TRANSMISSION

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	part no.
ISD400-7212	1065101

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

## Detailed technical data

### Technical specifications

<b>Accessory group</b>	Optical data transmission
<b>Accessory family</b>	ISD400
<b>Weight</b>	Approx. 800 g
<b>Housing material</b>	AlSi12
<b>Enclosure rating</b>	IP65
<b>Ambient operating temperature</b>	-20 °C ... +55 °C
<b>Permissible relative humidity</b>	90 %, Non-condensing

### Mechanics/electronics

<b>Power consumption</b>	≤ 3.6 W <sup>1)</sup>
<b>Frequency</b>	F2
<b>Protection class</b>	III

<sup>1)</sup> Without load with 24 V.

### Performance

<b>Transmission range</b>	≥ 0.2 m
<b>Light source</b>	Laser, red (660 nm)
<b>Laser class</b>	1M (IEC 60825-1:2014, EN 60825-1:2014)
<b>Typ. light spot size (distance)</b>	1.75 m (at 100 m)
<b>Aperture angle</b>	Sender

### Interfaces

<b>Ethernet</b>	✓
<b>Data transmission rate</b>	100 Mbit/s
<b>Digital input</b>	V <sub>S</sub> : sender deactivated
<b>Digital output</b>	
<b>Number</b>	1 <sup>1)</sup>

<sup>1)</sup> HIGH: U<sub>V</sub> - 3 V, LOW: < 2 V.

Type	PNP
Function	Output active for LOW and HIGH level
	Warning messages as the laser ages, if the permissible limits of the interior device temperature are exceeded or undercut, if the optical path is interrupted, if no Ethernet cable is connected, if the receiving level is undercut, if the laser is not ready for operation, if the heating is switched on.

<sup>1)</sup> HIGH:  $U_V - 3 \text{ V}$ , LOW:  $< 2 \text{ V}$ .

## Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2, EN 61000-6-4 <sup>1)</sup>
<b>Ambient temperature, operation</b>	-20 °C ... +55 °C
<b>Max. rel. humidity (not condensing)</b>	90 %, Non-condensing

<sup>1)</sup> 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, PROFI-safe, EtherNet/IP, EtherCAT, TCP/IP, etc.).
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## Features

<b>Weight</b>	Approx. 800 g
<b>Housing material</b>	AlSi12
<b>Enclosure rating</b>	IP65
<b>Ambient operating temperature</b>	-20 °C +55 °C
<b>Permissible relative humidity</b>	90 % Non-condensing

## Certificates

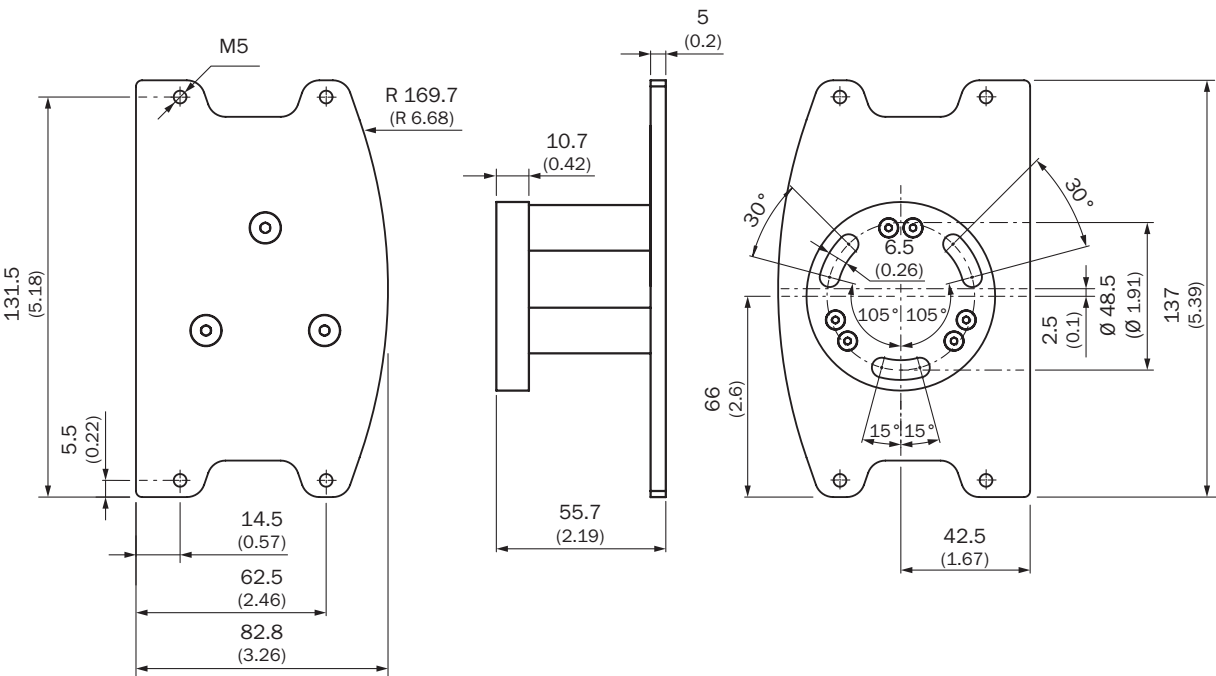
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>cULus certificate</b>	✓

## Classifications

<b>ECLASS 5.0</b>	19039001
<b>ECLASS 5.1.4</b>	19039001
<b>ECLASS 6.0</b>	19179090
<b>ECLASS 6.2</b>	19179090
<b>ECLASS 7.0</b>	19179090
<b>ECLASS 8.0</b>	19179090
<b>ECLASS 8.1</b>	19179090
<b>ECLASS 9.0</b>	19179090
<b>ETIM 5.0</b>	EC000515
<b>ETIM 6.0</b>	EC000515

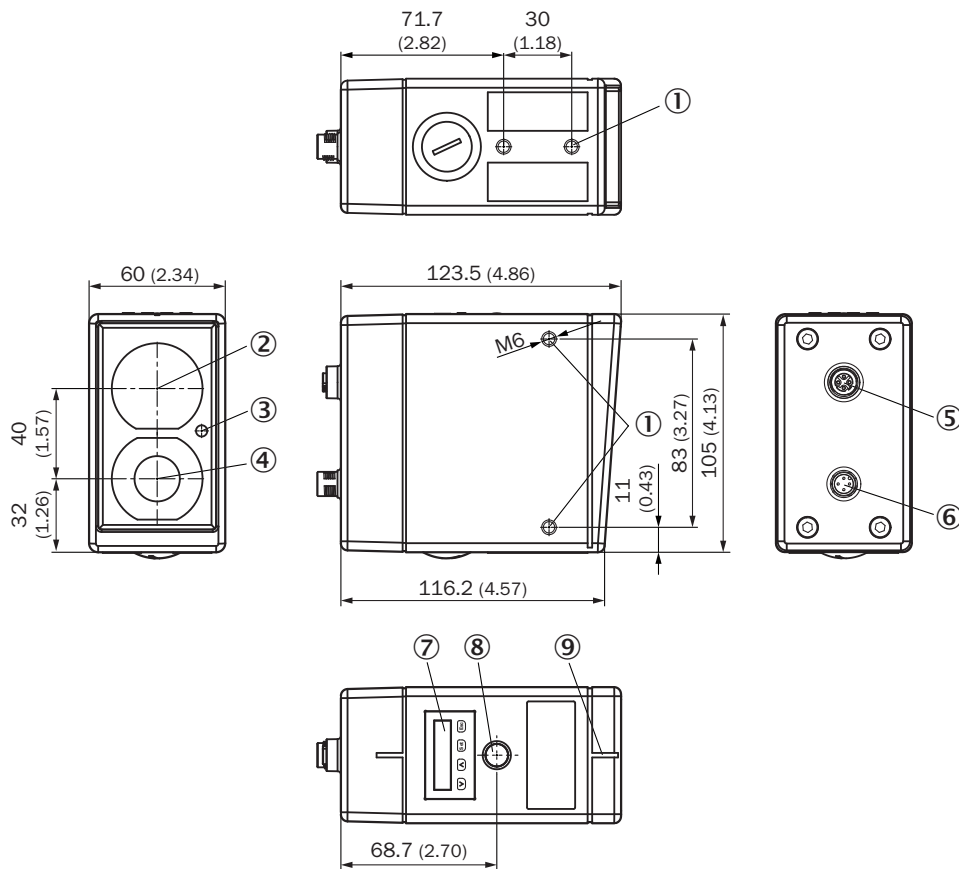
UNSPSC 16.0901	43201404
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Dimensional drawing



Dimensions in mm (inch)

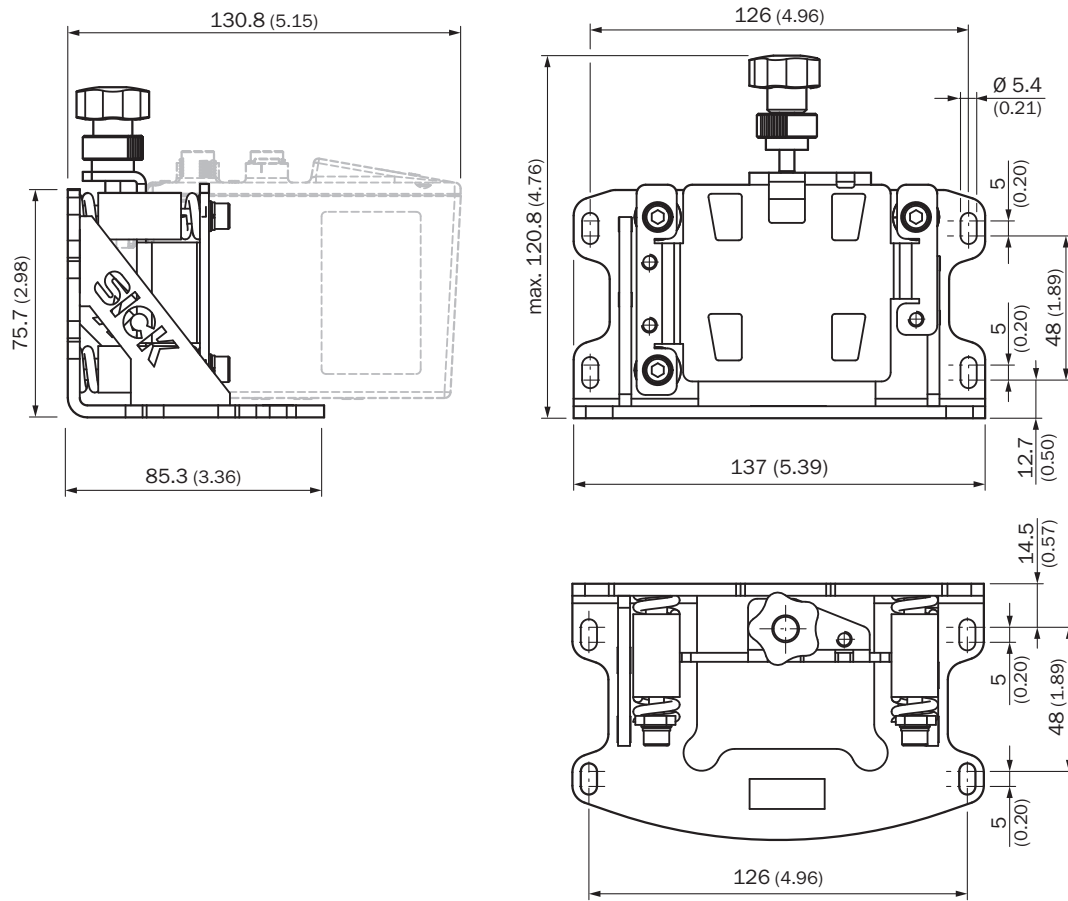
## Dimensional drawing



Dimensions in mm (inch)

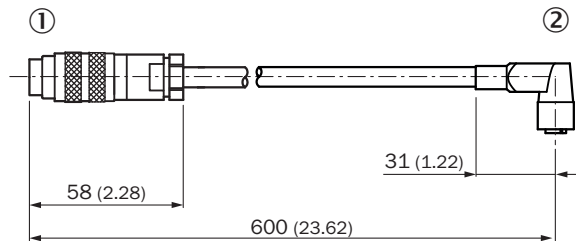
- ① Threaded mounting hole M6
- ② Center of optical axis, sender
- ③ Receive indicator
- ④ Center of optical axis, receiver
- ⑤ Ethernet female connector M12, 4-pin, D-coded
- ⑥ Power supply male connector M12, 4-pin, A-coded
- ⑦ Display with pushbuttons
- ⑧ Optical adjustment aid
- ⑨ Alignment sight

## Dimensional drawing



Dimensions in mm (inch)

## Dimensional drawing

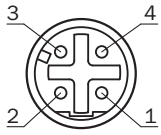


Dimensions in mm (inch)

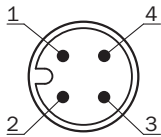
① Connector M16, 8-pin

② male connector M12, 8-pin

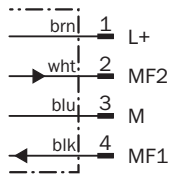
## Ethernet connection type



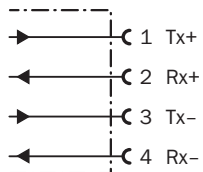
## Voltage supply connection type



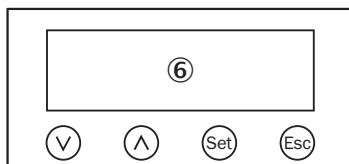
## Voltage supply connection diagram



## Ethernet connection diagram




## Adjustments



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.
Mounting systems			
	<ul style="list-style-type: none"><li><b>Description:</b> Alignment unit for DME4000/ISD400, aluminum, anodised</li></ul>	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.

**For us, that is “Sensor Intelligence.”**

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)