



# ISD400-6121

ISD400

OPTICAL DATA TRANSMISSION

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
ISD400-6121	1046120

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



### Detailed technical data

#### Performance

<b>Transmission range</b>	0.2 m ... 180 m
<b>Light source</b>	LED, infrared (880 nm)
<b>Typ. light spot size (distance)</b>	1.75 m (at 100 m)
<b>Aperture angle</b>	Ca. ± 0.5°
<b>Heating</b>	✓

#### Interfaces

<b>Data transmission rate</b>	3 Mbit/s
<b>Switching output</b>	HIGH: $U_v - 3\text{ V}$ , LOW: $< 2\text{ V}$
<b>Data interface</b>	Ethernet <sup>1)</sup>
<b>Switching input</b>	$V_s$ : sender deactivated
<b>Signal delay</b>	$\leq 350\ \mu\text{s}$ , + no. of Bytes x 8 / 3 Mbit/s <sup>2)</sup>

<sup>1)</sup> Internal buffer 8 kB.

<sup>2)</sup>  $1\ \mu\text{s} + 2\text{ Tbit}$  only for PROFIBUS.

#### Mechanics/electronics

<b>Supply voltage <math>V_s</math></b>	DC 18 V ... 30 V
<b>Power consumption</b>	$\leq 25\text{ W}$ <sup>1) 2)</sup>
<b>Housing material</b>	Metal
<b>Connection type</b>	Connector, M12, 4-pin
<b>Weight</b>	Approx. 900 g

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

<sup>2)</sup> At 24 V.

#### 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.

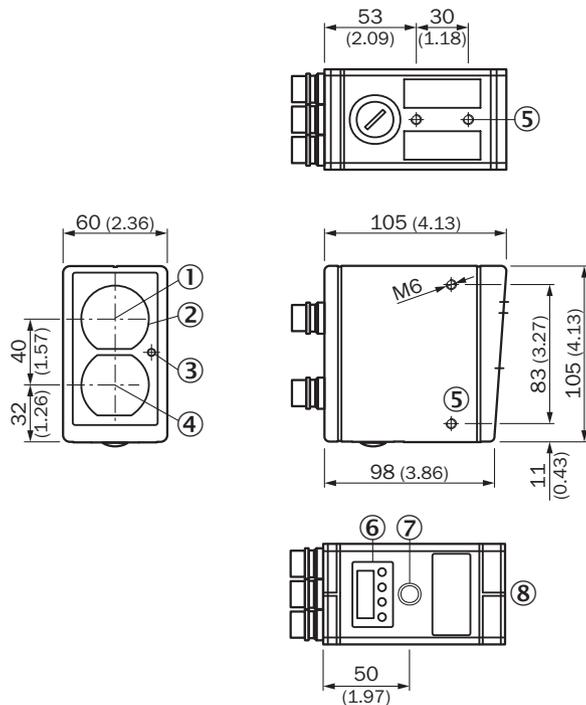
<b>Max. rel. humidity (not condensing)</b>	90 %, Non-condensing
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1) This is a Class A device. This device can cause radio interference in living quarters.

### 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, PROFI-safe, EtherNet/IP, EtherCAT, TCP/IP, etc.).
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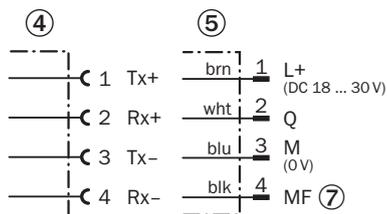
### Dimensional drawing (Dimensions in mm (inch))



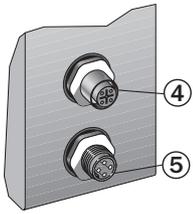
- ① Optical axis, sender
- ② View finder lens
- ③ Function indicator/level warning
- ④ Optical axis, receiver
- ⑤ Threaded mounting hole M6
- ⑥ Liquid crystal display with function keys
- ⑦ Optical adjustment aid
- ⑧ Alignment sight

### Connection type

#### ISD400 Ethernet



### Connection diagram



⑦ Multifunctional input (MF)

### 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			
	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](http://www.sick.com)