



# ISD400-1111

ISD400

OPTICAL DATA TRANSMISSION

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
ISD400-1111	1042286

Data transmission requires two devices. The second device must be ordered separately.

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

## Detailed technical data

### Mechanics/electronics

<b>Supply voltage <math>V_s</math></b>	DC 18 V ... 30 V
<b>Power consumption</b>	$\leq 4.8 \text{ W}^{1)}$
<b>Connection type</b>	Connector, M12, 4-pin
<b>Enclosure rating</b>	IP65
<b>Protection class</b>	III

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

### 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. $\pm 0.5^\circ$

### Interfaces

<b>PROFIBUS DP</b>	✓
Data transmission rate	3 Mbit/s
<b>Digital input</b>	$V_s$ : sender deactivated
<b>Digital output</b>	
Number	1 <sup>1)</sup>
Type	PNP
<b>Signal delay</b>	$\leq 1 \mu\text{s} + 2 \text{ Tbit}^{2)}$

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

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

### Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 <sup>1)</sup> EN 61000-6-4
<b>Ambient temperature, operation</b>	$-25 \text{ }^\circ\text{C} \dots +55 \text{ }^\circ\text{C}$
<b>Ambient temperature, storage</b>	$-40 \text{ }^\circ\text{C} \dots +75 \text{ }^\circ\text{C}$

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

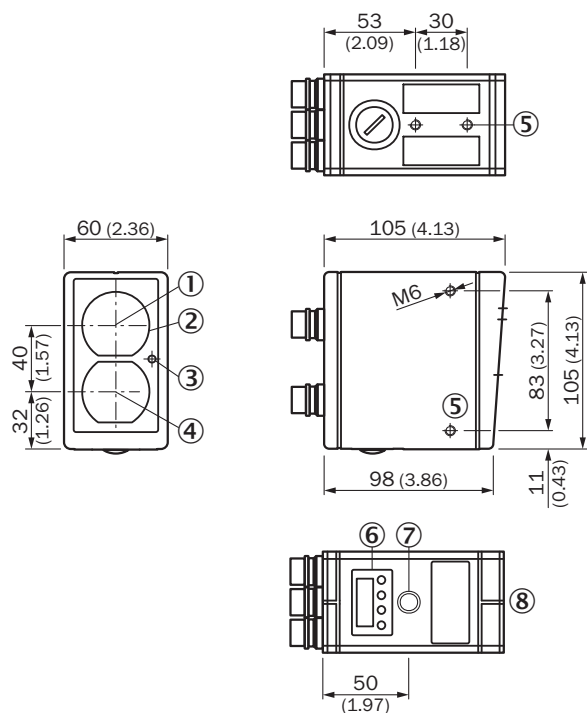
### General notes

<b>Note</b>	2 devices are required to construct a data transmission path. The devices are identical and must be ordered separately. Frequencies F1 and F2 can be set.
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### 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>ECLASS 10.0</b>	19179090
<b>ECLASS 11.0</b>	19170500
<b>ECLASS 12.0</b>	19170500
<b>ETIM 5.0</b>	EC000515
<b>ETIM 6.0</b>	EC000515
<b>ETIM 7.0</b>	EC000515
<b>ETIM 8.0</b>	EC000515
<b>UNSPSC 16.0901</b>	43201404

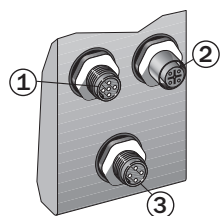
Dimensional drawing (Dimensions in mm (inch))



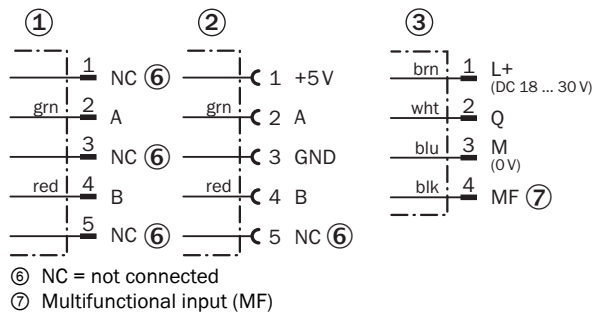
- ① Optical axis, sender
- ② View finder lens
- ③ Function indicator/level warning
- ④ Optical axis, receiver
- ⑤ Threaded mounting hole M6
- ⑥ Liquid crystal display with function keys
- ⑦ Optical adjustment aid
- ⑧ Alignment sight

Connection type

ISD400 RS-485/PROFIBUS



### Connection diagram




### 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)