Data sheet

ISD400-7222

ISD400

OPTICAL DATA TRANSMISSION

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	part no.
ISD400-7222	1065103

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

Detailed technical data

Technical specifications

Accessory group	Optical data transmission
Accessory family	ISD400
Weight	Approx. 800 g
Housing material	AlSi12
Enclosure rating	IP65
Ambient operating temperature	–40 °C ... +55 °C
Permissible relative humidity	90 %, Non-condensing

Mechanics/electronics

Power consumption	≤ 30 W [1]
Frequency	F2
Protection class	III

[1] Without load with 24 V.

Performance

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

Interfaces

Ethernet	✓
Data transmission rate	100 Mbit/s
Digital input	V_S: sender deactivated
Digital output	

[1] HIGH: U_V – 3 V, LOW: < 2 V.

Number	1 [1]
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.

[1] HIGH: U_V – 3 V, LOW: < 2 V.

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-2, EN 61000-6-4 [1]
Ambient temperature, operation	–40 °C ... +55 °C, operation with heating
Max. rel. humidity (not condensing)	90 %, Non-condensing

[1] 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, EtherNet/IP, EtherCAT, TCP/IP, etc.).

Features

Weight	Approx. 800 g
Housing material	AlSi12
Enclosure rating	IP65
Ambient operating temperature	–40 °C +55 °C
Permissible relative humidity	90 % Non-condensing

Certificates

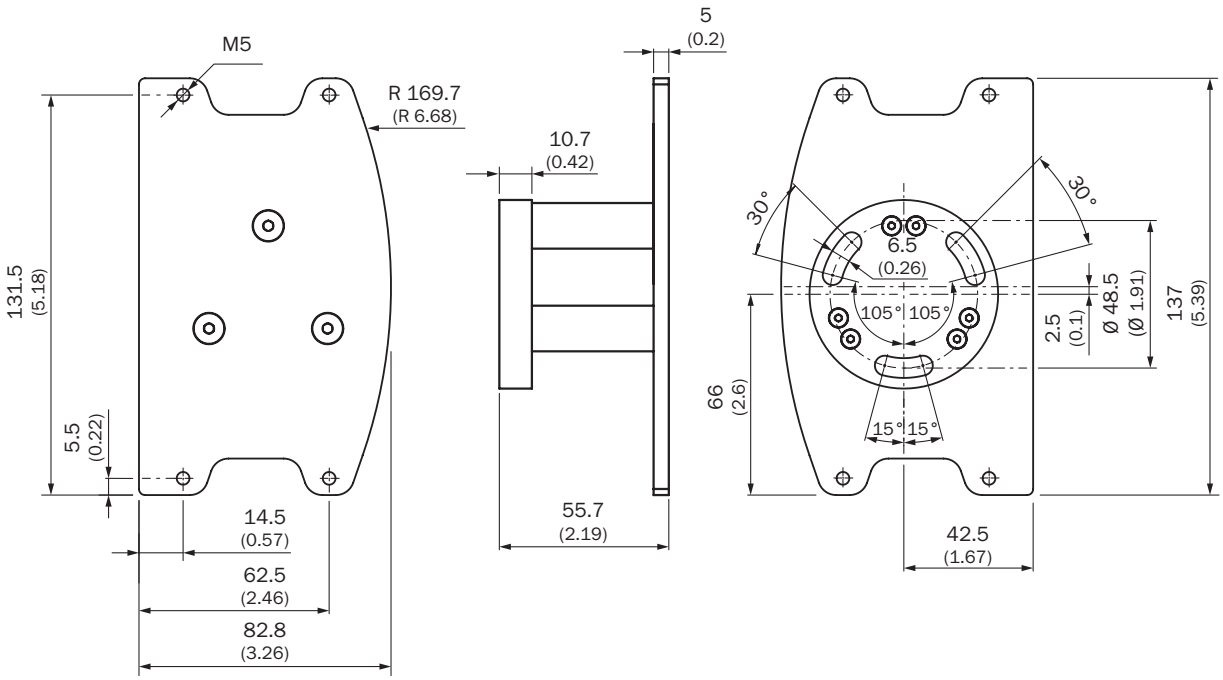
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Classifications

ECLASS 5.0	19039001
ECLASS 5.1.4	19039001
ECLASS 6.0	19179090
ECLASS 6.2	19179090
ECLASS 7.0	19179090
ECLASS 8.0	19179090
ECLASS 8.1	19179090
ETIM 5.0	EC000515

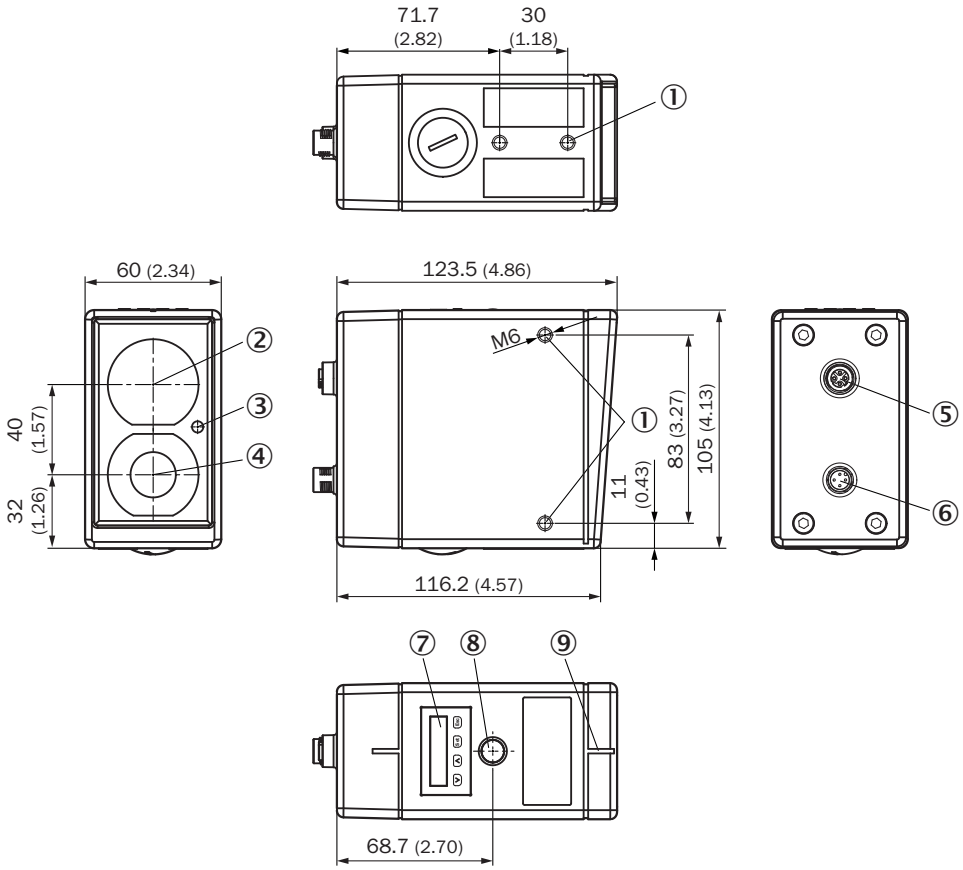
ETIM 6.0	EC000515
UNSPSC 16.0901	43201404

Dimensional drawing



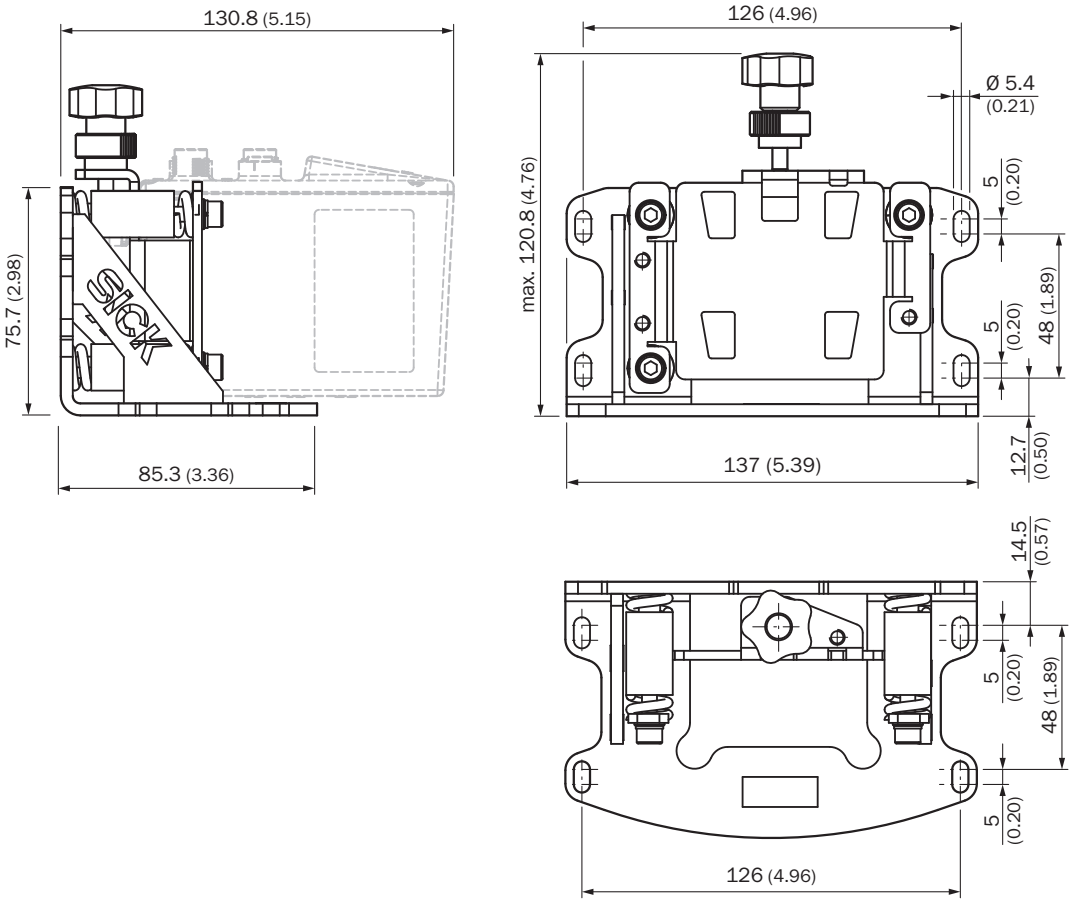
Dimensions in mm (inch)

Dimensional drawing



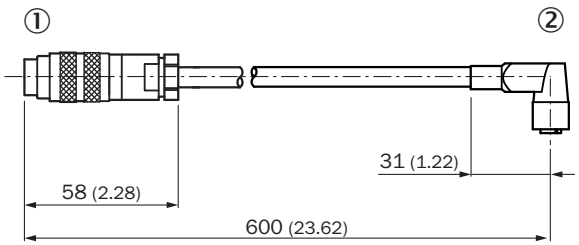
Dimensions in mm (inch)
① Threaded mounting hole M6
② Center of optical axis, sender
③ Receive indicator
④ Center of optical axis, receiver
⑤ Ethernet female connector M12, 4-pin, D-coded
⑥ Power supply male connector M12, 4-pin, A-coded
⑦ Display with pushbuttons
⑧ Optical adjustment aid
⑨ Alignment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

Dimensional drawing



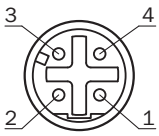
Dimensions in mm (inch)

Dimensional drawing

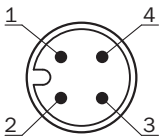


Dimensions in mm (inch)
① Connector M16, 8-pin
② male connector M12, 8-pin

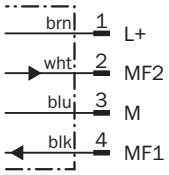
Ethernet connection type



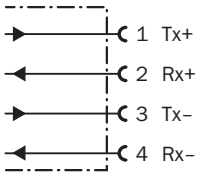
Voltage supply connection type



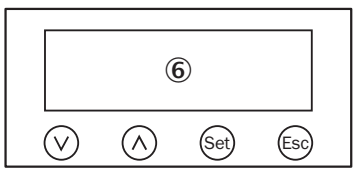
Voltage supply connection diagram



Ethernet connection diagram



Adjustments



⑥ Liquid crystal display with function keys

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Alignment unit for DME4000/ISD400, aluminum, anodised	BEF-DME/ISD	2046052

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