ISD400-7311

ISD400

OPTICAL DATA TRANSMISSION

SICK
Sensor Intelligence.

ISD400-7311 | ISD400
OPTICAL DATA TRANSMISSION

Illustration may differ

Ordering information

Type	Part no.
ISD400-7311	1071522

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

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

Detailed technical data

Mechanics/electronics

Supply voltage V_s	DC 18 V … 30 V
Power consumption	≤ 3.6 W [1]
Connection type	1 x Ethernet female connector M12, 4-pin, D-coded 1 x power supply male connector M12, 4-pin, A-coded
Frequency	F1
Enclosure rating	IP65
Protection class	III

[1] Without load.

Performance

Transmission range	0.2 m … 200 m
Light source	Laser, red (660 nm) Laser, infrared (785 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	1° (sender) 1.5° (receiver)

Interfaces

Ethernet		✔
	Data transmission rate	100 Mbit/s
Digital input		V_s: sender deactivated
Digital output		
	Number	1 [1]
	Type	Push-pull: PNP/NPN
	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 [1] EN 61000-6-4
Ambient temperature, operation	–20 °C ... +55 °C
Ambient temperature, storage	–40 °C ... +75 °C
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.).

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
ECLASS 9.0	19179090
ECLASS 10.0	19179090
ECLASS 11.0	19170500
ECLASS 12.0	19170500
ETIM 5.0	EC000515
ETIM 6.0	EC000515
ETIM 7.0	EC000515
ETIM 8.0	EC000515
UNSPSC 16.0901	43201404

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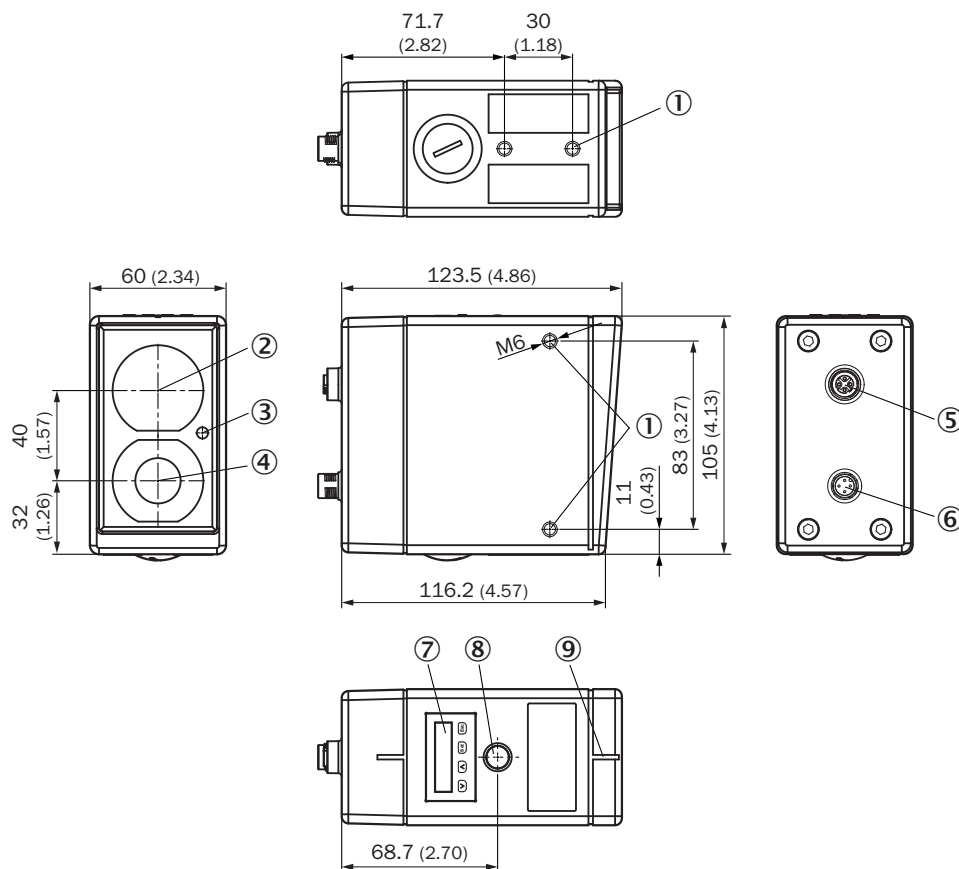
① Threaded mounting hole M6
② Center of optical axis, sender
③ Receive indicator
④ Center of optical axis, receiver
⑤ Ethernet female connector M12, 4-pin, D-coded
⑥ Power supply male connector M12, 4-pin, A-coded
⑦ Display with pushbuttons
⑧ Optical adjustment aid
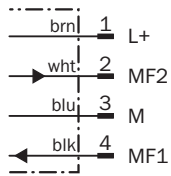⑨ Alignment sight

Connection type

Ethernet connection type
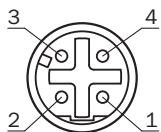
Voltage supply connection type
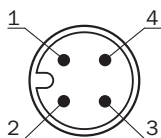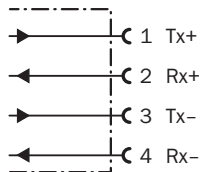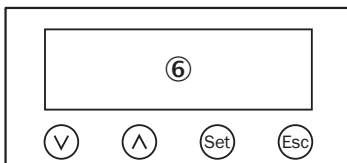
Connection diagram

Voltage supply connection diagram

brn	1	L+
wht	2	MF2
blu	3	M
blk	4	MF1

Ethernet connection diagram

	1	Tx+
	2	Rx+
	3	Tx−
	4	Rx−

Adjustment possible

⑥

∨ ∧ (Set) (Esc)

⑥ Liquid crystal display with function keys

Recommended accessories

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

Brief description	Type	Part no.
Terminal and alignment brackets		
Alignment unit for DME4000/ISD400, aluminum, anodised	BEF-DME/ISD	2046052

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