



ISD300-1111

ISD300

OPTICAL DATA TRANSMISSION

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
ISD300-1111	6024761

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

Other models and accessories → www.sick.com/ISD300

Detailed technical data

Mechanics/electronics

Supply voltage V_s	DC 18 V ... 30 V
Connection type	Terminals
Current consumption	≤ 0.2 A
Frequency	F1 ¹⁾
Enclosure rating	IP65
Protection class	I

¹⁾ A pair of devices with numbers ending in 1 and 2 are required to create a data transfer section.

Performance

Transmission range	0.2 m ... 120 m
Light source	LED, infrared (880 nm)
Typ. light spot size (distance)	1.75 m (at 100 m)
Aperture angle	Ca. ± 0.5°

Interfaces

PROFIBUS DP	✓
Data transmission rate	1.5 Mbit/s
Serial	✓, RS-485
Remark	On request
Data transmission rate	1.5 Mbit/s
Digital input	0 V ... 2 V: sender deactivated
Digital output	
Number	1 ^{1) 2)}
Signal delay	≤ 1.5 μs, + 1 Tbit

¹⁾ 0 V ... 2 V: interference-free operation.

²⁾ $V_s - 2$ V: reduced system reserve.

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-2 ¹⁾ EN 61000-6-4
Ambient temperature, operation	-5 °C ... +50 °C
Ambient temperature, storage	-30 °C ... +70 °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

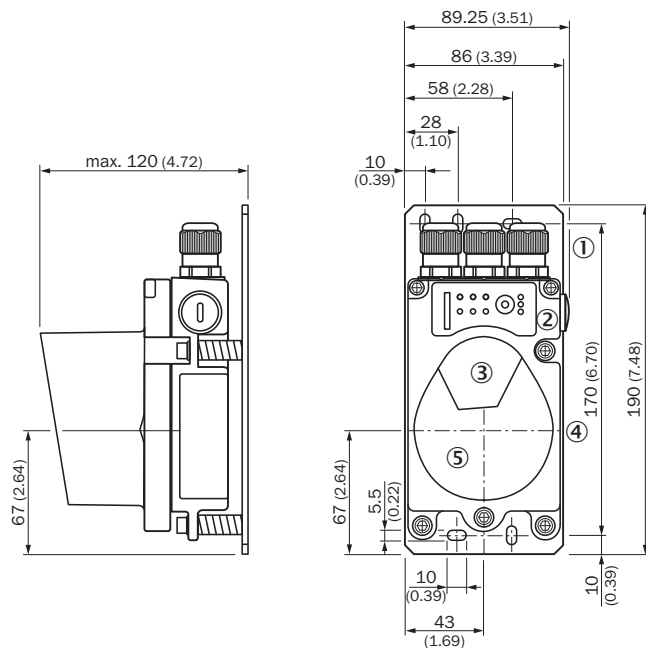
Note	2 devices are required to construct a data transmission path: ISD300-xxx1 (frequency 1) and ISD300-xxx2 (frequency 2). The two devices must be ordered separately.
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Classifications

eCl@ss 5.0	19039001
eCl@ss 5.1.4	19039001
eCl@ss 6.0	19179090
eCl@ss 6.2	19179090
eCl@ss 7.0	19179090
eCl@ss 8.0	19179090
eCl@ss 8.1	19179090
eCl@ss 9.0	19179090
eCl@ss 10.0	19179090
eCl@ss 11.0	19170500
eCl@ss 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))

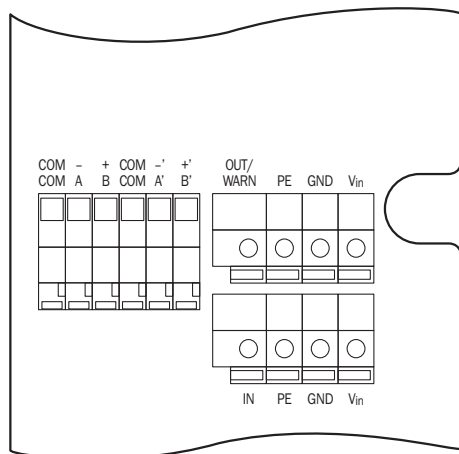
ISD300 RS-485/PROFIBUS, ISD300 RS-422/Interbus, ISD300 DH+/RIO, ISD300 DeviceNet/CANopen



- ① M16 gland
- ② Control panel
- ③ Sender lens
- ④ Center of optical axis
- ⑤ Receiver lens

Connection type

ISD300 RS-485/PROFIBUS

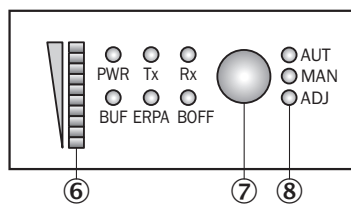


Connection diagram

Terminals, general		Terminals, PROFIBUS	
V_{in}	L+	A, -	A wire
GND	M	B, +	B wire
PE	Shield	COM	Pot. balance
OUT/WARN	Q	A', -'	A wire
IN	Switch. input	B', +'	B wire

Adjustment possible

ISD300 RS-485/PROFIBUS, ISD300 RS-422/Interbus, ISD300 DH+/RIO, ISD300 DeviceNet/CANopen





- ⑥ Display for signal level
- ⑦ Operating mode selector switch
- ⑧ LED operating indicator

Recommended accessories

Other models and accessories → www.sick.com/ISD300

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: Flying leads Head B: Flying leads Cable: PROFIBUS DP, PUR, shielded	LTG-2102-MW	6021355
	Head A: Flying leads Head B: Flying leads Cable: CANopen, DeviceNet™, shielded Wire shield Al-Pt film, overall shield C-screen tin-plated	LTG-2804-MW	6028328
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: Flying leads Cable: PROFIBUS DP, twisted pair, PUR, halogen-free, shielded, 5 m Wire shield Al-Pt film, overall shield C-screen tin-plated	STL-1205-G05MQ	6026005
	Head A: female connector, M12, 5-pin, straight Cable: CANopen, DeviceNet™, shielded	D0S-1205-GA	6027534
	Head A: female connector, M12, 5-pin, straight, B-coded Cable: PROFIBUS DP, shielded	D0S-1205-GQ	6021353

	Brief description	Type	Part no.
	Head A: male connector, M12, 5-pin, straight, A-coded Cable: CANopen, DeviceNet™, shielded	STE-1205-GA	6027533
	Head A: male connector, M12, 5-pin, straight, B-coded Cable: PROFIBUS DP, shielded	STE-1205-GQ	6021354

Recommended services

Additional services → www.sick.com/ISD300

	Type	Part no.
Extended warranty		
<ul style="list-style-type: none"> • Product area: Identification solutions, machine vision, Distance sensors, Detection and ranging solutions • Range of services: The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery). • Duration: Five-year warranty from delivery date. 	Extended warranty for a total of five years from delivery date	1680671

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