



Optical data transmission ISD300

ISD300-1312



Model Name > [ISD300-1312](#)
Part No. > [6028214](#)



At a glance

- PROFIBUS interface
- Push button displays opposing device's reception level for simple one man alignment
- Up to 1.5 Mbit/s transfer rate
- Integrated 3-point mounting bracket

Your benefits

- Non-contact system eliminates wear and tear thus guaranteeing high machine uptime and significantly reduced maintenance costs
- Electronic alignment methods significantly reduce installation times thus saving costs
- Very long scanning range ensures high gain reserve even in challenging environmental conditions
- Reduced installation costs by eliminating cables
- Excellent ambient light immunity and EMC compatibility ensure accurate and reliable data transmission
- Increased system speed with fast data transmission
- Fast and easy integration into PROFIBUS network without additional converter cards
- Fast and easy assembly with integrated 3-point mounting bracket reduces installation time and costs



CE RS-485

Performance

Light source:	LED, infrared (880 nm)
Heating:	-
Typ. light spot size (distance):	1.75 m (at 100 m)
Transmission range:	0.2 m ... 300 m
Field of view:	Ca. $\pm 0.5^\circ$

Interfaces

Data transmission rate:	1.5 Mbit/s
Output type:	0 V ... 2 V: interference-free operation VS -2 V: reduced system reserve
Switching input:	0 V ... 2 V: sender deactivated
Signal delay:	$\leq 1.5 \mu\text{s} + 1 \text{Tbit}$
Data interface ¹⁾ :	RS-485/PROFIBUS DP

1) RS-485 on request

Mechanics/electronics

Supply voltage Vs:	DC 18 V ... 30 V
Power consumption:	≤ 0.2 A
Weight:	Ca. 1.2 kg
Housing material:	Metal
Electrical connection:	Terminals
Frequency:	F2 ¹⁾

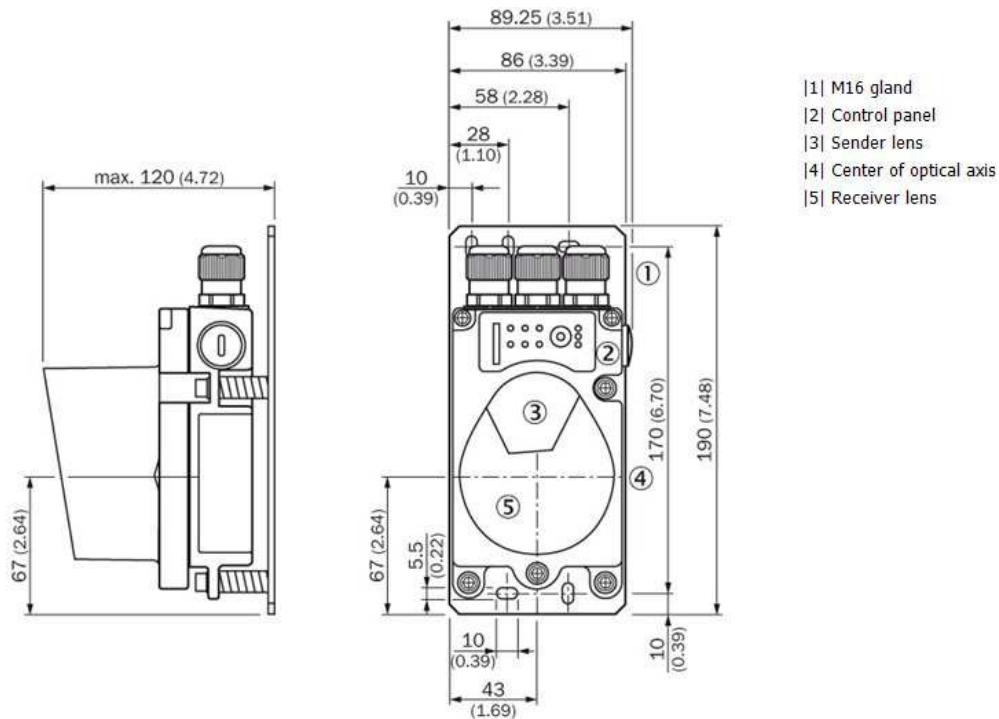
1) A pair of devices with numbers ending in 1 and 2 are required to create a data transfer section.

Ambient data

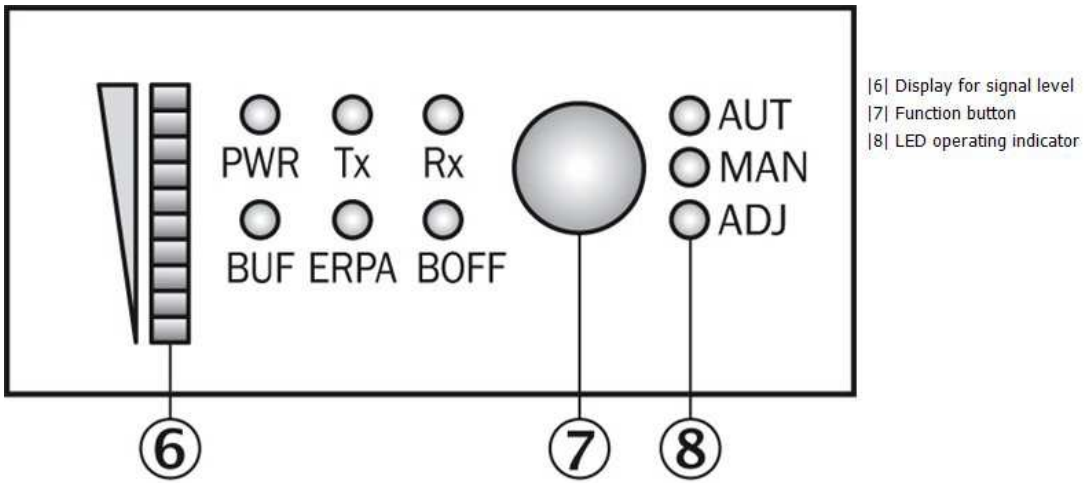
Enclosure rating:	IP 65
Protection class:	I
Electromagnetic compatibility (EMC):	EN 61000-6-2/EN 61000-6-4 ¹⁾
Ambient temperature:	Storage: -30 ... +70 °C
Ambient temperature operation:	-5 °C ... +50 °C
Max. rel. humidity (not condensing):	90 %, non-condensing

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

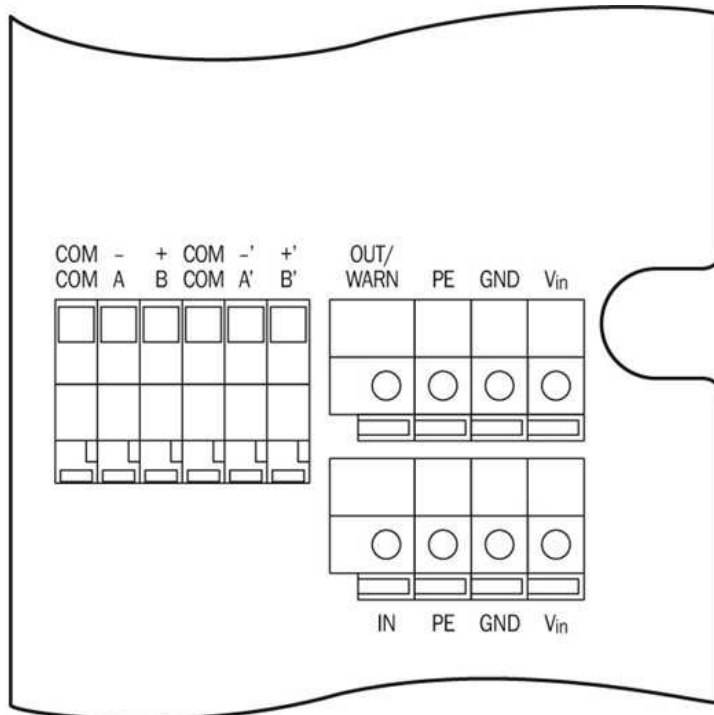
Dimensional drawing



Adjustments



Connection type



Connection diagram

Terminals, general

V_{in}	L+
GND	M
PE	Shield
OUT/WARN	Q
IN	Switch. input

Terminals, PROFIBUS

A, -	A wire
B, +	B wire
COM	Pot. balance
A', -'	A wire
B', +'	B wire

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