


ONLINE DATA SHEET
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# Optical data transmission
# ISD300

ISD300-1312



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# Optical data transmission
# ISD300

| | |
|---|---|
| **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. ± 0.5 ° |

## Interfaces

| | |
|---|---|
| Data transmission rate: | 1.5 Mbit/s |
| Output type: | 0 V ... 2 V: interference-free operation<br>VS -2 V: reduced system reserve |
| Switching input: | 0 V ... 2 V: sender deactivated |
| Signal delay: | ≤ 1.5 µs + 1 Tbit |
| Data interface [1]: | RS-485/PROFIBUS DP |


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[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] |

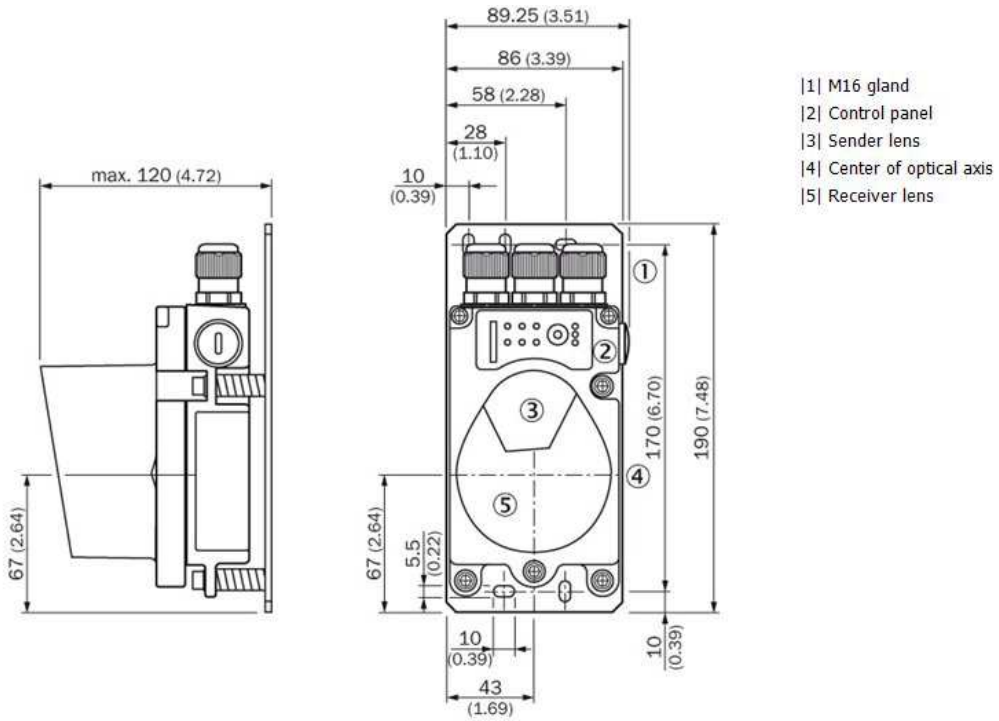
[1] A pair of devices with numbers ending in 1 and 2 are required to create a data transfer section.

## 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.

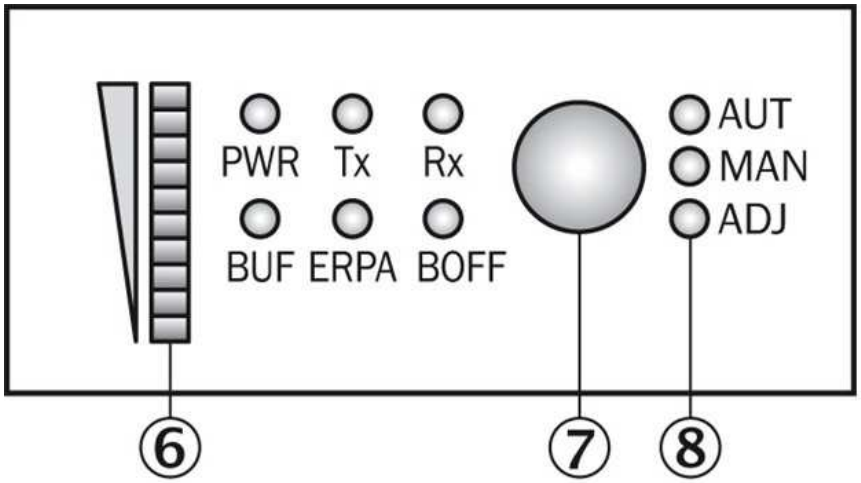
## Dimensional drawing





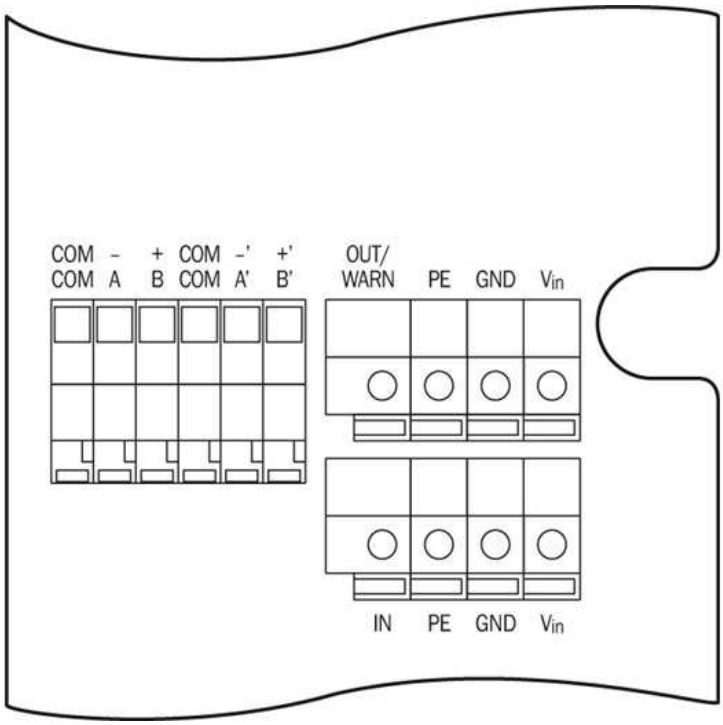
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## Adjustments




|6| Display for signal level
|7| Function button
|8| LED operating indicator

## Connection type





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## 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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**Australia**
Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

**Belgium/Luxembourg**
Phone +32 (0)2 466 55 66
E-Mail info@sick.be

**Brasil**
Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

**Canada**
Phone +1 905 771 14 44
E-Mail information@sick.com

**Česká republika**
Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

**China**
Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

**Danmark**
Phone +45 45 82 64 00
E-Mail sick@sick.dk

**Deutschland**
Phone +49 211 5301-301
E-Mail info@sick.de

**España**
Phone +34 93 480 31 00
E-Mail info@sick.es

**France**
Phone +33 1 64 62 35 00
E-Mail info@sick.fr

**Great Britain**
Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

**India**
Phone +91–22–4033 8333
E-Mail info@sick-india.com

**Israel**
Phone +972-4-6881000
E-Mail info@sick-sensors.com

**Italia**
Phone +39 02 27 43 41
E-Mail info@sick.it

**Japan**
Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

**Magyarország**
Phone +36 1 371 2680
E-Mail office@sick.hu

**Nederland**
Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

**Norge**
Phone +47 67 81 50 00
E-Mail sick@sick.no

**Österreich**
Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

**Polska**
Phone +48 22 837 40 50
E-Mail info@sick.pl

**România**
Phone +40 356 171 120
E-Mail office@sick.ro

**Russia**
Phone +7-495-775-05-30
E-Mail info@sick.ru

**Schweiz**
Phone +41 41 619 29 39
E-Mail contact@sick.ch

**Singapore**
Phone +65 6744 3732
E-Mail sales.gsg@sick.com

**Slovenija**
Phone +386 (0)1-47 69 990
E-Mail office@sick.si

**South Africa**
Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

**South Korea**
Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

**Suomi**
Phone +358-9-25 15 800
E-Mail sick@sick.fi

**Sverige**
Phone +46 10 110 10 00
E-Mail info@sick.se

**Taiwan**
Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

**Türkiye**
Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

**United Arab Emirates**
Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

**USA/México**
Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at **www.sick.com**



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