



Optical data transmission
ISD300, ISD300 PROFIBUS/RS-485, RS-485/PROFIBUS DP

ISD300-1121



Model Name > [ISD300-1121](#)
Part No. > [6024840](#)



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



Performance

| | |
|----------------------------------|------------------------|
| Light source: | LED, infrared (880 nm) |
| Heating: | ✓ |
| Typ. light spot size (distance): | 1.75 m (at 100 m) |
| Transmission range: | 0.2 m ... 120 m |
| Field of view: | Ca. ± 0.5 ° |

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: | ≤ 1.5 μs + 1 Tbit |
| Data interface ¹⁾ : | RS-485/PROFIBUS DP |

1) RS-485 on request

Mechanics/electronics

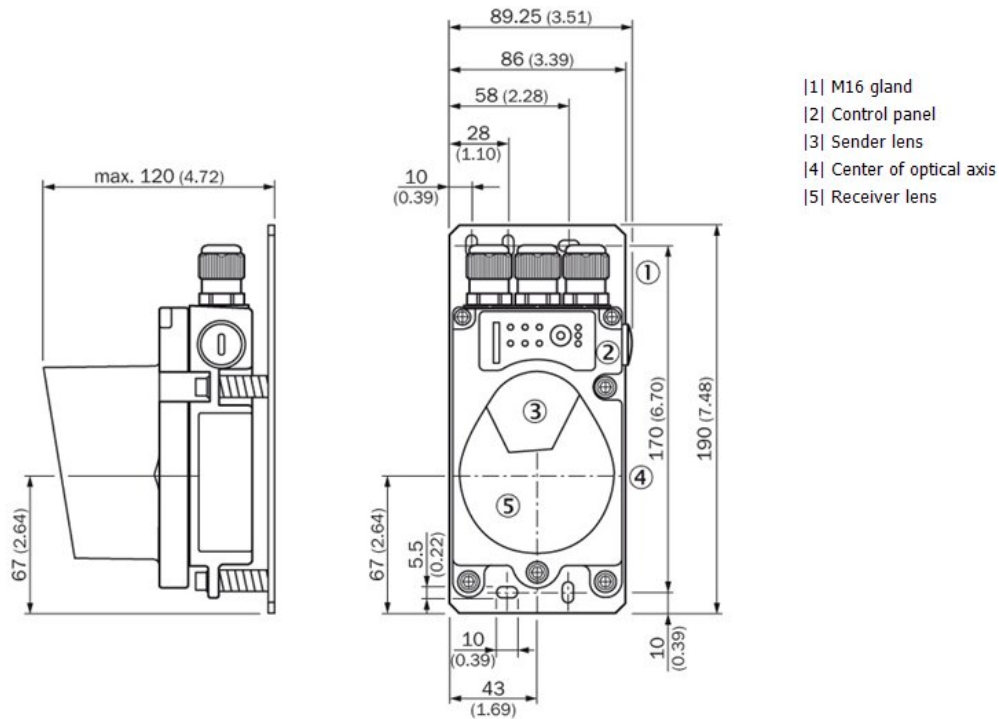
| | |
|------------------------|------------------|
| Supply voltage V_s : | DC 18 V ... 30 V |
| Power consumption: | ≤ 0.8 mA |
| Weight: | Ca. 1.2 kg |
| Housing material: | Metal |
| Connection type: | Terminals |
| Frequency: | 1 |

Ambient data

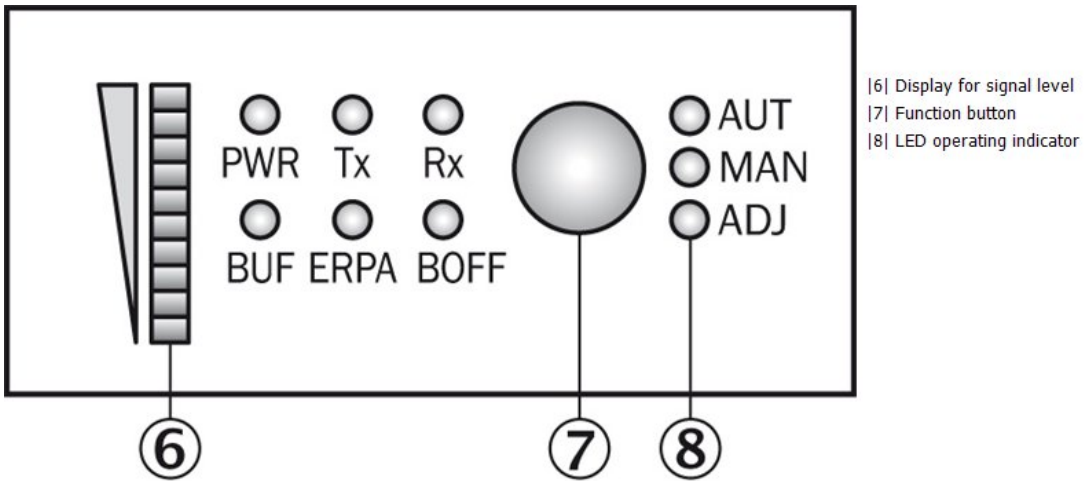
| | |
|--------------------------------------|---|
| Enclosure rating: | IP 65 |
| Protection class: | I |
| Ambient temperature: | Storage: -30 ... 70 °C |
| Max. rel. humidity (not condensing): | 90 %, non-condensing |
| Ambient operating temperature: | -30 °C ... 50 °C |
| Electromagnetic compatibility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

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

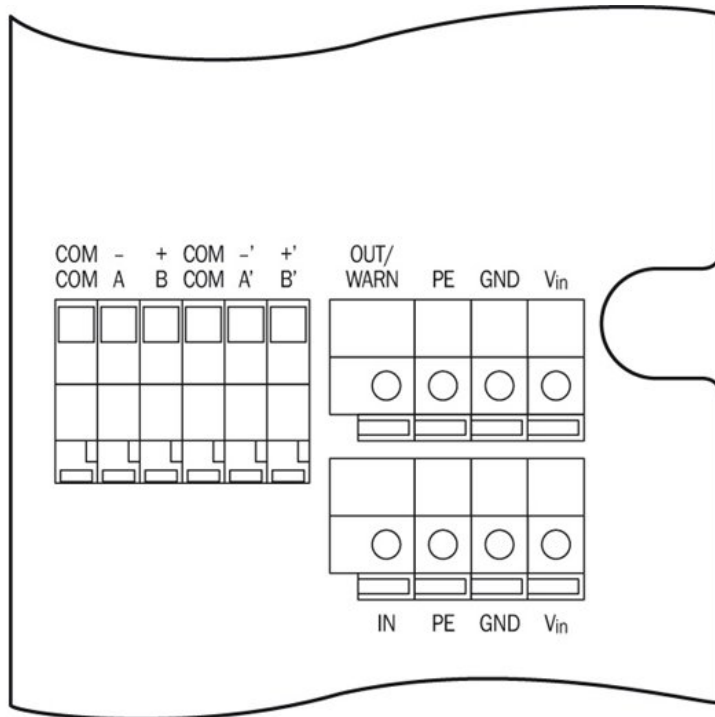
Dimensional drawing



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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