

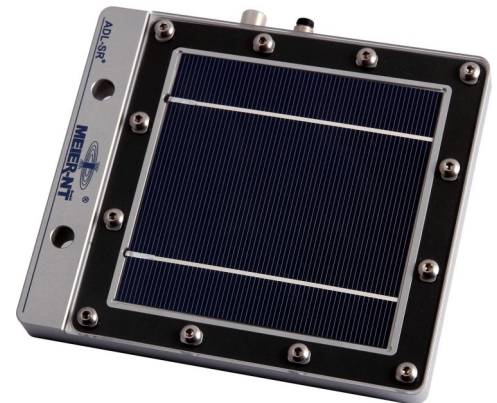


ADL-SR[®] Sonnenmeter the irradiation sensor

The sun sensor is used to measure the irradiance in photovoltaic systems. Among other things, the instantaneous irradiance in W/m² and the module temperature in °C are available as output signal. With the integrated high-resolution ADL-FE Field Extension, the analog signal of the solar module is converted into a digital RS485 signal.

Advantages:

- each sensor is supplied with an individual calibration
- the sensor is connected via a 2-wire RS485 bus with open vendor-independent Modbus RTU protocol
- up to 253 sensors of different types can be connected to each bus (example sensors: sun sensor, string monitor, digital inputs, analog inputs, etc.)
- production in Germany is certified with ISO9001:2008 and ISO14001:2004 standard
- simple installation
- no accuracy loss due to cable lengths



ADL-SR[®] Sonnenmeter

Technical specifications

| | |
|-----------------------------|--|
| Resolution | 16 Bit |
| Radiation measuring range | 0 to 1500 W/m ² +/- 5 % |
| Temperature sensor | internal PT1000 1/3 DIN |
| Temperature measuring range | -40 °C to 125 °C +/- 1 °C |
| Digit input | frequency measurement up to 1 kHz resolution 1 Hz |
| Supply voltage | 9 to 36 V DC / 260mW |
| Operating temperature range | -30 °C to 70 °C |
| Operating humidity range | 0 to 100 %rH |
| Communication interface | Modbus RTU - 19200 Baud, 8n1 address 1 to 253 (shipped with 2, broadcast with 254) |
| Connection bus / supply | Plug M8 4-pin, A-coded |
| Connection external sensors | Socket M8 4-pin, A-coded (for option with Y-splitter) |
| Housing material | Aluminum / PMMA acrylic glass |
| Protection class | IP 65 according to DIN 40 050-9/5.93 |
| Dimensions (L/W/H) | 150x130x20 mm |
| Weight | 550 g |
| Option | External temperature sensor PT1000 1/3 DIN Wind sensor (0.9 to 40 m/s +/- 0.5 m/s) |

Accessories for ADL-SR[®] Sonnenmeter

ADL-SR module temperature sensor PT1000 1/3 DIN

This sensor measures the temperature of photovoltaic modules. Fastening is done via the stainless steel block by means of a screw. On request there are different types available. The sensor is ready-made for connection to the ADL-SR Sonnenmeter.

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|------------------------|--|
| Temperature sensors: | PT1000 |
| Temp. measuring range: | -35 °C to +105 °C (Opt. -40 °C to +125 °C) |
| Measuring current: | about 1 mA |
| Insulation resistance: | at 20°C and 500V DC, typ. 100 MOhm |
| Cable: | PVC-Cable (2 x 0,25 mm ²) |
| Cable length: | Standard 2 m (others on request) |
| Connection type: | 2-wire connection |
| Stainless steel block: | stainless steel VA 1.4571 |
| Dimensions: | L 15 x W 8 x H 8 mm, borehole Ø 5 mm |
| Protection class: | IP54 |
| Storage temperature: | -30 °C to +50 °C |
| Weight: | 77 g |



ADL-SR[®] module temperature sensor PT1000

ADL-SR wind sensor

Capture the wind speed of your system directly via the ADL-SR Sonnenmeter. The wind speed can then be read from the ADL-SR in „m/s“ or be captured by the ADL-MXS data logger. The wind sensor is connected directly to the ADL-SR. The plug is made-up for this already.

Sensor for measuring the horizontal wind speed in m/s.

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|----------------------|--------------------------------|
| Measuring range: | 0,5 - 40 m/s |
| Accuracy: | ±0.5 m/s resp. ±5% of reading |
| Resolution: | 0.4 m wind way |
| Electrical output: | 0-100 Hz |
| Load: | max. 60 m/s |
| Contact load: | 10 VA, max. 42 VDC, max. 0.4 A |
| Ambient temperature: | -25 °C ... +60 °C |
| Cable: | LiYY 2 x 0.5 mm ² |
| Cable length: | standard 3 m |
| Dimensions: | Ø 134 x 160 mm |
| Protection class: | IP54 |
| Weight: | 0.3 kg |



ADL-SR[®] wind sensor 0,5 - 40 m/s