



MEIER-NT[®]
WWW.MEIER-NT.DE

www.SolarDatenlogger.de

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	-30 °C to 70 °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 plexiglass
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. The sensor is ready-made for connection to the ADL-SR Sonnenmeter.

Temperature sensors:	PT1000
Temp. measuring range:	-35 to +105 °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 2m (others on request)
Connection type:	2-wire connection
Stainless steel block:	stainless steel VA 1.4571
Dimensions:	L 15 x W 8 x H 8mm, borehole Ø 5mm
Protection class:	IP54
Storage temperature:	-30 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.

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 ... +60 °C
Cable:	LiYY 2 x 0.5mm ²
Cable length:	standard 3 m
Dimensions:	Ø 134 x 160 mm
Protection class:	IP54
Weight:	0.3kg



ADL-SR[®] wind sensor 0,5 - 40 m/s