



Digital “Secondary Standard” Pyranometer

The sun[e] Modbus offers the highest accuracy and highest data availability: using new ventilation and heating technology, the sun[e] Modbus outperforms all pyranometers equipped with traditional ventilation systems.

sun[e] Modbus is the ideal instrument for use in PV system performance monitoring and meteorological networks.

It measures the solar radiation received by a plane surface, in W/m^2 , from a 180° field of view angle.

- heated for best data availability
- new technology outperforms traditional pyranometer ventilation
- compliant in its standard configuration with the requirements for Class A PV monitoring systems of the IEC 61724-1:2017

professional meteorological applications • building automation • photovoltaic systems • industrial meteorology



Professional Line	Pyranometer sun[e] Modbus	Id-No. 00.16130.501 030
Meas. element/ -principle:	thermopile • thermal difference measurement	
Measuring range:	-400...4000 W/m^2 • global radiation within a range of 285...3000 nm	
Range of application:	temperatures -40...+80 °C	
Spectral sensitivity:	< $\pm 3\%$ (0.35...1.5 μm) • tilt deviation < $\pm 2\%$	
Non-linearity:	< $\pm 0.2\%$ (100...1000 w/m^2)	
Resolution:	0.05 W/m^2	
Output:	Modbus RTU	
Power supply:	24 VDC (8...30 VDC)	
Power requirement:	approx. 2.3 W	
Response time:	3 s (95 %)	
Directional answer:	< $\pm 10 W/m^2$	
Dimensions/ Weight:	max. \varnothing 92 mm • approx. H 95 mm • approx. 0.64 kg	
Standards:	ISO 9060 “Secondary Standard” • IP67	