

## Sensor Box Professional and Professional Plus

## Irradiation Sensor

Sensors help to record the deviations between the possible and the actual power production and provide important key figures in regard to the quality of the entire PV plant. An error message is generated when there is a deviation from the reference value and its current production.

The internal cell temperature sensor allows the temperature coefficient of the modules to be included when calculating the reference values. At larger plants, up to nine Sensor Boxes Professional and Professional Plus can be connected to a Solar-Log Base, 300, 1200, 1900 and 2000.

It is possible to use the Sensor Boxes with other RS485 components on the same bus.

Additionally, the Sensor Box Professional Plus can be expanded with ambient temperature sensors and wind sensors.



Sensor Box Professional Plus



Sensor Box Professional

Technical data	Sensor Box Professional	Sensor Box Professional Plus
Solar cell, laminated inside glass	Mono crystalline silicon (5 cm x 3.3 cm)	
Dimensions (w x h x d) in mm, weight	155 x 85 x 40; approx. 360 g	
Housing	Powder-coated aluminum	
Protection mode	IP65	
Operating temperature	-35 °C to +80 °C	
Power supply	Via RS485 data cable from Solar-Log™, No additional power supply required	
Supply current	Typical 80 mA	
Communication port	RS485	
Protocol	Solar-Log™, 9600 Baud, 8N1	
Measurement uncertainty	Radiation strength: 5 W/m <sup>2</sup> ± 2,5 % of the measured value (0 W/m2 to 1400 W/m <sup>2</sup> ) Cell-temperature: ± 1K (-40 °C to +85 °C)	
Installation	Same orientation and pitch as the PV generator	
Connection cable	4 pole, 3 m (10 feet), weather and UV resistant (LiYC11Y (4 x 0,14) expandable up to 50 m (0,14 mm²)	
Conformity	CE in accordance with DIN EN-61000-6- 1:2007 and DIN EN-61000-6-3:2007	
Wind sensor	-	•
Ambient temperature sensor	-	•
Warranty	2 years	
Article number	255896	220060

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