

Sensor Box Professional and Professional Plus

Irradiation sensor specifically designed for large-scale PV plants

Sensors precisely record the deviations between the possible and the actual power production and provide important key figures in regard to the quality of the entire plant. An error message is generated when a deviation is detected. The irradiation sensor is the most important element of the Sensor Box Professional and Professional Plus. It provides a reference value for the amount of solar irradiation that can be used to evaluate the potential power production. Power reductions are easier to analyze with the internal module temperature sensor. The sensor evaluation provides indications of the cause of the fault. Up to nine Sensor Boxes Professional and Professional Plus can be connected. It is possible to use the Sensor Boxes with their own RS485 inverters on the same bus the Solar-Log™.

The Sensor Box Professional Plus also has the option to connect an ambient temperature sensor and window sensor.



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	145 x 85 x 40; 360 g	
Housing	Powder-coated aluminum	
Protection mode	IP65	
Operating temperature	-20 °C to +70 °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	
Irradiance	Irradiance : ± 5 % (0 W/m ² to 1400 W/m ²) Cell-temperature: ± 1K (-20 °C to +70 °C) / ± 2 K (-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) prolongable up to 50 m (0,14 mm ²))	
Conformity	CE nach 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