



Kipp & Zonen SMP3 Pyranometer

Product #: 0374900
USD Price: Contact Hach

The SMP3 is a smart pyranometer with low maintenance and industry standard digital and analogue amplified outputs. Based on the proven CMP3 technology the SMP3 adds Modbus® interface, improved response time and temperature corrected measurement data.

The wide and low power supply range from 5 to 30 VDC makes integration in meteorological stations easy. The SMP is protected against over voltage, reversed polarity and short circuiting.

Because all SMP's have identical sensitivity and connections, exchanging instruments during recalibration is easy. SmartExplorer Windows™ for data logging, display of data and Modbus® address setting is provided as standard.

SMP3 measures global solar radiation on a horizontal plane. When tilted with the same angle as a PV panel it measures the tilted global radiation for PV module efficiency calculations.

ISO / IEC classification

ISO 9060 spectrally flat Class C, with ISO / IEC 17025 calibration.

Minimized maintenance

No desiccant change for 10 years, best MTBF with 5 years warranty.

Smart interface

Modbus RTU interface, wide temperature correction range and very low power consumption. Both digital and analog outputs available. No need to adjust data logger after recalibration.

Specifications

Analog Outputs:	0 to 1 V (V-model) or 4 to 20 mA (A-model)
Cable Length:	33, 82, 164, 330 ft (10, 25, 50, 100 m)
Classification:	Spectrally Flat Class C (ISO 9060:2018)
Digital Outputs:	Modbus RTU 2-wire RS-485
Directional Response:	# 20 W/m ² (up to 80 ° with 1000 W/m ² beam)
Drying Cartridge and Maintenance Interval:	Internal, no replacement necessary
IP Rating:	IP67

Irradiance Saturation:	2000 W/m ² (Max.)
Material Enclosures:	Aluminum, anodised
Non-linearity:	# ±3% (0 to 100 W/m ²)
Non-stability:	# ±1% (change/year)
Operating Humidity:	0 to 100 %
Operating Temperature Range:	-40 to +70 °C
Response Time:	# 1.5 s (63 %), # 12 s (95 %)
Sensitivity:	N.A.
Spectral Accuracy:	300 to 2800 nm
Temperature Correction:	# ±3 % (-20 to +50 °C)
Weight:	0.7 lb (300 g)
Zero offset A:	# ±15 W/m ²
Zero offset B:	# ±5 W/m ²