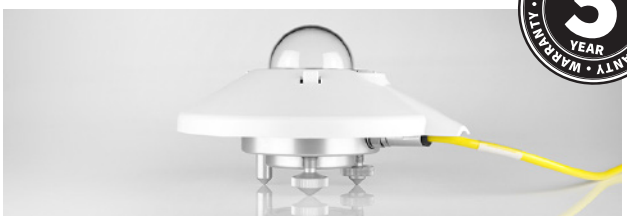
SUV5



SUV5 is the Smart version of CUV5. Internal temperature correction gives the SUV5 better performance than the CUV5 and linearization allows monitoring of the high UV irradiances used in material stress and ageing tests, and in solar simulators.

The high quality dome and diffuser give optimized directional response. An optical filter provides sensitivity to combined UVA and UVB irradiance, as shown in the graph below. The photodiode generates a voltage output linearly proportional to the UV intensity.

SUV5 is not suitable for the measurement of specific parts of the UV spectrum such as UVA, UVB or UVE / UV Index. For measurement of these individual parameters our UVS Series is required.

A waterproof plug and socket cable connection facilitates easy installation. The snap-on sun shield protects the connector and allows viewing of the integrated bubble level.

The SUV5 has Modbus® interface, amplified analogue output, fast response time and temperature corrected measurement data. The wide and low power supply range from 5 to 30 VDC makes integration in meteorological and industrial application easy. The SUV5 is extremely robust and comes with 5 years warranty (*).

Thanks to standardised output and connections of every SUV5, exchanging instruments for recalibration is easy. SmartExplorer Windows™ software for data logging, display of data and Modbus® address setting is provided as standard.

Specifications	
Analogue output • V-version	0 to 1 V
Analogue output range	-100 to 400 W/m²
Analogue output • A-version	4 to 20 mA
Analogue output range	0 to 400 W/m²
Serial output	RS-485 Modbus®
Serial output range	0 to 400 W/m²
Response time (95 %)	< 1 s
Spectral range (50 % points)	300 to 385 nm
Spectral range (overall)	280 to 400 nm
Spectral selectivity (312 to 382 nm)	< 20 %
Non-stability (change/year)	< 5 %
Non-linearity (0 to 400 W/m², ref. 100 W/m²)	< 1.5 %
Directional response (up to 70 ° with 1000 W/m² beam)	< 5 W/m²
Temperature response	< 2 % (-20 °C to +50 °C)
Field of view	180 °
Accuracy of bubble level	< 0.1 °
Power consumption (at 12 VDC)	V-version: 55 mW A-version: 100 mW
Software, Windows™	Smart Sensor Explorer Software, for configuration, test and data logging
Supply voltage	5 to 30 VDC
Detector type	Photodiode with filter
Operating temperature range	-40 °C to +80 °C
Storage temperature range	-40 °C to +80 °C
Humidity range	0 to 100 %
Ingress Protection (IP) rating	67

Part number	Instrument
0377900-102	SUV5-V Smart UV Radiometer • 0 to 1 V version • 10 m cable
0377900-100	SUV5-V Smart UV Radiometer • 0 to 1 V version • no plug, no cable
0377900-202	SUV5-A Smart UV Radiometer • 4 to 20 mA version • 10 m cable
0377900-200	SUV5-A Smart UV Radiometer • 4 to 20 mA version • no plug, no cable

Part number	Accessories
See accessories	CVF4 Ventilation Unit Recommended to reduce offsets and frequency of dome cleaning
0362700	CMF1 Mounting Fixture For 1 or 2 unventilated radiometers (1 upper / 1 lower) Diameter 88 mm. Mounting rod 350 mm long x 16 mm ø
0362703	CMF4 Mounting Fixture For 1 or 2 ventilated or unventilated radiometers (1 upper / 1 lower) Length 375 mm, width 280 mm. Mounting rod 350 mm long x 20 mm ø
0369701	CMB1 Mounting Bracket In combination with mounting rod for easy attachment to a pole or a wall
0346900	CM121B Shadow Ring for unventilated radiometers Manually adjusted device provides diffuse sky irradiance measurement Note: CM121B can not be used with CVF4 Ventilation Unit
0346901	CM121C Shadow Ring for ventilated radiometers Manually adjusted device provides diffuse sky irradiance measurement Mounts the radiometer at the correct height when used with a CVF4

(*) This product will need to be registered by the end-user within 6 months of purchase to activate the warranty extension.