KIPP & ZONEN
an OTT HydroMet brand

CUV5 | SUV5 | SUV-A | SUV-B | SUV-E

Meteorology
Climate Research
Renewable Energy
Medical Applications
Industry



UV Radiometers

For accurate measurement of solar ultraviolet radiation

Measurement of 'Total UV' radiation or specific parts of the UV spectrum
Spectral responses optimized for UVA, UVB and UVE/UVI
Analog and digital outputs
Temperature stabilized detection system
5 years warranty

Optimized for every purpose

'Total UV' is usually monitored in meteorology and climatology stations in addition to pyranometer measurements. UVA and UVB radiation are monitored to investigate their effects on plants and animals. In materials testing important issues are the ageing effects of outdoor UV exposure that cause degradation. UVE is monitored for human biology and medical applications.

Internal desiccant

All models are fitted with a maintenance-free internal drying cartridge to provide stable measurements and have an IP67 ingress protection rating. The radiometers feature a snap-on white sun shield, integrated leveling and a high-quality connector which is supplied pre-wired with 10 m signal cable for simple installation.

Analog or digital outputs

The CUV5 does not require any power. Incoming solar UV radiation generates a continuous millivolt output, which is converted in a data logger to irradiance in W/m² using the calibrated sensitivity. For easy integration into SCADA systems the SUV series has Modbus® RTU RS-485 serial communication, plus an amplified analog output. The sensitivity is stored inside for standardized outputs, and it features improved response time and digital temperature compensation.

5 years warranty

All radiometers from Kipp & Zonen come with a 5-year warranty and we have service and calibration centers around the world.

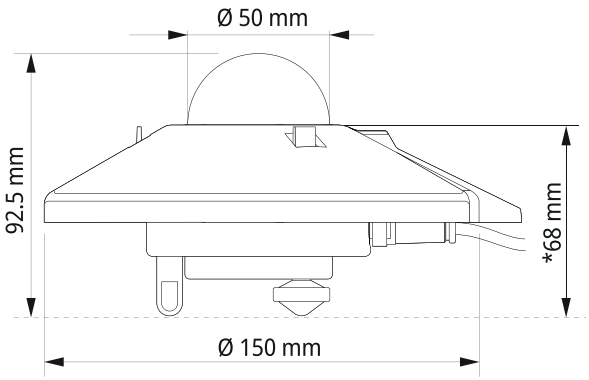
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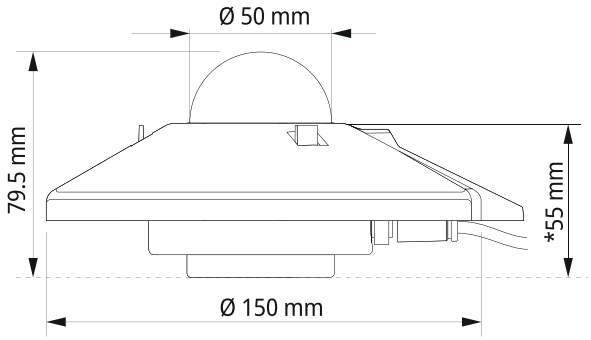
Technical Specifications

	CUV5	SUV5	SUV-A	SUV-B	SUV-E
Spectral response	280 to 400 nm	280 to 400 nm	315 to 400 nm	280 to 315 nm	ISO 17166:1999 CIE S 007/E-1998
Measurement range	0 to 400 W/m²	0 to 400 W/m²	0 to 90 W/m²	0 to 9 W/m²	0 to 0.9 W/m²
Spectral error	< 2 %	< 2 %	< 2 %	< 20 %	< 20 %
Zero offset (in darkness)	N/A	< 1 mV	< 1 mV	< 1 mV	< 1 mV
Response time (95%)	< 1 s	< 0.2 s	< 0.2 s	< 0.2 s	< 0.2 s
Non-stability (change/year)	< 2 %	< 2 %	< 2 %	< 2 %	< 2 %
Non-linearity	< 1 %	< 1 %	< 1 %	< 1 %	< 1 %
Directional response (up to 70° zenith angle)	< 5 %	< 5 %	< 5 %	< 5 %	< 5 %
Temperature response	< ±3 %	< ±1 %	< ±1 %	< ±1 %	< ±1 %
Impedance	2.5 kΩ	500 Ω	500 Ω	500 Ω	500 Ω
Operating temperature	-40 to +80 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C
Power supply	N/A	5 to 30 VDC 55 mW for 12 V power	5 to 30 VDC 55 mW for 12 V power	5 to 30 VDC 55 mW for 12 V power	5 to 30 VDC 55 mW for 12 V power
Ingress Protection (IP) rating	IP67	IP67	IP67	IP67	IP67
Dimensions					
Diameter x height	150 x 92.5 mm	150 x 92.5 mm	150 x 92.5 mm	150 x 92.5 mm	150 x 92.5 mm
Diffusor height	54.85 mm	54.85 mm	54.85 mm	54.5 mm	54.5 mm
Cable length	10, 25, or 50 m	10, 25, or 50 m	10, 25, or 50 m	10, 25, or 50 m	10, 25, or 50 m

Dimensions



With feet



Without feet

* = Sensor height

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