

# NEW GENERATION OF UV RADIOMETERS UV-A, UV-B AND UV-E

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**After more than 15 years of setting the standard in UV measurements, our well-known UVS series of Radiometers are being replaced with a new generation; the SUV series.**

Based on the established SUV5 'total' UV radiometer, there is now a family of broadband UV radiometers for the measurement of specific types of ultraviolet radiation. This new range has models to measure UVA, UVB and UVE; alongside the existing SUV5 total UV version.

## Advantages of the new SUV series

The SUV series has improved specifications over the UVS, plus the benefits of an RS-485 Modbus® digital output and a very low power consumption. Due to the all-new optical detection systems for UVA, UVB and UVE with digital data processing the new SUV Radiometers do not need power-hungry temperature stabilization; they have a very accurate polynomial function temperature correction over a wider operating temperature range, from -40 °C to +70 °C.

The wide supply voltage range and low power requirements make the SUV series very suitable for use in remote areas where power is scarce. Like all our Smart radiometers the Modbus® output provides not only the irradiance value in W/m<sup>2</sup>, but also body temperature, power supply voltage, status info, model and serial number plus calibration history.

The SUV housings are identical in dimensions to Kipp & Zonen double-dome pyranometers; making it simple to use all our radiometer accessories (such as mounting, shading, ventilation and tilting). Another improvement over the UVS is that the SUV series has no external drying cartridge to inspect, the internal desiccant will last at least 10 years.

As with our other Smart instruments, the standard 2-year factory warranty will be extended free of charge to 5 years after registering the purchase through our website.

## UV Index

The Global Solar UV Index (UVI) was developed in an international effort by the WHO in collaboration with WMO, UNEP and ICNIRP. The 'harmful' UV radiation level at the Earth's surface is measured by an instrument with a spectral response that represents a 'standard' human skin. This Erythemal irradiance, UVE in W/m<sup>2</sup>, is measured by the SUV-E and multiplied by 40 m<sup>2</sup>/W to convert the value to the UV Index. UVI serves as an important means to raise public awareness and to alert people about the need to adopt protective measures when exposed to harmful UV radiation.

## Analogue output

Our Smart instruments also have an analogue output derived from the digital data and the SUV continues this feature with a 0 to 1 V range. For the SUV-A, SUV-B and SUV5 it is the irradiance in W/m<sup>2</sup>, for the SUV-E it is the UV Index.

