

UV-A Sensors

Cost-effective measurement of UV radiation from 300 to 400 nm



	SU-200-SS	SU-202-SS	SU-205-SS	SU-220	SU-221-SS
Power Supply	Self-powered	5 to 24 V DC	5.5 to 24 V DC	5 V USB power source	5.5 to 24 V DC
Output (sensitivity)	0.1 mV per $W m^{-2}$; 0.03 mV per $\mu mol m^{-2} s^{-1}$	25 mV per $W m^{-2}$; 8.33 mV per $\mu mol m^{-2} s^{-1}$	50 mV per $W m^{-2}$; 16.67 mV per $\mu mol m^{-2} s^{-1}$	Custom for each sensor and stored in the firmware	
Calibration Factor (reciprocal of sensitivity)	10 $W m^{-2}$ per mV; 30 $\mu mol m^{-2} s^{-1}$ per mV	0.04 $W m^{-2}$ per mV; 0.12 $\mu mol m^{-2} s^{-1}$ per mV	0.02 $W m^{-2}$ per mV; 0.06 $\mu mol m^{-2} s^{-1}$ per mV	Custom for each sensor and stored in the firmware	
Calibration Uncertainty	± 5 %				
Output Range	0 to 10 mV	0 to 2.5 V	0 to 5 V	USB	SDI-12
Measurement Range	0 to 100 $W m^{-2}$				
Measurement Repeatability	Less than 0.5 %				
Long-term Drift	Less than 2 % per year				
Non-linearity	Less than 1 %				
Response Time	Less than 1 ms				Less than 0.6 s
Field of View	180°				
Spectral Range	305 to 390 nm (wavelengths where response is greater than 10 % of maximum)				
Directional (cosine) Response	± 2 % at 45°; ± 5 % at 75° zenith angle				
Temperature Response	0.1 % per C				
Operating Environment	-30 to 85 C; 0 to 100 % relative humidity				
Dimensions	30.5 mm diameter, 37 mm height				
Mass	140 g (with 5 m of lead wire)				
Warranty	4 years against defects in materials and workmanship				

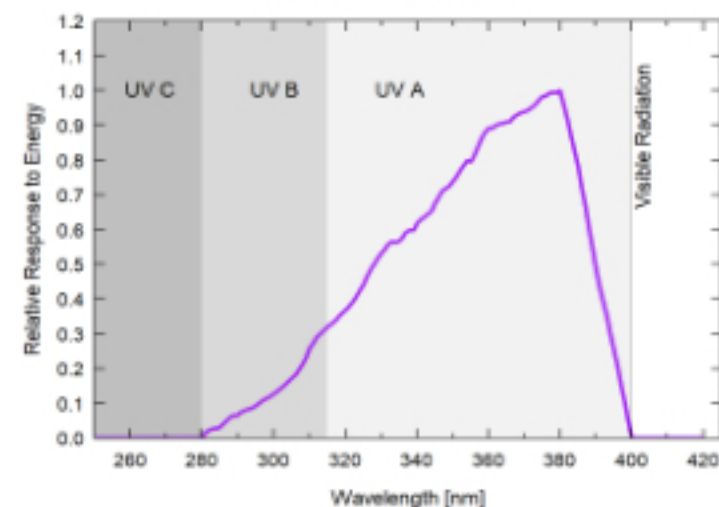
Overview

Apogee's new UV-A sensors offer a low-cost option for detecting UV radiation from 300 to 400 nm and are calibrated in energy flux units of Watts per square meter.

Typical Applications

- Monitoring the filtering ability and stability of various materials
- Measuring UV-A radiation outdoors and in the laboratory
- Monitoring UV radiation in horticultural environments

Spectral Response



Case Study

Cyanobacterial blooms in Lake Champlain are monitored using an Apogee UV-A sensor.

