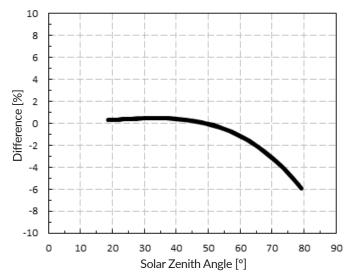


## **UV-A METER**

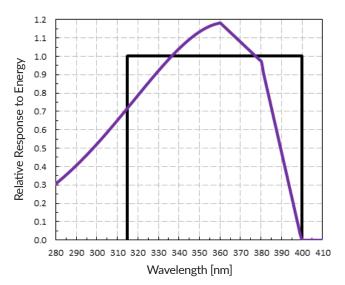
MU-250



# Response Graphs



Mean cosine response of four Apogee UV-A sensors. Cosine response was calculated as the relative difference of UV-A sensors from the mean of replicate reference UV-A sensors deployed outdoors. These data are the average of the AM and PM response.



Spectral response estimate of Apogee SU-200 UV-A sensors. Spectral response was modeled from sensitivity of the photodetector and transmittance of the diffuser.

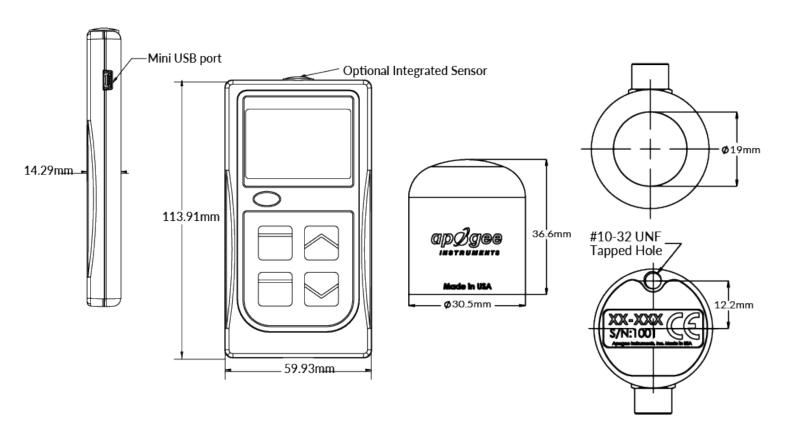
# **Product Specifications**

|                               | MU-250                                                                                                                                   |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Calibration Uncertainty       | ± 5 %                                                                                                                                    |
| 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                                                                                                                           |
| 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          | Less than 0.1 % per C                                                                                                                    |
| Operating Environment         | 0 to 50 C; less than 90 % non-condensing relative humidity up to 30 C; less than 70 % noncondensing relative humidity from 30 to 50 C    |
| Meter Dimesions               | 126 mm length, 70 mm width, 24 mm height                                                                                                 |
| Dimensions                    | 30.5 mm diameter, 37 mm height                                                                                                           |
| Mass                          | 180 g                                                                                                                                    |
| Cable                         | 2 m of two conductor, shielded, twisted-pair wire; TPR jacket (high water resistance, high UV stability, flexibility in cold conditions) |
| Warranty                      | 4 years against defects in materials and workmanship                                                                                     |

### Overview

UV-A radiation is important in material sciences and has numerous photo-biological functions that are both harmful and beneficial. Apogee's new UV-A radiometers offer a low-cost option for continuously measuring UV-A radiation in outdoor environments, laboratory settings, and monitoring the filtering ability and stability of various materials.

## **Dimensions**



### **Features**

### RUGGED, SELF-CLEANING HOUSING

Sensor features an anodized aluminum body with fully-potted electronics. The dome-shaped sensor head minimizes errors by shedding dust and water for a self-cleaning performance.

#### CALIBRATION TRACEABILITY

Apogee UV-A series sensors are calibrated through side-by-side comparison to the mean of four transfer standard UV-A sensors under UV-enhanced T5 fluorescent tubes. The transfer standard UV sensors are calibrated though side-by-side comparison to an Apogee model PS-300 spectroradiometer under sunlight (clear sky conditions) in Logan, Utah. The PS-300 is calibrated with a quartz halogen lamp traceable to the National Institute of Standards and Technology (NIST).



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