Radiometer / Photometer
SanUV-PMA2200
Single-Input Radiometer / Photometer

SanUVAire's versatile NIST-Traceable Model SanUV-PMA2200 Radiometer / Photometer accepts different SanUV-PMA21xx-Series sensors measuring UV, Visible and IR wavelengths. Solar Light's patented Intelligent Detector Technology allows users to interchange sensors without losing the functionality of a single purpose meter, while the Automatic Sensor Recognition feature eliminates the need to match meters and sensors. Any SanUV-PMA Sensor can interface with any SanUV-PMA Meter thanks to a memory chip, which makes it unnecessary to permanently load sensor information into the meter. This is especially useful in labs that have more than one meter and several sensors! Instant values (such as power) can be time-integrated to also show energy, and the unit has a programmable alarm for time integral or maximum value.

Applications

- Laboratory and Industrial Radiometry
- UV Curing, Printing, and Photolithography
- Skin and SPF Testing
- Clinical Studies
- Phototherapy
- Environmental Monitoring
- Material Testing
- UV-A Transmission Measurements

Features and Benefits

- High Sensitivity
- Dynamic Range (6.5 Digit Display)
- User Selectable Units
- Dose Integration Capability
- 2-Line LCD Display with Anti-Glare Screen
- Displays Min and Max Readings
- Programmable I/O
- Automatic sensor recognition
- NIST traceable calibration
- Radiometric units
- Made in USA

Digital Sensors
UVC Sensor SanUV-PMA2122
Measures Germicidal Radiation (253.7nm)

SanUVAire's Model SanUV-PMA2122 Digital Germicidal UVC Sensor provides fast and accurate irradiance measurements of the effective germicidal radiation. Ultraviolet radiation at 253.7nm has been used in germicidal applications for several decades. Microorganisms in air and water can be killed using UV or a combination of UV and ozone. The UVC-producing germicidal lamps in purification systems must be continually monitored to ensure that the bacteria are receiving a lethal dose of radiation. When properly monitored, these expensive lamps can be utilized to their maximum useful life before replacement. The SanUV-PMA2122 sensors can also be used to ensure that replacement lamps are performing to specification. Several packages are available for different types of environments, including standard, low profile, and weatherproof.

Applications

- Water Treatment Plants
- Purification Systems
- Environmental Testing

Features and Benefits

- High Sensitivity
- Cosine Corrected
- NIST Traceable Calibration
- Ease of Use
- Selectable Units

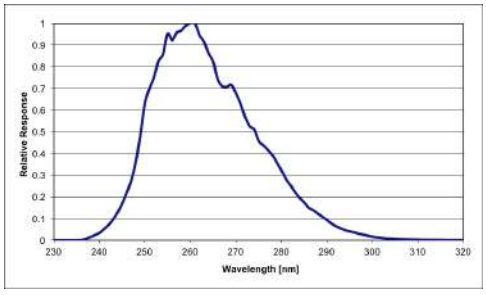

Fig. 1. Linear Spectral Response

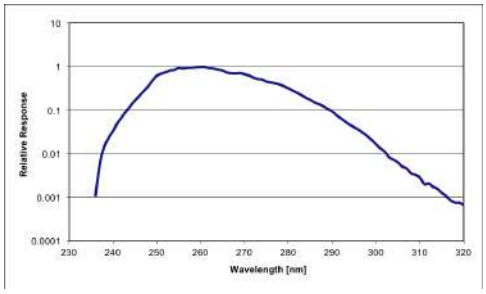

Fig. 2. Log Spectral Response

SPECIFICATIONS	
Spectral Response	249-261nm, Figure 1
Cosine Response	<60° (Standard Chassis)
Range	**See model chart on the next page*
Display Resolution	**See model chart on the next page*
Operating Environment	32 to 120°F (0 to +50°C)
Temperature Coefficient	7% /°C for Solar Radiation
Cable Length	6 ft. Straight Cable (1.82m)
Dimensions and Weight	**See outline drawings*

REFERENCES

[1] ACGIH technical Affairs Office, 1330 Kemper Meadow Drive, Cincinnati, OH 45240

SanUVmeter Model 8.0

UVC Meter • 0-1999 µW/cm²

Handheld Digital UVC Radiometer with Integral Sensor

Applications

- Monitoring UVC Germicidal Lamp Intensity & Aging
- Testing Eyewear UVC Blocking Capabilities
- Measuring Germicidal Lamp Fixture Leakage

Features and Benefits

- Compact, Handheld, and Durable
- Simple Single-Button Operation
- NIST Traceable Accuracy
- LCD Display
- Made In USA

Sensor

Silicon Diode (SiC) Photodiode in hermetically sealed UV glass window cap. Interference filter blocks UV above 280nm as shown on Spectral Sensitivity Graph.

Meter Operation

To operate your SanUVmeter, aim the sensor window located on the top panel of the meter directly at a UV source. Press and hold the push-button switch on the face of the meter. For best results take note of the distance the reading was taken from the UV source in order to ensure repeatable results.

Battery operation voltage is viable from 9V down to 6.5V. Below 6.5V, the numbers on the LCD display will begin to dim, indicating the need for battery replacement. Under typical service load, a standard 9V battery will last approximately 2 years.

Proper Usage of SanUVmeter® Ultraviolet Radiometer

- When checking UVC sources, wear face, hand, and eye protection and cover any skin that may be exposed.
- Allow lights to warm-up prior to taking readings (at least 5 min).
- For individual light intensity, hold meter close to LED or lamp.
- For effective light intensity, hold meter at working distance from the light source.
- When checking aging of lights, keep measuring distance and locations constant.
- Lights should be replaced when output drops to about 70% of their original (new) readings.