

Radiometer / Photometer PMA2200

Single-Input Radiometer / Photometer

Solar Light's versatile NIST-Traceable **Model PMA2200 Radiometer / Photometer** accepts over 85 different 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 PMA Sensor can interface with any 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





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| SPECIFICATIONS | |
|-------------------------|--|
| Detector Inputs | 1 Detector Input with Up to 4 Analog Signals |
| Input Ranges | ±4V, single range (autoranging not necessary) |
| Resolution | 13μV on 4V Range |
| Dynamic Range | 2.6 x10 ⁶ (6.5 digits) |
| Accuracy | Within 0.5% FS |
| Non-Linearity | 0.003% Integral Non-linearity |
| Operating Environment | 32 to 120°F (0 to +50°C) |
| Temperature Coefficient | Max 50ppm/°C |
| Power Source | 4 x AA NiCd or Alkaline Batteries, 9-12V AC or DC Charger |
| Sampling Rate | 3 per second |
| Screen Refresh Rate | 10 per second |
| Battery Life | Up to 40 Hours Between Charges |
| External Power | 9-12V AC or DC adapter. 100mA min |
| Power Consumption | Approximately 110mW |
| Program Control | 12-Button Keypad |
| Size WxDxH | 4" x 1.75" x 7.5" (10 x 4.3 x 19.3 cm) |
| LCD Size | 2.5" x 0.5" (6.4 x 1.3 cm) Program control 9-button keypad x4.5 cm |
| Weight | 18 oz. (510 grams) |
| ORDERING INFORMATION | |
| PMA2200 | Single input radiometer package features the PMA2200 Radiometer, a power supply (not a battery charger), and a hard cover carrying case. |
| REFERENCES | |

The biological effects of UV-A radiation - Edited by F. Urbach and R.W. Gange, Praeger Publishers,

² Nichodemus F., "Self study manual on optical radiation measurements", NBS Technical Note

New York, 1986

910-1 (1976)





PMA2200 Rugged Carrying Case with room for 2 sensors





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Since 1967, Solar Light Company, LLC has been recognized worldwide as America's premier manufacturer of Precision Solar Simulators and Light Sources, Light Measurement Instrumentation, UV Transmittance Analyzers, Meteorological Instrumentation, and Digital and Analog Sensors. Our advanced line of UV, visible, and IR radiometers and light meters measure laboratory, industrial, environmental, and health related light levels with NIST traceable accuracy. Column ozone, aerosol, and water vapor thickness measurements, in addition to long-term global ultraviolet radiation studies all over the world are performed using our atmospheric line of instrumentation. Solar Light also provides NIST traceable spectroradiometric analyses, calibrations for light meters and light sources, accelerated ultraviolet radiation degradation testing of materials, and OEM instrumentation and monitors. Please visit our website for more details, specifications, and pictures!



State Of The Art Solar Simulators available in 150-1000+ watt UV or AM variations for a variety of applications including PV Cell Testing, Materials Testing, Pre-Irradiation for In Vitro Broad Spectrum Sunscreen Testing, SPF Testing, and much more.



Multi-Functional Professional Grade Radiometers available with and without data logging, and compatible with over 130 Solar Light PMA-Series Sensors to measure UV, Visible and IR wavelengths. Specialty Meters also available to measure UV Radiation, SUV/UVA, Scotopic/Photopic Spectra, and much more.



Advanced NIST-Traceable Sensors for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength — well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



Ultraviolet Transmittance Analyzers available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



Handheld Ozonometers and Sunphotometers for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.

