

# Meters • Radiometer/Photometer

PMA2200



## Radiometer / Photometer with Single Input

### 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
- Select from Over 135 Standard and Custom Detectors
- 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

The PMA2200 is a radiometer that accepts detectors measuring UV, Visible and IR wavelengths. Solar Light's patented Intelligent Detector Technology\* allows users to interchange detectors without losing the functionality of a single purpose meter. This streamlined model allows all functions to be operated directly from the keypad. The automatic sensor recognition also means that there is no need to match meters and sensors. Any sensor will connect with any meter and work perfectly. This is especially useful in labs that have more than one meter and several sensors!

Extremely portable, the PMA2200 Radiometer is powered by 4 AA Alkaline or NiCd batteries. A power supply is also included in the product package, for use when working in the laboratory.

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. The sensor output algorithm provides precision readings, choice of units and date of calibration.

Instant values, such as power, can be time integrated to also show energy. Units can be altered, for example ft-candles to lux. Min., Max., Average can be displayed. Programmable alarm from a time integral or max. value. Numerical or graphical LCD display. Auto ranging, Sensors remember the last configuration, including units, alarms and data storage settings.

**SOLAR**<sup>®</sup>  
L I G H T

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 <sup>6</sup> (6.5 digits)
Accuracy	Within 0.5% FS
Nonlinearity	0.003% Integral Non-linearity
Operating Environment	32 to 120 °F (0 to +50 °C) No Precipitation
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 19.3cm)
LCD Size	2.5" x 0.5" (6.4 x 1.3 cm) Program control 9-button keypad x4.5cm
Weight	18 oz. (510 grams)
Ordering Information	
PMA2200	Single input radiometer package, features the PMA2200 Radiometer, a power supply (not a battery charger), a USB cable and a hard cover carrying case.
References	
<sup>1</sup>	The biological effects of UV-A radiation - Edited by F. Urbach and R.W. Gange, Praeger Publishers, New York, 1986
<sup>2</sup>	Nichodemus F., "Self study manual on optical radiation measurements", NBS Technical Note 910-1 (1976)

Meters/PMA2200\_10/2014  
US Patent 5,790,432