

Solar Light's [Model PMA1142 Digital Laser Sensor](#) is available in two full scale power levels of 10 watts (Model PMA1142-10,) and 40 watts (Model PMA 1142-40.) PMA1142-10 has an active area of 3.14 cm<sup>2</sup>, and the PMA1142-40 has an active area of 4.91 cm<sup>2</sup>. Display resolution is 1mW for the 10 watt model and 10mW for the 40 watt model. Each of these sensors includes an adjustable instrument base for accurate, stable placement.



### Applications

- Low Power Lasers and LEDs
- Mid-power Lasers
- Laboratory Use
- Optical Power Meter

### Features and Benefits

- Flat Spectral Response
- Response Time <1 Second
- NIST Traceable
- Uniform Active Area
- Dose Integration

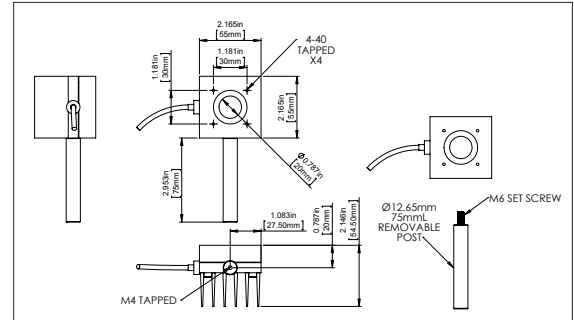
SPECIFICATIONS	
Spectral Response	PMA2142-10: 0.19-25 $\mu\text{m}$
	PMA2142-40: 0.25-11 $\mu\text{m}$
Range	PMA2142-10: 10W
	PMA2142-40: 40W
Operating Environment	Indoor
Sensitivity	1-2 mV/W
Cable Length	5ft. (1.5m) Straight Cable
Dimensions and Weight	*See Outline Drawings
WIRE CONNECTIONS	
Wire Color	PMA1142 Signal
Yellow	Signal Output
Brown	Analog Ground
REFERENCES	
Fraden J., "AIP Handbook of Modern Sensors Physics, Design and Applications"	

Part Number: 210044

Revision Level: B

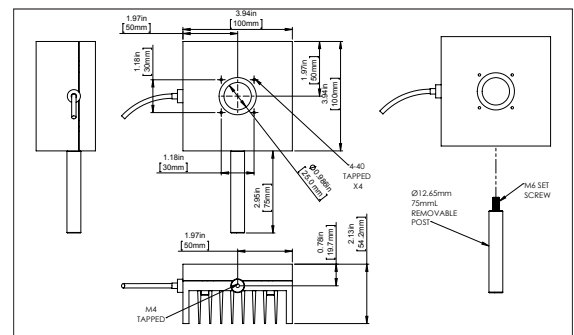
Specifications subject to change without notice.

Laser Detector Sensor PMA1142-10



Est. Weight: 7 oz. (200 g)

Laser Detector Sensor PMA1142-40



Est. Weight: 35 oz. (1 kg)

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 100 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 100 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.