

# UVB SENSOR PMA 2105 WITH BEAM SPLITTER ADAPTER

**SENSORS**  
**SPF CLINICAL AND**  
**LABORATORY RESEARCH**

Delivery on all products is  
Stock to 2 weeks.

Every product is  
calibrated to NIST  
traceable standards  
before shipment.



**Special mounting hardware allows direct coupling of the UVB sensor with the beam splitter available for 16S Solar Simulators.**

The UVB sensor's spectral response follows closely the erythema action spectrum. Due to built-in Teflon diffuser the detector has negligible azimuthal error making the measurement insensitive to the rotation of the detector. Extended measurement range of 600 MED/Hr enables measurement of intense radiation.

In conjunction with the Solar Simulator and XPS200 Xenon Lamp Power Supply the PMA2100 with the PMA2105 sensor can operate as a smart dose controller/monitor substantially enhancing the functionality of the Solar Simulator.

The measurement result can be shown in MED/Hr,  $\mu\text{W}/\text{cm}^2$  as well as a time to accumulate 1 MED. High dynamic range of the detector allows measurements down to  $0.1 \mu\text{W}/\text{cm}^2$  with the ability to measure radiation as strong as  $3.5 \text{ mW}/\text{cm}^2$ .

The biologic effectiveness of ultraviolet radiation is strongest for wavelengths between 280 to 320 nm, classified as UVB by the CIE. The most commonly used, erythema action spectrum, also referred to as CIE 1987 action spectrum, represents the sensitivity of human skin to sunburn.

## Uses

The PMA2105 UVB sensor gives an accurate measurement of biologically weighted ultraviolet radiation from Solar Simulators manufactured by Solar Light Co.

## Alternate Views



## Specifications

### Spectral response:

Follows erythema action spectrum Figure 1

### Range:

600 [MED/Hr],  $3.5 \text{ [mW}/\text{cm}^2]$

### Display resolution:

$0.01 \text{ [MED/Hr]}$ ,  $0.1 \text{ [}\mu\text{W}/\text{cm}^2]$

### Operating environment:

$32 \text{ to } 120 \text{ }^\circ\text{F}$  ( $0 \text{ to } +50 \text{ }^\circ\text{C}$ ) no precipitation

### Temperature coefficient:

$1\% / ^\circ\text{C}$

### Cable:

5ft (1.5m)

### Diameter:

1.6" (40.6 mm)

### Height:

1.8" (45.8 mm)

### Weight:

7.1 oz. (200 grams)

