

PMA 4100 SERIES CALREADY™ UVA AND PHOTOPIC VISIBLE LIGHT SENSORS



SENSORS
INDUSTRIAL PROCESS
SENSING AND OEM
PRODUCTS

Delivery on all products is
Stock to 2 weeks.

Every product is calibrated
to NIST traceable
standards before
shipment.

**THE PMA4100 SERIES CALREADY™ UVA AND
PHOTOPIC VISIBLE LIGHT SENSORS ARE PROCESS
CONTROL SENSORS THAT HAVE THE CAPABILITY
OF BEING CALIBRATED IN THE FIELD BY THE END
USER.**

The PMA 4100-420 sensor System has two sensor types, the PMA 4110-420 UVA sensor and the PMA 4130-420 Photopic sensor. The sensors detect light from their respective spectral bands and send a current proportioned signal on a 4 – 20 mA current loop. The PMA 4110-420 sensor is sensitive to the 320 – 400 nm spectral band and has a maximum (20 mA) sensitivity of 1.000 W/cm². The PMA 4130-420 sensor is sensitive to the CIE Weighted Photopic spectral range, 480 – 620 nm, and has a maximum (20 mA) sensitivity of 5000 Lux.

This CALReady™ sensor system includes reference sensors, transfer calibrated from NIST traceable standards. One Reference sensor is available to calibrate the Process sensor for the Photopic range and one Reference sensor is available to calibrate the Process sensor for the UVA. The software system can perform an *in situ* transfer calibration when connected via the USB.

The unique feature of infield calibration is the capability through use of the SL3301 software that can be installed on a laptop computer to meet performance standards.

Uses

Photostability Testing and Control

Alternate Views



Applications

Photostability

Features

High sensitivity
Dynamic range 2*10⁵
Excellent long term stability
Cosine corrected
NIST traceable calibration
Radiometric units and max. exposure time
Field Calibration

Specifications

PHOTOPIC SENSOR

Spectral response:

Follows CIE photopic spectral luminous efficiency curve (400-700nm) Figure 1

Angular response:

5% for angles <60°

Range:

PMA2130 - 150,000 Lux, 220 W/m², 14,000 ft-cd PMA2130L - 1,500 Lux, 2.2 W/m², 140 ft-cd PMA2130H - 1,500,000 Lux, 2200 W/m², 140,000 ft-cd

Display resolution:

PMA2130 - 1 Lux, 0.001 W/m², 0.1 ft-cd PMA2130L - 0.01 Lux, 0.00001 W/m², 0.001ft-cd PMA2130H - 10 Lux, 0.01 W/m², 1 ft-cd

Operating environment:

32 to 120 °F (0 to +50 °C) no precipitation

Cable:

5ft (1.5m)

Diameter:

1.6" (40.6 mm)

Height:

1.8" (45.8 mm)

Weight:

7.1 oz. (200 grams)

UVA SENSOR

Spectral response:

320-400nm, figure 2

Angular response:

5% for angles <60°

Range:

200 [mW/cm²] or 2000 [W/m²]

Display resolution:

0.001 [mw/cm²], 0.01[W/m²]

Operating environment:

32 to 120° F (0 to +50° C) no precipitation

Temperature coefficient:

<0.1%/° C

Cable:

5ft (1.5m)

Diameter:

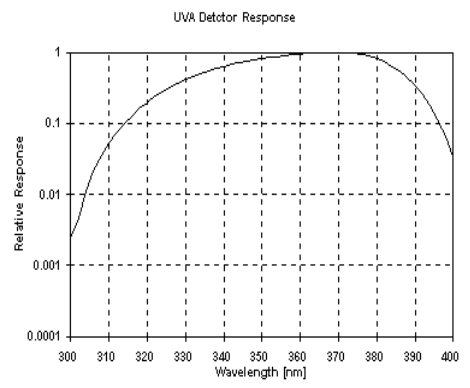
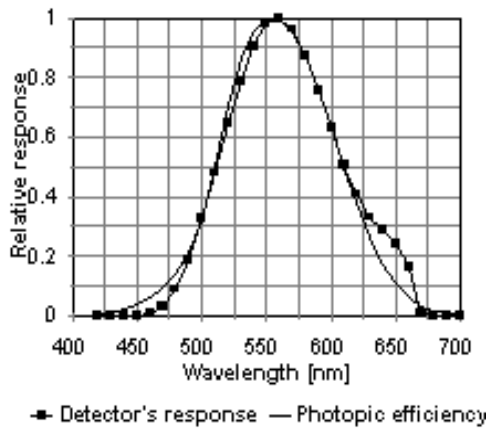
1.6" (40.6 mm)

Height:

1.8" (45.8 mm)

Weight:

7.1 oz. (200 grams)



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