

Measure Shortwave Radiation



Pyranometers use a silicon cell photodiode and are calibrated to measure total shortwave radiation. The cosine-corrected sensor is designed to maintain its accuracy when radiation comes from low zenith angles.

The meters include data recording capability and can store up to 99 manually recorded measurements. In

automatic mode, measurements are made every 30 seconds and averages are stored every 30 minutes. Daily totals are also calculated for the past 99 days.

Related Products



AL-100

A plate used to keep meters with separate sensor level. (IMP-200)



AL-210

Leveling plate and mounting base for meters with integral sensor.



AC-100

Communication cable is required for data download to a computer.

Viewable on meter display & downloadable to a PC:

- (SMPL) 99 Sample Measurements
- (LOG) 99 Log Measurements

Downloadable only:

- (LOG) 99 Daily Total Measurements

Specifications

Memory

- 99 manually stored data points
- Automatically store 99 consecutive 30 minute averages
- 99 daily averages

Cosine Directional Response

- 45° zenith angle: $\pm 1\%$
- 75° zenith angle: $\pm 5\%$

Absolute Accuracy

- $\pm 5\%$

Uniformity

- $\pm 3\%$

Repeatability

- $\pm 1\%$

Spectral Range

- 380 to 1120 nanometers

Input Power

- Standard 3 V coin cell battery

Response Time

- Less than 1 millisecond

Long Term Drift

- Less than 3% per year

Temperature Response

- 0.1 %/°C

Field of View

- 180°

Operating Environment

- 0 to 50 C
- Less than 90% non-condensing, relative humidity up to 30 C
- Less than 70% relative humidity from 30 to 50 C

Materials

- Anodized aluminum with cast acrylic lens

Mass

- JMP-100: 150 g
- JMP-200: 180 g

Dimensions

- 2.4 cm diameter by 2.75 cm height

Display

- 4.2 by 2.8 cm

Range

- 0 to 1999 W m⁻²

Cable (JMR-200 Series)

- 2 meters of twisted-pair wire
- Foil shield
- Santoprene jacket
- Longer cable lengths are available in multiples of 5 meters

Warranty

- 1 year against defects in materials and workmanship

Measurements

