

MEASURES SHORTWAVE RADIATION REACHING THE EARTH'S SURFACE.

DESCRIPTION

Pyranometer meters measure the shortwave radiation reaching the Earth's surface, measured in Watts per meter squared.

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.

An ideal pyranometer measures the entire solar spectrum, 280 to 2800 nanometers (nm). However, about 90% of sunlight energy is between 300 and 1100 nm. Models JMP-100 and JMP-200 are calibrated to estimate all of the shortwave energy from sunlight. Apogee pyranometer meters are calibrated under sunlight over a multiple day period to a heated and ventilated Kipp and Zonen model CM21 precision reference radiometer.

These meters still feature the cosine-corrected head, self-cleaning characteristics, and long-term stability.



(SMPL) 99 Sample Measurements	(LOG) 99 Log Measurements	(LOG) 99 Daily Total Measurements
Viewable on meter LCD & downloadable		Downloadable Only

RECOMMENDED ACCESSORIES



AL-100 A leveling plate used to keep meters with separate sensor level. (MP-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.

SPECIFICATIONS

MEMORY

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

COSINE RESPONSE

- 45° zenith angle: $\pm 1\%$
- 75° zenith angle: $\pm 4\%$

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

UNIFORMITY

- $\pm 3\%$

REPEATABILITY

- $\pm 1\%$

MATERIALS

- Anodized aluminum with cast acrylic lens

MASS

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

SENSITIVITY

- Custom calibrated to exactly 5.0 W m⁻² per mV

ABSOLUTE ACCURACY

- $\pm 5\%$

INPUT POWER

- Standard 3 V coin cell battery

DIMENSIONS

- 2.4 cm diameter by 2.75 cm height

MEMORY

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

DISPLAY

- 4.2 by 2.8 cm

RANGE

- 0 to 1999 W m⁻²

CABLE (JMP-200SERIES)

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

WARRANTY

- 1 year against defects in materials and workmanship

MEASUREMENTS

