

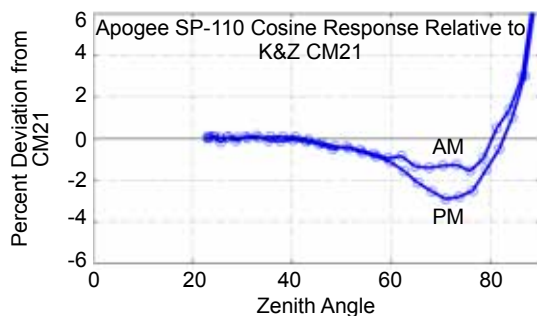
MEASURES SHORTWAVE RADIATION REACHING THE EARTH'S SURFACE.

DESCRIPTION

This sensor is a silicon-cell pyranometer. It is calibrated to measure total shortwave radiation. The evaporation of water from soil and the transpiration of water from plant leaves are partly determined by the intensity of shortwave radiation, which is measured in Joules per meter squared per second or Watts per meter squared.

A cosine corrected sensor is designed to maintain its accuracy when radiation comes from different angles. For pyranometers, the test of cosine response is to measure extreme zenith angles.

The cosine response and accuracy of the pyranometer have met with the high standards of Campbell Scientific, one of the world's leaders in environmental measurements.



Campbell Scientific installs Apogee pyranometers on certain weather stations such as the ET106 and other data collection systems.



RECOMMENDED ACCESSORIES



AL-100 A leveling plate used to keep the sensor heads level.

ORDERING INFORMATION

All products can be ordered at www.apogeeinstruments.com

For technical information contact techsupport@apogee-inst.com

SPECIFICATIONS

COSINE RESPONSE

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

ABSOLUTE ACCURACY

- $\pm 5\%$

OUTPUT

- Responsivity: 0.20 mV per $W m^{-2}$
- In Full Sunlight: 220 mV ($1100 W m^{-2}$)
- Linear Range: 0 - 350 mV ($0 - 1750 W m^{-2}$); 1.75 full sun

UNIFORMITY

- $\pm 3\%$

REPEATABILITY

- $\pm 1\%$

SENSITIVITY

- Custom calibrated to exactly $5.00 W m^{-2}$ per mV

OPERATING ENVIRONMENT

- -40 to 55° C
- 0 to 100% relative humidity
- Designed for continuous outdoor use
- Can be submerged in water

MATERIALS

- Anodized aluminum with cast acrylic lens

MASS

- 70 g (with 3 m lead wire)

INPUT POWER

- None, self-powered

CABLE

- 5 meters of twisted-pair wire
- Shielded w/ Santoprene casing
- Ending in pigtail leads
- Additional cable is available in multiples of 5 meters

WARRANTY

- 1 year against defects in materials and workmanship

MEASUREMENTS

