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PYRANOMETER SENSORS FOR REFLECTED RADIATION STUDIES

Skye silicon cell pyranometer sensors SKS 1110 are individually calibrated directly against a calibrated reference World Meteorological Office First Class thermopile pyranometer, under natural daylight conditions.

The silicon cell pyranometer is actually only responsive to radiation between 400-1100 nm but this calibration method is well proven and is valid for all incident total solar radiation measurements made in natural daylight conditions.

The SKS 1110 pyranometer should not be used for measurements inside glass houses, polytunnels, under lamps etc as the calibration is not valid for these conditions.

Similarly, the SKS 1110 sensor is not suitable for measuring reflected radiation or net solar radiation. Generally it is the higher wavelengths (higher than 1110 nm) in the Near Infra-Red and Infra-Red which are usually reflected back from the ground, and this range is not physically detected by the sensor. For these applications please choose the SKS 1160 net radiation sensor which consists of two thermopile pyranometers, or alternatively the SKS 1170 NR LITE net radiometer.