

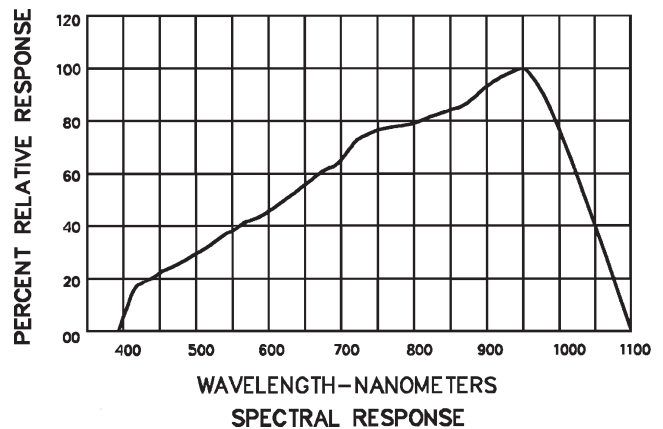
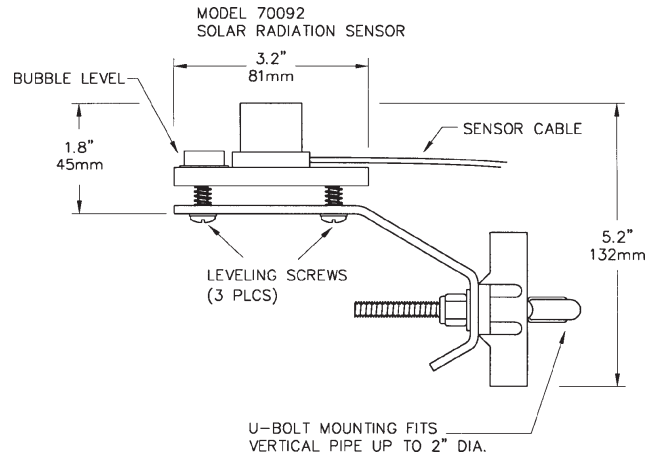


SOLAR RADIATION SENSOR

GENERAL DESCRIPTION: The Model 70092 Solar Radiation Sensor is a low cost pyranometer designed for agricultural, meteorological and hydrological applications. The 70092 features a silicon photovoltaic detector mounted in a fully cosine-corrected head. The pyranometer compares favorably with first class thermopile type pyranometers in clear unobstructed daylight conditions. A convenient offset mounting bracket for attachment to vertical post or tower member is included. For applications requiring greater signal output, MODEL 70201 includes amplifier circuit for full 0-1v signal.

SPECIFICATIONS:

Sensor type:	High stability silicon photovoltaic detector (blue enhanced)
Measurement range:	400-1100 nanometers
Sensitivity:	Typically 80 μA per 1000 W m^{-2}
Linearity:	1% max up to 3000 W m^{-2}
Stability:	$\pm 2\%$ per year
Response time:	10 μs
Signal: 70092	0-8 mV = 0-1000 Wm^{-2} typical across 100 W load.
70201	0-1000 mV = 0-1000 Wm^{-2}
Temperature dependence:	0.15% per $^{\circ}\text{C}$ maximum
Cosine Correction:	Cosine corrected up to 80° angle of incidence
Operating temperature:	-20 to $+65^{\circ}\text{C}$ (-4 to 149°F)
Material:	Anodized aluminum housing Acrylic diffuser Aluminum mounting base Powder coated aluminum offset bracket
Weight: 70092	0.5 kg (1.1 lb)
70201	1.0 kg (2.2 lb)
Cable:	3 meters shielded coaxial included



Ordering Information:

Model	Description
70092	Solar Radiation Sensor w/Offset Mounting Bracket
70201	Solar Radiation Sensor w/ Signal Amplifier (0-1000 mV = 0-1000 Wm^{-2})