

SEM228A Photoelectric Solar Radiation Transmitter

MAIN FEATURES

- Using high-precision photosensitive elements, high absorption in the spectral range
- Comes with level and adjustment hand wheel, easy to adjust on site
- Adopt standard Modbus-RTU protocol
- Highly transparent dust cover, good sensitivity, special surface treatment to prevent dust adsorption
- Using all-aluminum shell, high protection level
- Wide voltage power supply DC 7~30V



OVERVIEW

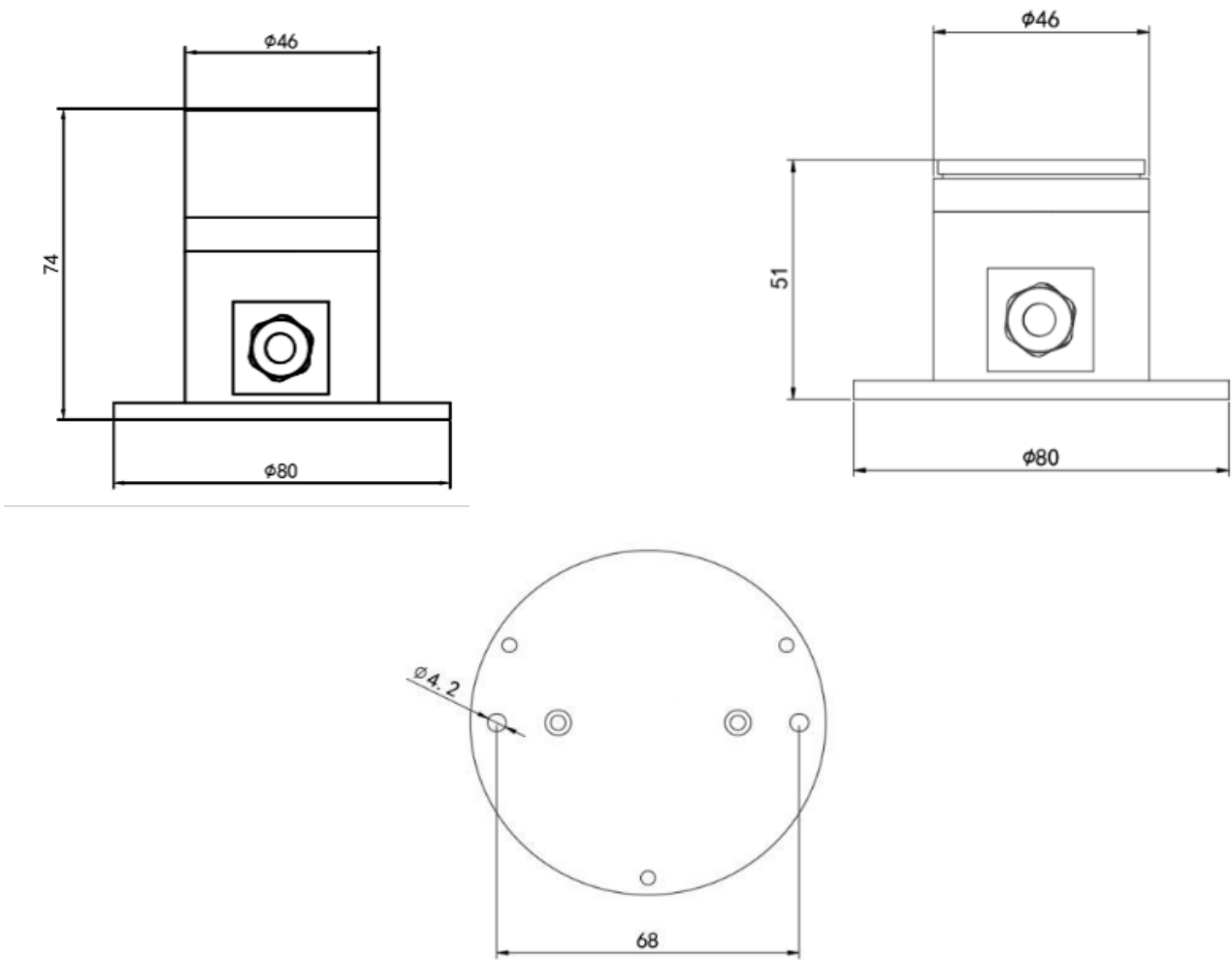
The SEM228 total solar radiation sensor adopts the photoelectric principle and can be used to measure the total radiation value under sunlight. The radiation sensor adopts a high-precision photosensitive element, with wide spectral absorption, high absorption in the full spectral range, and good stability; at the same time, a dust cover with a light transmittance of up to 95% is installed outside the sensing element, and the dust cover is specially treated to reduce dust. Adsorption can effectively prevent the interference of environmental factors on internal components, and can measure the amount of solar radiation more accurately.

The product supports standard analog output or Modbus-RTU 485 communication protocol, which can directly read the current solar radiation value, and the wiring method is simple. The appearance is small and beautiful, and takes up little installation space. Products are widely used in solar energy utilization, meteorology, agriculture, building material aging and air pollution and other departments to do the measurement of total solar radiation.

SPECIFICATION

Material	Matte aluminum + quartz glass cover
Power supply	7V~30V DC
Measuring Range	0~1800W/m ²
Power consumption	0.06W (RS485), 0.6W (analog output)
Response time	≤10S
Output signal	RS485(Modbus-RTU protocol),4-20mA,0-5V, 0-10V
Spectral range	0.3~3μm
Working humidity	0%~100%RH
Working temperature	-40°C~60°C
Resolution	1W/m ²
Nonlinearity	< ±3%
Long-term stability	≤±3%
Cosine response	≤±10%
Load capacity	Current output: ≤600Ω, voltage output: output resistance ≤250Ω
Cable length	60cm (customized)

DIMENSION



ORDER CODE

Code:	A	-	B	-	C
SEM	228A	-	P	-	R

Model	Code A
Solar radiation sensor	228
Material	Code B
Aluminum shell	228A

Signal output	Code C
485 output (standard Modbus-RTU)	R
4~20mA current output	S4
0~5V voltage output	S5
0~10V voltage output	S1