SEM228P Photosynthetically active radiation (PAR) sensor

MAIN FEATURES

- Response spectral range 400-700nm
- Adopt all-aluminum shell, protection grade IP67
- Self-contained level meter and adjustment handwheel, convenient on-site adjustment
- Adopt standard Modbus-RTU protocol
- Use high-quality cosine corrector to ensure standard cosine response
- Wide voltage power supply DC7~30V

OVERVIEW

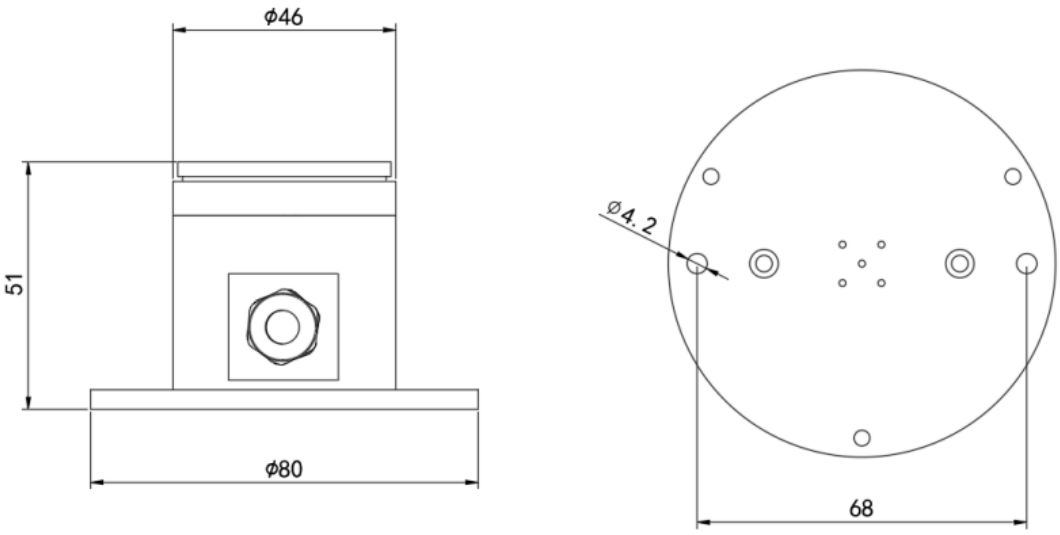
The photosynthetically active radiation sensor adopts the photoelectric sensing principle, which can be used to measure photosynthetically active radiation in the spectral range of 400~700nm. The sensor uses high-precision photoelectric sensing elements, wide spectrum absorption, high absorption in the range of 400-700nm, and good stability; when there is light, it generates a voltage signal proportional to the intensity of the incident radiation, and its sensitivity is less than that of the incident light. The cosine of the direct angle is proportional. The dust cover adopts special treatment to reduce dust absorption, effectively prevent environmental factors from interfering with internal components, and can more accurately measure the amount of photosynthetic effective radiation.

The product adopts the standard Modbus-RTU 485 communication protocol, which can directly read the current photosynthetic effective radiation value, and the wiring method is simple. The appearance is small and beautiful, and the installation space is small. Products are widely used in research in meteorology, agriculture, air pollution and other fields.

SPECIFICATION

Power supply	7V~30V DC
Power consumption	0.06W
Output signal	RS485(Modbus)
Working temperature	-30°C~75°C
Response spectrum	400nm~700nm
Measuring range	0~2500μmol/㎡·s
Resolution	1μmol/㎡·s
Degree	±2%
Response time	10μs
Linearity	≤±1%
Annual stability	≤±2%

DIMENSION



ORDER CODE

Code:	A	–	B	–	C
SEM	228P	–	A	–	R

Model	Code A
PAR sensor	228P
Range	**Code B**
Aluminum housing	A

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