

# PAR sensor

Model ES-S228P





### 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

## Compliance

The electromagnetic compatibility in accordance with the following applicable directives:

LVD 2014/35/EU Low Voltage EMC 2014/30/EU Electromagnetic Compatibility

EMC 2014/35/EU Electromagnetic Compatibility

#### Introduction

ES-S228P 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.

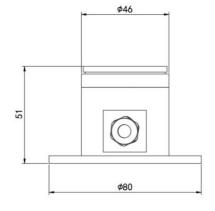
The product adopts the standard Modbus-RTU 485 communication protocol, which can directly read the current photosynthetic effective radiation value, and the wiring method is simple. The appearance is small and beautiful, and the installation space is small.

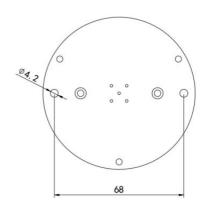
## **Application**

They are widely used in research in meteorology, agriculture, air pollution and other fields.

#### **Dimension**

Unit:mm





# Specification

Power supply	7V~30V DC	
Power consumption	0.06W	
Output signal	4-20mA, 0-5V/0-10V, RS485	
Communication protocol	Modbus-RTU	
Working temperature	-25°C~60°C	
Response spectrum	400nm~700nm	
Measuring range	0~2500µmol/m²·s	
Resolution	1μmol/m²·s	
Degree	±2% (1000umol/m²·s, 60%RH, 25°C)	
Response time	0.1s	
Linearity	≤±1%	
Annual stability	≤±2%	
Cable length	60cm can be customized	
IP level	IP65 default	

# Order guide

ES-S228P	PAR sensor			
	CODE	Material Aluminum shell		
	А			
		CODE	Signal output	
		1	4-20mA	
		2	0-10V	
		3	0-5V	
		4	RS485	
ES-S228P	А	1	Order example	