

The RK200-02 PAR Sensor is mainly used for measuring solar radiation within 400~700nm wavelength. It is easy installation and can work continuously in all weathers. When there is sunlight, voltage output proportional to incident light intensity will be generated by the silicon-photo detector in the sensor. Its sensitivity is proportional to the cosine of incident light direct angle. Each product is with one sensitivity coefficient respectively. It can directly output radiation value in unit of $\mu\text{mol}/\text{m}^2\cdot\text{s}$.

FEATURES

- Metal construction
- Harsh environment workable
- High sensitivity
- No power supply measurement
- Compact size for easy use



APPLICATIONS

- Agrometeorological research
- Crop growth monitoring
- Ecological research
- Environment surveillance
- Greenhouse control

SPECIFICATIONS

Item	Specifications
Spectral range	400~700nm
Accuracy	$\pm 5\%$ rdg
Range	0-2500 $\mu\text{mol}/\text{m}^2\cdot\text{s}$ or 0-2000W/m ²
Supply	5VDC, 12V-24VDC
Output	0-2000mV, 4-20mA, 0-5V, RS485
Sensitivity	160-1000 $\mu\text{V}/\mu\text{mol}/\text{m}^2\cdot\text{s}$
Response time	<1s (99%)
Temperature effect	<0.05%/°C
Cosine correction	<10% (until 80°)
Non-linearity	< $\pm 2\%$
Operating temperature	-40~+80°C
Shell material	Aluminum alloy
Storage Condition	10°C-60°C @20%-90%RH

OUTPUT CHARACTERISTICS

- **0-2000mV**

PAR values(W/m²)= Voltage output value(μV)/sensitivity coefficient(μV*W⁻¹*m²),

Each product is with one sensitivity coefficient respectively (It is mentioned on the product's label)

- **0-5V**

PAR values(W/m²)=(V/5)*2000(Where V is output voltage value,unit:V)

- **4-20mA**

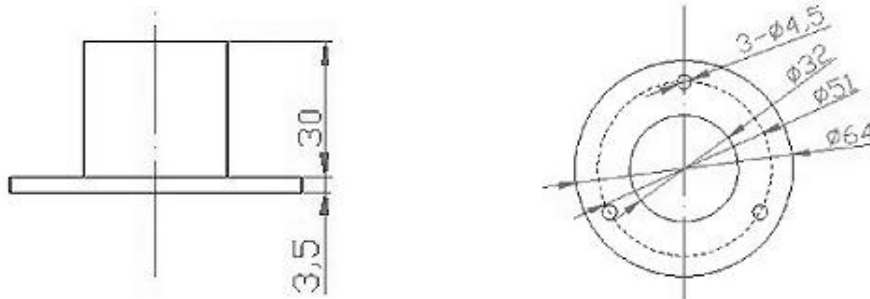
PAR values(W/m²)=(I-4)/16*2000(Where V is output current value,unit:mA)

- **RS485**

MODBUS-RTU

DIMENSION

Unit:mm



In order to ensure measurement accuracy, please keep the horizontal installation.

PARAMETER SELECTION TABLE

Remark	Series	Type	Range	Output	Cable Length	
RK						
	200					
		02				
			A			0-2500μ*mol/m ² *s
			B			0-2000W/m ²
			C			Other
				A		4-20mA
				B		0-5V
				C		
				D		0-2000mV
				E		RS485(0-2000W/m ²)
				F		Other(customized)
					1500	Units:mm (typ)
					3000	Units:mm
					...	Units:mm

Example: RK200-02BA1500 Range: 0-2000W/m²,Output:4-20mA,Cable Length:1.5m.

 Complies with applicable CE directives.

Specifications subject to change without notice. Version 2.0

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