

RK200-02B PAR Sensor is mainly used for measuring solar radiation within 350~1100nm 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 W/m².

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 | 350~1100nm | | |
| Supply | 5VDC,12V-24VDC | | |
| Accuracy | ±5% rdg | | |
| Range | 0-2000W/m ² | | |
| Output | 0-2000mV | 4-20mA(2-wires) | RS485 |
| Sensitivity | 1000μV/W/m ² | 8uA/W/m ² | |
| Response time | <1s (99%) | | |
| Temperature effect | <0.05%/°C | | |
| Cosine correction | <10% (until 80°) | | |
| Non-linearity | <±2% | | |
| Operating temperature | -40~+80°C | | |
| Shell material | Aluminum alloy | | |
| Storage condition | 10°C-60°C@20%-90%RH | | |

OUTPUT CHARACTERISTICS

● **0-2000mV**

Range:0-2000W/m² PAR values(W)= Voltage output value(μV)/1000

● **4-20mA**

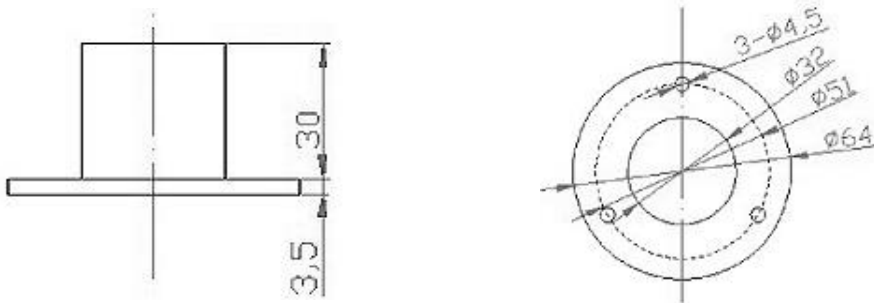
Range:0-2000W/m² PAR values(W)=(I(μA)-4000μA)/8 (Where I is output current value,unit:μA)

● **RS485**

MODBUS-RTU

DIMENSION

Unit:mm




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

PARAMETER SELECTION TABLE

| Remark | Series | Type | Supply | Range | Output | Cable Length | |
|--------|--------|------|--------|-------|--------|--------------|------------------------|
| RK | | | | | | | |
| | 200 | | | | | | |
| | | 02B | | | | | |
| | | | A | | | | 5V |
| | | | B | | | | 12-24V |
| | | | X | | | | Other |
| | | | | A | | | 0-2000W/m ² |
| | | | | X | | | Other |
| | | | | | A | | 4-20mA(2 wires) |
| | | | | | B | | 0-5V |
| | | | | | C | | |
| | | | | | D | | 0-2000mV |
| | | | | | E | | RS485 |
| | | | | | X | | Other |
| | | | | | | 1500 | Units:mm (typ) |
| | | | | | | 3000 | Units:mm |
| | | | | | | ... | Units:mm |

Example: RK200-02BBAA1500 Supply:12-24V, Range: 0-2000W/m²,Output:4-20mA,Cable Length:1.5m.




 Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0

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