

RK200-04 Solar Radiation Sensor



RK200-04 Solar Radiation Sensor is designed on basis of silicon-cell principle. It is mainly used for measuring solar radiation within 300-3000nm wavelength. If the sensing face is downwards, it can test the reflected radiation and solar radiation on the incident to the inclined plane. If shade is added, it can test the scattered radiation. It is widely used to monitor the solar radiation in meteorology, solar energy, agriculture, construction materials aging and atmospheric pollution and etc..

FEATURES

- Designed on silicon-cell principle
- No moving parts, no maintenance, can work in any altitude
- High sensitivity
- Low power consumption
- Light weight, long service life
- Used as sunshine duration sensor



APPLICATIONS

- Meteorology
- Agriculture
- Construction materials aging monitoring
- Air pollution monitoring
- Solar energy

SPECIFICATIONS

Item	SPECIFICATIONS
Spectral range	300~1100nm
Supply	5V,12-24VDC
Range	0-1500W/m ²
Resolution	1W/m ²
Output	0-5V,4-20mA,RS485
Response time	≤5s
Cosine correction	≤±10%(Solar elevation angle=10°)
Non-linear	≤±3%
Temperature effect	±0.08%/°C
Stability	≤±2%/year
Operating Temperature	-40°C~+80°C
Ingress Protection	IP65
Weight(unpacked)	420g
Shell material	Aluminum alloy
Storage Condition	10°C-60°C@20%-90%RH

- The product can be used as a sunshine time sensor

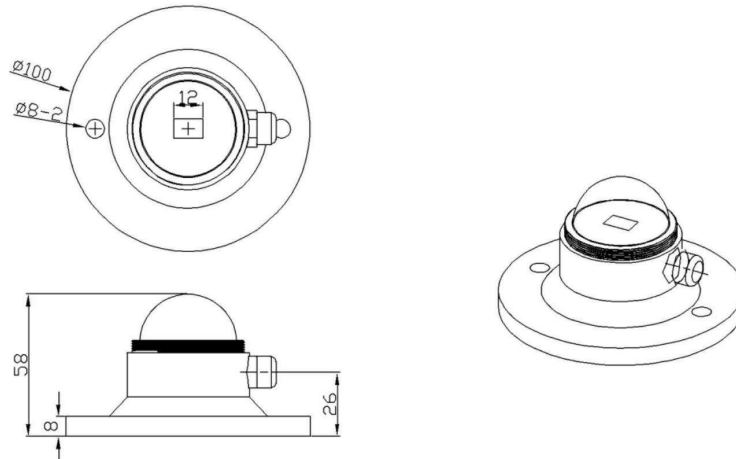
Sunshine hours is the sum of time periods that the sun direct irradiance intensity to reach or exceed 120W/m² time , hour as a unit, a decimal. Sunshine hours is also known as actual irradiance time.

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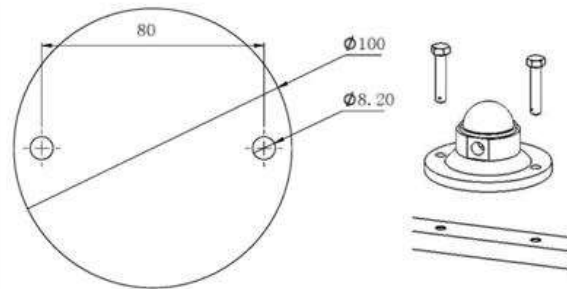
DIMENSION

Unit:mm

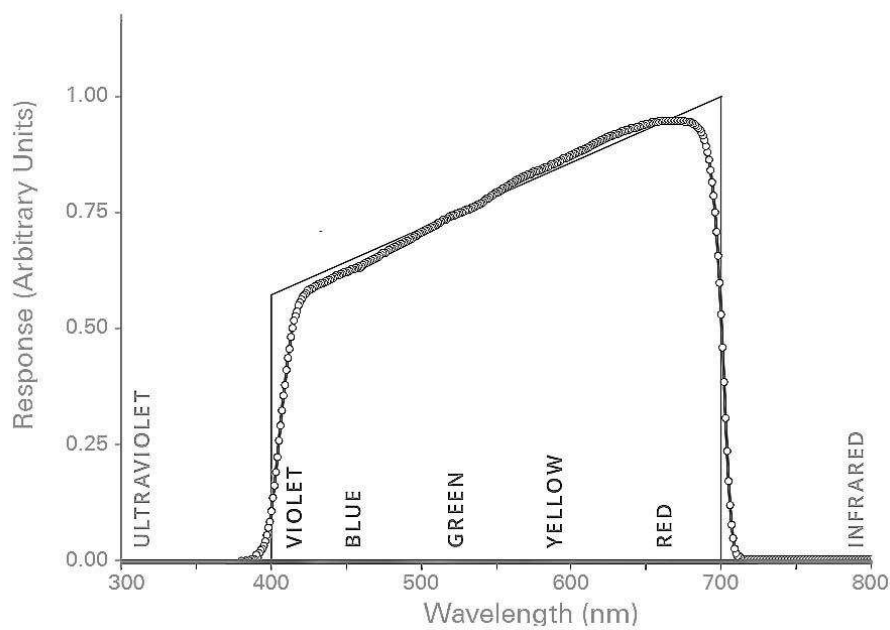


MOUNTING

In order to the accuracy of the measurement, please ensure that the sensor mounted horizontally as much as possible.



SPECTRAL RESPONSE



RK200-04 Solar Radiation Sensor



PARAMETER SELECTION TABLE

Remark	Series	Type	Shell material	Supply	Output	Cable Length	
RK							
	200						
		04					
			M				Metal(Aluminum alloy)
				A			5V
				B			12-24V
				X			Other
					A		4-20mA
					B		0-5V
					C		
					D		RS485
					X		Other
						2500	Units:mm (typ)
						3000	Units:mm
						...	Units:mm

Example: RK200-04MBA2500 Shell material: Aluminum alloy, Supply:12-24V,Output:4-20mA,Cable Length:2.5m.

 Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0
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