

RK200-04 Solar Radiation Sensor is designed on basis of photodiode detector. It is mainly used for measuring solar radiation within 300-1100nm 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
- Low response time
- High sensitivity
- Low power consumption
- Light weight, long service life
- Used as sunshine duration sensor

## APPLICATIONS

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



## SPECIFICATIONS

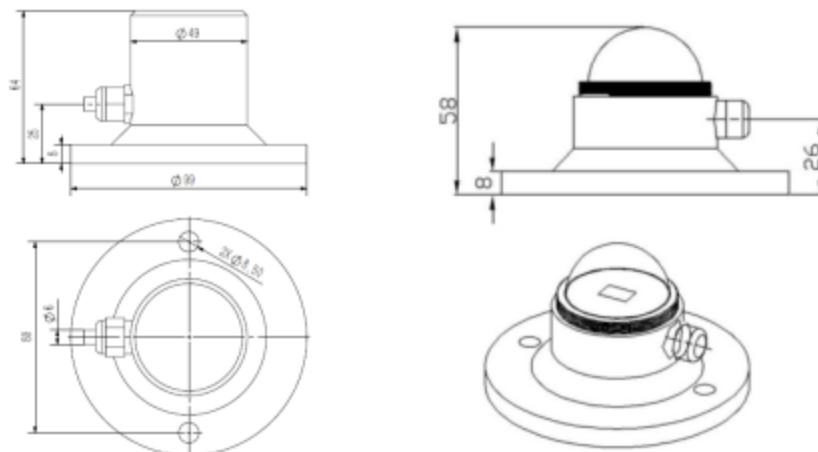
Item	SPECIFICATIONS
Spectral range	300-1100nm
Supply	5V, 12-24VDC
Range	0-1500W/m <sup>2</sup>
Resolution	1W/m <sup>2</sup>
Output	0-2.5V, 0-5V, 4-20mA, RS485, SDI-12
Power consumption	0.2W
Response time	≤500ns(95%)
Cosine correction	≤±10%(Solar elevation angle=10°)
Non-linear	≤±2%
Temperature effect	±0.08%/°C
Stability	≤±2%/year
Operating temperature	-40°C - +80°C
Ingress protection	IP67
Weight(unpacked)	420g
Shell material	Aluminum alloy
Storage condition	10°C-60°C@20%-90%RH

- This product can be used as a sunlight time sensor when paired with a recorder

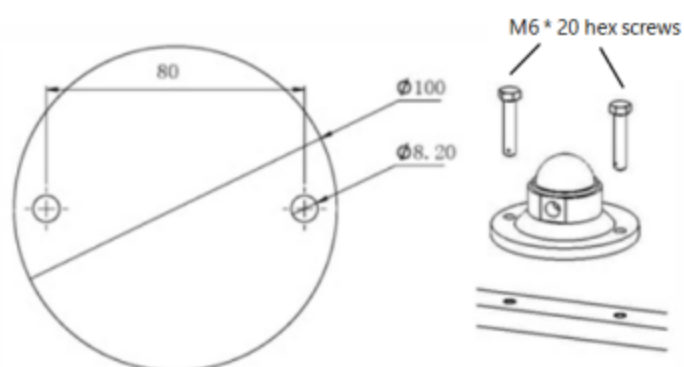
Sunshine hours is the sum of time periods that the sun direct irradiance intensity to reach or exceed 120W/m<sup>2</sup> time hour as a unit, a decimal. Sunshine hours is also known as actual irradiance time.

## DIMENSION

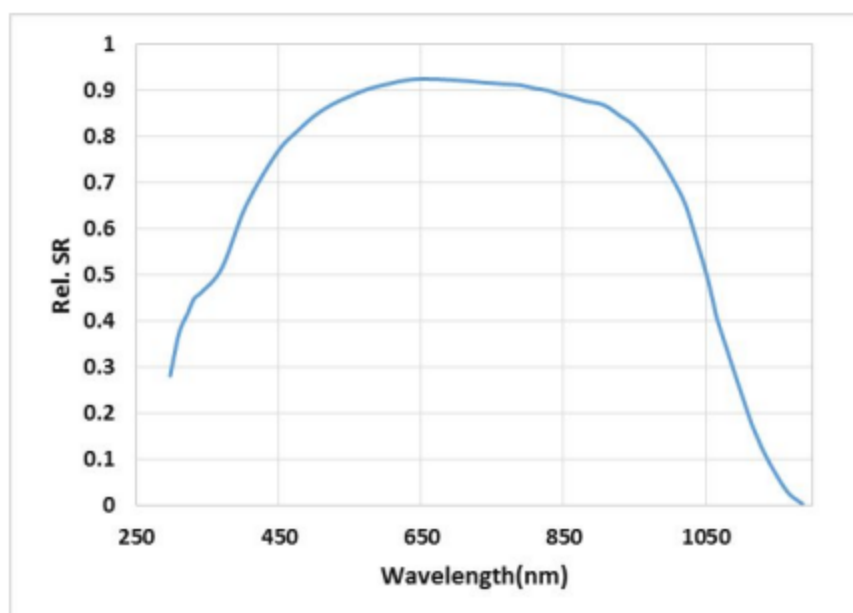
Unit:mm



## MOUNTING



## SPECTRAL RESPONSE



## PARAMETER SELECTION TABLE

Remar	Series	Type	Shell	Supply	Output	Cable	
RK							
	200						
		04					
			M				Metal(Aluminum alloy)
				A			5V
				B			12-24V
				X			Other
					A		4-20mA
					B		0-5V
					C		0-2.5V
					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 Length2.5m.

Revision time	Reviser	Current Version	Remarks
20250403	Lee	V5.0	