



## Pyranometer, Shortwave Radiation Sensor, Solar Irradiance Meter

### Overview

**BS200-04 Solar Radiation Sensor** is based on the silicon photovoltaic cell principle and is designed to measure solar radiation in the 300–3000 nm wavelength range. When the sensing surface is positioned downward, it can measure reflected radiation and incident solar radiation on inclined surfaces. With the addition of a shading device, the sensor can also measure scattered radiation.

This versatile sensor is widely used in meteorology, solar energy research, agriculture, building material aging studies, and atmospheric pollution monitoring, providing accurate and reliable solar radiation data for various environmental and industrial applications.

### 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

## Technical Specifications

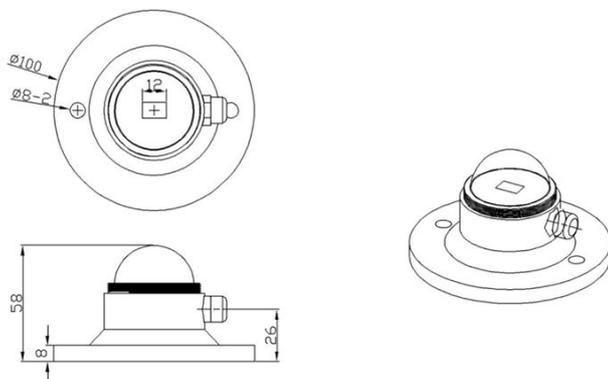
Item	Specification
Spectral Range	300 ~ 1100nm
Supply	5V, 12 ~ 24VDC
Range	0 ~ 1500W/m <sup>2</sup>
Resolution	1W/m <sup>2</sup>
Output	0-5V, 4 ~ 20mA, RS485
Response Time	≤5s
Cosine Correction	≤±10% (Solar Elevation Angle=10°)
Non-Linear	≤±3%
Temperature Effect	±0.08%/°C
Stability	≤±2%/year
Operating 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/m<sup>2</sup> time, hour as a unit, a decimal. Sunshine hours is also known as actual irradiance time.

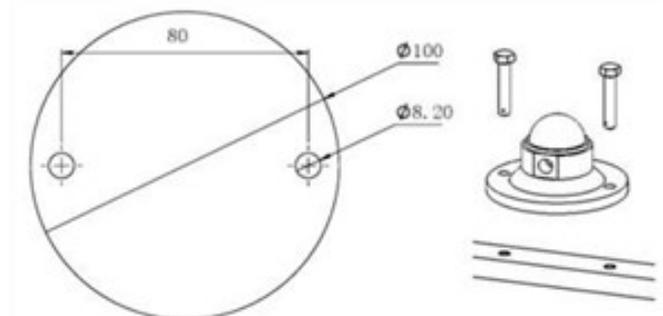
## Dimension

Unit:mm

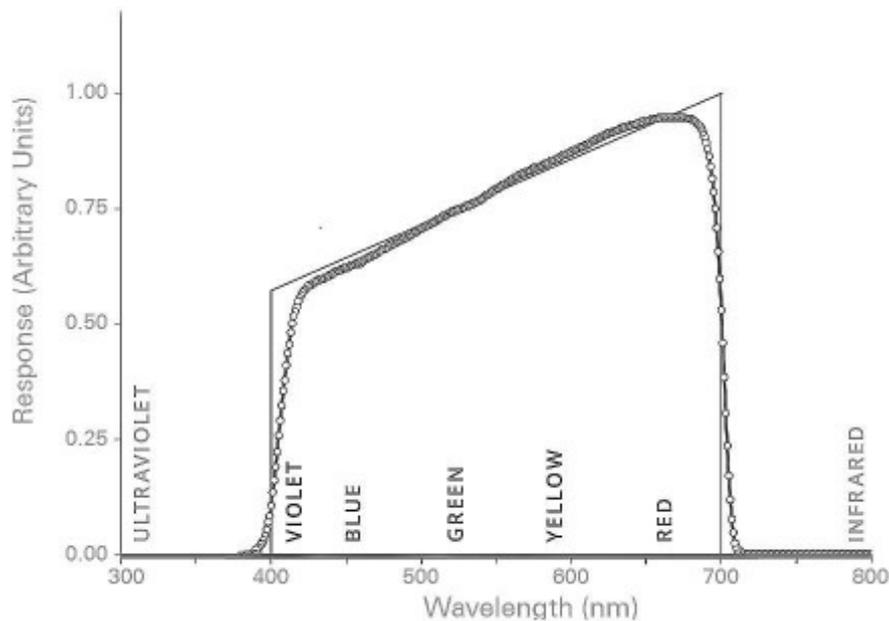


## Mounting

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



## Spectral Response



## Parameter Selection Table

Remark	Series	Type	Shell material	Supply	Output	Cable Length	
BS							
	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:** BS200-04 MBA2500

Shell Material: Aluminum Alloy, Supply: 12 ~ 24V, Output :4 ~ 20mA, Cable Length: 2.5m.

For comprehensive details, visit: [www.buraq.com/BS200-04](http://www.buraq.com/BS200-04)



**BURAQ INTEGRATED SOLUTIONS**  
When Precision Matters...



**HQ:** Buraq Center, 11-D, 6th Road, Satellite Town, Rawalpindi, Pakistan.

**STZ:** 1st Floor, Alpha-18, NASTP, Old Airport Road, Rawalpindi, Pakistan.



info@buraq.com