MS-107

Solar Radiation Measuring Instrument

Contact us

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Features and Applications

The MS-107 solar radiation measuring instrument is a widely used device, applicable in fields such as solar radiation measurement, solar research, physical optics laboratories, high-performance window identification, meteorology, agriculture, etc. In daily life, it can also be utilized, for instance, to help people understand the intensity of solar radiation and take corresponding sun protection measures. Its measurement unit is W/M² or BTU/(ft²×h).

- The measurement function is diverse, capable of measuring solar radiation, film effectiveness, etc., and can also assist in determining the optimal angle of the solar panel. It has a wide range of applicable scenarios and is highly practical.
- The display is clear and intuitive, supporting unit switching and data retention, with precise peak tracking function, and the operation is convenient and easy to master.
- The performance is stable and reliable, with high precision and minimal error over a long period of use. It also provides clear indications for overload and low voltage conditions, ensuring measurement safety.
- The design is lightweight and portable, with moderate size and light weight. It is equipped with a cloth bag for easy carrying and is suitable for various indoor and outdoor environments.
- Maintenance is simple and hassle-free. The battery replacement process is straightforward.
- Cleaning only requires a dry soft cloth. Storage instructions for long-term use are clearly stated.
- Compliant with safety standards, meeting the safety standards for electronic measuring instruments, with strong electromagnetic compatibility, and having multiple protective measures in place.

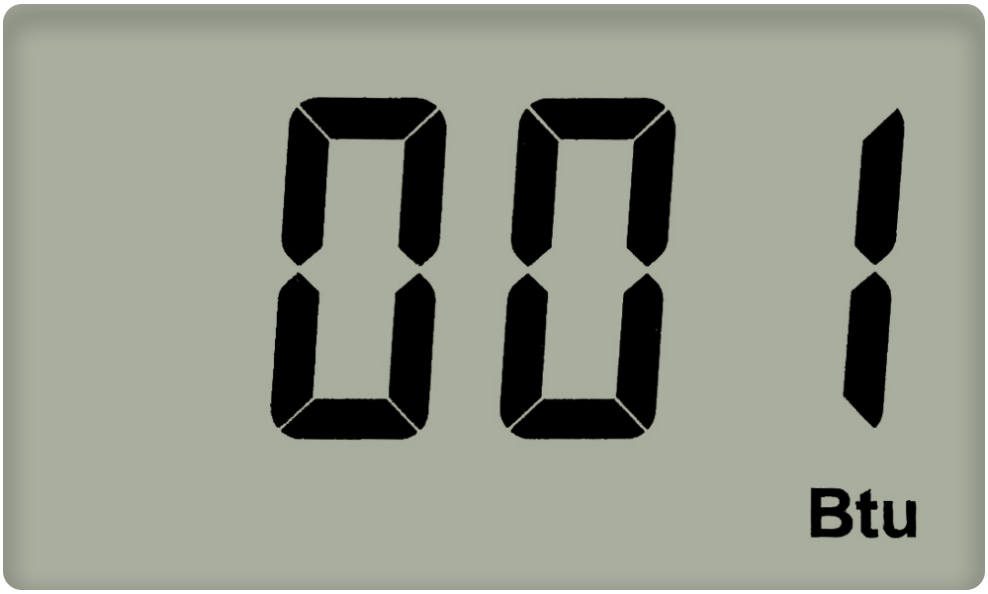
Features and Applications

- Used for measuring the effectiveness of solar films, to evaluate their transmission performance, and to provide data support for related research;
- Measure the intensity of solar radiation, which helps with data analysis and application in fields such as meteorological monitoring and agricultural production;
- Determine the optimal incidence angle of solar panels, enhance their absorption efficiency, and optimize the utilization of solar energy.
- Testing the sunlight transmission of transparent film glass, which is applicable for material performance assessment in fields such as construction.
- Measure the brightness of the car headlights, compare the values of the left and right lights, and provide a reference for vehicle lighting maintenance.
- Test the heat insulation effect of car and home windows, and understand the efficiency of the window films through numerical comparison;

Product Details

1.Display Screen	2.Power Button	3.Range Button	4.W/M² Unit
5.Btu (Ft²×H) Unit	6.Peak Button	7.Hold Button	8.Testing Instrument

Operation Interface



- Unit selection is flexible: You can choose between W/m² or BTU/(ft²×h) as the units, fully considering the usage habits of users in different regions and industries.
- The measurement range reaches 1999 W/m² and 634 BTU/(ft²×h), which can meet the measurement requirements in various complex scenarios.

Operation Interface

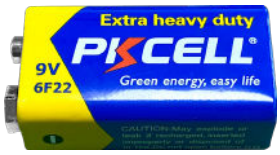
- Data retention function: By simply pressing, the current measurement data can be frozen, facilitating the recording of stable readings in complex environments and avoiding interference caused by data changes.
- Peak retention function: It can precisely track pulse signals longer than 100 milliseconds and lock onto the peak value, facilitating the capture of the strongest radiation data at a specific moment.

- It integrates the compass function. For scenarios where one needs to determine the direction outdoors and measure solar radiation at the same time, such as the installation and debugging of solar energy equipment in the wild, as well as ecological environment monitoring, there is no need to carry an additional compass. It is convenient and practical.
- It is compact in size, lightweight, and features designs such as hooks (judging from its appearance, it is convenient for carrying around). This makes it suitable for researchers, outdoor workers, etc. to carry with them when conducting field operations, allowing them to measure solar radiation at any time.

Technical Specification

Battery Life	About 100 hours
Precision	±W/m²[+3 BTU/(ft² X h)]
Working Temperature	Relative humidity: 50% - 40%, relative humidity lower than 80%
Storage Temperature	Relative humidity: -10°C to 60°C, relative humidity less than 70%
Monitor	Three-and-a-half-inch liquid crystal display, with the maximum reading capacity of 1999
Sampling Time	Approximately 0.25 seconds
Resolution	1W/m² BTU/(ft² X h)
Accuracy	±<3 per year
Range	1999 W/m²,634 BTU/(ft²×h)
Size(Mm)	100x60x27
Weight	About 300g

Standard Delivery

Name	Qty	Photo
Host	1 set	
Battery	1 pc	
Instrument Bag	1 pc	
Instruction Manua	1 pc	