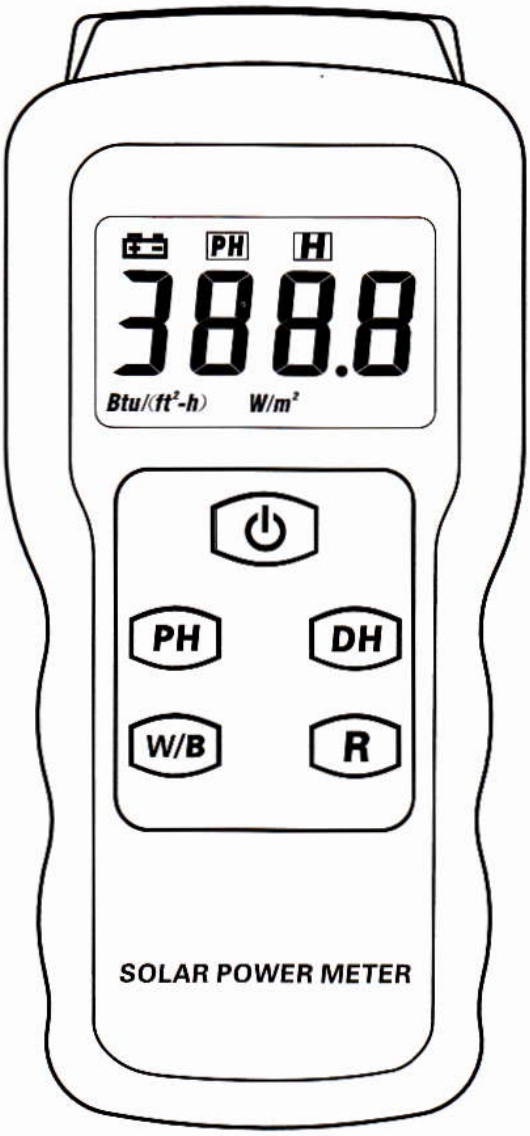
SOLAR POWER METER INSTRUCTION MANUAL



As this device is an intellectual precise measurement apparatus, it is very important that you read through these instructions before using this device.

I Overview

Thank you for selecting our product. Before using this meter, please carefully read this Manual. It will instruct you on correct operation methods and simple examination and handling essentials so you can benefit from its advantages.

This meter is a precision instrument for measuring light intensity. It is used in solar radiation measurement, solar research, physical and optical experiments, meteorology, and agriculture. It can also be used to measure glass light intensity to verify glass properties. For example: Measurement of light intensity through vehicle windows.

II Features

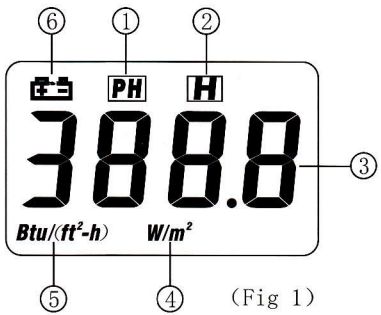
a. Selectable from two units: W/m² and Btu/(ft²-h)
b. Peak value retention function
c. Data retention function
d. Measure directly without adjustment
e. Steadily measure for a long period

III Specifications

Resolution: 0.1W/m², 0.1 Btu/(ft²-h)
Accuracy: ±10W/m² [±3 Btu/(ft²-h)]
or ±5% of the measured value
Temperature coefficient: ±0.38W/m² per ℃
[±0.12 Btu/(ft²-h)/℃] deviation at 25℃
Display: 3-3/4LCD display, maximum displayed numerical value 3999
Shift: <±3% /year
Overload display: "OL"
Range: 0.1～399.9 W/m²
1～3999 W/m²
0.1～399.9 Btu/(ft²-h)
1～3999 Btu/(ft²-h)
Sampling time: 0.25s/time
Operation temperature and humidity:
0℃～50℃, <80%RH
Storage temperature and humidity:
-10℃～60℃, <70%RH
Dimensions and weight:
132 x 60 x 38 mm
Weight: approx. 150g
Battery needed: one 9V 6F22 battery
Battery operation life: Approx. 100 hours

Ⅳ Description of the display (Fig 1)

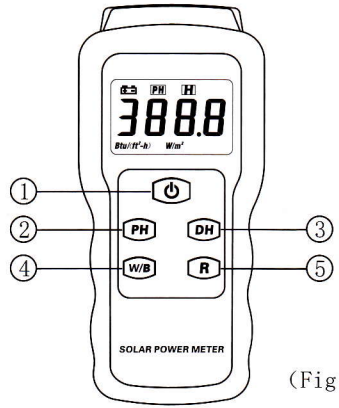
1. Peak value retention symbol
2. Data retention symbol
3. Displayed data
4. W/m²
5. Btu/(ft²-h)
6. Low battery symbol



(Fig 1)

Ⅴ Description of the keypad (Fig 2)

1. ⏻ : ON/OFF key
2. PH : Peak value retention key
3. DH : Data retention key
4. W/B : Units W/m² and Btu selection key
5. R : Range switching key



(Fig 2)

Ⅵ Operation

1. After installing the battery correctly, press "⏻" to turn the meter on. It enters the measuring state. The LCD screen displays "00.0". The default unit after turning on is W/m².
2. Press "W/B" to select the unit W/m² or Btu, as desired.
3. Make measurements after unit selection. If the display on the screen is "399.0" or "OL", it indicates the measurement

will or already has overloaded. At this time, please key in "R" to switch the range. The range after switching is 1~3999 W/m² [or Btu/(ft²-h)].

4. If you need to read the maximum value in this measurement process, press "PH" first in the measuring state. The screen displays "PH". Then conduct measurement. It can measure the peak value at this time and retain it. Press "PH" once again to exit the peak value retention function.
5. Press "DH" during measurement and the LCD screen displays "H" and the displayed value is locked at the same time. Press "DH" to exit the data retention function to continue measurement.
6. After the measurement is completed, press "⏻" to turn the meter off.

Ⅶ Battery replacement

1. When the battery voltage becomes too low, the low battery symbol "🔋" will appear on the screen, indicating that the battery needs to be replaced. If it is not replaced in time, the measurement

accuracy will be affected.
2. Open the battery door and take out the battery.
3. Correctly install a new 9V battery.
4. If the meter is not used for a long period of time, please take out the battery to prevent damage to the meter from leakage of the battery.

Ⅷ Precautions

1. This meter is a precision instrument. Please store it in the storage device provided with it. Avoid storing it in moist places.
2. Do not allow the meter to touch any live object to prevent damage to it.
3. Never clean or wipe the meter with any liquid or water.