

# CENTER<sup>®</sup> 533 SOLAR POWER METER

## Safety Information

Read the following safety information carefully before attempting to operate or service the meter.

Use the meter only as specified in this manual ; otherwise, the protection provided by the meter may be impaired.

### Environment Conditions:

- ‡ Altitude up to 2000 meters
- ‡ Relatively humidity 90% max.
- ‡ Operation Ambient 0 ~ 40°C

### Explanation of Symbols:

- CE Comply with EMC.  
When servicing, use only specified replacement parts.

## Introduction

Thank you for using our SOLAR POWER METER. To ensure that you can get the most from it, we recommend that you read and follow the manual carefully before use. The SOLAR POWER METER has been designed for meteorology, agriculture, solar transmiss measurement and solar panel arrays. This meter has the following characteristic.

- Easy to use
- Data Hold function
- 1 W/m<sup>2</sup> · 1 BTU / (ft<sup>2</sup>·h) unit selection
- MAX/MIN function
- 3 1/2 digits, 1999 count LCD

## Precautions on handling

Operating carefully, and do not drop the meter or hit it with a hard object. Avoid using the meter in a dirty, dusty, or salt-air area or where there are corrosive gases. If dirt or dust adhered to the surface of the light detecting surface, this will decrease the accuracy of the measuring value. To clean the surface, use soft and dry cloth to wipe it clean.

## Maintenance

### Attention!

Repairs or servicing not covered in this manual should only be performed by qualified personal.

### Cleaning

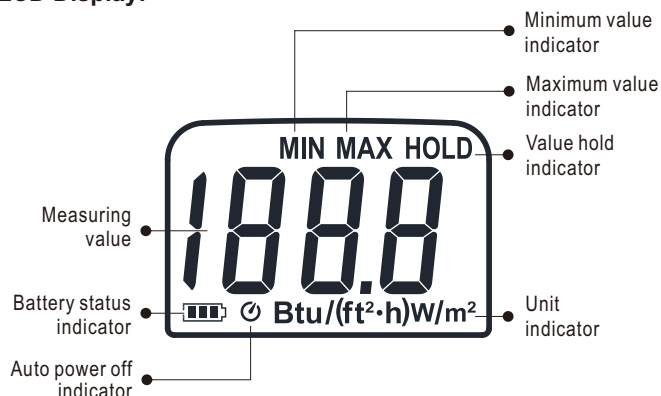
Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instrument.

### Note

If it is not used for a long time, please store the meter in chamber under 60%RH.

## Symbol Definition & Button Location

### 1. LCD Display:



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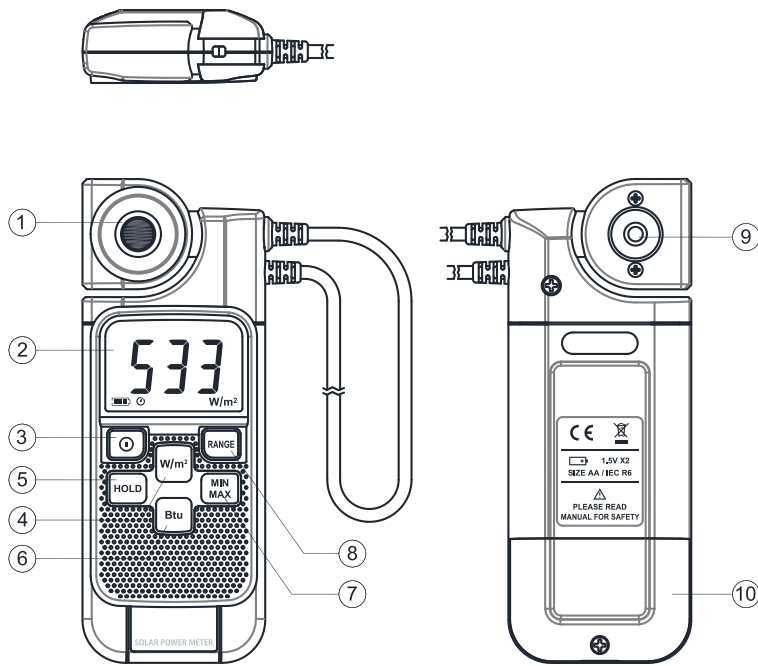
http://www.centertek.com

GCA000533-02000

## Specifications

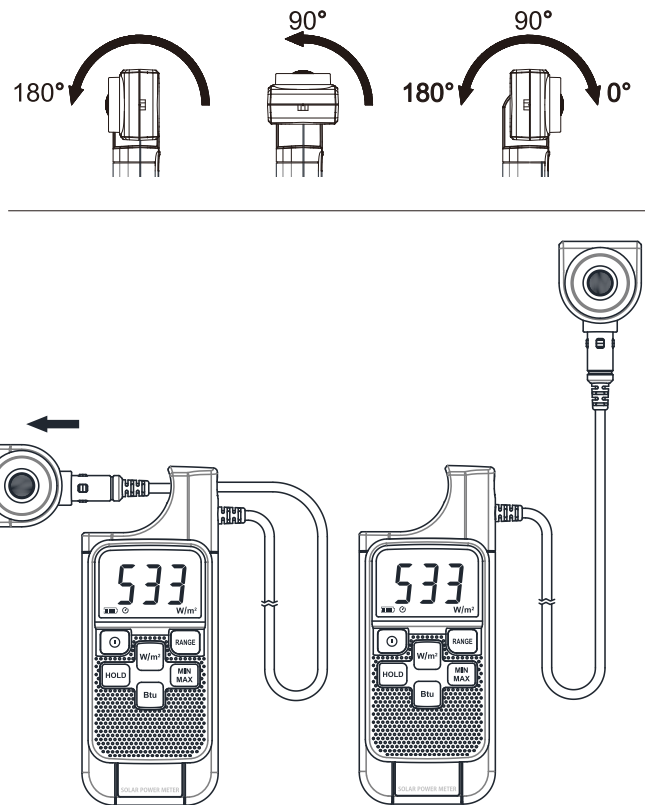
Measuring range:	0.0 to 199.9/1999 W/m <sup>2</sup> 0.0 to 199.9/634 BTU / (ft <sup>2</sup> ·h)
Resolution:	0.0 ~ 1W/m <sup>2</sup> · 0.0 ~ 1 BTU / (ft <sup>2</sup> ·h)
Accuracy:	typically within ± 10W/m <sup>2</sup> [ ±3 BTU / (ft <sup>2</sup> ·h) ] or ±5% whichever is greater in sunlight
Temperature characteristics:	±0.38W/m <sup>2</sup> / °C [±0.12BTU/(ft <sup>2</sup> ·h)/°C] from 25°C
Response time:	0.5 sec
Light detector:	SI Photodiode
Over range:	“ OL ” display
Power supply:	1.5V type AA battery x2
Power life:	Approx. 80 hours
Operation temperature:	0°C ~ 40°C(32°F ~ 104°F)
Operation humidity:	0~80% RH
Storage Temperature:	-10 to 50°C (14 to 122°F)
Storage Humidity:	0 to 60% RH
Dimension / Weight:	169(L)×63(W)×37(H)mm (6.7”×2.5”×1.5”)
Weight:	Approx. 185g
Accessories:	Battery, instruction manual, carrying case.

## 2. Name of Parts & Position:



### ① Light detecting surface:

- This probe can be fixed on the meter parallel or perpendicular to the LCD surface. Or it may be detached from the unit to fit the measuring requirement.



### ② LCD display:

2.2 inch large size back light LCD display.

### ③ Power button:

Push this button to turn on the meter. Push this button again to turn it off. The unit will automatically turn itself off after 30 minutes if there is no key operation. To disable the automatic power off function, turn the meter off, push and keep holding "HOLD" button, then push power button to turn it on. The "⏻" will disappear from the LCD to confirm this operation.

### ④ W/m<sup>2</sup> button:

To switch the measuring scale to W/m<sup>2</sup>.

### ⑤ HOLD button:

The user may hold the present reading and keep it on the LCD display by pressing the HOLD button. To release the data held operation, user may press the button again.

### ⑥ BTU/(ft<sup>2</sup>\*h) button:

To switch the measuring scale to BTU/(ft<sup>2</sup>\*h).

### ⑦ Max Min button:

Push this button to set the meter working under MAX/MIN mode. By pushing this button, the user may swap the LCD reading among maximum, minimum and current reading. Push and hold this key for 3 seconds to exit MAX/MIN mode.

### ⑧ Range selector button:

"200.0" and "2000" 2 ranges switching.

### ⑨ Tripod mounting thread.

### ⑩ Battery cabinet cover:

When battery capacity segment is less than one, the user should replace the battery. The battery cabinet cover can be opened with a Philips screw driver and two AA type batteries should be replaced.

