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INSTRUMENTOS DE MEDICIÓN INDUSTRIAL

Medidor de Radiación Solar, Tenmars

TN-TM206

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**Solar Power
Meter TN-TM206
User's Manual**



HB2TM2060002

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1. FOREWORD

The instrument measure the solar power from the solar power.

2. WARNING AND PRECAUTIONS



CAUTION

For your own safety and to avoid damaging the instrument follow the procedures described in this instruction manual and read carefully all notes preceded by this symbol .

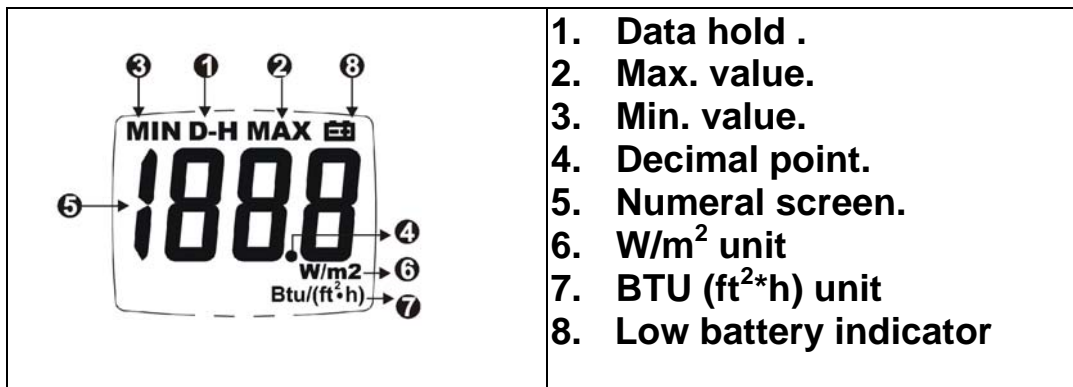
- Avoid doing that in humid or wet places.
- Avoid doing that in rooms where explosive gas, combustible gas, steam or excessive dust is present.

3. APPLICATIONS

- Transmission measurement is most suitable for measuring the effectiveness of the solar film.
- Solar radiation measurement.
- Car windows light intensity measurement.
- Optimal incident angle for the solar panel.
- Convenient, no need to adjust, data displayed clearly.

4. NAME AND FUNCTION OF EACH PART


4.1. THE LCD DISPLAY SHOWS:







4.1.1. Power button


Turn power on or off .

4.1.2. Lock up Max. and Min button:

- When you test in W/m² or BTU (ft²*h) press the “  ” button to display the max. or min. reading.

- Press and hold the “  ” button for 1 second to allow the device to read the max. value. Press the button one more time to read the min. value.
- Press and hold the “  ” button for more than 1 second, and the max. and min. come off.
- When the “  ” button is functional, the “  ” button is disabled.


4.1.3. BTU (ft²*h) / W/m² button :

The screen displays BTU (ft²*h). Press the “  ” button to switch from BTU (ft²*h) to W/m². To select a different unit, just press this button once again.



4.1.4. Data hold button :

Freezes the reading present on the LCD at the moment the button is pressed. Press HOLD again to disable Data Hold.

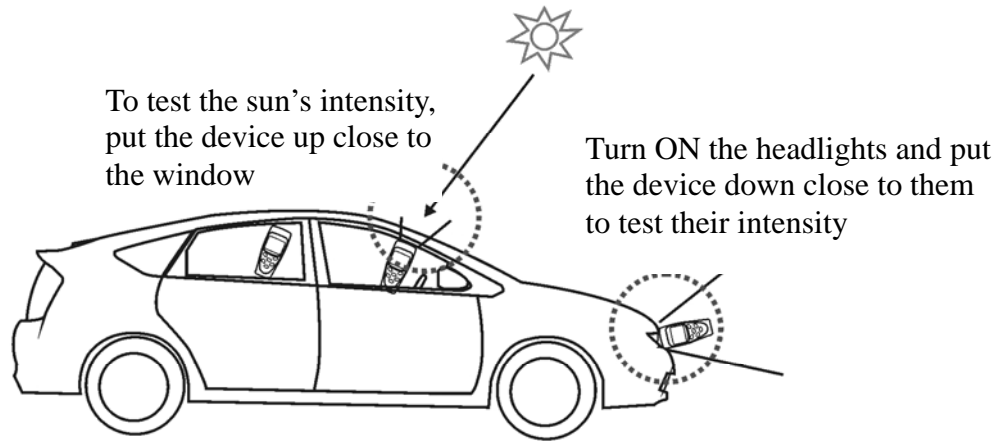
4.1.5. Manual range selection :

If “199.9” comes up on the screen, it suggests the device will become overloaded or has become overloaded “OL”. In this case, press the “  ” button, and “1999” or your acquired value then comes up.

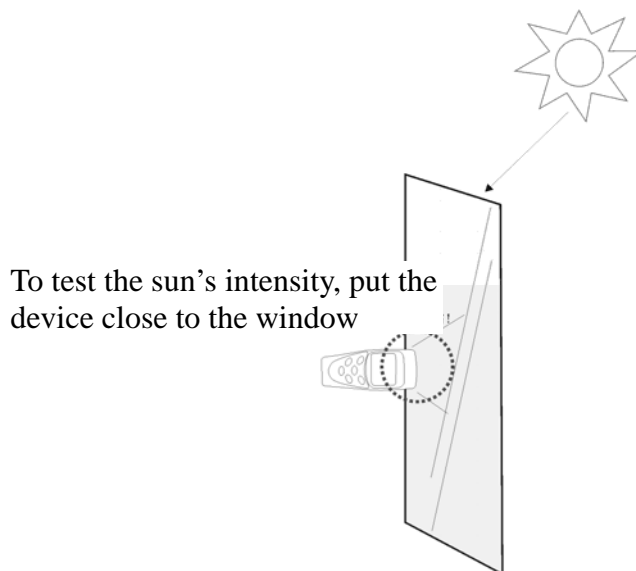
4.2. OPERATION


1. Press the  button to turn power on or off
2. Remove sensor cap and place the sensor perpendicular to the light.
3. Select  button scale and range for reading.
4. When done testing, replace the sensor cover to protect the filter and sensor.

Picture 2:



Picture 3



- Measure the solar insolation effect of your house's windows:
- Close the window. Press the “” button on your TM-206 solar meter, and “00.0” comes up on the screen. Put the device close to the window and aim it at the sun. Compare the value against that acquired when the window is closed and the device is placed at the same position, in order to understand the window's heat efficiency. (Picture 3)

5. ELECTRIC SPECIFICATION

- Battery life: approx. 100 hr.
- Accuracy : typically within $\pm 10\text{W/m}^2$ [$\pm 3 \text{ BTU} / (\text{ft}^2 \cdot \text{h})$] or $\pm 5\%$, whichever is greater in sunlight; Additional temperature induced error $\pm 0.38\text{W/m}^2 / ^\circ\text{C}$ [$\pm 0.12 \text{ BTU} / (\text{ft}^2 \cdot \text{h}) / ^\circ\text{C}$] from 25°C
- Operating temp. & RH: $5^\circ\text{C} \sim 40^\circ\text{C}$, below 80%RH.
- Storage temp. & RH: $-10^\circ\text{C} \sim 60^\circ\text{C}$, below 70%RH.
- DISPLAY : 3-1/2 digits LCD with maximum reading 1999.
- Sampling Time : Approx. 0.25 second
- Resolution : 0.1W/m^2 、 $0.1 \text{ BTU} / (\text{ft}^2 \cdot \text{h})$.
- Accuracy: $< \pm 3/\text{year}$
- Over-input : Display shows" OL".
- Range : 1999W/m^2 、 $634 \text{ BTU} / (\text{ft}^2 \cdot \text{h})$.
- Dimensions & weight: 132(L) x 60(W) x 38 (H)mm, approx. 150g.
- EMC: this instrument is EMC-compliant and has undergone compatibility tests according to EN61326 (1997) + A1 (1998) + A2 (2001).

6. ACCESSORIES

- User manual.
- 9V battery(NEDA 1604 IEC 6F 22 JIS 006P)*1
- carrying case.

7. SAFETY AND MAINTENANCE

- Operating altitude: below 2,000m.
- Operating environment: for indoor use, expose to pollution level II.
- This is a precision device. During use or storage, do not go beyond its spec. to prevent any possible damage or danger.
- Do not put this device in direct sunlight or where it is hot and/or damp.
- Remember to turn OFF the power after use. For long storage, remove the battery to prevent the battery from leaking to cause damage to the parts inside.
- Clean the device with a dry soft cloth. Wet cloths, liquid and water are prohibited.

8. BATTERY REPLACEMENT

When the symbol " " is displayed, batteries need replacement.



CAUTION

Before replacing batteries disconnect the test leads from any energized circuits to avoid electrical shocks.

Turn OFF the meter and disconnect the test leads from the input terminals.

- Unscrew the battery cover and remove the battery. Insert a new battery of the same type (9V NEDA1604, JIS006P, IEC6F22) observing the proper polarity, re-screw the battery cover and reposition the protective holster.

9. END OF LIFE



Caution: this symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal

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