

BM200/BM280

Manual for infrared thermometer

I . Sketch

BM200/BM280 infrared thermometer is a kind of professional hand-held non-contact infrared thermometer. It is simple to use, with high accuracy and wide range of temperature measurement, etc.

It has a laser target, with back light LCD display, and has a few functions such as holding maximum and automatic shutdown, etc. while using, you just need to align the detecting window at the measured object and then you can get the temperature quickly and accurately.

II . Performance index

1. Normal working conditions

- 1) Environmental temperature: 10~45°C ;
- 2) Relative humidity: less than 85%;
- 3) Power supply: 9V laminated battery (6F22) .

2. LCD display resolution: 0.1 or 1°C/°F

3. Measuring range: BM200: -50°C ~380°C (-58°F ~716°F) ,
BM280: -50°C ~600°C (-58°F ~1112°F) 。

4. Measuring error: -50°C ~-31°C : For reference only
-30°C ~20°C: ±3°C , 20°C ~600°C : ±2°C or ±2% taking the maximum

5. Repeatability: -30°C ~20°C: ±1.5°C , 20°C ~600°C : ±1°C or ±1% taking the maximum

6. Response time: <0.5S

7. Spectral response: 6.5~14um Thermopile detector

8. Measuring distance ratio: 12:1 (measuring distance and target diameter ratio)

9. Default of Emissivity: 0.95.

10. The laser power: <1mW

11. Battery: 6F22 (9V) ×1

12. Weight: about 175g.

III. Using methods:

1. Safety requirements:

- 1) Do not point the laser beam towards the eyes directly, or it may cause permanent damage to the eyes.
- 2) Avoid making the laser beam reflect to people's eyes after it shoots towards the surface of objects.
- 3) Do not allow children to access to the thermometer.
- 4) Do not shoot the laser beam towards the explosive gas.

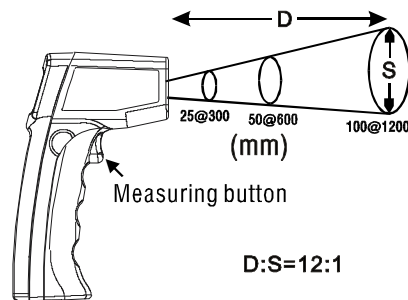
2. Step methods of measurement:

- 1) Open the battery cover and select the setting position of the toggle switch for °C or °F , or turn off /on the laser pointer.

2) In order to get more accurate temperature, this thermometer should be placed for 10 minutes after the battery is installed and then can be used for measuring, or it should also be placed for 15 minutes before measuring when removed to a new environment.

3) After aligning the detecting window at the object under test, press the measuring button and then you can easily get its surface temperature. While doing a constant measurement by pressing and holding the measuring button, the screen displays SCAN symbols. Under the SCAN state, the screen displays emissivity and the maximum value at that time. After the measuring button is loosened, the thermometer will preserve the final result and power off 10S later if you don't press any button.

Note: Adjust the measuring distance (D: S= 12:1) according to the size of the object, and make sure that the measured target is completely within the field of view of the detecting window.



IV. Notes

1. Please carefully protect the glass of the temperature detecting window which is the most fragile part. When cleaning and maintaining, you can use clean compressed air to blow the dust or remove the debris with a soft brush, and then gently wipe the glass with wet cotton balls or soft cloth. Please don't clean the glass with solvent.
2. Don't charge the used battery or throw it into fire. Please discard it to the designated collection point.
3. Please remove the battery if the product will not be used for a long time.
4. Please don't immerse this product into water and avoid direct sunlight exposure.
5. Failing to measure aiming at the center of the measured object based on the effective distance may result in deviation of measuring results. It is suggested to repeat the measurement for once or multiple times.
6. This product has a one-year quality guarantee period since the date of purchase.