Mengshen HT-86 Digital Temperature and Humidity Meter Instruction Manual

Contents

Mengshen

Mengshen HT-86 Digital Temperature and Humidity Meter

Product Information

Specifications

- **Storage environment:** -20°C to 60°C
- **Working environment:** -20°C to 60°C
- **Measurement temperature range:** -20°C to 60°C
- **Measurement humidity range:** 0% to 100%
- **Dew point temperature range:** -20°C to 60°C
- **Wet bulb temperature range:** -20°C to 60°C
- **Temperature accuracy:** ±0.5°C
- **Humidity accuracy:** ±3%
- **Resolution:** 0.1°C/1%RH
- **Response Time:** < 10 seconds
- **Type of Battery:** AAA (2x)
- **Power consumption:** < 10mW
- **Physical dimension:** [insert dimensions]
- **Weight:** [insert weight]

Product Usage Instructions

1. **Powering On/Off**

   To power on the device, press and hold the power button for a few seconds until the display lights up. To power off the device, press and hold the power button again until the display turns off.

2. **Temperature Measurement**

   To measure the ambient temperature, ensure the device is powered on. Hold the device in your hand or place it in the desired location, making sure it is not exposed to direct sunlight or any other heat sources. The temperature reading will be displayed on the LCD screen.

3. **Humidity Measurement**

   To measure the humidity, ensure the device is powered on. Hold the device in your hand or place it in the desired location, away from any moisture sources. The humidity reading will be displayed on the LCD screen.

4. **Dew Point Temperature Measurement**

   The device is capable of measuring the dew point temperature, which indicates the temperature at which air becomes saturated and condensation occurs. To measure the dew point temperature, ensure the device is powered on and follow the same procedure as temperature measurement. The dew point temperature reading will be displayed on the LCD screen.

5. **Wet Bulb Temperature Measurement**

   The wet bulb temperature is a measurement that takes into account the evaporative cooling effect of water. To measure the wet bulb temperature, ensure the device is powered on and follow the same procedure as temperature measurement. The wet bulb temperature reading will be displayed on the LCD screen.

Frequently Asked Questions (FAQ)

- **Q: Can this device be used outdoors?**

  A: Yes, this device can be used outdoors as long as it is within the specified working temperature range of -20°C to 60°C.

- **Q: How often should I replace the batteries?**

  A: The device has a low power consumption and the batteries should last for an extended period of time. However, it is recommended to replace the batteries when the display becomes dim or if the device fails to power on.

- **Q: Can I calibrate the device?**

  A: This device does not support user calibration. It has been factory calibrated and should provide accurate measurements within the specified accuracy range.

INSTRUCTION MANUAL

- Humidity & Temperature Meter
- Wet Bulb Temperature
- DewPoint Temperature

Product Overview

- This product is a professional level instrument with the integrated measurement function of the ambient

temperature, humidity, dew point and wet bulb temperature; it is applicable for the temperature and humidity measurement of production workshop, factory warehouses, libraries, offices, laboratories, and the family living rooms and so on;

- The products are featured by the high-precision and low-power consumption digital temperature and humidity sensors and the industrial-grade LCD display, which are characterized by the advantages of beautiful appearance, ease of use, wide measurement range, high accuracy, solid and durable structure.

Technical Specifications

Storage environment	– 20℃ 60℃; <80%RH non-condensing
Working environment	– 20℃ 60℃
Measurement temperature range	– 30℃ 60 ℃(– 22℉ 140℉)
Measurement humidity range	0 100%RH
Dew point temperature range	– 50℃ 60℃(– 58℉ 140℉)
Wet bulb temperature range	– 20℃ 60℃(– 4℉ 140℉)
Temperature accuracy	± 0. 5℃/ ± 0.9 ℉(10 55℃); ± 1. 5℃/ ± 3℉(Other ranges)
Humidity accuracy	± 3% RH(25℃; 10% 90%RH) ; ± 4. 5%RH (<10% >90%RH) ;
Resolution	0. 1%RH , 0. 1℃/ , 0. 1℉
Response Time	10S
Type of Battery	6F22 9V battery
ower consumption	3mA
Physical dimension	175 mm x58 mmx35mm
Weight	143g
Auto shutdown	≈ 15 mins

Precautions

1. Do not put sensor in the liquid or make the sensor exposed to sunlight;
2. Do not put the instrument under extreme conditions or the heavily polluted environment such as chemical vapors, hazardous substances and so on, so as not to affect the accuracy of the meter, and even cause damage or reduce the life of the instrument;
3. Do not use solvents and detergents to clean the product, and do not disassemble the body arbitrarily for research or repair;
4. Remove the battery if do not use for a long time, so as to avoid battery leakage and corrosion of the instrument;
5. When the battery is low (LCD displays the symbol of please replace the battery, so as not to affect test

accuracy.

PANEL DESCRIPTION

1. **Humidity / Air Temperature Probe:** (Humidity Sensor and Semiconductor Sensor inside)
2. **LCD display:** 4 1/2 dual digits LCD display with units of "C, "F, %RH dewpoint wet bulb and low battery "BAr MIN /MAX HOLD, DATA HOLD indication.
3. **MAXI MIN Button:**

   MAX/MIN: Press MAX/MIN to enter MAX, MIN Recording mode (manual range only). Select the proper range before selecting MAX MIN to ensure that the MAX/MIN reading will not exceed the testing range. Press once to select MIN. Press again to select MAX. Preaa and hold the Button for over 2 second to tum off MAX, MIN Recording.
4. **• F, C, dewpoint, wbt select Button:**

   Press F, "C, dewpoint, wbt select Button to enter select F, C, dewpoint, wbt Measurement
5. **Power ON/OFF Button :**

   Turn the meter power ON/OFF
6. **Battery Compartment**

Humidity and air Temperature Measurements

1. Hold the probe in the area to be tested & allow adequate time for readings to stabilize.
2. Press "F, "C ,dewpoint, WBT select Button to enter select "F, "C ,dewpoint WBT Measurement.
3. Read the Relative Humidity and Air Temperature, dewpoint temperature wet bulb temperature.

NOTE.· Do not immerse the probe in liquid; it is intended for use in air on.

Warning:

- Don't expose the humidity sensor to direct sunlight (insolation).
- Don't touch or manipulate the humidity sensor.

Battery Replacement

If the sign "   " appears on the LCD display, it indicates that the battery should be replaced. Open the battery case and replace the exhausted battery with new battery. (1 x 9V battery NEDA 1604, 6F22 or equivalent)

Documents / Resources

Mengshen HT-86 Digital Temperature and Humidity Meter [pdf] Instruction Manual
HT-86 Digital Temperature and Humidity Meter, HT-86, Digital Temperature and Humidity Meter , Temperature and Humidity Meter, Humidity Meter, Meter

References

- **User Manual**