

Mengshen M350

Mengshen Digital Psychrometer M350 User Manual

Model: M350 | Brand: Mengshen

1. INTRODUCTION

The Mengshen Digital Psychrometer M350 is a handheld, professional-grade instrument designed for accurate measurement of environmental conditions. It provides precise readings for temperature, relative humidity (RH), dew point temperature, and wet bulb temperature. This manual provides detailed instructions for the proper setup, operation, and maintenance of your device.

2. PRODUCT FEATURES

- Measures Temperature, Relative Humidity, Dew Point, and Wet Bulb Temperature.
- Wide measurement range for humidity (0 to 100% RH) and temperature (-30°C to 100°C / -22°F to 212°F).
- Fast response time of approximately 10 seconds for quick readings.
- Backlit LCD display for clear visibility in various lighting conditions.
- MAX/MIN data hold function.
- Automatic power-off feature to conserve battery life.
- Compact and handheld design for portability.

3. PACKAGE CONTENTS

Please check the package contents upon unboxing to ensure all items are present:

- 1 x Mengshen Digital Psychrometer M350
- 1 x 9V Battery
- 1 x User Manual (this document)

4. PRODUCT OVERVIEW

Familiarize yourself with the physical components of your Mengshen Digital Psychrometer M350.

Structure Description



Image 4.1: Physical components of the Mengshen Digital Psychrometer M350. This diagram illustrates the external parts of the device, including the temperature and humidity sensor, LCD screen, various control buttons, and the battery compartment on the rear.

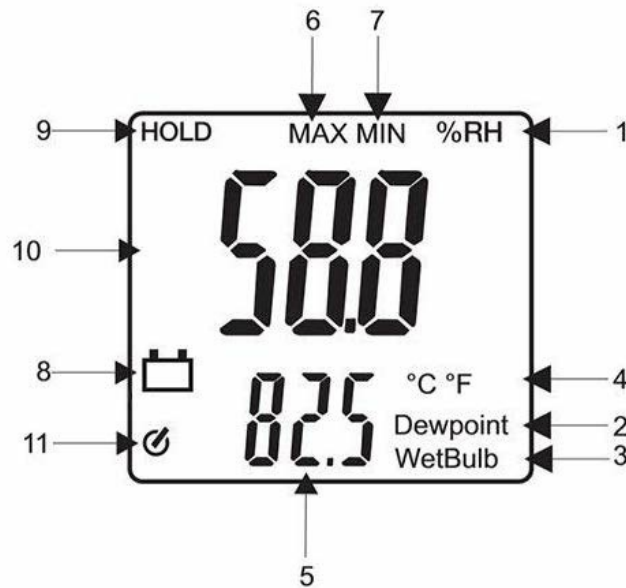
Component Identification:

1. **Temp & Humidity Sensor:** Located at the top, this probe measures ambient temperature and relative humidity.
2. **LCD Screen:** Displays all measurement readings and indicators.
3. **°C/°F Switch / Wet Bulb / Dew Point Button:** Used to cycle through temperature units and display wet bulb or dew point readings.
4. **Hold / Backlight Button:** Press briefly to activate backlight; press and hold to freeze the current display reading.
5. **ON/OFF Button:** Powers the device on or off.
6. **MAX/MIN Button:** Toggles between maximum and minimum recorded values.
7. **Battery Compartment:** Located on the rear, houses the 9V battery.

5. DISPLAY DESCRIPTION

Understand the various indicators and values shown on the LCD screen.

Screen Description



- | | | |
|----------------------|--------------------|--------------|
| 1) Relative humidity | 6) MAX | 11) Auto-Off |
| 2) Dewpoint | 7) MIN | |
| 3) Wetbulb | 8) Low Battery | |
| 4) °F / °C | 9) HOLD | |
| 5) Temperature Value | 10) Humidity Value | |

Image 5.1: LCD Screen indicators of the Mengshen Digital Psychrometer M350. This diagram details each segment and icon on the display, explaining what each represents, such as relative humidity, dewpoint, temperature values, and various status indicators.

Screen Indicators:

1. **Relative Humidity (%RH):** Displays the percentage of relative humidity.
2. **Dewpoint:** Indicates the dew point temperature.
3. **Wetbulb:** Indicates the wet bulb temperature.
4. **°F / °C:** Unit indicator for temperature.
5. **Temperature Value:** The primary temperature reading.
6. **MAX:** Appears when the maximum value function is active.
7. **MIN:** Appears when the minimum value function is active.
8. **Low Battery:** Icon indicates that the battery level is low and requires replacement.
9. **HOLD:** Appears when the data hold function is active.

10. **Humidity Value:** The primary humidity reading.
11. **Auto-Off:** Icon indicates that the automatic power-off function is enabled.

6. SETUP

6.1 Battery Installation

The Mengshen Digital Psychrometer M350 requires one 9V battery (included).

1. Locate the battery compartment cover on the back of the device (refer to Image 4.1, item 7).
2. Slide the cover downwards or unclip it to open the compartment.
3. Connect the 9V battery to the battery connector, ensuring correct polarity (+ to + and - to -).
4. Place the battery into the compartment, carefully tucking in any wires to allow the cover to close properly.
5. Replace the battery compartment cover, ensuring it clicks securely into place.

Note: If the low battery indicator appears on the display, replace the battery promptly to ensure accurate readings.

7. OPERATING INSTRUCTIONS

7.1 Power On/Off

- To turn the device **ON**, press the **ON/OFF** button (Image 4.1, item 5). The display will illuminate.
- To turn the device **OFF**, press and hold the **ON/OFF** button for approximately 2 seconds.
- The device features an automatic power-off function (indicated by the Auto-Off icon on the display) to save battery life if no buttons are pressed for a certain period (typically 15 minutes).

7.2 Measurement Modes (Dew Point / Wet Bulb)

- After powering on, the device typically displays relative humidity and ambient temperature.
- Press the **°C/°F Switch / Wet Bulb / Dew Point** button (Image 4.1, item 3) repeatedly to cycle through the display modes: Relative Humidity & Temperature, Dew Point Temperature, and Wet Bulb Temperature.

7.3 Unit Switching (°C/°F)

To switch between Celsius (°C) and Fahrenheit (°F) temperature units:

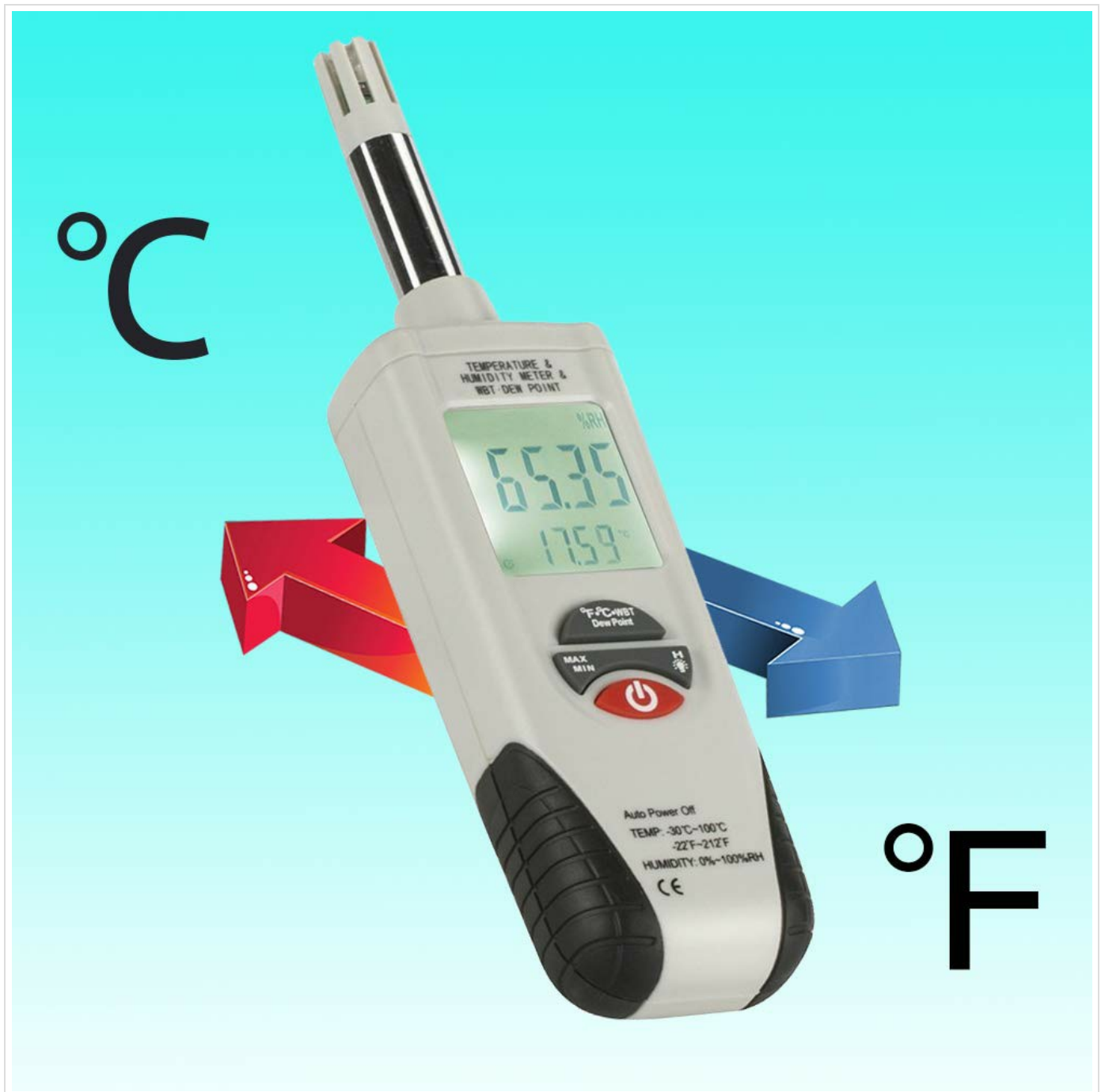


Image 7.1: Temperature unit switching on the Mengshen Digital Psychrometer M350. The image shows the device displaying temperature readings, with visual cues indicating the ability to toggle between Celsius and Fahrenheit units.

- While the device is on, press and hold the **°C/°F Switch / Wet Bulb / Dew Point** button (Image 4.1, item 3) for approximately 2 seconds. The temperature unit on the display will change.

7.4 MAX/MIN Function

- Press the **MAX/MIN** button (Image 4.1, item 6) to display the maximum recorded temperature and humidity values since the device was powered on or the function was reset. The 'MAX' indicator will appear.
- Press the **MAX/MIN** button again to display the minimum recorded values. The 'MIN' indicator will appear.
- Press the **MAX/MIN** button a third time to return to real-time measurements.
- To clear MAX/MIN records, press and hold the **MAX/MIN** button for 2 seconds while in MAX or MIN mode.

7.5 Data Hold

- To freeze the current readings on the display, press the **Hold / Backlight** button (Image 4.1, item 4) briefly. The 'HOLD' indicator will appear.

- Press the button again to release the hold and resume real-time measurements.

7.6 Backlight

- To activate the display backlight, press the **Hold / Backlight** button (Image 4.1, item 4) briefly.
- The backlight will typically remain on for a few seconds before automatically turning off to conserve battery.

8. SPECIFICATIONS

Parameter	Value
Humidity Range	0 to 100% RH
Temperature Range	-30°C to 100°C (-22°F to 212°F)
Dewpoint Temperature Range	-30°C to 100°C (-22°F to 199°F)
Wet Bulb Temperature Range	0°C to 80°C (32°F to 176°F)
Humidity Accuracy	±2% RH
Temperature Accuracy	±0.9°F / ±0.5°C (at 25°C / 77°F)
Resolution	0.01% RH, 0.01°F / 0.01°C
Response Time	Approximately 10 seconds
Power Supply	1 x 9V Battery
Auto Power Off	Yes (after approx. 15 minutes of inactivity)
Weight	Approximately 8.47 ounces (240g)
Model Number	M350 (Item No. CECOMINOD048683)
Manufacturer	Mengshen

9. MAINTENANCE

9.1 Cleaning

- Wipe the device casing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Keep the sensor probe clean and free from dust or debris. Avoid touching the sensor directly.

9.2 Storage

- When not in use for extended periods, remove the battery to prevent leakage.
- Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.

9.3 Battery Replacement

- Replace the 9V battery when the low battery indicator appears on the display.
- Follow the battery installation steps outlined in Section 6.1.

10. TROUBLESHOOTING

If you encounter issues with your Mengshen Digital Psychrometer M350, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed battery.	Check battery installation. Replace with a new 9V battery.
Inaccurate readings.	Sensor dirty, not stabilized, or exposed to extreme conditions.	Ensure sensor is clean. Allow device to stabilize in the environment for several minutes. Avoid direct sunlight or strong heat/cold sources.
Display is blank or erratic.	Low battery or internal malfunction.	Replace battery. If problem persists, contact customer support.
Backlight not working.	Low battery or internal malfunction.	Replace battery. If problem persists, contact customer support.

11. APPLICATIONS

The Mengshen Digital Psychrometer M350 is suitable for a wide range of applications requiring precise environmental monitoring:



1) Greenhouse



2) Aquaculture



3) Warehouse



4) Laboratory

Image 11.1: Diverse applications of the Mengshen Digital Psychrometer M350. This collage illustrates the meter's utility in various settings such as greenhouses, aquaculture farms, warehouses, and laboratories, demonstrating its versatility for environmental measurement.

- **HVAC Systems:** For monitoring and troubleshooting heating, ventilation, and air conditioning performance.
- **Greenhouses:** To maintain optimal growing conditions for plants.
- **Warehouses & Storage Facilities:** For humidity control to protect goods from moisture damage.
- **Laboratories:** For environmental control in sensitive experiments and storage.
- **Aquaculture:** To monitor conditions in aquatic environments.
- **Home & Office:** For general comfort and air quality monitoring.

12. WARRANTY AND SUPPORT

Mengshen products are manufactured to high-quality standards. For warranty information or technical support, please refer to the contact details provided with your purchase documentation or visit the official Mengshen website. Please retain your proof of purchase for warranty claims.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question