RIDGID HM-100

RIDGID Micro HM-100 Temperature and Humidity Meter User Manual

Model: HM-100 | Part Number: 37438

1. Introduction and Overview

The RIDGID Micro HM-100 is a professional and user-friendly device designed for accurate measurement of air humidity and temperature. It instantly and simultaneously displays both measured values (%RH and °C or °F) on its dual backlit LCD. This meter is ideal for assessing indoor air quality, air conditioning systems, ventilation, and storage conditions. The Micro HM-100 also automatically calculates Dew Point and Wet Bulb temperatures, and its robust capacitance sensor is built to withstand condensation and high temperatures, making it suitable for various HVAC environments.





Figure 1: RIDGID Micro HM-100 Temperature and Humidity Meter. This image shows the meter's front view, highlighting its LCD display, control buttons, and the sensor probe at the top.

2. What's in the Box

Upon unpacking your RIDGID Micro HM-100, please ensure all the following items are present:

- RIDGID Micro HM-100 Temperature Humidity Meter
- Carrying Case
- 9V Battery

3. Key Features

- Easy and accurate measurements of air temperature and humidity.
- Automatic Dew Point and Wet-Bulb temperature calculation.
- Wide Humidity Range: 0% to 100% Relative Humidity (RH).
- High Humidity Accuracy: +/- 2% RH.
- Broad Temperature Range: -30°C to 100°C (-22°F to 212°F).
- Precise Temperature Accuracy: 0.5 °C (0.9 °F).
- Equipped with a Heavy-Duty Capacitance Sensor for durability.
- Dual Backlit LCD for clear readings in various lighting conditions.

4. Setup

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the meter.
2. Slide or unclip the cover to open the compartment.
3. Insert the supplied 9V battery, ensuring correct polarity (+ and - terminals).
4. Replace the battery compartment cover, ensuring it is securely closed.

4.2 Initial Power On

Press the power button (**U**) located on the front panel to turn on the device. The dual LCD display will illuminate, showing current temperature and humidity readings.



Figure 2: RIDGID Micro HM-100 being held and displaying readings. This image illustrates the meter in an operator's hand, showing the digital display with temperature and humidity values.

5. Operating Instructions

5.1 Power On/Off

- To power on the meter, press the **U** button.
- To power off the meter, press and hold the **U** button for approximately 2 seconds until the display turns off.

5.2 Taking Measurements

Once powered on, the meter will immediately begin taking readings. Position the sensor probe in the area where you wish to measure temperature and humidity. Allow a few moments for the readings to stabilize on the LCD.

5.3 Displaying Dew Point and Wet Bulb Temperatures

The Micro HM-100 automatically calculates Dew Point and Wet Bulb temperatures. To cycle through the display modes (Temperature/Humidity, Dew Point, Wet Bulb), press the **°C/°F/WBT/Dew Point** button. The display will indicate which value is currently shown.

5.4 Changing Temperature Units

To switch between Celsius (°C) and Fahrenheit (°F), press the**°C/°F/WBT/Dew Point** button until the desired unit is displayed for temperature readings.

5.5 Backlight Operation

To activate or deactivate the display backlight, press the light bulb icon button (). This feature enhances readability in low-light conditions.

5.6 Max/Min Function

Press the **MAX/MIN** button to view the maximum or minimum recorded temperature and humidity values since the meter was powered on or the function was reset. Press again to cycle through MAX, MIN, and current readings. To reset the MAX/MIN values, press and hold the **MAX/MIN** button.

6. Maintenance

6.1 Cleaning

To clean the meter, use a soft, damp cloth. Do not use abrasive cleaners, solvents, or immerse the device in water. Ensure the sensor probe is kept clean and free from dust or debris for accurate readings.

6.2 Storage

When not in use, store the RIDGID Micro HM-100 in its protective carrying case in a cool, dry place, away from direct sunlight and extreme temperatures. If storing for extended periods, it is recommended to remove the 9V battery to prevent leakage.

6.3 Battery Replacement

When the battery indicator appears on the LCD, replace the 9V battery promptly to ensure continued accurate operation. Follow the battery installation steps outlined in Section 4.1.

7. Troubleshooting

If you encounter issues with your RIDGID Micro HM-100, refer to the table below for common problems and solutions:

Problem	Possible Cause	Solution
Meter does not power on.	Dead or incorrectly installed battery.	Replace the 9V battery, ensuring correct polarity.
Inaccurate readings.	Sensor obstructed or dirty; extreme environmental conditions; meter not stabilized.	Clean the sensor probe. Allow meter to stabilize in the measurement environment. Avoid extreme conditions outside operating range.
Display is dim or flickering.	Low battery.	Replace the 9V battery.

Problem	Possible Cause	Solution
Meter consumes battery quickly.	Backlight left on; prolonged usage; faulty battery.	Turn off backlight when not needed. Ensure meter is powered off when not in use. Use fresh, quality batteries.

8. Specifications

Specification	Value
Model Number	HM-100
Product Dimensions	3.94 x 7.09 x 1.97 inches
Item Weight	12.63 ounces (358 Grams)
Humidity Range	0% to 100% RH
Humidity Accuracy	+/- 2% RH
Temperature Range	-30°C to 100°C (-22°F to 212°F)
Temperature Accuracy	0.5 °C (0.9 °F)
Battery Type	9V Alkaline
Mounting Type	Inside Mount
Manufacturer	Ridge Tool Company
Date First Available	December 8, 2013

9. Warranty and Support

RIDGID products are engineered for durability and reliability. For information regarding the warranty coverage for your Micro HM-100 Temperature and Humidity Meter, please refer to the warranty card included with your product or visit the official RIDGID website. For technical support, service, or replacement parts, please contact RIDGID customer service through their official channels. Keep your purchase receipt as proof of purchase for warranty claims.

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