Bluetooth® Hygrometer

800019

Instruction Manual

SPER
SCIENTIFIC

Environmental Measurement Instruments

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INTRODUCTION

Sper Scientific's Bluetooth® Hygrometer is small, light, and simple to use. Displays humidity, wet bulb, dew point and air temperature in °C or °F on the meter's large 1-½" backlit display. Features a bar graph display, minimum and maximum hold (peak) and data hold functions. The meter offers the convenience of Bluetooth® for wireless communication with free iOS and Android smart phone Apps. Results can also be remotely viewed on your smartphone in real time, saved and exported. This enables the meter to be used as a remote wireless probe and as a datalogger. Comes ready to use with tripod screw, instructions and a 9V battery. N.I.S.T. traceable certificate of compliance available.

PANEL DESCRIPTION

1. Temperature/
   RH Sensors
2. LCD Display
3. HOLD/☀ button
4. MAX/MIN button
5. Power button
6. Temp. Mode button
7. Bluetooth button

MEASUREMENT PROCEDURES

1. Turn the meter on/off by pressing the **POWER** button.

2. RH (Relative Humidity) will appear in large digits on the lower display and temperature in smaller digits on the upper display.

3. Hold the red button down for 2 seconds to toggle between temperature readings in °C and °F.

4. Press the red button to toggle between WB (Wet Bulb), DP (Dew Point) and ambient temperature.

BACKLIGHT

Press ☀ for 2 seconds to turn the illuminated display on/off.

HOLD FUNCTION

With the meter on, press the **HOLD** button

to display "HOLD" and the last reading. Press **HOLD** again to exit this function.

MAX/MIN FUNCTION

Max/Min readings are continually updated as soon as you enter the Max/Min mode. These readings are reset when you exit the Max/ Min mode, or when the meter is turned off.

1. Press the **MAX/MIN** button once to display "MAX" and the maximum (peak) recorded RH and Temperature. The display will be updated only when the max (peak) RH and Temperature levels are exceeded.

2. Press the **MAX/MIN** button again to display "MIN" and the minimum RH and Temperature. The display will be updated only on reaching lower RH and Temperature readings.

3. Press the **MAX/MIN** button again to exit Max/Min mode. The current reading is now displayed and continually updated.

AUTO POWER OFF

1. If no buttons are pushed for about 10 minutes, the meter will automatically turn off.

2. While the meter is on, press the power button for 2 seconds to override Auto Power Off: "⏾"disappears from the display indicating that Auto Power Off is disabled.

Note…The meter defaults to Auto Power Off each time it is turned on.

BLUETOOTH® COMMUNICATION

Download and pairing

1. Download the iOS or Android "Meterbox Pro" APP to your smartphone.

2. Press the ⁕ button on the meter to activate Bluetooth®.

3. Press "Connect Device" on the APP.

4. Now choose "800019" from the device list that now appears. The meter will immediately begin displaying a real time graph of your meter's readings.

Saving your results

5. To begin recording data press the red button on screen. You will now be asked to name and save the file. The data will now start recording. Press the red button again to stop recording.

Viewing saved Data

6. Press **<** at the top of the screen to view saved data. Next, choose "Files" at the bottom of the screen, then choose the file you wish to view. A graph of the entire record will now appear. Press ≡ on the lower right to see the data including recording times, maximum, minimum and average readings.

7. ✎ (saved data file graph) enables you to add notes and photos to your data file.

8. Press ⤴ at the top of the screen to export the data for to your computer for further analysis or storage.

Settings

Alarms:

1. Select Instrument Type: **Environmental Meter**.

2. Press **Next** then **Choose Function** and select your alarm parameter.

3. Insert your **Hi** and **Low** alarm values.

4. Repeat steps 3 & 4 for additional alarm parameters you wish to set for your meter.

5. Use the **Alarm** switch at the bottom to enable / disable the alarm for the parameter shown. Use the **Allow Alarm** switch at the top to enable / disable alarms on all parameters.

Recording: Choose your test sample rate and duration.

BATTERY REPLACEMENT

- Turn off the meter when 🔋 is displayed.

- Open the battery compartment and insert a fresh 9V battery.

- Replace the cover.

SPECIFICATIONS

Display	½" high digits, 4-digit LCD, display updates every 0.5 seconds.
Range	0.0 ~ 100.0% RH -20.0°C ~ 60.0°C (-0.4°F ~ 140.0°F)
Resolution	0.1% RH, 0.1°C/0.1°F
Sensors	Humidity: Capacitance Temperature: Thermistor
Operating Environment	32 to 122°F (0 to 50°C) 80% RH non-condensing
Storage Environment	4-140°F (-20°C - 60°C) 80% RH non-condensing
Low Battery	🔋 will flash when battery voltage drops below 7.2V. When battery voltage drops below 6.5V the backlight and 🔋 will flash twice and the meter will auto power off.
Humidity	±3.5% RH (20 ~ 80%) ±5% RH (0 ~ 20 & 80 ~ 100%)
Dry Bulb Temp	±0.5°C/0.9°F (0 ~ 40°C) ±1°C/1.8°F (-20 ~ 0 & 40 ~ 60°C)
Wet Bulb Temp	±0.5°C/0.9°F (0 ~ 40°C) ±1°C/1.8°F (40 ~ 60°C)
Dew Point Temp	±0.5°C/0.9°F (0 ~ 40°C) ±1°C/1.8°F (-20 ~ 0 & 40 ~ 60°C)
Dimension	8" x 2" x 1 ½" (204 x 54 x 36 mm)
Weight	6 oz (172 g)

OPTIONAL ACCESSORIES

840093 Field Tripod

NOTES

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WARRANTY

Sper Scientific warrants this product against defects in materials and workmanship for **one (1) year** from the date of purchase, and agrees to repair or replace any defective unit without charge. If your model has since been discontinued, an equivalent Sper Scientific product will be substituted if available. This warranty does not cover damage resulting from accident, misuse, or abuse of the product. To obtain warranty service, ship the unit postage prepaid to:

SPER SCIENTIFIC LTD,
8281 E. Evans Rd., Suite 103
Scottsdale, AZ 85260
(480) 948-4448

The defective unit must be accompanied by a description of the problem and your return address. Register your product online at www.sperwarranty.com within 10 days of purchase.

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