Smartphone® RH/Temperature Probe

800014
Instruction Manual

SPER
SCIENTIFIC

Environmental Measurement Instruments

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INTRODUCTION

This Sper Scientific Smartphone® RH/Temperature Probe (Model 800014) turns any smartphone® into a datalogging humidity and temperature meter. Simply plug the probe into the earphone jack of your smartphone®; no battery is required.

Free Android® and iPhone® apps display, log and graph ambient relative humidity (RH), temperature, wet bulb and dew point along with minimum and maximum values. You can attach a photo of the location with RH, temperature and GPS coordinates displayed on the image. Record-stamped photos and Excel-formatted data can be sent via email or other media options.

The 800014 features multiple customizable audible and visual high-low alarms for RH and temperature.
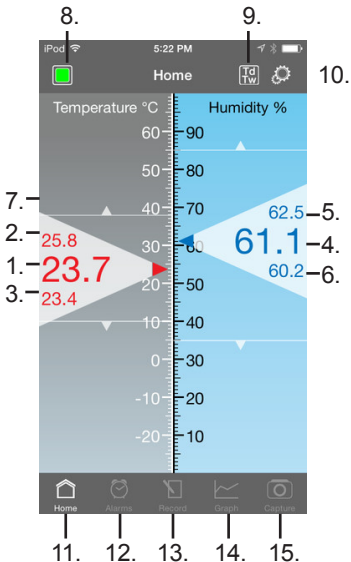
FEATURES

- Plugs directly into a smartphone®

- Displays current readings while automatically logging humidity, air temperature, dew point, and wet bulb

- Monitors temperature in °F or °C

- Minimum/maximum value tracking

- Logs and graphs data

- Record stamps location photos

- Direct upload of data to Excel

- Customizable audible and visual RH and temperature alarms

APP SCREEN

1. Current Temperature
2. Maximum Temperature
3. Minimum Temperature
4. Current RH
5. Maximum RH
6. Minimum RH
7. Maximum and Minimum
   Alarm Thresholds
8. Visual Alarm Indicator
9. Dewpoint/Wet Bulb
10. Settings
11. Home
12. Alarm
13. Record
14. Graph
15. Capture Photo

APP SCREEN

8.

9.

10.

iPod 5:22 PM

Home

Temperature °C

Humidity %

60

90

50

80

7.

40

70

62.5 — 5.

2.

25.8

30

61.1 — 4.

1.

23.7

60

3.

23.4

20

60.2 — 6.

10

50

0

40

-10

30

-20

20

10

Home	Alarms	Record	Graph	Capture
11.	12.	13.	14.	15.

MEASUREMENT PROCEDURES

Before first use, download the SMARTHY® app from the App Store onto your smartphone®. Use keyword search "Smarthy"

Note…
Handle the unit by the middle (white) section. Avoid touching the sensor.

1. Remove the cap. Insert into the phone's headphone port.

2. Open the app on your smartphone®. Temperature and RH readings display, along with maximum and minimum values.

3. Tap the $\frac{Td}{Tw}$ **icon** to display the dewpoint and wet bulb readings.

Settings

Tap the **SETTINGS** icon to display the settings menu.

1. Slide the "Unit in °F" button to toggle between °F and °C.

2. Tap **INFO** to access app information.

3. Slide the "Simulation (no dongle)" button to run the app as a simulation. The probe must be disconnected from the smartphone® to access this function.

Alarm

Audible and visual alarms indicate when the temperature or RH readings are outside the selected limits.

1. Tap **ALARM** to access the five customizable alarm settings. A blue alarm icon indicates the active setting.

2. Tap the ⓘ **icon** next to any of the alarms to view the high and low thresholds for RH and temperature.

3. Toggle the green button right or left to turn an alarm parameter off or on.

4. Tap any of the values to change the setting.

   a. Slide the values up or down to increase or decrease the setting.

   b. Tap **OK** to save.

5. Tap **HOME** to return to the display screen.

Record

1. Tap **RECORD** to record the current data and view stored records.

2. The current readings are displayed in the white bar. Tap to save this record.

3. Tap **EDIT** to add a photo, name, or description of the location to the current record.

   a. Tap the photo square to take a new photo or select an existing photo.

   b. Enter the name of the location in the *"New Name"* field.

   c. Enter a description of the location in the *"Description"* field.

   d. Tap **DONE** to save the data.

   e. Tap **RECORD** to finish.

4. Tap **SEND** to email the current record. The data will be sent in Excel spreadsheet format.

5. Tap **OK** to delete all records, or **CANCEL** to return to the record list.

6. Tap the ☝ **icon** if desired to delete the list of records.

7. Tap **HOME** to return to the display screen.

Graph

1. Tap **GRAPH** to view the data as a graph. The data will continue to update.

2. Pinch or spread two fingers horizontally on the screen to zoom and adjust the screen display.

3. Swipe to the right to view earlier data.

4. Double tap the screen to return to the current values.

5. Tap the **camera icon** to add a photo and/or share the graph.

   a. Tap **YES** to take a new photo or select an existing photo.

• Tap the **camera icon** to take a new photo or tap **LIBRARY** to select an existing photo.

• Tap **CANCEL** to return to the graph or tap **OK** to view the photo and graph.

- Tap **OK** to save, email, print, or post the photo and graph.

    b. Tap **NO** to save, email, print, or post the graph without a photo.

- Tap **OK** to save, email, print, or post the graph.

6. Tap the **arrow icon** in the upper right to view or change the data time interval.

    a. Tap the start or end time to adjust the setting.

    b. Slide the values up or down to increase or decrease the setting.

    c. Tap **OK** to save.

7. Tap **HOME** to return to the display screen.

Capture

1. Tap **CAPTURE** to create a photo of the location with date, time, RH, temperature and GPS coordinates displayed on the image.

2. Tap the **camera icon** to take a new photo or tap **LIBRARY** to select an existing photo.

3. Tap **OK** to save, email, print, or post the photo.

4. Tap **CANCEL** to return to the display screen.

CARE AND MAINTENANCE

- Remove the probe from the smartphone® and replace the probe cover when not in use.

- Protect the product from extreme temperatures, vibrations, or shocks.

- Do not expose the product to moisture, sand, dirt or dust.

- Clean with a soft, damp cloth. Avoid solvents or abrasive cleaners.

COMPATIBILITY

The Smartphone® RH/Temperature Probe is compatible with:

- Android® 4.0 or later
- iPhone® 4 or later
- iPad® 2nd generation or later
- iPad® mini or later
- iPod® touch 4th generation or later

SPECIFICATIONS

	Range	Resolution	Accuracy
Temperature	-20 to 60 °C -4 to 140 °F	0.1 °C 0.1 °F	±1 °C / ±1.8 °F
Relative Humidity	20% to 95%	1%	±5% (30% to 80%)
Dimensions	54 x 18 x 9 mm (2 1/8" x ¾" x 3/8")		
Weight	7 g (0.25 oz)		

WARRANTY

Sper Scientific warrants this product against defects in materials and workmanship for a period of **five (5) years** 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 probes, batteries, battery leakage, or damage resulting from accident, tampering, misuse, or abuse of the product. Opening the meter to expose its electronics will break the waterproof seal and void the warranty. 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.