

**Bluetooth®  
IR Pen**

**800110**

Instruction Manual

SPER  
SCIENTIFIC

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Environmental Measurement Instruments

## INTRODUCTION

Simply choose single, or continuous, monitoring on the App and aim the laser circle guide at the target to read the temperature. The laser circle corresponds precisely to IR Pen's 6:1 distance to spot. Results are sent to your smartphone via Bluetooth®.

The App displays and charts temperature readings in °C or °F, and shows Max, Min, Dif & Avg temperatures. The App also enables you to adjust emissivity between 0 and 99 using a roller with various surfaces listed next to their recommended emissivity number. You may save the results in file format to your phone and e-mail them. Comes complete with one AAA battery and free Android and iOS App.

# DOWNLOAD THE APP AND CONNECT TO YOUR IR PEN

1. Find and download the Sper Scientific App in the Apple, or Google Play, store.


Search for Sper Scientific or Bluetooth® IR Pen.

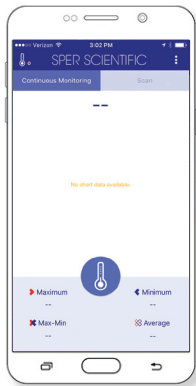


2. Next, open the App using the Sper Icon on your phone.



3. To connect the APP to your Bluetooth IR Pen:

- a. Press the thermometer icon. You can do this by pressing the large icon or the small icon  in upper left corner.



- b. Push the button above the battery compartment on the back of the pen.



- c. Select the Bluetooth® IR Pen 800110 device from the list.

A new window will appear once the phone connects to the Bluetooth® IR Pen.



- d. Carefully pull out the rubber cap and rotate upward. Then push in to secure in place.



## TEMPERATURE MEASUREMENT

In the new window choose **Continuous Monitoring** or **Scan**.

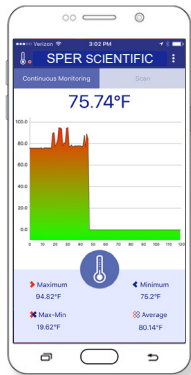
1. In **Continuous Monitoring** mode press the thermometer icon once to begin recording temperature. A continually updated temperature graph, Max, Min, Avg, and Max-Min readings will appear.

Press the thermometer icon again to stop monitoring.

2. In **Scan** mode press and hold the thermometer icon to scan temperature, release to hold the last result. Press the thermometer icon again to erase results.

### Note:

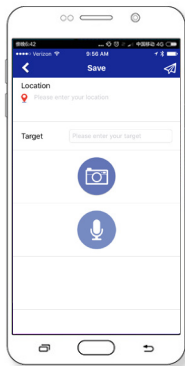
For continuous monitoring you will need to turn off the sleep mode in your phone settings.



## SAVE AND SEND

Once data has been recorded:

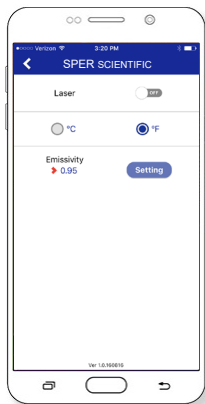
1. Press the **Save** button to the right of the thermometer button. A new window opens. Use the camera button for a photo or **Press and Hold** the microphone for a voice memo.
2. When done press **Send** or **Save** on the top right side of the screen. The file is saved in a (.txt) format which can be opened in Microsoft Word or Excel.



## ADJUST YOUR SETTINGS

You may select emissivity, °C or °F, and turn the laser guide **ON** or **OFF**.

To enter the settings screen, press the ":" icon in the upper right corner of the display.



## BATTERY REPLACEMENT

Using the **BATTERY REMOVAL TOOL**, gently place the battery removal tool behind battery door at the seam and push in the direction of the arrow.



## SPECIFICATIONS

<b>D:S</b>	6:1
<b>Wavelength</b>	8 to 14 $\mu\text{m}$
<b>Emissivity</b>	0 to 0.99 adjustable
<b>Range</b>	-30 to 510°C -22 to 950°F
<b>Accuracy</b>	$\pm 2.0\%$ or 2.0°C
<b>Resolution @-9.9 to 99.9°C</b>	0.1°C/°F
<b>Operating Temperature</b>	0 to 50°C / 32 to 122°F
<b>Response Time (90%)</b>	1 second
<b>Frequency</b>	1 Hz
<b>Power Supply</b>	AAA x1
<b>Mode</b>	MAX/MIN/AVG/DIF
<b>Operation System</b>	Above Android 4.3 (Jelly Bean) Above iOS 8.0
<b>Hardware Request</b>	Above Bluetooth 4.0

## 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](http://www.sperwarranty.com) within 10 days of purchase.



rev. 11/9/2017