

IAQ Monitor w/PM_{2.5}

800098

Instruction Manual

SPER
SCIENTIFIC

Environmental Measurement Instruments

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INTRODUCTION

Accurately measures particulate matter in the air <2.5 microns ($PM_{2.5}$), CO_2 , relative humidity, and temperature. These tiny air pollution particles travel into the respiratory system reaching the lungs and may cause respiratory and other health problems. All parameters are simultaneously displayed on a large backlit color TFT display. Graphs of historic data are also available. The meter's simple one-button operation is quick and easy. The unit can be used as a bench-top monitor using the fold-out stand or as a portable meter. It comes complete with a rechargeable Lithium ion Battery and micro USB power cord.

FUNCTION DESCRIPTION



SET UP AND USE

First-time Set-up

This model is self-calibrating. However, there are steps that must be taken the first time the meter is turned on, or when re-setting is needed.

1. Find a time period in which no humans will be present in a well-ventilated room overnight (7-8 hours).
2. Remove the plastic face shield from the meter. This step is important because the shield blocks the internal sensors.
3. Plug the power cord into the micro USB port and turn the meter on. The meter can be powered by a computer's USB port or any cell phone power block during first-time set-up.
4. The screen displays "Loading" and a status bar will briefly display on the main screen.
5. When the meter powers on, both the humidity and the CO₂ readings will be inaccurate. This is normal due to the air trapped in the housing during storage.
6. Leave the meter in a well-ventilated room overnight to allow the humidity and CO₂ readings to stabilize overnight.
7. The meter is now ready for use and can be operated with or without the power cord.

General Use

1. The key readings will display on the main screen. The main screen is underway when the multicolored bar graph is seen in the upper right corner.
2. To scroll between individual screens, press the button in the center of the meter.
3. The final screen displays two QR barcodes. This screen is for manufacturing purposes and is not necessary for operation.

CARE AND MAINTENANCE

- Do not drop the meter as it may damage the internal sensors or crack the TFT display.
- Occasionally, you will have to recalibrate the meter if readings become erratic or unexpected. Do this by following the steps for first-time setup.
- If the meter is repeatedly exposed to dirt, dust, or corrugate wipe both the meter and the surface with a damp cloth periodically.
- Do not use abrasives or solvents containing carbon to clean the meter.

SPECIFICATIONS

	Range	Resolution	Accuracy
PM_{2.5} :	0 to 500 µg/m ³	1 µg/m ³	±10%
Temperature:	-4 to 105°F	1 °F	±4°F
RH:	0 to 95%	1 %	±8%
CO₂ :	0 to 5000	1 ppm	±(50 ppm + 5% rdg)

WARRANTY

Sper Scientific warrants this product against defects in materials and workmanship for a period of **one (1) 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 batteries, battery leakage, or damage resulting from accident, tampering, misuse, or abuse of the product. Opening the meter to expose its electronics will 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.