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.

PM2.5 and PM10 Monitors

900014, 900015 & 900016
Instruction Manual

Contact :
EASTERN ENERGY CO.,LTD. (HEAD OFFICE)
40/4 Vitoondumri Rd., Banbueng, Banbueng, Chonburi 20170

Tel: 0-3844-6117 Fax: 0-3844-6200
Email: info@ete.co.th

SPER SCIENTIFIC Environmental Measurement Instruments

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:

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PM2.5 and PM10 Monitors

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SPER SCIENTIFIC Environmental Measurement Instruments

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SPECIFICATIONS

	Range	Resolution	Accuracy
PM 2.5:	0 to 500 µg/m³	1 µg/m³	±10%
PM 10: (Models 900014/15)	0 to 500 µg/m³	1 µg/m³	±10%
Temperature C: (Model 900014)	-20 to 40°C	1 °C	±2°C
Temperature F: (Models 900015/16)	-4 to 105°F	1 °F	±4°F
RH:	0 to 95%	1 %	±8%
CO2: (Model 900016)	0 to 5000	1 ppm	±(50 ppm + 5% rdg)

EASTERN ENERGY

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RH:	0 to 95%	1 %	±8%
CO2: (Model 900016)	0 to 5000	1 ppm	±(50 ppm + 5% rdg)

General Use

1. For all models, 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 the operation of the 900014, 900015, and 900016 meters.

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.

INTRODUCTION

900014: PM2.5, PM10, Relative Humidity, and Temperature in °C

900015: PM2.5, PM10, Relative Humidity, and Temperature in °F

900016: PM2.5, CO_2, Relative Humidity, and Temperature in °F

Accurately measures particulate matter in the air <2.5 microns (PM 2.5), and <10 microns (PM10). 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 along with a graph of historic data. The meter's simple two-button operation is quick and easy. For a complete analysis of indoor air quality, the 900016 meter displays both PM2.5 and CO_2. 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.

General Use

1. For all models, 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 the operation of the 900014, 900015, and 900016 meters.

CARE AND MAINTENANCE

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- 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.

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INTRODUCTION

900014: PM2.5, PM10, Relative Humidity, and Temperature in °C

900015: PM2.5, PM10, Relative Humidity, and Temperature in °F

900016: PM2.5, CO_2, Relative Humidity, and Temperature in °F

Accurately measures particulate matter in the air <2.5 microns (PM 2.5), and <10 microns (PM10). 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 along with a graph of historic data. The meter's simple two-button operation is quick and easy. For a complete analysis of indoor air quality, the 900016 meter displays both PM2.5 and CO_2. 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.

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BUTTON DESCRIPTION

All models have two buttons and a power port as shown below.

SET UP AND USE

First-time Set-up

All models self-calibrate. However, there are steps that must be taken the first time the meter is turned on.

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 and protective plastic bag 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 CO_2 (model 900016) 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 CO_2 readings to stabilize overnight.
7. The meter is now ready for use and can be operated with or without the power cord.

BUTTON DESCRIPTION

All models have two buttons and a power port as shown below.

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SET UP AND USE

First-time Set-up

All models self-calibrate. However, there are steps that must be taken the first time the meter is turned on.

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