

The ParticleScan[®] Lite

Operating Instructions

1. How to charge the ParticleScan Lite

- a. To charge the ParticleScan Lite, connect the AC adapter to the input socket located on the side of the device. (**Caution:** only use the supplied AC adapter. Other AC adapters may damage the ParticleScan Lite.)
- b. Fully charged, the ParticleScan Lite should provide approximately 4 hours of continuous operation.
- c. When the battery power level becomes low, the green 'Low Battery' indicator will flash. It takes approximately 4 hours to fully charge the ParticleScan Lite.

2. How to take airborne particle measurements

- a. Take the ParticleScan Lite out of the carrying case and remove the protective red rubber cap from the air intake nozzle located at the top of the ParticleScan Lite. (Note: do not operate the ParticleScan Lite with the cap in place as this may damage the internal pump.)
- b. Connect the supplied isokinetic probe to the air intake nozzle with the attached plastic tube. The ParticleScan Lite is now ready for sampling.
- c. Turn ParticleScan Lite on with the ON/OFF switch located on the right side of the device. A humming sound indicates that the pump is drawing in air for sampling.
- d. Immediately after it is switched on, the instrument starts a short countdown until its first particle reading. The particle reading is updated every 2 seconds thereafter.
- e. The particle reading appearing in the display represents the concentration of particles (0.3 µm or larger) per cubic foot of air.
- f. To switch the ParticleScan Lite off, set the ON/OFF switch to the 'off' position. (**Note:** for storage and transport, the protective red rubber cap must always be placed over the air intake nozzle.)

3. Testing and cleaning the sensor

- a. After repeated readings in dusty or polluted environments, the particle sensor may accumulate contaminants. As a result, the particle reading may become inaccurate.
- b. To test the sensor, a purge filter is supplied with the ParticleScan Lite. Simply connect the plastic tube from the purge filter to the air intake nozzle and switch the ParticleScan Lite on.
 - i. If the particle reading reaches zero after a few readings, the sensor is clean.
 - ii. If the particle reading does not reach zero within a few minutes, this may be an indication of sensor contamination. In such a case, leave the ParticleScan Lite running for several hours with the purge filter attached. Should the readout then still not show a zero count, the ParticleScan Lite should be returned for cleaning and recalibration.
- c. Two basic steps can be taken to reduce the accumulation of contaminants on the sensor:
 - i. Measurements in very polluted environments should be avoided.
 - ii. The purge filter 'zero count' test should be performed regularly after a few hours of use.

4. Calibration and Service

The ParticleScan should be calibrated once per year to ensure continuous, accurate and reliable performance. Contact the Technical Support at 1-888-560-1020 to have your ParticleScan recalibrated.

The ParticleScan® Lite

Description and Specifications

The ParticleScan® Lite Kit includes

- ParticleScan Lite
- Protective Carrying Case
- AC Adapter/Battery Charger
- Purge Filter
- Isokinetic Probe (for sampling)

ParticleScan® Lite Features:

- 1 Isokinetic Probe (for sampling)
- 2 Air Intake Nozzle
- 3 "Low Battery" Indicator
- 4 8-Digit LED Display
- 5 ON/OFF Switch
- 6 Input Socket for AC Adapter/Battery Charger



Specifications

Minimum sensitivity:	0.3 microns	
Light Source:	laser diode	
Measurement Unit:	Particles per cubic foot	
Sample Time:	2 seconds, updates every 2 sec.	
Flow Rate:	0.025 cubic foot per minute	
Size (HxWxD):	8 x 4 x 2 inches	
Weight:	1.6 pounds (0.71 kg)	
Power:	120V AC adapter/battery charger	
Battery:	6V rechargeable Ni-MH pack	recharge time: approx. 4 hours operating time: up to 4 hours

Specifications are subject to change without notice.