

# ParticleScan<sup>®</sup> Lite

Handheld Laser Particle Counter

## Airborne Micro-Particle Detection Made Easy!



Quantify airborne particles down  
to the size of bacteria  
(0.3 microns, 0.0000118 inch)

# ParticleScan Lite: See what's in the air!

Airborne particles consist of a mixture of solid matter and liquid droplets. Quantifying the concentration of particles in indoor air can give important information about:

- **Air quality**
- **Pollutant sources**
- **Effectiveness of pollution control measures**
- **Filter efficiency**

## Real-Time Particle Measurement

The ParticleScan Lite uses laser technology to measure particle concentrations in ambient air. The instrument continuously samples and analyses the concentration of airborne particles and displays an updated reading every six seconds on the easy to read LED display. This enables the user to monitor particle concentration changes as they occur. It also allows individual pollution sources to be tracked down by using the ParticleScan as a "particle sniffer".

## High Sensitivity

The ParticleScan Lite can identify single particles, making it far more sensitive than photometers and other particle monitors, which identify only particle clouds.

## Evaluate Air Cleaning Performance

The ParticleScan Lite allows you to evaluate the efficiency of air filters and air cleaning equipment for particulate contaminants. By taking readings at the air intake and the air outlet of an air cleaning system, you are able to calculate the true particle removal efficiency of the system:

$$\% \text{ Efficiency} = 1 - \frac{\text{Particle count at air outlet}}{\text{Particle count at air intake}} \times 100$$

**Note:** to get a picture of the true performance, measure at highest fan speed.

## Improving Indoor Air Quality

Begin by sampling the areas of concern and record the relative particle levels in each area. Make sure to include areas with both acceptable and unacceptable indoor air quality along with outdoor reference levels. In areas with the highest particle concentration, use the ParticleScan to locate the particle source and take corrective steps to eliminate, or reduce the source. Once remediation is complete, go on to areas with the next highest particle levels and repeat the process.



## Who should use the ParticleScan Lite?

### Abatement and IAQ Professionals

- Verify & demonstrate the effectiveness of your contamination control measures
- Track down particulate pollutant sources
- Evaluate effectiveness of remedial action

### HVAC Professionals

- Verify filtration efficiency of installed particulate air filters
- Check for filter leakage
- Track down particulate pollutant sources

### Air Cleaning Professionals

- Compare filter efficiency of different air cleaning equipment
- Check for filter leakage
- Demonstrate to customers the efficiency of air cleaning systems
- Demonstrate to customers the benefit of upgrading to more efficient filters

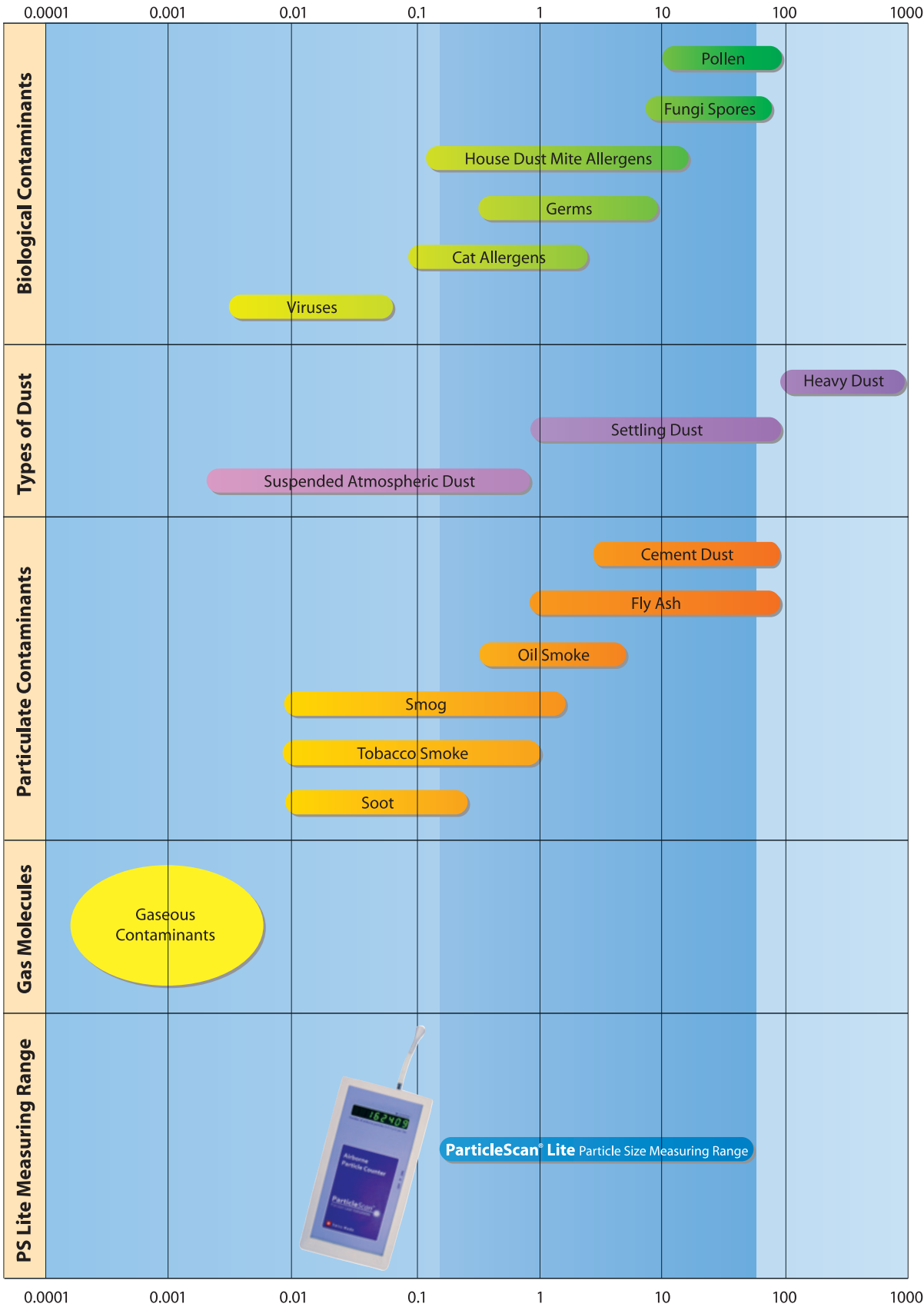
### Vacuum Cleaner Sales Professionals

- Show customers the superior particle retention of good HEPA vacuum cleaners
- Increase high-end sales

### Duct Cleaning Professionals

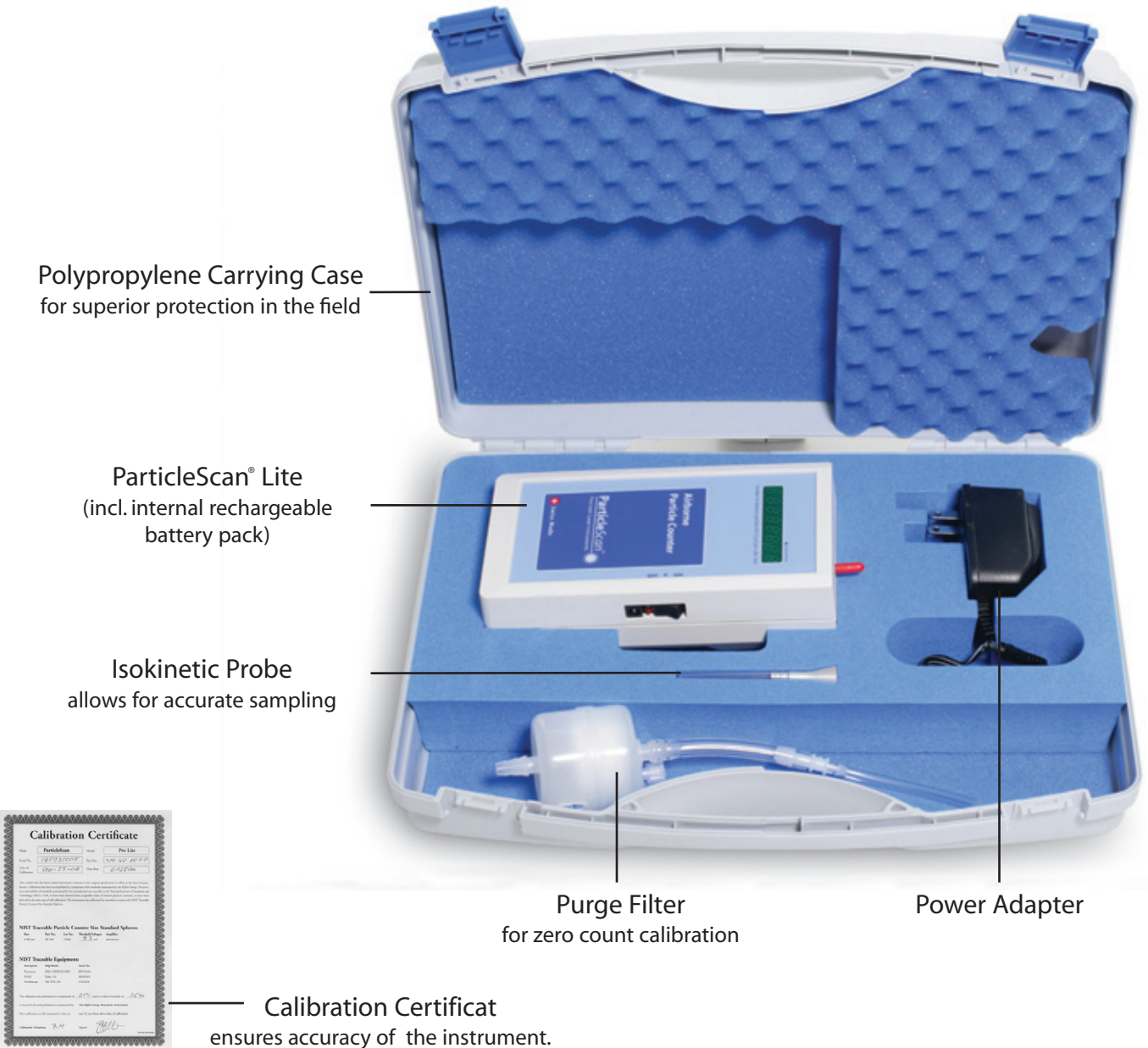
- Show the need for duct cleaning
- Certify your work
- Win government & healthcare contracts by particle count validation

# ParticleScan® Lite Particle Size Measuring Range



Particle diameter in microns  
 (1 μm = 0.001 mm = 0.0000393 inch)

# The ParticleScan® Lite Kit



Specifications			
<b>Minimum sensitivity:</b>	0.3 microns	<b>Power:</b>	220 – 240V / 50 – 60 Hz or 120V / 60 Hz
<b>Flow rate:</b>	0.025 cfm	<b>Battery:</b>	Internal rechargeable Nickel-Metal Hydride
<b>Light Source:</b>	laser diode	<b>Battery Life:</b>	up to 4 hours
<b>Display:</b>	eight-digit LED	<b>Charging cycle:</b>	3 hours
<b>Measurement units:</b>	particles/litre or particles/cubic foot (specify with order)	<b>Warranty:</b>	1 year on parts and labor
<b>Sample Time:</b>	2 seconds, updates every 2 sec.	<b>Incl. accessories:</b>	Carrying case, zero count filter, isokinetic probe, power adapter/battery charger, calibration certificate
<b>Size (WxHxD):</b>	10.0 x 19.5 x 5.5 cm		
<b>Weight:</b>	0.8 kg		

Specifications are subject to change without notice.