



**KANOMAX**  
The Ultimate Measurements

# **PAMS** *Model 3310*

## **Portable Aerosol Mobility Spectrometer**

The new PAMS model 3310 is equipped with a detachable charger in addition to all the functions and specifications succeeded from the previous model. The detachable construction allows you to do charger maintenance now easily by yourself. The unit uses a non-radioactive bipolar aerosol charger to allow easy access to sampling sites with tight safety regulations. Its bipolar charger significantly reduces measurement uncertainty of larger particles in the submicrometer range.

### **Applications**

- Personal Nanoparticle / Aerosol Exposure Measurement
- Workplace protection factor measurement of respirators
- Atmospheric process studies
- Air pollution and air quality measurements
- Combustion and engine exhaust emission measurements
- Filtration studies
- Inhalation toxicology studies
- Indoor air quality studies

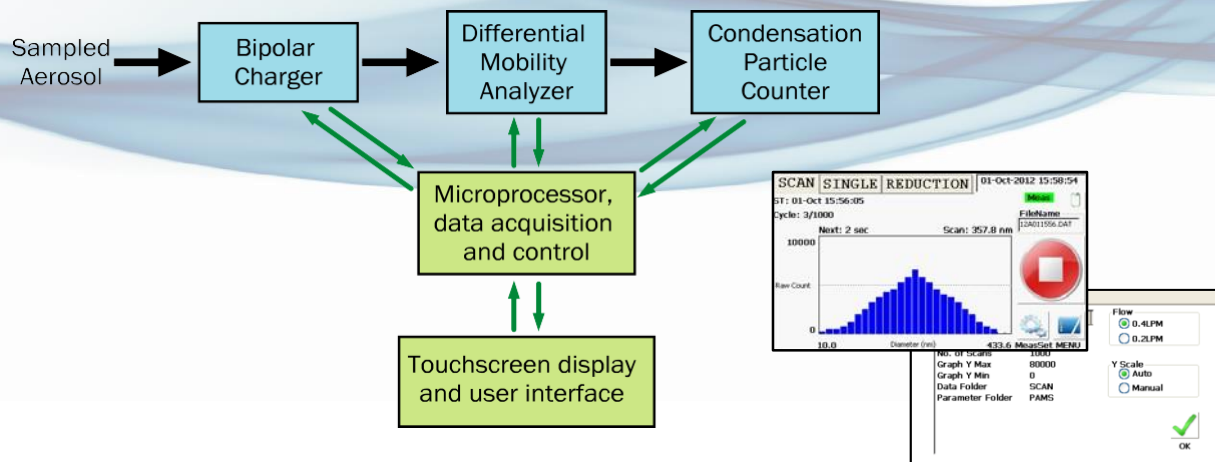


### **Key Features**

- Electrical mobility size spectrometer designed for portable, mobile, or handheld aerosol sampling applications
- Provides number-weighted diameter distribution of aerosols over the entire submicrometer range (10-863 nm) in one scan
- Uses a non-radioactive bipolar aerosol charger to allow easy access to sampling sites with tight safety regulations
- Bipolar charger significantly reduces measurement uncertainty of larger particles in the submicrometer range
- Can be used in two modes :
  - Single diameter count mode : to get a total count within a narrow size range
  - Size distribution mode : to get an automated size distribution measurement over desired size range or size resolution
- Stand-alone, battery-operated instrument ; no external computer needed, equipped with a detachable charger

## Operation:

Sampled aerosol is charge-conditioned using a non-radioactive, bipolar charger which brings the particles to steady-state charge distribution. Particles are subsequently sorted according to their electrical mobility in a differential mobility classifier (DMA). Classified particles are detected and counted downstream using a condensation particle counter (CPC).



Portable Aerosol Mobility Spectrometer (PAMS) is developed using technology licensed from the National Institute for Occupational Safety and Health (NIOSH)

## Portable Aerosol Mobility Spectrometer (PAMS) Model 3310 Specifications

<b>Measuring Modes</b>	Single size mode (single size concentration) Scanning mode (size distributions)
<b>Particle Size Range</b>	0.2 LPM : 14.5 to 863 nm Wide Mode 0.4 LPM : 10 to 433 nm Highres Mode
<b>Scan Resolution</b>	0.2 LPM : 14 channels Wide Mode 0.4 LPM : 27 channels Highres Mode
<b>Scan Time</b>	0.2 LPM : 56 sec to minutes for one scan Wide Mode 0.4 LPM : 108 sec to minutes for one scan Highres Mode
<b>Concentration Range</b>	0 to 100,000 particles/cc
<b>Flow Rate</b>	Inlet : 0.7 LPM Sample : 0.05 LPM
<b>Bipolar Charger</b>	Dual corona charger with corona current less than +/- 5 uA
<b>Condensing Fluid</b>	Isopropyl alcohol
<b>Interface</b>	USB
<b>Display</b>	Color touchscreen
<b>Power Source</b>	Li-ion battery or AC adapter Battery life : continuously for 6 hours
<b>Operating Environment</b>	Temperature : 10-35 °C / Humidity : 20-85 % RH (with no condensation)
<b>Dimensions (WHD) / Weight</b>	230 × 230 × 150mm / 5.0 kg (w/o battery)

Specifications subject to change without notice.



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