

# DUSTCOUNT® 8899 SPECIFICATION SHEET

## OVERVIEW

The DustCount 8899 provides the features required to support real-time personal aerosol monitoring in a single, lightweight, wearable, easy to use package.

The DustCount enables Hygienists to use its real-time mass concentration, particle concentration, and size distribution data to determine whether a worker is being exposed to dangerous levels of particulate. With the built-in filter cassette, Hygienists can correlate the real-time data using standard method gravimetric analysis and/or composition analysis without the need for an external pump and filter.

Hygienists have used the DustCount real-time data, and filter analysis results, to enhance discussions on aerosol exposure issues with senior management, to graphically demonstrate dangerous areas to workers, to verify if mitigation systems or processes are working effectively, and to lowering costs by focusing on problem areas identified by real-time accurate air measurements.



## FEATURES AND BENEFITS

- ❖ Optical Particle Counter technology provides real-time mass, particle concentration, and particle size distribution data.
- ❖ Size distribution data is stored in 128 internal digital particle size bins, with 20 size bins exposed in logs and graphs.
- ❖ Built-in cassette houses 25mm filter for standard method gravimetric, or composition analysis.
- ❖ Wireless interface for management and control from PC or Smartphone with a maximum of 128 Bluetooth connections on user interface software on PC .
- ❖ Real-time graphing with DustCount software.
- ❖ Automated pump management eliminates ongoing manual calibration of pumps.
- ❖ Rechargeable batteries and long-life pump ensure lower maintenance demands.

## TECHNICAL SPECIFICATIONS

### DIMENSIONS

**Size (H x W x D):** 13 x 9 x 4 cm (5.5 x 3.5 x 1.8 in)

**Weight:** 0.5 Kg (1.0 lb)

### OPERATING PARAMETERS

**Temperature:** 5 to 32° C (41 to 89° F)

**Humidity:** < 80% up to 32° C, non-condensing

**Altitude:** Flow rate adjusts automatically for -2000m to +10,000m altitude. Reduce reported flow by 1% for every 100m above sea level. Increase reported flow 1% for every 100m below sea level..

**Maximum Operational Pressure:** 1.26 to 0.26 atmospheres.

### FLOW RATE

Factory set to 0.5 L/min with +/- 5% accuracy.

### DEVICE INTERFACES

**Display:** Liquid Crystal Display, monochrome, 20-character, 4-line.

**Communications Interfaces:** USB (USB-Type A connector), Bluetooth 4.2

### ALARMS / ALERTS

**Alarm Notifications:** Visual – Flashing LCD panel, and Audible alarm.

**Alarm Types:** PEL, or STEL with user configurable parameters.

## DUSTCOUNT SOFTWARE

**Operating Systems:** Mac OS 10.11 or higher and Windows 7 or higher.

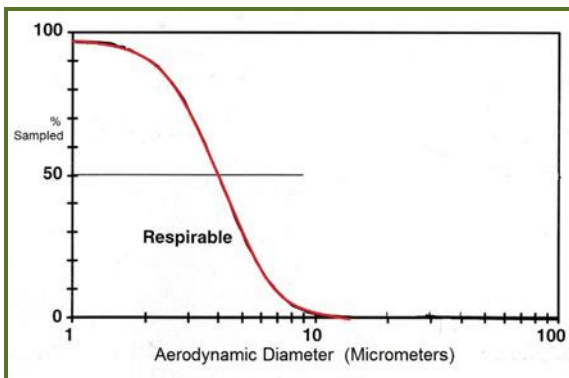
## MEASUREMENTS

**Mass concentration linearity range:** up to 5mg/m<sup>3</sup> with ISO 12103-1 A1 ultra-fine test dust (Arizona Road Dust)

**Post Sample Analysis:** Removable 25mm filter

**Particle Diameter:** 0.5µm to 10 µm: NIOSH recommended transfer curve (shown below)

**Particle Count rate:** Maximum: 400X10<sup>6</sup> particles/m<sup>3</sup> maximum.



## DATA

**Data Storage:** 4 GB on-board memory (holds 1 million logged events)

**Logging Interval:** Configurable between 5 seconds to 60 minutes.

**Formats:** Logs saved as either CSV, or Excel (.xlsx) format. Graphs saved as .png format.

## POWER

**Battery:** Two-cell Lithium Ion battery pack (7.5V, 2 Wh – battery protection included)

**Run Time:** 10-hour continuous use on a fully charged battery

**Charge Time:** 2-hour maximum recharge time using charger provided.

**Charger Voltage range:** 100 to 240VAC 50/60 Hz, 17W maximum (Use only supplied charger)

## CALIBRATION

Calibrated against gravimetric reference using ISO 12103-1 A1 ultra-fine test dust (Arizona Road Dust)

Sizing Calibration: Standard PSL particles in size range 0.4 - 6µm

## INFORMATION

- ❖ [www.nanozen.com](http://www.nanozen.com) for more information.
- ❖ Email Nanozen at [moreinfo@nanozen.com](mailto:moreinfo@nanozen.com)
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