

# Technical Data Sheet: TDS 16a

## DC1700 Air particle monitor

This unit is designed for continuously counting airborne particles in the indoor environment. Suitable for monitoring personal space at home and work, evaluating the effectiveness of air filtration and correlating health issues with changes in particulate levels. Includes battery or mains operation.



**Description:** Laser particle counter for counting individual particles. Sizing bands of small and large, according to calibration.

**Specifications:**

- Enhanced air particle monitor with PC serial interface for data transfer.
- Includes rechargeable battery for up to 6 hours of continuous use.
- Use of a serial to USB cable requires an FDI chipset cable

**Manufactured calibration ranges : (please specify when ordering) (>0.5 & >2.5 microns)**

- 0.5 and 2.5  $\mu\text{m}$
- 2.5 and 10  $\mu\text{m}$

**Flow rate:** 0.06 cfm nominal

**Display:** Backlit Negative LCD

**Display Format:** Particles per cubic foot (divided by 100)

**Concentration limit:** Coincidence loss less than 10% at 1 million particles per cubic foot

**History modes:** Minute, hour and day modes.

**Data storage:**

- Internal real-time clock – stored data is date and time stamped
- 60 minutes of minute averages OR
- 24 hours of hourly averages OR
- 30 days of daily averages
- Additionally, downloadable storage of 7 days worth of minute data from continuous sampling – approximately 10,000 samples. Accessed by PC interface, (adaptor cable included). USB Serial Interface accessory is also available separately.

**Dimensions:** 190 mm x 127 mm x 89 mm

**Weight:** 340g

**Power requirements:**

- 230v AC – (UK mains adaptor included)
- Up to 6 hours continuous use with battery.

**Warranty:** 12 months for defects in parts or workmanship. Units repaired or replaced at our discretion.

The DC1700 is shielded against Electro-Magnetic Interference. This means it will count accurately even in close proximity to sources of interference, such as industrial machinery and high voltage power supplies found in some air purifiers.

The DC1700 readings will respond fully to a change in particle concentration within 6 seconds.

**For 0.5/2.5um calibration**

Small particles are all particles detected down to the detection limit of 0.5um.

Large particles are all particles detected above the threshold of 2.5um.

To determine particles between these sizes, subtract the large particle reading from the small particle reading.

**For 2.5/10um calibration**

Small particles are all particles detected down to the detection limit of 2.5um.

Large particles are all particles detected above the threshold of 10um.

To determine particles between these sizes, subtract the large particle reading from the small particle reading.

**Health Disclaimer**

While the DC1700 can detect levels of airborne particulates, it cannot determine the health impact for any individual. Respiratory ailments and allergic symptoms are caused by a variety of factors. The DC1700 is not meant to be used in the treatment or mitigation of any medical condition. As such, Gradko International does not offer a consultative service, advice or inference regarding readings obtained.