# Micro Dustec - 500X

## *Realtime Dust Monitor & Particulate Counter*

**PM-10**  **PM-2.5**  **PM-1**  **Temperature Humidity**

### Features:
- ⮞ Dust Concentration in µg/m3
- ⮞ Particle counts with Avg, Min & Max values
- ⮞ Temperature and Humidity measurement
- ⮞ Data download in MicroSD Card. report saved in Excel format.
- ⮞ ISO 21501-4 2007 calibration (*Optional)
- ⮞ High performance Li-Ion battery with 8-24 hours backup
- ⮞ Communication options - GPRS / RS-232 / RS-485

The Micro-Dustec 500X is the latest addition in the list of Environmental Monitoring Innovations by Instrumex. This is the most comprehensive dust monitoring solution that can measure dust particles as low as 0.3µ upto 10µ. Housed in an IP-65 protected case, this unit is capable for outdoor continuous monitoring. Extremely portable & Light weight unit ensures maximum mobility. Available in 3 different models - 5003 , 5006 & 5008

### Applications:
- ⮞ Indoor / Outdoor Air Monitoring
- ⮞ Clean Room Applications
- ⮞ Environmental Monitoring
- ⮞ Industrial Hygiene
- ⮞ Workplace Exposure Monitoring
- ⮞ Surveying & Research on Aerosols

# Technical Specifications:

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|---|---|
| **Measurement Principle** | Optical Light Scattering using high intensity Class-1 Laser Diode |
| **Dust Concentration Measuring Range** | 0.01 µg/m$^3$ to 10,000 µg /m$^3$ |
| **Size Channels** | 5003 – 3 Channels (1.0µm, 2.5µm, 10µm)<br>5006 – 6 Channels (0.3µm, 0.5µm, 1µm, 2.5µm, 5µm, 10µm)<br>5008 – 8 Channels (0.3µm, 0.5µm, 0.7µm, 1µm, 2.5µm, 4µm, 5µm, 10µm) |
| **Particle Size Range** | 0.3µ to 10µ |
| **Particle Count Rate** | 10,000 Particles/Second |
| **Temperature Sensor** | Range: -20°C – 50°C. Sensor housed in a Radiant Shield. |
| **Humidity Sensor** | Range: 0 – 95%. Sensor housed in a Radiant Shield. |
| **Total Flow Rate** | 1.2 LPM |
| **Display** | 20 x 4 LCD Display |
| **Data Logging** | Inbuilt MicroSD Card to store Data. Logging Interval: 1 – 10 Seconds. |
| **Communication (Optional)** | RS485 & GPRS Modem for sending Real Time data online. |
| **Calibration Certificate (Optional)** | Particle Counter as ISO 21501-4 2007<br>Temperature & Humidity as per ISO 17025 |
| **Software Calibration** | User Settable Calibration Factor to suit various Environmental Profiles |
| **Power** | 230V, 50Hz AC Adapter with country Specific plug |
| **Battery & Charger** | Rechargeable Li-Ion with 8 Hour Run Time.<br>(Optional 24 Hours Run time to be ordered separately)<br>Charger – 110-240V AC, 50Hz – 5V, 3A DC. |
| **Enclosure** | IP65 Protected High Impact Plastic Suitable for outdoor application |
| **Weight** | 2.2lbs (1kg.) |
| **Dimensions** | L x W x H = (24 x 20 x 11) cms |
| **Supplied with** | Operation Manual, 2GB MicroSD Card, Charger & Power Cord. |
| **Optional** | Tripod Stand with Tripod mounting adapter |
| **Warranty** | One year from the date of Supply. |