

Specifications for Micro-Orifice Uniform Deposition Impactor

1. **Principle of operation:** Inertial Impaction based low pressure cascade Impactor
2. **Output type:** Continuous aerosol mass size distribution
3. **Particle size cut off diameters:** Minimum- 0.1 μm or lower
Maximum- 15 μm or higher
4. **Number of stages:** More than 8 stages
5. **Pressure drop:** Between 10-50 kPa (without back-up filter)
6. **Vacuum pump:** Power higher than 0.5 kW
7. **Volumetric flow rate:** More than 20 Lmin^{-1}
8. **Stage micro-orifice nozzles:** Variable but not lesser than 1000
9. **Weight of impactor:** Lesser than 3 kg
10. **Inter-stage losses:** Lesser than 5%
11. **Reproducibility:** Better than 95 % of total measuring range
12. **Power requirements:** 240 VAC, 60 Hz
13. **Operating conditions:** Temperature range: 20-45 degree Celsius
Relative humidity range: 20-80% (non-condensing)
14. **Calibration:** Calibration curve for each stage should be provided
15. **Warranty:** Minimum period of 1 year from the date of supply