

PM 2.5 SAMPLER - SPECIFICATION

Specifications:

- ❖ Fine dust sampler designed and developed as per the latest norms and comply with EPA reference method for determination of PM2.5 as published in federal Register 40CFR Part 50 Appendix L.
- ❖ Instrument is easy to set up and suitable for outdoor use.
- ❖ The standard instrument is supplied with PM10 sampling inlet, WINS impactor, orifice assembly for flow measurement, proportioning valve, sensors for ambient temperature and pressure, Filter holder to accommodate 47mm dia. Filter, and mass flow controller to control flow and to set various parameters as per requirements. Sampling inlet, impactor, manufactured out of aluminum with machining, heat treatment, and Surface coated as per EPA standards.
- ❖ **PM2.5 SIZE SELECIVE INLET** EPA PM2.5 WINS impactor
- ❖ **AMBIENT AND FILTER TEMPERATURE MEASUREMENT**
Range : 0°C to 50°C with Resolution 0.1°C
Recording and Display: Average, Min. and Max. Values of both temperatures
- ❖ **BAROMETRIC PRESSURE MEASUREMENT** 600-800 mmHg with a resolution of 1mmHg
- ❖ **SYSTEM LEAK TEST** Internal & External with a resolution of 1mmHg
- ❖ **LEAK RATE** < 80 cc/min
- ❖ **DATA TRANSFER PORT** USB port to store data in pen drive
- ❖ **VACUUM PUMP** Diaphragm type pump working on 230V
- ❖ **AC POWER** 230V AC +/- 10% 50Hz

- ❖ **MICROPROCESSOR BASED WITH MASS FLOW CONTROLLER**
 - Flow rate setting and control
 - Ambient temperature and Pressure measurements
 - Real time Clock & Timer (Date and Time of sampling)
 - LCD display 20 Characters x 4 lines
 - Data transfer Facility
 - Large Display and keyboard
 - Volume Totalizer

- ❖ **FLOW RATES & VOLUME MEASUREMENTS**
 - Range 13-20 lpm, preset @ 16.67lpm +/- 0.5%
 - Accuracy +/-0.5 % of reading
 - Electronic flow control system with mass flow controller
 - Accuracy of Control : Better than +/-0.5%over 24Hrs @ 16.67 lpm
 - Volume Measurement M3 resolution : 0.01M3
 - Averaging : Every 5 minutes
 - Reporting : Every 5 minutes
 - Computations : Flow average & coefficient of variance