

### INSTRUMENT CATALOG

# RESPIRABLE DUST SAMPLER WITH PM2.5 SAMPLING ATTACHMENT & GASEOUS SAMPLING ATTACHMENT

APS - 113BL WITH APS - 203 & APS - 311



## COMPLETE ENVIRONMENTAL SOLUTIONS

Air, Sound, Water, Soil Pollution Monitoring, & Safety Instruments Manufacturing, Sales, Servicing and Calibration (Lab Instruments Avilable)

#### 870FF, BLOCK-A, MU-IInd, GREATER NOIDA, GAUTAM BUDH NAGAR-201308 U.P.

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Designed for convenient monitoring of both PM 10 and PM 2.5
simultaneously

#### **OVERVIEW:-**

Simultaneous sampling of PM10 and PM2.5 Particulates. Two part cabinet ensures that PM2.5 filter remains close to ambient air temperature at all times. Low sampling rate of 1m3/hr reduced filter choking even in areas of high PM concentration Critical Orifice maintains constant flow rate. Oil free pump requires very little maintenance. Induction motor driven pump is immune to voltage fluctuation.

# Cyclone based Separation (NEERI Design) Improved Brushless Blower OVERVIEW:-

The APS 113BL sampler uses an improved cyclone with sharper cutoff (D50 at 10 microns) to separate the coarser particulates from the air stream before filtering it on the glass microfibre filter. By using the APS 113BL, measurement of Respirable Particulate Matter can be done accurately and TSPM can also be assessed by collection of dust retained in the cyclone cup.

#### **Special features:**

- Brushless blower reduces equipment downtime and maintenance effort.
- **Provision of light** for flow and time reading during night.
- **Toolbox** within the instrument.
- Lockable casters, top cover and gaseous attachment.
- Improved cabinet design which is more sturdy and durable with SS hardware.
- Electromagnetic Interference (EMI) to TVs totally eliminated.

APS 113BL comes with **an in-built voltage stabilizer to compensate for voltage fluctuations**. This model has been made more user-friendly by providing a lighting arrangement for night operation, tool box within the instrument, softer handles, lockable top-cover and wheels for easy transportation. The cabinet design has also been improved to prevent entry of rain water and dust into the machine.

Owing to its modular design, APS 113BL can be easily paired with a gaseous sampling attachment (for monitoring SO2, NOx, NH3, Ozone etc) as gaseous sampling requires only a few LPM of air flow. This is possible through an attachable subsidiary unit APS 311 or the more modern APS 311TE. Kindly refer to respective brochures of APS 311 and APS 311TE for details.

#### **SPECIFICATIONS:-**

Particle Size	Particles of 10 microns & below collected on Filter Paper holder. SPM bigger than 10 microns collected in a separate sampling bottle under the cyclone
Sampling Time	28 hours (maximum)
Sampling Time Record	0 to 9999.99 hrs. recorded on a Time Totalizer
Power requirement	Nominal 220 V, Single Phase, 50Hz AC mains supply. For proper operation and safety a good earth connection is mandatory
Size & Weight	435 x 330 x 850mm, 35 Kg
Automatic Sampling	24 hrs programmable timer to automatically shut off the system after pre-Control set time interval
Warranty	Two year



Particle Size	Omni-directional air inlet with PM10 separation through an Respirable Dust Sampler followed by PM2.5 separation through a WINS impactor.
Sampling Rate	Constant sampling rate of PM10- $.9-1.4$ m3 /min free flow & PM.25 1 m3/hr, unaffected by voltage fluctuation maintained by critical orifice system.
Filter Media	Filter holder designed to accept any standard 47 mm diameter filter media.
Sample Volume	Independent manometer for PM 10 & Dry Gas Meter PM 2.5 flow streams. Time Totalizer records the period of operation
Power Requirement	Single phase AC 220 volts, 50 Hertz supply. Sampler unaffected by +/- 10% fluctuation in supply voltage
Warranty	Two year