

# PM10/PM2.5 SAMPLER ECOTECH MODEL AAS 127 MFC

EQUIPPED WITH TRUE MASS FLOW CONTROLLER & DATA LOGGER & CLOUD CONNECTIVITY

## Manual Filter Based Sampler (Filter 47 mm Dia.)

Air quality standard notified by Govt of India where measurement of PM 2.5 dusts has been made mandatory besides other parameters for defining the quality of ambient air. An impactor based PM2.5 sampler has been developed by Ecotech which meet requirement of PM 2.5 sampling. Using AAS 127MFC, PM2.5 concentration in ambient air can be measured gravimetrically. AAS 127MFC have option to be used for PM10 sampling by removing WINS impactor from sampling stream

USEPA published standardised design of PM10 & of PM2.5 impactors in Federal Register 40 CFR part 50 Appendix L (updated May 2002) are used in manufacturing key components of impactor with defined tolerances.

Ecotech AAS 127MFC is fitted with European pump with low noise and non-pulsating. Sampling rates of 1m<sup>3</sup>/hr with 2% accuracy complying with flow performance criteria as defined in BIS 5182 Part 24 2019 Flow is maintained constant with the help of True Mass Flow Controller. These features ensure that sampling rate is unaffected with filter choking and input voltage fluctuations. Stabilizer fitted in unit to give stable power supply 220±10V for operation of unit with provision of displaying input and output voltage.

Key components of the instrument are opposed jet impactor for PM10 and WINS IMPACTOR for PM2.5. These are accurately fabricated using CNC machine as per design of USEPA. Modular design of sampler, tubing and other fitments made this sampler simple and most suitable for PM10 or PM2.5 monitoring (only one parameter can be monitored at a time). Digital time totalizer provided with 1 sec resolution to measure sampling time accurately.

AAS127MFC is easy to operate and work successfully in harsh Indian climatic conditions fitted with Mass Flow Controller system and a microprocessor based data logger which have following features.

1. Logger display Flow rate, Ambient & Filter Temp., B P & Volume of air passed continuously.
2. Displayed values of all parameters updated every 2-30 seconds.
3. Time, date, and 5 min. avg. data of all parameters are stored in logger can be transferred to computer in Excel format
4. Logged data stored in cloud for independent access continuously during operation of machine
5. Cloud connectivity available in sampler and user need to fit a sim card. One year server subscription is provided.
6. Data logger has been provided USB port and a pen drive where all recorded data can be transferred to computer
7. Logger has option to enter filter ID and location number
8. Display and recording compliance are as per CPCB specs

**All Ecotech products can be opened using a master key and fitted with rust free SS hardware door is 180 degrees openable. One Year Standard Warranty on site is provided**



## FEATURES & ADVANTAGES

1. Filter holder is designed to accept any standard 47 mm dia. filters (PTFE) Filter pressure recorded and once it reaches to 200 mmHg sampler stops automatically
2. Sampling of PM 2.5 is done at constant sampling rate of 1 m<sup>3</sup>/hr (16.7lpm) sampler stops if sampling rate reduce more than 10%.
3. Suitable for outdoor use, corrosion free lockable housing for WINS Impactor and filter holder.
4. Filter holder is suspended in air with enough space is available for loading unloading of filter. Two-part cabinet thus not affected by the heat of motor and easy to transport.
5. AAS127MFC is simple to operate with user friendly features and having low operating cost.
6. Sampler can run continuously 24 hrs or more.
7. Unit is compact with two part cabinet and portable- easy to transport

For pricing information and queries contact:

## ECOTECH INSTRUMENTS

K-127, UPSIDC Industrial Area, Site-V, Kasna, Greater Noida, (Uttar Pradesh)

Phone: 9810392043,9999575740 Land line: 0120-6252157

Email: [ecotechinstruments@gmail.com](mailto:ecotechinstruments@gmail.com) Website: [www.ecotechinstruments.co.in](http://www.ecotechinstruments.co.in)



