



APM 460DXNL



APPLICATION

The APM 460DXNL is used for precise monitoring of PM 10 in the ambient air. The present special design of the blower impeller and acoustic material used in the blower ensures that it does not produce any unpleasant noise while in operation. Thus the machine can be operated even in silent areas like a library, hospitals, wild life sanctuary and in other noise sensitive areas including residential areas.

WORKING PRINCIPAL

The size fractionating cyclone of the APM 460DXNL operates close to its designed separation velocity, resulting in a sharper cut-off for particulates larger than 10 microns (CSIR NEERI knowhow).

The APM 460DXNL uses an electronic feedback flow controller with pressure sensor, to automatically maintain constant sampling rate through the filter/cyclone assembly. When the dust load on filter becomes excessive and exceeds the capacity of the blower, the electronic circuits provided in the flow controller automatically shut down the machine. (As per BIS IS 5182 Part 23:2006). To compensate for a variation in filter characteristics the flow controller has a provision to allow adjustment of the sampling rate.

The APM 460 DXNL uses a brushless, noiseless blower manufactured by a prominent American company. This heavy-duty blower can be operated for several thousand hours without any maintenance. As the blower of the APM460 DXNL is powered by an Induction Motor it is practically immune to voltage fluctuations thus need of voltage stabilizer is completely eliminated.

FEATURES

- Automatic Flow Controller with electronic feedback for constant sampling rate throughout the sampling period.
- Brushless regenerative blower with very little noise.
- Heavy duty Induction motor fitted in blower requires no maintenance.

NEED OF MONITORING

PM10 can penetrate through the respiratory tract through mouth and nose, and can easily enter into the lungs leading to illness such as extreme asthma attacks, bronchitis, and lung diseases. Also, it may impact vegetation and be a general nuisance.

India has adopted monitoring of PM10 as part of the Ambient Air Quality network in 1994.



APM 460DXNL



SPECIFICATIONS

| | |
|-----------------------------------|---|
| Housing | Sturdy Aluminium cabinet to house Blower, Filter holder assembly, time totalizer, Programmable timer, Flow Controller & Flow Measurement device |
| Particulate Sampling / Separation | A cyclone is used for fractioning the dust into two fractions at D-50 cut off for 10 microns. Particles from 10 micron down to 0.1 micron are collected on Filter Paper placed on filter holder. Coarse particles (bigger than 10 microns) collected in a cup under the cyclone. |
| Heavy Duty Blower | Brushless & Noiseless, operated at 220V AC (+/-) 10V single phase 50 Hz, supply continuously for at least 28 hours |
| Flow Rate | 0.8 – 1.4 m ³ /min free flow with flow stabilization by Electronic Feedback Flow Control Device |
| Filter Holder | Aluminium casting with fine finished rubber gasket |
| Flow Measurement | Glass Manometer Tube accurately graduated directly in m ³ /min and measured across a critical orifice |
| Flow Controller | The system will automatically maintain the flow rate constant through an Electronic Flow Controller with pressure sensor and compensate for dust load deposited on the filter. When the dust load increases beyond the capacity of the blower the flow rate will begin to decrease and the system will automatically be shut-down if the flow rate tends to drop below 0.85 m ³ /min (As recommended in BIS IS 5182-Part 23:2006). |
| Programmable Timer | 0-24 hrs (Flexible to set at any interval of time) |
| Time Totalizer | 0 – 9999.99 hrs |
| Size & Weight | 400 x 300 x 650mm, 60Kg |

1
Year
Warranty

*Specifications are subject to change without any prior notification

To facilitate sampling of gaseous pollutants, provision has been made to attach the APM 411/ 411TE gaseous sampling attachment with the main sampler



For More Information Contact

Envirotech Instruments Pvt. Ltd.

A-271, Okhla Industrial Area, Phase – 1,
New Delhi – 110020, India



+91-011-41026749
+91-9810038803



sales@envirotechindia.com
sales.envirotech@gmail.com



www.envirotechindia.com