

HiVol 3000

HIGH VOLUME AIR SAMPLER

The HiVol 3000 particulate sampler performs remote unattended sampling of $PM_{2.5}$, PM_{10} or TSP along with basic meteorological parameters.

The HiVol 3000 incorporates advanced programming functions and electronic volumetric flow control to maintain a consistent flow and collect a truly representative sample of particulate matter.

Optional attachments allow the sampler to measure wind speed and direction which can then be used to trigger sector selectable sampling (e.g. fence-line monitoring).

Approvals

- U.S. EPA Manual Reference Method: RFPS-0706-162 approval for PM_{10}
- Meets Australian standard for PM_{10} and TSP monitoring.
- Only high volume air sampler with CE and C-tick approval.
- Manufactured under ISO9001 and ISO14001.



Reliable sampling

- Volumetric flow control automatically corrected to standard reference temperature.
- Programmable reference temperatures.
- Industrial brushless motor (100 000 hours continuous field operation).
- Weather-proof marine quality anodised aluminium cabinet.
- Automatic supply voltage monitoring and shut-down facility reduces damage to instrument.

Directional sampling

- Wind direction and speed used to activate/de-activate sampler.
- External trigger (0-5VDC) can be used for activating sampling program.

Enhanced communication

- RS232 output for data collection and remote communication.
- Filter blocked and instrument error alarms.
- Total control of instrument remotely from PC.
- Simple programming of sampling periods, including daily and weekly programs, with in built '1-in-X day' sampling capability.



SPECIFICATIONS

Operation:	Microprocessor controlled (internal data logging)
Pump/Motor:	Side channel blower driven by an induction motor (brushless)
Flow controller:	Variable frequency drive
Volumetric flow range:	Nominal 45-96 m ³ /hr
Vacuum capability:	140 mBar max
Flow accuracy:	Better than +/- 1m ³ /hr
Flow repeatability:	+/- 1 % of reading
Construction:	Anodised aluminium and Stainless steel fasteners
Filter size:	250 x 200 mm rectangular element
Dimensions:	380 mm (W) x 380mm (D) x 1200mm (H) plus inlet
Weight:	45 kg plus inlet weight
Operating voltage:	200-240V + 10% 50/60 Hz (optional 115V 60Hz)
Power Consumption:	1500 VA Max (depending on filter loading & flow rate)
Temp measur. range:	0-50 °C
Barometric pressure:	600-900 mmHg +/- 4mmHg

Communications/Data logging

No. of readings:	150 (averaging period is user selectable, for example 75 hours of 30 min averages)
External inputs:	1 x wind direction sensor input (10k potentiometer) 1 x wind speed sensor input (contact closure) or, 1 x spare contact closure input (eg. Tipping bucket rain gauge)
Output:	RS232C

OPTIONS

- PM₁₀, PM_{2.5} or TSP size selective inlets
- Calibration plate and field calibration transport case
- Manometer
- WS/WD sensors
- RH Sensor
- Muffler

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www.ecotech.com/distributors

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