# HiVol 3000 XAD

HIGH VOLUME XAD SAMPLER

The HiVol 3000 XAD Sampler provides a flexible platform for sampling organic compounds and monitoring basic meteorological parameters.

The XAD Sampler collects a wider variety of compounds (than a PUF sampler) on a hydrophobic polyaromatic resin (XAD).

The HiVol 3000 XAD unit is a reliable, durable and proven sampler using volumetric flow control to maintain consistent flow and collect a truly representative sample.

Optional attachments allow the sampler to measure wind speed and direction which can then be used as triggers to capture other meteorological parameters.

# RELIABLE SAMPLING

- Volumetric flow control automatically corrected to standard reference temperature
- 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 (0-5 VDC) 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 10 - 20 m³/hr

Vacuum capability: 325 mBar max

Flow accuracy: Better than ± 0.2 m<sup>3</sup>/hr

Flow repeatability: ± 5 % of reading

Construction: Anodised aluminium &

stainless steel fasteners

Filter size: 100mm diameter filter

Replaceable XAD glass cartridge element

**Dimensions:** 380 mm (W) x 380 mm (D)

x 1200 mm (H) plus inlet

Weight: 45 kg plus inlet weight

**Operating voltage:** 200 - 240 V + 10 % 50 / 60 Hz

**Power consumption:** 1500 VA Max (depending on

filter loading & flow rate)

Temp measurement

range:

0-45 °C

Barometric pressure: 600 - 900 mmHg ± 4 mmHg

## **COMMUNICATION & DATA LOGGING**

# Number of readings

• 150 (averaging period is user selectable, e.g. 75 hours of 30 min averages)

#### **External inputs**

- 1 x wind direction sensor input (10k potentiometer)
- 1 x wind speed sensor input (contact closure)
- 1 x spare contact closure input (e.g. tipping bucket rain gauge).

## Output

• RS232C

#### **OPTIONS**

- Calibration plate
- Field calibration transport case
- Manometer
- WS/WD sensors
- Muffler.



