

Product Data Sheet

VS8500 Series – Intelligent Viable Air Sampler



The iVAS series of intelligent viable air samplers offers unrivalled efficiency and consistency in microbiological monitoring. Sample plates (90mm) can be readily deployed and recovered even with gloved hands, thanks to the quick fit 316 Stainless Steel head.

Available in two mounting styles, each capable of running at 50lpm or 100lpm flow rates, iVAS can be used free standing or built into isolators and filling machines. The truly intelligent iVAS unit incorporates the perforated head, impeller, flow control and communication systems into a highly integrated unit. iVAS itself controls the air flow and measures the volume of air sampled to maximise regulatory compliance and can operate in both continuous and intermitted modes. The integral fan means that no bulky vacuum tubes or pumps are needed, facilitating quick and easy installation.

Although optimised for use with enVigil software, iVAS uses industry standard Modbus protocol and runs from 24Vdc to cater for the widest variety of monitoring and application software.

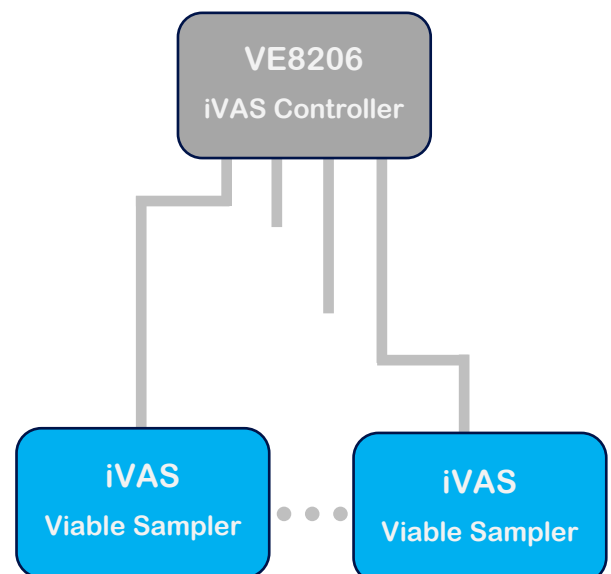
Calibration coefficients are held in non-volatile memory within iVAS, offering in-field swap-ability for the first time, reducing down time and allowing for fast calibration both on and off site.

A single cable carries both RS485 communications and 24Vdc power to iVAS. The connection is via a quick release connector on the free-standing pedestal unit or via a cable rising through the mounting column in the tri-clamp variant, where the VE8206 interface module can be deployed below the filling machine base plate. Use of RS485 allows longer cable lengths to be used such that the VE8206 interface module can be conveniently installed in a plant room where necessary.

Up to six* iVAS units can be connected to a Pharmagraph VE8206 interface module that offers a quick and easy Ethernet connection to the host PC.

Further iVAS units can be readily accommodated via additional VE8206 modules on Ethernet.

*VE8206 offers connection of up to 6 iVAS units, but hardware control via opto-isolated inputs and outputs is only available for up to 4 iVAS units.
If using software control via Modbus commands, then six iVAS units can be driven by each VE8206.



iVAS Specification

- Flow rate: 50lpm or 100lpm with integral flow and volume measurement
- Sample plates: 90mm diameter +1mm/-5mm, 13mm to 17mm height
- Continuous or user-programmable intermittent sampling
- Calculated D50: 1.1µm @100lpm, 1.6µm @50lpm
- 316 Stainless Steel construction:
 - Diameter 105mm
 - Height 125mm (pedestal), 145mm (TriClamp)
 - Weight 1.95kg (pedestal), 2.05 kg (TriClamp)
 - TriClamp 1.5" gasketed
- Power supply: 24Vdc +/-10%
 - Current consumption:
 - 100lpm: 0.65A running (1.2A startup)
 - 50lpm: 0.2A running (0.4A startup)
- Communications Interface:
 - Serial RS485 Modbus RTU protocol
- Environmental:
 - Vapourised Hydrogen Peroxide tolerant
 - Operating temperature 10 to 30°C
 - Storage temperature -20 to 60°C

VE8206 Interface Specification

- Communications Interfaces
 - Ethernet 100mpbs Modbus TCP protocol via RJ45 to host PC
 - 6 Serial RS485 Modbus RTU protocol Interfaces for up to 6 iVAS
- 8 Opto-Isolated digital inputs for 'Run' and 'Gas' request for up to 4 iVAS
- 8 Opto-Isolated digital outputs for 'Running' and 'Fault' indications for up to 4 iVAS
- ABS plastic construction:
 - Width 200mm
 - Height 120mm (excluding cable entry)
 - Depth 90mm
 - Weight 2.00kg
- Power supply:
 - 24Vdc +/-10%, 7.5A max. for 6 iVAS @100lpm
- Environmental:
 - IP65 rated
 - Operating temperature 10 to 30°C
 - Storage temperature -20 to 60°C



Ordering Information

Item	Description
VS8501	Pedestal iVAS for 90mm petri dishes
VS8502	TriClamp mount iVAS for 90mm petri dishes
VE8206	iVAS Controller with Ethernet Interface for up to 6 off VS850x (Note: If using digital I/O to control the connected iVAS units, there is a limit of 4 off iVAS)

For details of optional accessories, please see separate datasheet.