

Vortex3

Personal High Flow Air Sampling Pump

- 2 year warranty
- High-Flow rate (5 – 12 L/min)
- Impressive back pressure capability
- Full colour OLED display
- Compatibility with the Airwave App for easy remote monitoring
- Inlet pressure monitored to establish filter loading
- Mains and battery powered
- Rugged IP65 design
- Case finish enables easy decontamination
- Flow accuracy better than +/-5% to comply with ISO 13137
- An interlocking mechanism enabling multiple pumps to be carried at once



Overview

The Vortex3 High-Flow Sample Pump is the latest generation of static, high flow rate sampling pumps, which can now be controlled and monitored from your mobile phone or tablet. Ideal for area sampling for airborne contaminants including Asbestos and other hazardous materials.

Applications

- Biosampling
- Indoor air studies
- Asbestos monitoring
- Building contractors
- Occupational hygiene
- Domestic, commercial and industrial environments
- Personal compliance monitoring
- Site dust levels



Technical Specifications		Model Selection		
Flow performance		Vortex3	Standard	Pro
Flow range ml/min	5-12	Flow range 5-12 L/min	•	•
Flow control	< ± 5% at calibrated point	Flow control +/-5%	•	•
Fault detector	Detects blockages with a selectable number of automatic restarts up to 10 tmes	Battery & mains powered	•	•
		Run duration timer	•	•
		Bluetooth		•
Compliance	ISO 13137 Compliant	Battery gauge		•
Physical		Pressure indicator		•
Display	Colour OLED	Remote start/stop		•
Controls	4 buttons			
Status	Red/Blue LED	Ordering Information		
Indicators	316 x 170 x 116mm	Vortex3 Models		
Dimmensions	(12.44 x 6.69 x 5.56 inches)	VORTEX3	Vortex3 Standard Pump	
Weight	2.17kg	VORTEX3PRO	Apex Plus Pump	
Environmental		Apex2 Accessories		
Temperature	Operation, 0 to 40°C Storage, -10 - 50°C	All pumps include 1.8m tube, Field Guide and a Certificate of Calibration and Conformity. Order battery charger (CF44) separately.		
Humidity	30-95% RH (non-condensing)			
Barometric pressure	Auto-correcting	CAS.CM362	Rotameter 1-20L/min	
Ingress protection	IP65	CAS.P110004	Calibrator Adaptor - Cowled Head	
Electrical		CAS.217002B	Spare Telescopic Mast	
Battery type	Li-ion	CAS.CF44	Battery Charger	
Battery level indicator	% or hours (Pro Model)	Our air sampling family is complete. With a low-flow (VAPex), medium flow (Apex2) and high-flow (Vortex3) pumps available.		
Battery life	2.5 hours @ 12L/min 4 hours @ 8L/min, with 25mm 8.8 µm filter			
Charge time	Typically <6 hours			

Related Products

A rotameter (CAS.CM362) can be used for field calibration checks



Simple Operation

The Vortex3 has an easy to use four button operation with LED lights for clear visibility of the pumps status.

- Clear display showing battery life at any time
- Quick set up options for all stages of a run
- Time or volume sample runs achievable with Vortex3 Pro
- Multi lingual operation
- Lockable key pad providing security during surveys

The Vortex3 is an ideal device to be used by personnel carrying out sampling surveys trained to RP402 level by BOHS.



Mast and sampling tube are fitted to the pump, during use and transportation



Intuitive menu navigation



OLED full colour display with Red/Blue LED's to indicate pump status, visible from a distance

Use the Airwave App on any mobile device to remotely control and monitor multiple pumps at once.

Get Connected

There are two models available - Vortex3 and Vortex3 Pro. With a number of advanced functions for each model to meet different user requirements.

The Vortex3 Pro high-flow air sampling pump has Bluetooth® connectivity capabilities allowing for remote control and monitoring with our Airwave App.

The paired device can then control and check the pump's status and measurement progress without having to go to the pump itself.

Remote Start/Stop – Timed Run using this mode you can run the pump for a set period, after which the pump will turn off automatically.

(Airwave is available for free in the Apple App Store and Google Play Store)



Applications

Suitable for area and environmental monitoring including applications such as biosampling, indoor air studies, asbestos monitoring and long-term background monitoring. Users would typically include; building contractors, occupational hygiene personnel to establish the presence of asbestos and other contaminants in domestic, commercial and industrial environments.

“The need to set up multiple pumps, in multiple areas on site is key and the ability to carry a number of pumps at the same time saved us time and effort”

Interlocking Design

The Vortex3 and Vortex3 Pro have a unique, patent-pending interlocking carrying mechanism, which means that several units can be connected together making it easy to carry them to and from site. Carrying three or four pumps at the same time is easy with the Vortex3.



Lightweight Ergonomic Design

- Weighs only 2.17kg (4.78lbs)
- Comfortable ergonomic carrying handle
- Made from ABS - Built for strength and durability
- IP65 housing that is easy to clean and decontaminate with water
- One way valves with no small crevices to trap dirt and for easy decontamination

Operate Remotely

- 25m range
- iOS or Android platforms supported
- View run information in real-time
- Confirmation of operation remotely



Download Data

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- View run information in real-time
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Stored Data

From the Casella Airwave Dashboard View you can download air sampling runs stored on the Vortex3 and/or make notes on your sampling activity. Highlighting individual sampling runs also provides the opportunity to copy the results to a clipboard and create email options to assist with sampling record maintenance and circulation.

Equipment Details	
Device	Casella Vortex3
Serial Number	9999999
Firmware Revision	217009.00.50
Battery Remaining	95%
Service Life	8000 Hours
Site Details	
Analyst Name	
Site Name	
Job ID	
Sample ID	
Location	Google Maps
Run Data	
Run Mode	Manual
Stop Mode	Manual
Start Date & Time	8 May 2021 18:08:47
End Date & Time	8 May 2021 22:10:16
Duration	04:01:29 (HH:MM)
Flow Rate	8.0 L/m
Volume Sampled	1931.75 L
Inlet Pressure (Start)	0.0 cmH2O
Inlet Pressure (End)	16.8 cmH2O
Temperature (Start)	62.6 Deg. F
Temperature (End)	93.2 Deg. F
Temperature (Avg.)	91.0 Deg. F
Flow Faults	0