

# CASELLA

A DIVISION OF TSI

## The next generation of air sampling

### Vortex3 High-Flow Air Sampling Pump With Improved Run Time



**The enhanced Vortex3  
air sampling pump  
can sample 480L in  
only 40 minutes!**

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

 **Vortex3**

[www.casellasolutions.com](http://www.casellasolutions.com)



## Samples 480L in only 40 minutes!

### Key Features

- High-Flow rate (5- 12 L/min)
- Long battery life (4 hours at 12L/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

### 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
- Multilingual 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 Casella's 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 2.37kg (5.23lbs)
- 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

- Ability to view the Vortex3 Pro memory
- Input site data directly
- Location stamp
- Emailing of results in report format

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	<a href="#">Google Maps</a>
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

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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.

## Technical Specification

### Flow Performance

Flow Range L/min:	5 to 12
Flow Control:	< ± 5% at calibrated point
Fault Detector:	Detects blockages with a selectable number of automatic restarts up to 10 times.
Compliance:	ISO 13137 Compliant

### Physical

Display:	Colour OLED
Controls:	4 buttons
Status Indicators:	Red/Blue LED
Dimensions:	316 x 170 x 116mm (12.44 x 6.69 x 5.56 inches)
Weight:	2.37kg (5.23lbs)

### Environmental

Temperature:	Operation, 0 to 40°C Storage, -10 to 50°C
Humidity:	30-95% RH (non-condensing)
Barometric Pressure:	Automatic-correcting
Ingress Protection:	IP65

### Electrical

Battery Type:	Lilon
Battery Level Indicator:	% or hours (Pro Model)
Charge Time:	Typically <6 hours
Battery Life:	

Flow Rate (L/min)	Typical Back Pressure (cm H <sub>2</sub> O)	Typical Battery Life (Hours)	Sample Volume (Litres)
12	181	4	2880
11	171	5	3300
10	159	6.5	3900
9	145	7.5	4050
8	125	8	3840
7	97	12	5040
6	96	24	8640
5	95	24	7200

Run times shown are with a 25mm 0.8µm MCE filter.

Filter back pressures can vary which will change battery life.

## Ordering Information

<b>VORTEX3</b>	Vortex3 Standard Pump
<b>VORTEX3PRO</b>	Vortex3 Pro Pump

All pumps include 1.8m tube, Field Guide and a Certificate of Calibration and Conformity. Order battery charger (CF44) separately.

<b>CM362</b>	Rotameter 1-20L/min
<b>P110004</b>	Calibrator Adaptor - Cowled Head
<b>217002B</b>	Spare Telescopic Mast
<b>CF44</b>	Battery Charger

## Model Selection



	Standard	Pro
Flow Range 5-12 L/min	●	●
Flow Control +/-5%	●	●
Battery & Mains Powered	●	●
Run Duration Timer	●	●
Bluetooth		●
Battery Gauge		●
Pressure Indicator		●
Remote Start/Stop		●

## Related Products

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



Our air sampling family is complete. With a low-flow (VAPex), medium flow (Apex2) and high-flow (Vortex3) pumps available!

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