



**Your trusted global partner
in life-saving research.**

For over 50 years, Allentown has provided critical solutions to the biomedical research community. Our high-quality equipment and advanced vivarium systems continue to define and exceed industry standards. Like everything we do, our unparalleled customer service is stamped with the Allentown hallmarks of integrity, dedication and care.

EcoFlo™

BLOWERS AND BLOWER CONTROL



OVERVIEW

Providing critical solutions with integrity and care.



Industry Leading Airflow Solutions

The EcoFlo family of blowers from Allentown are the most energy efficient, ergonomically friendly, and quietest blowers we've ever produced. Offered in a wide variety of solution friendly configurations – including rack mounted, wall mounted, ceiling mounted and free-standing tower – these blowers from the Allentown family of products share the same efficiencies, ease of use, superior control, and dependability that are the hallmarks of all Allentown products.

Smarter Design – We're the first to incorporate ECM Motor Technology into Individually Ventilated Caging air delivery systems. ECM allows for precise airflow control, less heat generation, and less noise and energy, meaning more for your research, more room in your budget, and more peace of mind.

The Quietest, Most Energy-Efficient Blowers – The heart of the EcoFlo system is the ECM blower technology, which allows for precise and reliable air delivery using only a fraction of the amount of energy that some blowers on the market use today.

Your Choice for Blower Control – EcoFlo blowers are also the easiest and most cost effective to use. With the choice of either a touchscreen or our cost-saving WiVarium tablet-based blower control app, you can monitor and control your blowers in the way that most suits your SOP – and your budget.

Multi-Rack Connectivity – The EcoFlo Tower blower is an excellent option to suit your blower preference or room layouts that require multiple racks on one blower system. The Tower offers the same energy efficient and ergonomic features as the rest of the EcoFlo blower configurations, in a free-standing configuration which suites certain room layouts.

Wireless IVC Rack Monitoring – Developed exclusively for the biomedical research industry, Allentown provides Wireless IVC Rack Monitoring that gives users the ability to wirelessly monitor and manage housing parameters without ever having to enter the animal holding room.

OVERVIEW



Performance and Reliability

Temperature and humidity monitoring of supply and exhaust:

Relative Humidity:

- Between 10% – 90% RH, accuracy = ± 2%
- IF there is any drift, drift = ± 1.2% RH / 5 years

Temperature:

- Between 5 – 50 °C, accuracy = ± 0.13 °C
- IF there is any drift, drift = ± 0.015 °C / year

Developed with the use of Computational Fluid Dynamics (CFD)

Automatic Filter Load Compensation (FLC™)

Pressure polarity control / monitoring

Noise and vibration reduction

Certified HEPA filtration:

- Entire blower HEPA certified, not just the filter media
- Certified installation of HEPA filters (H14) after gravimetric pre-filtration at the inlet and the outlet

Pre-filters are washable and reusable

Air quality: Class 5 (ISO 146441)

Touchscreen Night Mode feature

UL / CUL listed

CE and C-tick certified

Warranty and service

Multiple configurations: rack mounted, wall mounted, and tower blower

Level of Control & Ease of Use

Software-driven technology

Controlled from icon-based, real-time touchscreen, or WiVarium tablet-based blower control app

Multi-rack connectivity available

BMS integration

Ergonomic pre-filter access

Ergonomic pocket handles

Energy and Environmental Considerations

Power consumption:

- Maximum 0.15 W per hour per cage location
- Voltage: 115 and 230 V

Case constructed of recyclable aluminum

Quiet and energy efficient (due to ECM motor technology)

OVERVIEW



Touchscreen

Home Screen, from which all other screens can be accessed and from which the following airflow parameters can be monitored:

- Temperature of Supply and Exhaust
- Relative humidity of Supply and Exhaust
- Cage polarity (Positive or Negative)
- Air Changes per Hour (ACH)

Filter Status Screen:

- Remaining HEPA filter life (expressed as a percentage) of both Supply and Exhaust can be monitored
- Pre-Filter life can be monitored and the counter reset

Blower Status Screen

- Status of both Supply and Exhaust blowers can be monitored in terms of CFM, WC, and RPM

Alarm Status Screen:

- Displays the exact location (filter, blower, or hose) of an alarm condition for either – or both – Supply and Exhaust.

Blower Alarm Screen:

- Turns red to communicate a Blower Alarm condition.

Filter Alarm Screen:

- Turns yellow to communicate a Filter Alarm condition.

Night Mode:

- When in Night Mode, the Home Screen dims to a red-tinted screen at the programmed Night Mode On time
- Returns to the normal Home Screen display at the programmed Night Mode Off time

Maintenance PIN Code Screen:

- Provides access to high level maintenance screens via PIN code

WiVarium and WiVarium Plus

Tablet / iPad app (Wi-Fi or Bluetooth)

Real-Time Monitoring:

- Allows users to monitor the full range of parameters and conditions necessary for the effective maintenance and success of the facility from anywhere

Entire Facility Communication:

- Does not require a touchscreen in order to monitor and control blowers
- Works with all current-generation EcoFlo blowers, even those that have a touchscreen
- Utilizes Wi-Fi or Bluetooth technology to wirelessly communicate with some – or even all – blowers from a single iPad or tablet

Instant Notifications:

- Alarm notifications are robust and easy to configure
- Alerts users through email or text message at anytime, to most anywhere.
- Alarms can be addressed quickly and effectively, before the animals or the research have been irreparably impacted

Data Collection and Reporting:

- Intuitive, easy-to-use interface with a 14-day device-based repository
- Remotely monitor research animal housing parameters, record and review collected data, generate reports, and set levels for automated alarm broadcasts via e-mail and text message

SPECIFICATIONS

Depth (A)	Depth (B)	Width (C)	Width (D)	Height (E)	Height (F)	Weight ¹	Supply Connection	Exhaust Connection	Acoustical Noise (1 m) ³	Energy Use ³	Heat Load ³
mm	mm	mm	mm	mm	mm	kg	mm	mm	dB	Watts	Watts
EcoFlo Supply Blower (EFS)											
272	354	533	575	215	234	9.8	76	-	20	7 – 23	20
EcoFlo Exhaust Blower (EFE)											
274	354	508	552	227	245	7.9	-	102	20	7 – 23	20
EcoFlo Exhaust Blower (EFV)											
360	446	508	574	254	265	11.6	-	102	20	5 – 150	53 – 1610
EcoFlo Tower Blower											
629	686	305	406	1278	1523	48.0	76 / 4 ²	102	42	7 – 23	20
EcoFlo Halo Blower											
577	629	1067	1119	305	515	34.0	76 / 102 ²	102	42	7 – 23	20

¹ All weights are approximations. ² Single-sided rack / Double-sided rack. ³ Dependent on rack size.

