

VORTEX 2000



HEPA FILTRATION AIR CLEANING DEVICE

PRODUCT DESCRIPTION

AIRBOX Vortex 2000 is a versatile, multi-use, industrial-grade air cleaning system which uses a 4-Stage Filtration System, including Chem Shield Advanced Molecular Adsorbent v-bank filter for heavier concentrations of unwanted gases, to provide Equivalent Clean Airflow (V_{ACS}) for indoor install types. The Vortex 2000 can be integrated into an existing ventilation system or as an independent air cleaning system. The Vortex 2000 utilizes a multi-stage filtration configuration designed to target and reduce high levels of airborne particulates/aerosols and molecular contaminants such as VOCs (volatile organic compounds) in commercial and industrial environments. The AIRBOX Vortex 2000 is equipped with the Smart Fleet Management® platform, which allows AIRBOX units to run on differing schedules and keeps track of actual filter life and other maintenance needs, such as the direct drive ECM Fans used for maximized efficiency. In addition, the VORTEX 2000 qualifies the space for ASHRAE Standard 62.1 IAQP (Indoor Air Quality Procedure) by cleaning the air with recirculation, which could allow for a reduction in the amount of outdoor air required and HVAC energy if all specified Design Compounds (DCs) are maintained below their design limits specified in ASHRAE Standard 62.1.

COMPLIANCE AND PERFORMANCE SPECIFICATIONS

ASHRAE 241-2023	Compliant*
UL Listed	Listing in Progress
IEST-RP-CC007	Certified 99.99% @ 0.3 microns HEPA Filter
US DOE-STD-3020-2015	
UL900	
Bioaerosol Testing	Available upon Request
Efficacy Testing	Available upon Request
*Compliance Testing and Certification in progress	



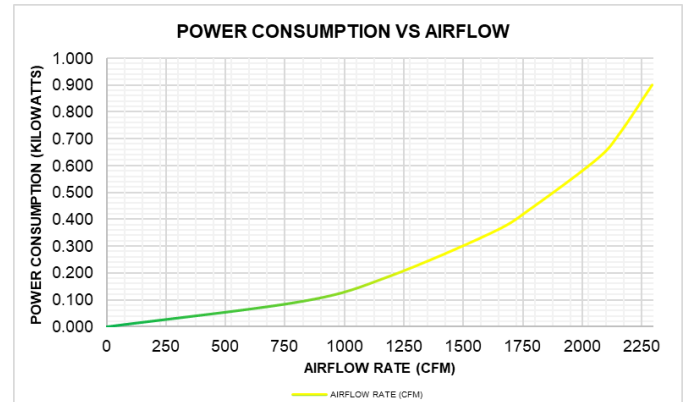
Vortex 2000

TECHNICAL SPECIFICATIONS

Unit Size	26"H x 24"W x 50.5"L*
Weight	300 lbs*
Maximum Nominal Air Flow Rate	2,300 CFM
Controls	Standard manual control and Smart Fleet Management System (IOT) allowing for remote adjustment.
Enclosure Material and Finish	Aircraft Grade Aluminum Alloy Outside Skin with Structural Steel Frame
	Powder Coat Finish
Additional Features	Differential Pressure and TVOC sensors for concentration and filter life monitoring.
Warranty	Transferable Limited Lifetime Warranty. Lifetime Warranty on material and workmanship. 5 Year warranty on fan and motor package inclusive of electrical.

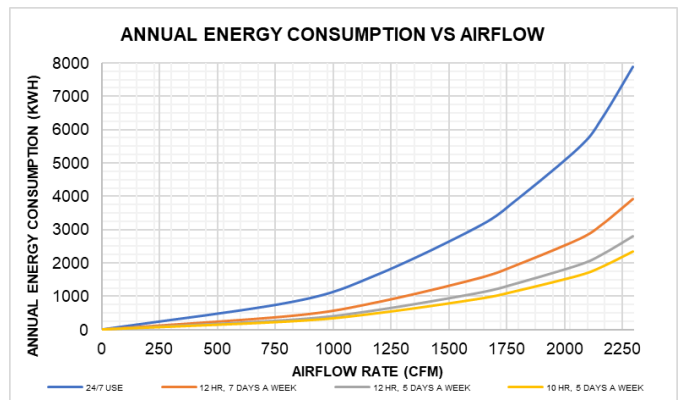
ELECTRICAL SPECIFICATIONS

Operating Voltage	110/120 VAC
ECM Fan	5x 115VAC, 50/60HZ, Ball Bearing, IP54 Rated UL Listed: File Number E319742
Connectors	Deutsch DT, IP68 Rated



FILTRATION SPECIFICATIONS

First Stage	Antimicrobial Filter
	MERV 9 4" Radial Pleated Polyester Filters treated with Microban Aegis Microbe Shield®
Second Stage	ChemShield Molecular Adsorbent Media Filter
	24x24x12" V-Bank Filter with Proprietary Blend of Adsorbent Media
Third Stage	Antimicrobial Filter
	MERV 9 4" Radial Pleated Polyester Treated with Microban Aegis Microbe Shield®
Fourth Stage	HEPA Filter
	Certified 99.99% Effective 12" Pleated Glass Media Treated with Microban Aegis Microbe Shield®



AIRBOX is regulated by the US Environmental Protection Agency and state governments as a pesticidal device. Accordingly, our air cleaners are packaged and labeled in accordance with EPA regulations under FIFRA section 2(q)(1) and 40 CFR Part 156. EPA Registered Establishment No.: 97081-NC-1

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Molecular Adsorbent Media Filter

The 2nd stage of filtration is configured and customized with various blends to neutralize application specific concentrations of unwanted gases and chemical contaminants, such as VOCs and ozone. Efficacy tested in accordance with ISO 10121 and ASHRAE 145.1.

ECM Fan

UL Listed motors producing 2,300 CFM.

High Flow V-Bank HEPA Filter

The final filtration stage is Certified 99.99% effective in removing airborne particles and aerosols at most penetrating particle size (MPPS) OF 0.3 Micron. IEST-RP-CC001, IEST-RP-CC034.5.

Antimicrobial Particle Filter

The 1st and 3rd stage of filtration is used to extend the life of other filters within the system by removing larger particles from the air using it's proprietary dual-layered blended polyester media treated with an EPA registered antimicrobial agent. This filter has an efficiency value of MERV9-A and an ISO 16890 ePM2.5-55.

Guaranteed Construction

Manufactured in the USA, this unit was built to last with a transferable lifetime warranty. It was designed with a durable powder coat finish, all aluminum sheet metal skin for leak-free construction and seamless maintenance in mind with well-designed slide-out filter racks and cam-lock style compression seals.

Advanced Management Controls

This unit is equipped with a remotely controlled dashboard that allows you to connect, manage, adjust, schedule, and monitor, allowing you to conserve energy and money. This software connects to the integrated differential pressure, VOC, and CO2 sensors on board to read real-time indoor air quality and track filter life and efficiency.



VORTEX 2000 SECTION VIEW