Airdog
Breathe different

CLEANER AIR BETTER FUTURE

Advanced TPA Technology for Every Environment



INDUSTRIAL COMMERCIAL HEALTHCARE SPECIALIZED

ABOUT AIRDOG

Silicon Valley Innovation.
Cleaner Air for Life.

Airdog was founded in Silicon Valley in 2009 with a mission to redefine air purification through innovative technology. Driven by continuous research and development, Airdog delivers advanced solutions designed for cleaner, safer air.

At the core of Airdog innovation is the patented TPA (Two-Pole Active) filtration system, featuring washable and reusable technology that eliminate the need for disposable filters. This advanced system captures ultrafine particles down to 14.6 nanometers while actively eliminating bacteria and viruses.

Unlike traditional filtration methods, TPA does not simply trap pollutants—it neutralizes them, ensuring cleaner and safer air.



INNOVATIVE TECHNOLOGY

PROVEN PERFORMANCE

HEALTHIER ENVIRONMENTS

GLOBAL PRESENCE

Trusted in Over 96+ Countries

Airdog products are trusted worldwide to deliver clean, safe, and healthy air—supported by a growing global network of partners and users.



96+
Countries & Regions

213
Global Patents

12000+
Hospitals & Clinics in Japan

No.1
User preferred brand in Japan

NORTH AMERICA

- USA
- Canada
- More

EUROPE

- Germany
- Italy
- UK
- More

ASIA PACIFIC

- China
- Japan
- Russia
- More

MIDDLE EAST

- UAE
- Saud Arabia
- More

AWARDS & CERTIFICATIONS

Recognized. Certified. Trusted.

Airdog products and technologies have received numerous international awards and certifications.

International Awards























Globally Certified by World-Renowned Labs





























TPA TECHNOLOGY

The Heart of Airdog Air Purification

Airdog's patented TPA (Two-Pole Active) technology combines ionization and electrostatic technology to capture ultrafine particles down to 14.6 nanometers.

Unlike traditional filtration systems, TPA does more than trap pollutants—it neutralizes harmful contaminants, delivering cleaner, safer air.



Step 5

Catalyst Filter

The final step in the purification process removes unpleasant odors keeping your air fresh and pure.

Step 4

Collecting Plate

Charged particles stick to the collecting plates to remove dangerous toxins from the air.

Step 3

Ionic Field

Annihilates bacteria and germs. Charged particlesare destroyed.

Step 2

Wire Frame

Creates an electrostatic field that captures and neutralizes harmful particles before they can enter the lungs.

Step 1

Pre-Filter Screen

Air flows from the bottom and into the Pre-Filter Screen to collect hair, pet dander, etc.

☑ Proven Performance

99.9% removal of indoor smoke

99.9% removal of flu viruses and bioaerosols

99.9% removal of PM2.5 and ultrafine particles

99.9% reduction of total volatile organic compounds (TVOCs)

Captures Particles Down to 14.6 nm

Inactivates Viruses & Bacteria

No Filter Replacement Required

Eco-Friendly & Energy Saving

Consistent Performance Over Time

Airdog
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IEF IONIC ELECTRONIC FILTER



SMART AIR PURIFICATION, SEAMLESSLY INTEGRATED WITH HVAC SYSTEMS

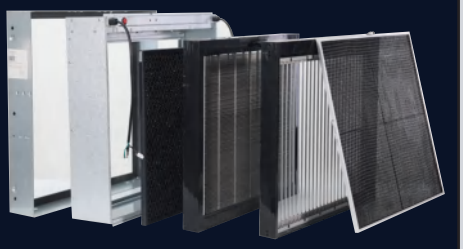
Powered by Airdog TPA® technology, the IEF module delivers high-efficiency, stable, and washable air purification for industrial and commercial HVAC systems.

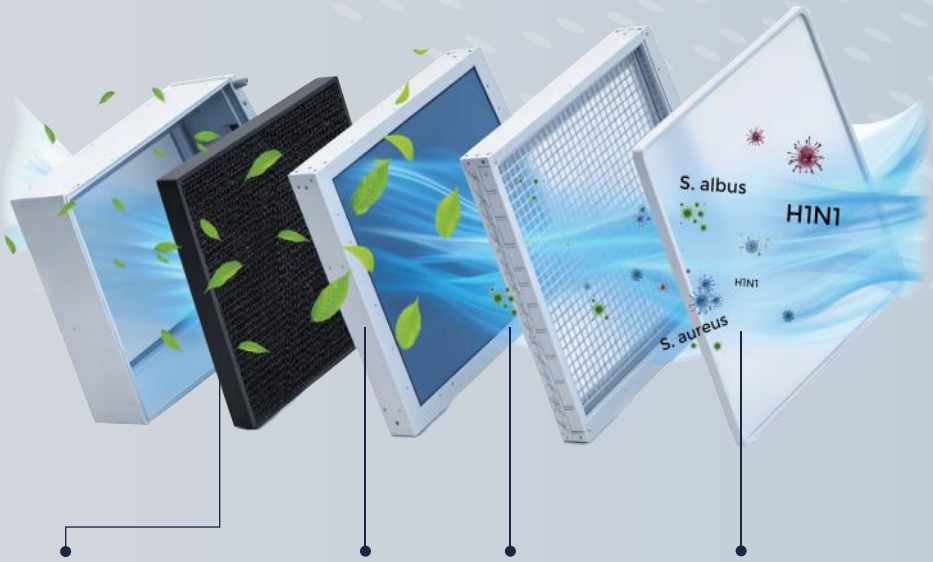
- High Efficiency Filtration
- Washable & Reusable
- Low Resistance Energy Saving
- Humidity Resistant
- Long-term Stability
- Easy Maintenance

HOW IT WORKS

Advanced TPA Technology

The IEF uses a 5-stage ionic and electrostatic filtration process to capture PM2.5, PM10, ultrafine particles, oil mist, bacteria, virus and other airborne contaminants.





4 CATALYST
Harmful gases, odors, & volatile organic compounds (TVOCs) are broken down &neutralized.

3 ELECTROSTATIC COLLECTION
Charged particles are attracted to collecting plates and firmly captured, including particles down to 14.6 nm.

2 IONIZATION
Air passes through a high-voltage ionic field, where ultrafine particles become electrically charged.

1 PRE-FILTRATION
Large particles such as dust, hair, and fibers are captured, protecting the system and improving overall efficiency.

WIDE APPLICATIONS

Ideal for environments where clean air and energy efficiency matter.



Hotel


Office


Shopping Mall


Commercial Building


Hospital


Factory

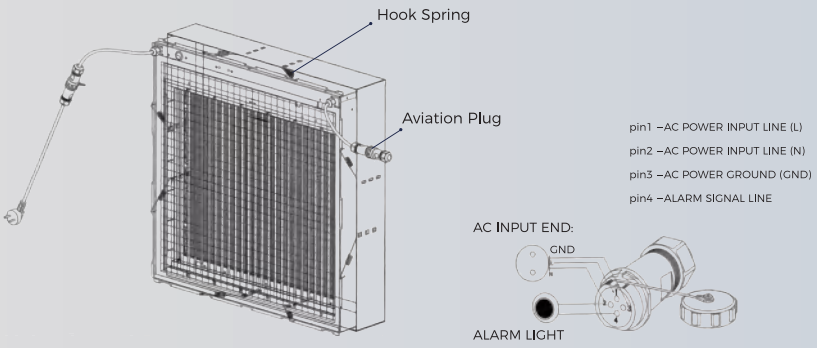
WIDE APPLICATIONS

Choose the right configuration for your airflow and space requirements.

	IEF-3400/ 3400pro	IEF-1700/ 1700pro
		
Rated air volume	3400m³/h	1700m³/h
Rated power	22W	17W
Power Supply	100-220V 50/60Hz	100-220V 50/60Hz
Usage Environment	-10~40°C 0-90%Rh	-10~40°C 0-90%Rh
Device Measurement	610*610*150mm	305*610*150mm
Device Weight	17.3kg/18.8kg	10kg/10.8kg
Cleaning Interval	Suggest cleaning every 6 moths,or more frequently depenaing on usage conditions.	

RELIABLE AVIATION-GRADE CONNECTION

Designed for safe, durable, and easy installation

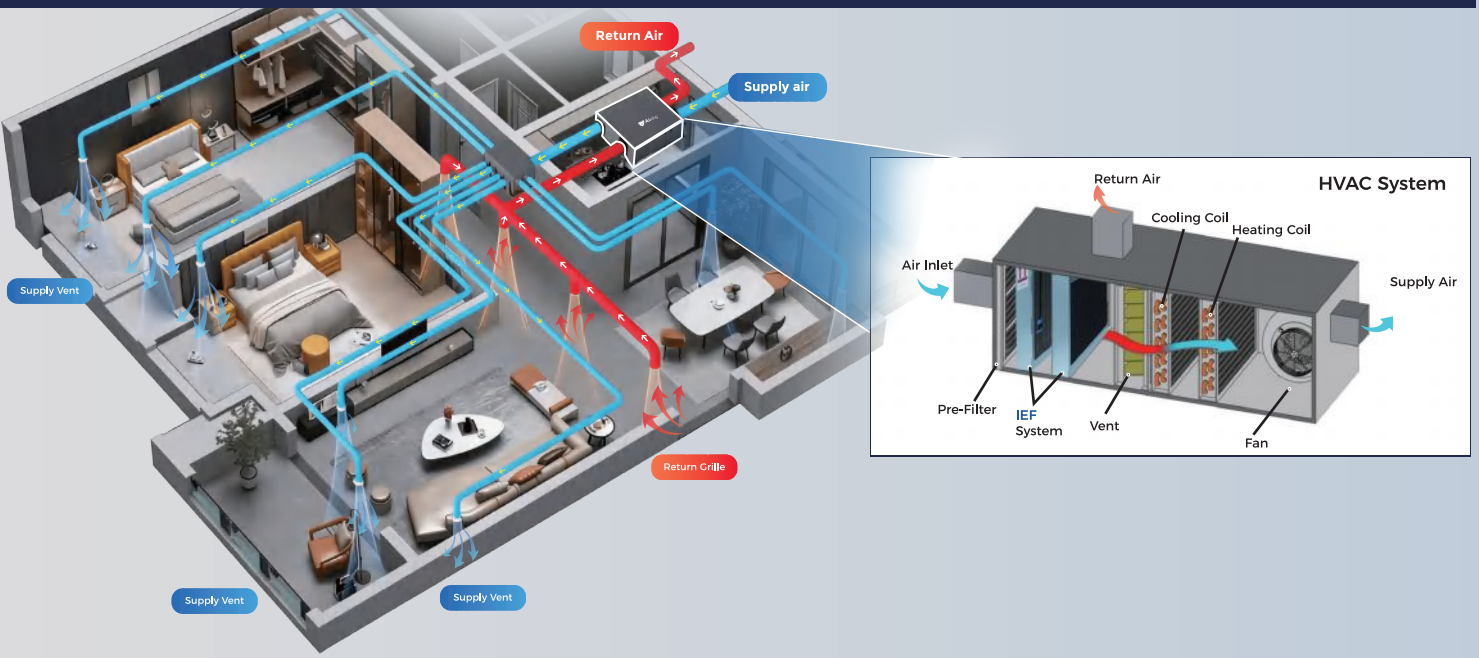


INSTALLATION FLEXIBILITY

- ☑ **Seamless HVAC integration**
  Easy to install in existing duct systems(AHU or inline)
- ☑ **Flexible positioning**
  Suitabe for various duct layouts andenvironments
- ☑ **Plug-and-play connection interface**
  Simplified installation with foolproof deisgn
- ☑ **Built-in alarm signal output**
  Real-time fault indication and system monitoring
- ☑ **Independent module control**
  Each unit operates and can be maintained individually

SEAMLESS HVAC INTEGRATION

IEF modules can be installed in AHU or inline duct systems, working together with other HVAC components.



Airdog
ProClean

Pure Air. Zero Compromises.

Air Purification for High-Critical Environments

Airdog ProClean delivers next-level air purification with TPA technology, capturing particles as small as 14.6 nm and destroying microorganisms and hard-to-contain pathogens.



TPA TECHNOLOGY

Nanometric filtration+ microorganism destruction. Consistent long-term efficiency

INDUSTRIAL PERFORMANCE

Up to 1,500 m^3/h airflow. Built for 24/7 continuous operation.

POWERFUL BUT QUIET

790m^3/h at only 40dBA Power and discretion, all in one.

LOW MAINTENANCE

Washable & reusable filters. No frequent replacements. Lower operating costs.

BUILT FOR PROFESSIONAL ENVIRONMENTS

Constructed entirely in stainless steel and powered by TPA electrostatic filtration,

Pro Clean is engineered for industries where air quality equals safety, productivity, and peace of mind.

TECHNICAL SPECIFICATIONS

Category	Specification
Airflow	1,500 m³/h
One Time Filtration Efficiency	92% – 97%
Suitable Area	105 m²
Noise Level	≤ 63 dB(A)
Rated Voltage	220V – 50/60 Hz
Rated Power	120 W
Filters	Washable TPA Filter
Dimensions (H × L × W)	1.09 m × 0.63 m × 0.41 m
Weight	62 kg
Mobility	Movable with wheels

FLEXIBLE INSTALLATION

Three ways to fit your space.



CEILING-MOUNTED
Frees up workspace.



WALL-MOUNTED
Protects the unit and optimizes airflow.



MOBILE (with wheels)
Perfect for modular or temporary areas.

WHY AIRDOG IEF PRO STANDS OUT

Performance comparison between Airdog TPA and conventional filtration systems.

Function	TPA by Airdog	HEPA Filtration	UVC	Ionization	Photocatalysis	Peroxide	Ozone
Safe to be used in presence of people	✓	✓	? Only if adequately shielded	? American study indicates it is dangerous	? Potential emission of By-products	✗	✗
Speed of 10 litres/sec/person (900 m³/h for 25 people)	✓ Up to approx 1500 m³/h	? Depends on the model	? Depends on the model	? Depends on the model	? Depends on the model	! N/A	! N/A
Double functionality: filtration of particulates & elimination of microorganisms	✓	✗	✗	✗	✗	✗	✗
Can exterminate viruses and bacteria	✓	✗	✓	✓ Yes, but only if sufficient quantity	✓	✓ Yes, but only if sufficient quantity	✓ Yes, but only if sufficient quantity

DESIGNED FOR HIGH-CRITICAL ENVIRONMENTS



FOOD INDUSTRY
Improved hygiene in production & packaging areas



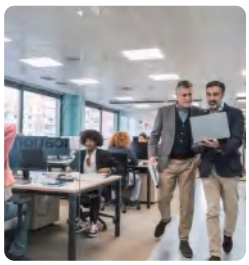
PHARMACEUTICAL
Supports particle & microbial control



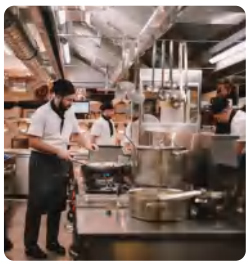
HOSPITALS
Reduces airborne microbial load



SCHOOL
Comfort & protection in high-traffic spaces



OFFICE
Improves microclimate



HORECA
Odor management & improved perceived quality

Airdog
Breathe different

CLEANER AIR.
SAFER OPERATIONS.
LOWER COSTS.

Airdog ProClean technology delivers consistent, long-term performance without the drawbacks of traditional filters

FRESH AIR HUMIDIFICATION & DEHUMIDIFICATION

Three-in-one machine

- Air Purification
- Humidity Control
- Fresh Air Circulation
- De-humidity
- Real-time Data Lifelong Filtration
- Mobile APP
- Space-Saving Design
- 14.6nm-Level Purification

99.9%
PM2.5 removal rate

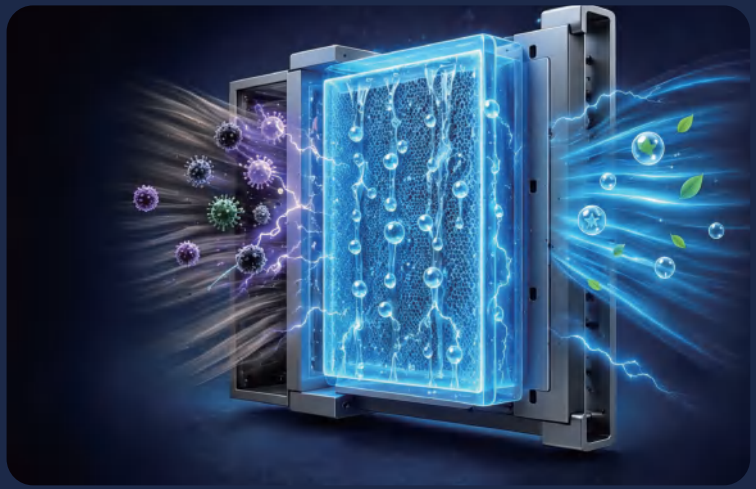
A class
Indoor air freshness

A class TPA + Polar phase sterilization Indoor air freshness



TPA air purification

14.6 nanometer-level air purification, replacing CO_2, odorous gases, & other indoor metabolic pollution with fresh air.



Polar Phase Sterilization Module

The wet film technology is superimposed on the humidification technology of the exclusive sterilization module to achieve faster humidification while ensuring a **99%** sterilization rate and healthy humidification.

Functional Modes | Seamless Switching

Internal air circulation mode. fresh air mode. dehumidification mode. humidification mode. fresh air dehumidification mode.



Internal Circulation

Purify the indoorair



Fresh Air Mode

Bring in fresh outdoor air



Dehumidification Mode

Remove excess moisture



Humidification Mode

Add healthy moisture



Fresh Air Dehumidification Mode

Fresh air dehumidification

O_2 Oxygen Content Management

Quiet Operation

Smart Panel AI-Powered

PRODUCT SPECIFICATIONS >>

Model	VS5OE
Air Circulation (m^3/h)	350
Maximum Fresh Air Volume (m^3/h)	350
Maximum Dehumidification Power (W)	950
Rated Power (W)	150
Noise (dB(A)	48
Dehumidification Capacity (30˚C/80%RH)	50L/D
Humidification Capacity (32˚C/40%RH)	1.5kg/h (Wet membrane humidification)
Measurement (mm)	1180 * 700 * 406
Weight (kg)	98
Static Pressure (Pa)	180



Breathe different

www.airdogint.com