





# Atem X - Big-device performance in a space-saving design.

With its compact dimensions and sophisticated design, one might assume that the Atem X is only capable of purifying small spaces. The truth is, however, that it can purify larger interiors just as well.

The Atem X boasts innovative HyperHEPA® filtration and BionicCore<sup>TM</sup> technology, allowing it to effectively tackle various airborne pollutants, including allergens, viruses, bacteria, mould spores, dust, smoke and ultrafine particles. Its orbital architecture enables the Atem X to clean more air with less noise and less energy consumption in a much smaller form factor than other air purifiers.

Due to its remarkable clean air delivery rate (CADR), the Atem X delivers outstanding purification results even in larger indoor areas. As a result, the Atem X is suitable for a broad range of applications, including open-plan apartments, offices, cleanrooms and critical healthcare applications.



### Residential

- Living rooms
- Bedrooms
- Open-plan apartments
- Lofts with high ceilings
- Designer interiors

### Medical & Healthcare

- Medical practices, clinics and hospitals
- Microbiological and research labs
- Intensive care units
- Organ transplant and oncology wards
- TB wards
- Patient rooms
- Waiting rooms

## Gastronomy, Hospitality & Commerce

- Bars and restaurants
- Hotel lobbies, guest rooms and suites
- Offices and open-plan offices
- Fitness studios
- Wellness and spa centres
- Conference rooms

### **Educational & Institutional**

- Nursing homes
- Archives and libraries
- Kindergartens and preschools
- Schools
- Museums and galleries
- Local government authorities











## "What Works is Beautiful"

"Schön ist, was funktioniert" - Bauhaus Design Principle

Combining effective performance and a stunning appearance in a single air purifier used to be an impossible feat. However, with the Atem X, that conflict has finally been resolved. Maintaining a focus on real-life effectiveness and reliable long-term performance, IQAir's engineers have always ensured that form follows function. This approach has led to the creation of multiple award-winning and highly efficient air purifiers that stood out as exemplary technical appliances. In more recent years, IQAir's team of engineers embraced an entirely new approach with the introduction of the Atem range of personal air purifiers (Atem Desk & Atem Car). This new generation of air cleaner architecture maximises the beneficial aspects of the fan motor's round shape at the core, by arranging all major components harmoniously around the fan, rather than in a sequential manner. We refer to this as the **BionicCore™** architecture.

# BionicCore™ Technology

IQAir's BionicCore technology empowers the Atem X to efficiently purify more air while producing less noise and consuming less energy compared to other air purifiers of its size.

In most air purifiers, the air intake, filters and fan are arranged either horizontally or vertically, resulting in a typical tower or box-shaped design. With **BionicCore**, IQAir has introduced a revolutionary **orbital architecture** that arranges all essential components around the fan. Behind sound-attenuating filters, a powerful fan resides at the core, while 35 aerodynamically optimised airflow fins gently guide the air through the system. The great advantage of this design is an airflow pattern that generates significantly more clean air while operating at much lower sound levels compared to ordinary air purifiers.



# Inertial Impaction — Science, Not Fiction

To prevent premature clogging of the primary high-efficiency filters, the **Atem X utilises the scientific principle of inertial impaction** to intercept coarse dust particles and larger fibres. As particles pass through the air stream, they are forced to make a sharp turn when encountering one of the 195 blades of the three Impaktors. The inertial momentum of large particles prevents them from bypassing the filter, causing them to impact and adhere to the surface of the Impaktor blades.

# HyperHEPA® HF Smart Filter Technology

The Atem X incorporates three separate HyperHEPA® HF filters, meticulously designed to strike the perfect balance between three crucial parameters:

- 1. high filtration efficiency to capture even the tiniest pollutants,
- 2. high airflow to treat a maximum amount of room air and a
- 3. large filter surface area to optimise yield and extend filter life.

IQAir's proprietary **HyperHEPA® HF technology** effectively captures all types of airborne particulate matter (PM), including ultrafine dust, allergens, pollen, mould spores, bacteria and viruses. The 3D multi-layer construction minimises airflow resistance while maintaining exceptional filtration performance.

The HyperHEPA HF filters also feature **smart RFID technology** that notifies the user when it's time to replace the filters, based on sensor-detected pollution levels, airflow speed and usage hours. This ensures optimal performance and longevity.



# FAR Technology — Revolutionary in Every Sense of the Word

The Atem X can be placed virtually anywhere in a room and still deliver outstanding air purification results. This is made possible by **Flexible Air Rotation (FAR) technology**.

The Atem X is suspended from a sturdy aluminium stand, allowing for a free 320° rotation around its central pivot point. This enables effortless single-handed adjustment of the clean air stream to accommodate the room's shape and the positioning of the air purifier. Tip: On a hot summer day, you can even direct the air stream to a specific part of the room for a refreshing cool breeze.



## Advanced Air Quality Sensors

The Atem X is equipped with built-in sensors that continuously monitor essential air quality parameters inside the room, including particulate matter (PM2.5), CO2 levels, temperature and humidity. The colour-coded LEDs of the integrated **Air Quality Indicator** provide instant feedback on air quality.

Furthermore, the Atem X offers intelligent operation that automatically adjusts the fan speed based on the detected air quality, thanks to the integrated particle sensor. You have the option to choose from three smart modes:

- 1. Quiet Mode: Ideal for environments where noise sensitivity is paramount.
- 2. Balanced Mode: Perfect for normal living and working environments.
- 3. Max Mode: Recommended for environments that require the highest

level of air purification.



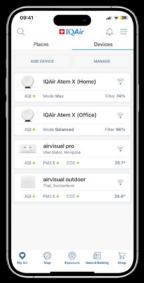




Air Quality Indicator

# Total Control at Your Fingertips

With WiFi compatibility and seamless interaction with IQAir's free AirVisual smartphone app, you can conveniently control your Atem X from anywhere, even when you're away from home. The smartphone interface grants access to a range of features, including 8 fan speeds, 3 smart modes, brightness adjustment of the Air Quality Indicator LEDs and a control panel lock function to prevent unauthorised access. Additionally, you can set up the advanced automatic timer to run the system at your desired fan speed according to your hourly, daily and weekly schedule.



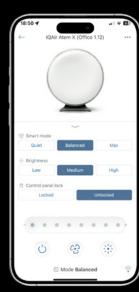
Get an overview of all your AirVisual compatible IQAir devices in one place. The WiFi compatibility enables you to control the air purifier using your smartphone. Through the AirVisual app. you can enjoy the advanced features offered by the Atem X. such as...



...an overview of the current indoor air quality, quick fan speed adjustment,...



...visual representations of hourly, daily and monthly air quality trends and real-time comparisons between indoor and outdoor air quality based on a selected reference station or your own AirVisual Outdoor monitor.



For the utmost convenience, the Atem X allows you to select from three smart modes that automatically adjust the fan speed based on the indoor particle concentrations detected by the PM2.5 sensor.

## Individually Tested & Certified Performance

When it comes to performance testing, IQAir maintains an unwavering commitment. Unlike other manufacturers, IQAir stands alone in individually testing and certifying each Atem X air purifier to verify the removal rate of ultrafine particles at low, medium and high fan speed settings. With the inclusion of a hand-signed Certificate of Performance accompanying each device, users can have absolute confidence that airborne particles will be effectively eliminated according to the specified parameters. This certification serves as the ultimate assurance of the Atem X's performance and quality.

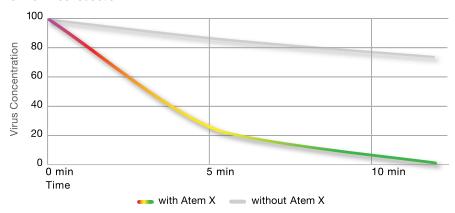


## Scientifically Proven Performance

The Atem X is the result of meticulous design and comprehensive testing, making it one of the most extensively evaluated air purifiers ever introduced. Its exceptional performance and effectiveness against viruses, bacteria, allergens, fungal spores and particulate pollution have been independently tested and certified by accredited laboratories worldwide.

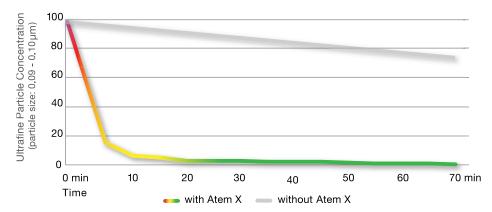
#### Virus Removal

The renowned microbiological test laboratory, *Airmid Health Group Ltd.*, conducted rigorous testing on the Atem X's ability to reduce airborne influenza A (H1N1) viruses. The results of the tests revealed an impressive virus removal rate of 99.9% within a mere 10 minutes.<sup>2</sup> In comparison, other HEPA air purifiers tested by Airmid took 3 to 6 times longer to achieve similar virus reduction.



#### **Ultrafine Particle Removal**

The Atem X underwent testing by CHEARI Certification & Testing Co. Ltd., a government-accredited laboratory. The results confirmed a Clean Air Delivery Rate (CADR) exceeding 800 m³/h and a "P4" rating for Cumulative Clean Mass (CCM), indicating top-level long-term filtration performance. The tests also demonstrated a rapid and effective reduction of ultrafine particles by more than 80% within just 5 minutes.³



Contaminant	Туре	Elimination Rate	Time	Test Report	Test Standard	
Influenza A virus (H1N1)	virus	> 99.90 %	10 minutes 1,2	ASCR092516	EPA/600/R-10/127	
Influenza A virus (H1N1)	virus	> 99.99 %	60 minutes <sup>3</sup>	2021FM18924R01D	T/SAEPI 005-2020	
Human coronavirus (HCoV-229E)	virus	> 99.99 %	60 minutes <sup>3</sup>			
Human enterovirus 71 (EV71)	virus	> 99.99 %	60 minutes <sup>3</sup>			
Escherichia coli (E. coli)	bacteria (gram-negative)	> 99.94 %	60 minutes <sup>3</sup>	2021FM18924R02D	GB 215513.3-2010	
Staphylococcus albus (S. epidermidis)	bacteria (gram-positive)	> 99.92 %	60 minutes <sup>3</sup>			
Aspergillus niger (A. niger)	fungi (mold spore)	> 99.96 %	60 minutes <sup>3</sup>	2021FM18924R02D	GB 215513.3-2010	
Pollen Allergen (Bet v1)	Bet v1	> 97.59 % 4	60 minutes <sup>3</sup>	2022FM07160R01D	T/GIEHA 009-2018	
Ultrafine Particles (0.09 - 0.10 µm)	particulate matter	> 92.05 %	10 minutes 3,5	WCk-22-50287	GBT 18801-2022	
		> 99.47 %	70 minutes 3,5			

<sup>1</sup> see graph "Virus Removal" 2 test performed in a 28.5 m³ test chamber at fan speed 8 3 test performed in a 30 m³ test chamber at fan speed 8 4 the measurable reduction was subject to measuring limitations resulting from low starting concentration 5 see graph "Ultrafine Particle Removal"

Atem X air purifiers are tested and/or certified by world-renowned and accredited test laboratories including the following:











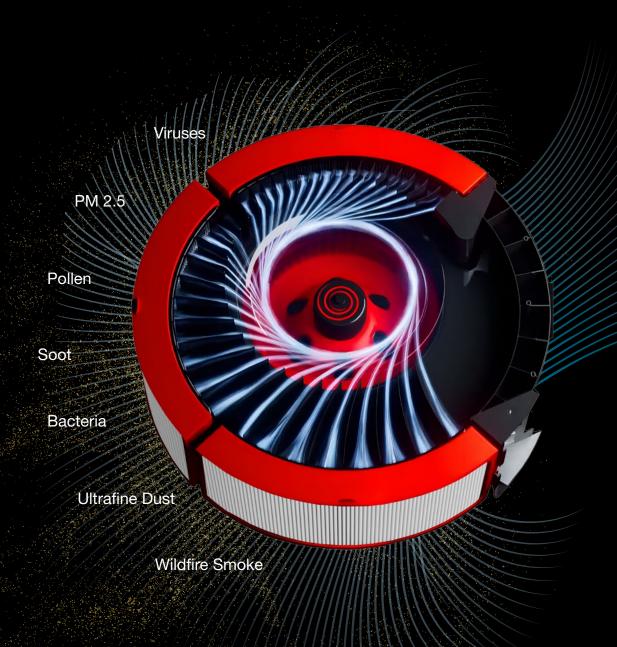






# "Prevention is better than cure" (Dutch philosopher Desiderius Erasmus Roterodamus, 1466-1536)

The wisdom of this saying is universally acknowledged, as improvements in general hygiene have undoubtedly saved millions in treatment expenses and alleviated much suffering. Unfortunately, when it comes to indoor airborne pollution and infection control, prevention is rarely prioritised. The neglect of air quality can be attributed to the fact that contaminated air appears no different from clean air and there is a common assumption that improving indoor air quality is too challenging or expensive. However, in real-world hospital settings, particularly in relation to pulmonary aspergillosis infections, which are notoriously difficult to treat and often fatal, IQAir has debunked these misconceptions.



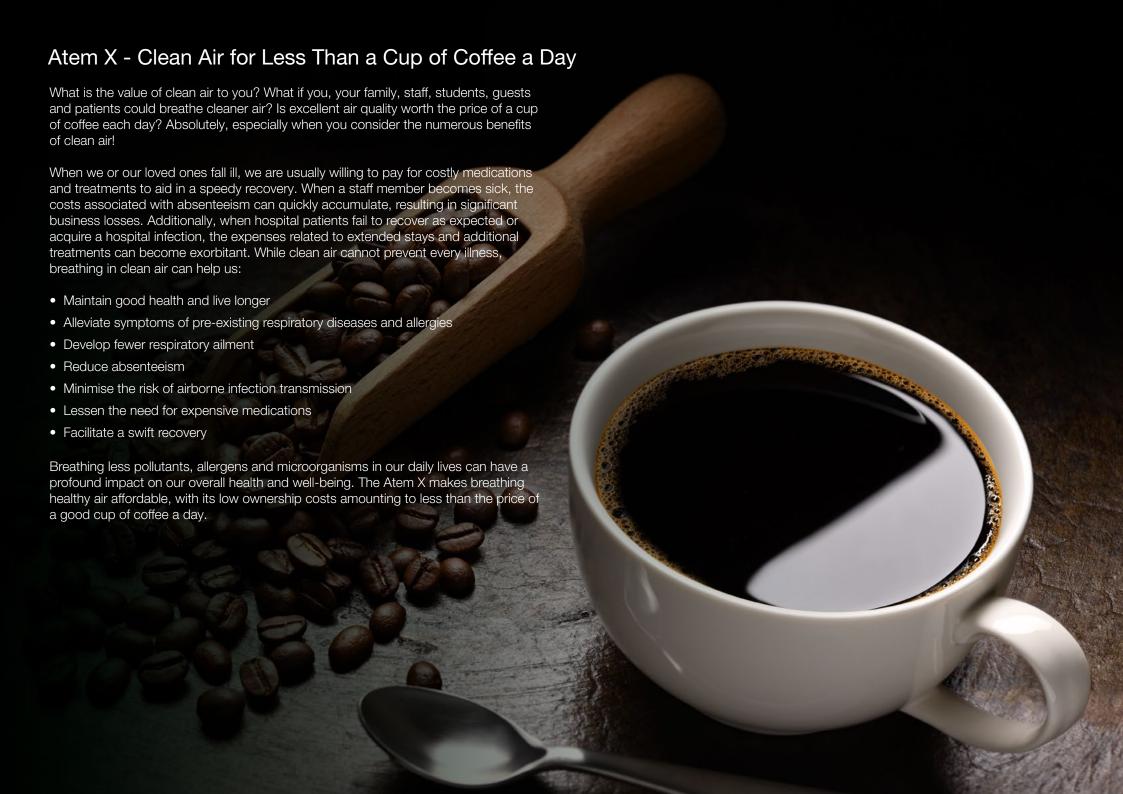
An independent research study conducted at *Singapore General Hospital*, published in the *American Journal of Infection Control*, revealed that IQAir HyperHEPA systems (HealthPro) reduced the incidence of aspergillosis fungal infections by 50%. The scientists concluded that IQAir systems not only serve as effective and powerful tools for airborne infection control, but also enable healthcare institutions to achieve significant cost savings by reducing infection rates. The study stated:

"Compared with patients without IA [invasive aspergillosis], patients with IA have an average excess duration of hospitalization of 12.3 days and an excess cost of \$51,779.

Thus, the deployment of [IQAir] portable HEPA units is a highly costeffective strategy."

Considering the high mortality rates ranging from 30% to 95% and the substantial treatment costs associated with these fungal infections, IQAir systems have the potential to save lives and reduce costs simultaneously.







# World-Leading Solutions for Monitoring and Improving Indoor Air Quality

As most of us spend a significant portion of our lives indoors, the quality of the air we breathe inside has a significant impact on our health. While we have little control over the air we breathe outdoors, we do have the choice to enhance the air quality in many indoor spaces where we spend most of our time. IQAir offers a diverse range of air purifiers and air quality monitors specifically designed to empower individuals to lead a healthier lifestyle in various indoor environments:



#### **Atem Desk**

The Atem Desk is a personal air purifier designed to enhance indoor air quality in your breathing zone and small rooms. It utilises HyperHEPA® technology to effectively remove ultrafine pollutants from the air, including PM2.5, viruses and bacteria.



### AirVisual Pro

This intelligent air quality monitor accurately measures air pollution (PM2.5), CO2 levels, temperature and humidity in homes, offices, schools and more. The data is displayed on the LED screen and can also be accessed by smartphone. When paired with the AirVisual Outdoor monitor, it allows for a comparison of indoor and outdoor air quality.



#### Atem X

The Atem X is a high-performance room air purifier that combines exceptional power and intelligence with remarkable quietness, compactness and energy efficiency. It is suitable for larger indoor spaces up to 150 m², including classrooms, open-plan offices, apartments and hospital wards.



### **AirVisual Outdoor**

This smart air quality monitor provides real-time measurements of outdoor particulate air pollution levels (PM2.5), offering accurate information about the air quality around your home or workplace. The data can be accessed through the AirVisual app and can also be displayed as a reference on a connected AirVisual Pro monitor.



#### Atem Car

The Atem Car is an incredibly powerful, yet quiet and compact car air purifier that effectively controls airborne particulates and also adsorbs and neutralises odours and chemicals.

## 60 Years of Clean Air Heritage

Since its modest beginnings in the early 1960s, the IQAir Group has remained a family-run company. It has evolved from being a pioneering leader in indoor air filtration to becoming a technology leader in the industry. With over six decades of experience, IQAir is widely recognised as a world-leading provider of effective indoor air cleaning solutions.

Unlike most air purifier brands, IQAir exclusively manufactures its air purifiers in Western Europe, adhering to high labour, social security, environmental and safety standards at its state-of-the-art Swiss and German production facilities.

IQAir goes to great lengths to ensure the reliable and superior performance of its products. While many air cleaner brands outsource the manufacturing of filter elements to third-party contractors, IQAir designs and manufactures every single filter element in-house. This approach allows IQAir to maintain total quality control over this crucial aspect of air cleaner performance.



INCEN AG (IQAir International) Staad, Switzerland



IQAir North America, Inc. California USA



IQAir (China) Sales & Service Co.,Ltd. DRC Tower - 13th Floor Beijing, China



IQAir AG Technology Center Steinach, Switzerland



IQAir Germany GmbH Wangen im Allgäu Germany

## World-Leading Solutions for Internationally Acclaimed Clients

In today's world, numerous global corporations, government and healthcare institutions, educational facilities, research laboratories and private individuals across more than 100 countries place their trust in IQAir's expertise and technological solutions for airborne pollution, contamination and infection control.

























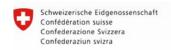
























All trademarks and logos shown are the property of the respective trademark owners and all rights are fully acknowledged. The above listing does not imply or signify any recommendation or endorsement of IQAir or its products by the mentioned companies and organisations, but merely reflects the fact that they have purchased and deployed IQAir products.

# IQAir® Atem® X — Technical Specifications

#### **Performance Overview**

Air delivery rate 1 Filter class Sound pressure 2 Power consumption

Fan speed	1	2	3	4	5	6	7	8
m³/h	100	150	200	300	400	500	650	750
based on EN 1822	H13	H13	E12	E12	E12	E12	E12	E11
dB(A) @ 1 m	15	18	24	33	37	43	48	54
Watt	6	7	9	12	21	34	57	86

### **Clean Air Delivery Rate**

CADR <sup>1</sup> particulate matter  $> 800 \text{ m}^3/\text{h}$ 

#### **Filter Specifications**

Atem X Impaktor Description Triple Impaktor-Technology

Art. No. 275 12 00 03 Purpose Pre-Filtration of coarse dust particles and fibres to extend yield of HEPA filter

> Media/Surface 195 Impaktor collection blades, ABS, washable

Filtration principle Inertial impaction <sup>3</sup>

Atem X HyperHEPA® HF Filter

Art. No. 275 20 10 05

Description Triple HyperHEPA® HF Filter

Purpose Control of particulate matter incl. dust, soot, allergens, pollen, mould spores, bacteria and viruses

Media/Surface Mini-pleated, non-woven, multi-layer synthetic HyperHEPA HF microfiber media; approx. 2.8 m<sup>2</sup>

Diffusion, interception, inertial impaction and electrostatic attraction <sup>3</sup> Filtration principle

#### Scope of Supply

Scope of delivery Atem® X air purification system with fitted stand and power cord, Mobile Base (use optional), Certificate of Performance

Wall Mount Kit (Art. No. 275 20 00 02) Accessories (optional)

#### **General Information**

Power ratings 220-240 V: 50/60 Hz: max. 110 W

Safety, EMC & Radio egpt. certification CE, IEC/IECEE (CB-Scheme), CCC, KC (KMEPS), WPC 100-120V: 50/60 Hz: max 110W

UL, FCC, CSA, IC (ISED), BSMI, NCC, PSE

Energy Star, California Air Resources Board (CARB)

Material / colour Housing: non off-gassing, impact-resistant ABS / white

Stand: die-cast aluminium (powder coated) / dark grey metallic

68.8 x 25.4 x 64.0 cm / 13 kg (incl. stand)

72.5 x 25.4 x 64.0 cm / 13.5 kg (incl. Mobile Base)

Dimensions (HxDxW) / weight



























Swiss Design

Made in Germany



1 including HyperHEPA HF filters; tolerance ±10 % (±10 m<sup>3</sup>/h)

2 EN ISO 60704-1:2010: EN ISO 11201:2010

3 The Atem X deploys mechanical filtration technologies only and does not use potentially harmful technologies, such as UV radiation, ionisation or ozonation.

© 2023 INCEN AG (IQAir Group), Switzerland. All technical specifications are subject to material tolerances and change without prior notice.

