

# Good Health Starts with Clean Air



## (IQAir®Sole Agent)

## **AirTek Limited**

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### **About IOAir®**

#### IQAir<sup>®</sup> Making The World A Better Place To Breathe

Since 1963, IQAir<sup>®</sup> has specialised in dealing with indoor air pollution problems. With years of experience, it is capable of building the best value for money air cleaning systems in the world, providing filtration solutions for even the most challenging indoor situations. All IQAir® systems, manufactured in Switzerland, are products of Swiss precision engineering and superior craftsmanship, ensuring that each system is built to the highest standard.

#### IQAir<sup>®</sup> – Pursuing Air Cleaning Excellence

- IQAir<sup>®</sup> is the world's first air purifying system for the mass.
- Each IQAir® is individually tested before it is launched into the market and supplied with a hand-signed Certificate of Performance.
- IQAir<sup>®</sup> can be equipped with different filters in order to combat specific airborne contaminants or gaseous pollutants. Also, it is supplemented with variable accessories providing flexible installation methods.
- IQAir<sup>®</sup> is installed in more than 80% of hospitals in Hong Kong and highly recommended by medical professionals.

### **Unique Design With An Intelligent Control Panel**

- Unique fan motor design with rubber suspension pads enables non-stop and ultra quiet operation in 24 hours 356 days.
- Patented triple sealing technology 3D UltraSeal<sup>™</sup> ensures perfect sealing and no internal leakage, which maintains high and reliable total system efficiency.

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Intelligent control panel is equipped with filter life span indicator, timer and a selection of languages on display.



- All IQAir<sup>®</sup> air purifiers are entitled to comprehensive maintenance services to guarantee filtration efficiency.
- IQAir<sup>®</sup> maintenance teams are all professionally trained to provide on-site after-sales services.





#### **Serious Air Pollution Problem**

In recent years, air pollution in Hong Kong has worsened causing major public concern. According to the World Health Organization (WHO), the air quality in specific regions in Hong Kong have exceeded far beyond safety standards.

#### Did you know?

- Each breath you inhale is approximately 1 litre of air.
- WHO recommended RSP level is 60,000 particles/litre.\*\*
- Number of particles (≥0.3µm) outdoors in **Canada**: as low as **5,000** particles/litre.
- Number of particles (≥0.3µm) outdoors in **Hong Kong**: more than **1,000,000** particles/litre.

## Can you imagine how many air pollutants we inhale everyday?



Smog damaging Hong Kong



Particle test in **Mongkok** outdoors (Particle Level: 1,414,996 particles/litre; 24 times higher than AQGs).\*\*

\*ParticleScan Advanced Particle Counter uses laser technology to detect  $\ge 0.3 \mu m$  airborne particles. \*\*World Health Organization (WHO) Air Quality Guidelines (AQGs) suggests recommended RSP level as ≤20µg/m<sup>3</sup>, approximate to 60,000 particles/ litre of air.



Factories and power plants in China (Pearl River Delta)



Particle test in Canada outdoors (Particle Level: 4,604 particles/litre).







Air Pollutants				
Types	Source	Potential Health Problems		
Particulate Pollutants	Bacteria and Viruses	Infections and diseases		
	Mould Spores			
	Fine Dust	Allergic reactions		
	Pollen			
	Dust Mites and their excrements			
	Smoke	Irritates eyes, nose, throat and lung Causes respiratory problems		
Gaseous Contaminants         Image: State of the sta	Volatile Organic Compounds (VOCs)	Irritates eyes, nose, throat and lung Increases the risk of cancer		
	Formaldehyde (HCHO)	Long exposure to high concentration can be fatal		
	Ozone (O3)	Irritates eyes and lung High concentration leads to respiratory and lung problems Long exposure to high concentration can be fatal		
	Carbon Monoxide (CO)	Causes cardiovascular diseases Fatigue, Nausea, Rapid breathing Impairs judgement Long exposure to high concentration can be fatal		
	Carbon Dioxide (CO2)	Fatigue Concentration problems Reduces judgement Burdens the heart's workload Fosters bacteria and viruses		
	Nitrogen Dioxide (NO2)	Irritates eyes and lung Causes respiratory problems		



Particle level in a smoking area: More than 1,600,000 particles/litre. (I.e. 27 times higher than AQG.s).\*



Particle level in **Central**: More than 900,000 particles/litre. (l.e. 15 times higher than AQGs).\*



Particle level in the lift lobby of an industrial building: More than 1,900,000 particles/litre. (I.e. 32 times higher than AQGs).\*

\*World Health Organization (WHO) Air Quality Guidelines (AQGs) suggests recommended RSP level as ≦20µg/ m<sup>3</sup>, approximate to 60,000 particles/ litre of air.



## Enjoy the benefits of clean air anywhere indoors....





The world's first particle-free air purifier.



### **Different Types of Air Purifiers**

Types of Air Purifiers	Features	Disadvantages
lonization / lonizers (positive & negative ions)	<ul> <li>Temporarily reduces airborne particles like bacteria and viruses.</li> <li>Low end air purifying technology.</li> </ul>	<ul> <li>Particles are not actually removed, but adhere to different surfaces.</li> <li>Particles may even adhere to users' face or other parts of their body.</li> <li>As the particles lose their charges over time, they will become airborne again.</li> <li>Does not remove gases and odours.</li> <li>Creates ozone as a by-product.</li> </ul>
UV Light	<ul><li>Kill bacteria and viruses to a certain extent.</li><li>Low end air purifying technology.</li></ul>	<ul> <li>Particles are not actually removed.</li> <li>Does not remove gases and odours.</li> <li>Does not kill microorganisms that pass through the UV light at high speeds.</li> </ul>
Photocatalytic Oxidation (PCO, TiO <sub>2</sub> )	<ul> <li>Kill bacteria and viruses to a certain extent.</li> <li>Eliminates partial VOCs.</li> <li>Dissolves partial odours.</li> </ul>	<ul> <li>Particles are not actually removed.</li> <li>Possible harmful by-products are generated.</li> <li>Does not kill microorganisms that pass through the PCO light at high speeds.</li> </ul>
Ozone (O <sub>3</sub> )	<ul> <li>Kills bacteria and viruses to a certain extent.</li> <li>Eliminates partial VOCs.</li> <li>Dissolves partial odours.</li> </ul>	<ul> <li>Particles are not actually removed.</li> <li>No independent evidence to support claims that low ozone concentrations can exterminate microorganisms.</li> <li>Excess ozone is harmful to health and can significantly increase incidences of lung disease.</li> </ul>
Electronic Air Cleaner (Electrostatic Precipitator EP)	<ul> <li>Uses high voltage to charge dust particles and bind them to corresponding collecting electrodes.</li> <li>No filtering system necessary, thus reducing airflow resistance.</li> </ul>	<ul> <li>Creates ozone as a by-product.</li> <li>Does not remove gases and odours.</li> <li>Risk of fire incidences.</li> </ul>
Activated carbon	The safest and most popular technology to handle gaseous pollutants.	<ul> <li>More activated carbon is required to tackle extremely high chemical levels.</li> <li>Require special storage to prevent declines in efficiency.</li> </ul>
Common HEPA filter	<ul> <li>The filtering media consists of glass fibres, which can filtrate particles effectively.</li> <li>No harmful gases or chemicals are produced.</li> <li>The safest and most popular technology to filtrate fine particles.</li> </ul>	<ul> <li>With increased airflow resistance, a powerful motor is required.</li> <li>To fit the size of a HEPA filter, air purifier housings have to be enlarged.</li> <li>Bacteria and viruses accumulate in the gaps between HEPA filter and the housing, as well as at the bottom of the filter. These pollutant sources can become hazardous and re-circulate indoors.</li> <li>Pollutants may continue to spread indoors if the filter replacement is not performed under safety precautions.</li> <li>Cannot remove gaseous type contaminants.</li> </ul>

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#### IQAir<sup>®</sup>'s HyperHEPA<sup>®</sup> Technology

An accredited test laboratory, Interbasic Resources Inc., purchased a number of indoor air purifiers to test their filtration efficiencies. Results show that only IQAir® air purifiers were able to trap over 99% of virtually all types of particle pollutions. Based on independent laboratory tests, the graph below demonstrates the removal efficiency of HyperHEPA® filters for various particle sizes. The tests show that the IQAir<sup>®</sup>'s HyperHEPA<sup>®</sup> filter is the most efficient and reliable filter media, guaranteeing powerful and stable long-term performance. Even the World Health Organisation (WHO) and the Centre of Controlled Diseases in the US (CDC) state that HyperHEPA® filter can absolutely filtrate fine dust, bacteria and viruses. In fact, after the outbreak of SARS in 2003, IQAir® was adopted in more than 80% of hospitals in Hong Kong, so as to safeguard the health of medical staff and patients.



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Cat Mould Pollen Allergens Spores 100 >99 99 93 98.3 98 89 97 81 78 96 95.5 95 94 93 92 91 90 0.03-3.0 3.0-5.0 >5 microns\* microns\* microns\* Electrostatic Precipitator with fan Electrostatic Precipitator

without fan







## IQAir<sup>®</sup> comes with different kinds of installations to fit the needs of clients.

AMERICAN LUNG ASSOCIATION. INDOOR AIR QUALITY EDUCATION PARTNER

#### American Lung Association Partnership

IQAir<sup>®</sup> is globally recognised as the No.1 air filtering product:

Since 2004, this exclusive partnership has combined the American Lung Association's over 100 years commitment to preventing lung disease and promoting lung health with IQAir®'s over 40 years commitment to air cleaning excellence.



#### Stiftung Warentest "Test Winner" in Test 9/98

Stiftung Waretest in Germany tested 10 brands of air filter, and only IQAir® was commented to have the best filtration efficiency of airborne particles.



#### **IAACM Ozone-Free Certified**

IQAir® air purifying system is certified by the IAACM (International Association of Air Cleaner Manufacturers) to produce absolutely no ozone.



### Parent Tested, Parent Approved (PTPA) Winner

IQAir® HealthPro® series has earned the highest marks for effectiveness, customer satisfaction and overall cost of ownership. Winners are chosen by an expert panel of parents that conduct exhaustive evaluation after using the products in a real-world setting.



#### **Consumer Digest's "Best Buy" Award**

Founded in 1960, Consumer Digest in the U.S. awarded IQAir® air purifying system with the "Best Buy" awards in 2004, 2007, 2011 and 2014 respectively.



#### Reviewboard.com "Best Buy" Award

Reviewboard.com of the U.K. recognised IQAir® as the "Best Buy" air purifier, in recognition of the unique advantages of each system.



#### **Allergy Buyers Club**

The U.S. Allergy Buyers Club award the IQAir® HealthPro® series with the title Category Winner for air purifiers and as the best choice for anyone with serious allergies or asthma.



#### **Discovery Health**

When the U.S. Discovery Health TV series set out to examine the world of air cleaning, they found the IQAir<sup>®</sup> to be the only air purifier to produce a "0" (zero) reading on a particle scan test. Their sensitive testing equipment could find no particles escaping the unit's powerful HyperHEPA® filtration.

#### Newsweek Magazine on IQAir<sup>®</sup>



"We tested an IQAir® air purifier in a basement that had been collecting dust for 20 years, and after two days, that musty smell was gone." The magazine commented IQAir® as being "designed for even larger areas, like the single floor of a house."

#### Cigar Aficionado Magazine on IQAir®



"We tested an IQAir® GC MultiGas™ air purifier in a less-than-laboratory, but smokier-than -average conditions in the Cigar Aficionado offices, and found it performed admirably under the strain. The unit quickly cleared smoke out of a small office and soon after the traces of cigar were unnoticeable."



**Mobile Direct Source Filtration** 



#### **Creating Negative Pressure and Positive Pressure Rooms**



#### **Vertical Mount Source Filtration**











 $\star$ Fair  $\star \star$ Satisfactory  $\star \star \star$ Good  $\star \star \star \star$ Very Good  $\star \star \star \star$ Excellent







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400	540	
38 x 41	101 x 38 x 41	
20	28	



**NE: New Edition**