



## BROAD AIR PURIFIER

90% PM2.5 Filtration Efficiency





# THE HARM OF AIR POLLUTION IS EQUIVALENT TO DAILY CRASHES OF TEN BOEING 747 JETS

*The Assessment of Global Disease Burden in 2010*, released by Aaron Cohen at the Seminar of Air Pollution and Health Effect on March 31<sup>st</sup>, 2013, was co-finished by 488 scientists in 303 institutions from 50 countries around the world. The report reads:

Outdoor air pollution in China leads to the early deaths of 1,234,000 people in 2010.

It is horribly equivalent to the harm of daily crashes of ten Boeing 747 jets.

Perhaps, we can not control the outdoor air pollution now. Yet, can we do something with indoor air?

BROAD air quality products have offered you a solution.







# ABCs OF AIR POLLUTION

## A. What is PM2.5?

PM2.5 refers to particles less than and equal to 2.5 microns in diameter (Micron is one thousandth of millimeter). It's smaller in size than human cells so that it can pass directly through the alveolus of lungs into the bloodstream. For particles, the smaller, the more harmful. Some select masks as a necessity in smog days, but this is a mistake. The masks which can really block PM2.5 are barely breathable.

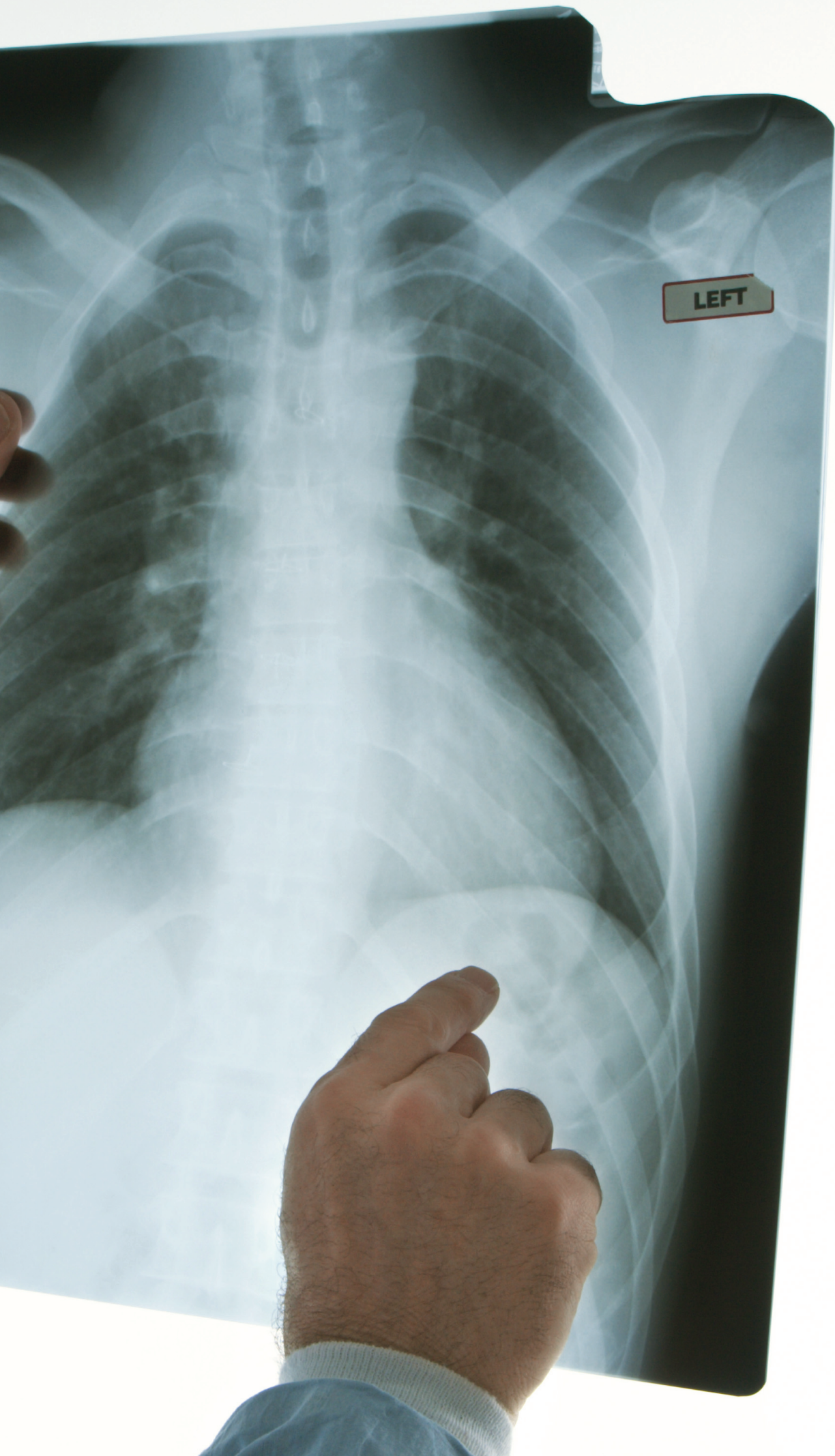
## B. Is indoor air cleaner than that outdoors?

The media usually advise the public not to go out in smog days. But in fact, it doesn't work even staying indoors. The drifting semidiameter of PM2.5 is generally over 100kms, which means the air pollution is the same everywhere in a city. The only difference is that indoor air is much dirtier than outdoor air. The World Health Organization has confirmed that indoor air pollution is five times worse than that outdoors.

## C. What are air pollution dangers?

1. Physical Hazard: airborne particulate matter, particularly the heavy metals that come from power plants, factories and vehicle emissions are the main cause of lung, liver, kidney and lymphoma cancers.
2. Chemical Hazard: airborne formaldehyde and benzene (from the paint and adhesives in decorations and furniture) are the main causes of nasopharyngeal carcinoma, colon cancer and brain tumors, as well as fetal malformation.
3. Biohazard: airborne bacteria and virus are the main causes of colds and flus (like H1N1, SARS and avian influenza), especially in smog days when bacteria can live longer and spread more widely through dust.
4. Anoxic Hazard: living in long-term anaerobic environment might lower blood circulation and harm human organs, especially to children.









## CLEAN AIR KEEPS POLLUTION FAR AWAY FROM OUR FAMILY

Coughs, colds and flus will become fewer.

Rhinitis, laryngitis, asthma and pneumonia cannot be contacted easily.

The percentage of cancers, diabetes and other critical diseases will be reduced drastically.







# PRODUCT FUNCTION

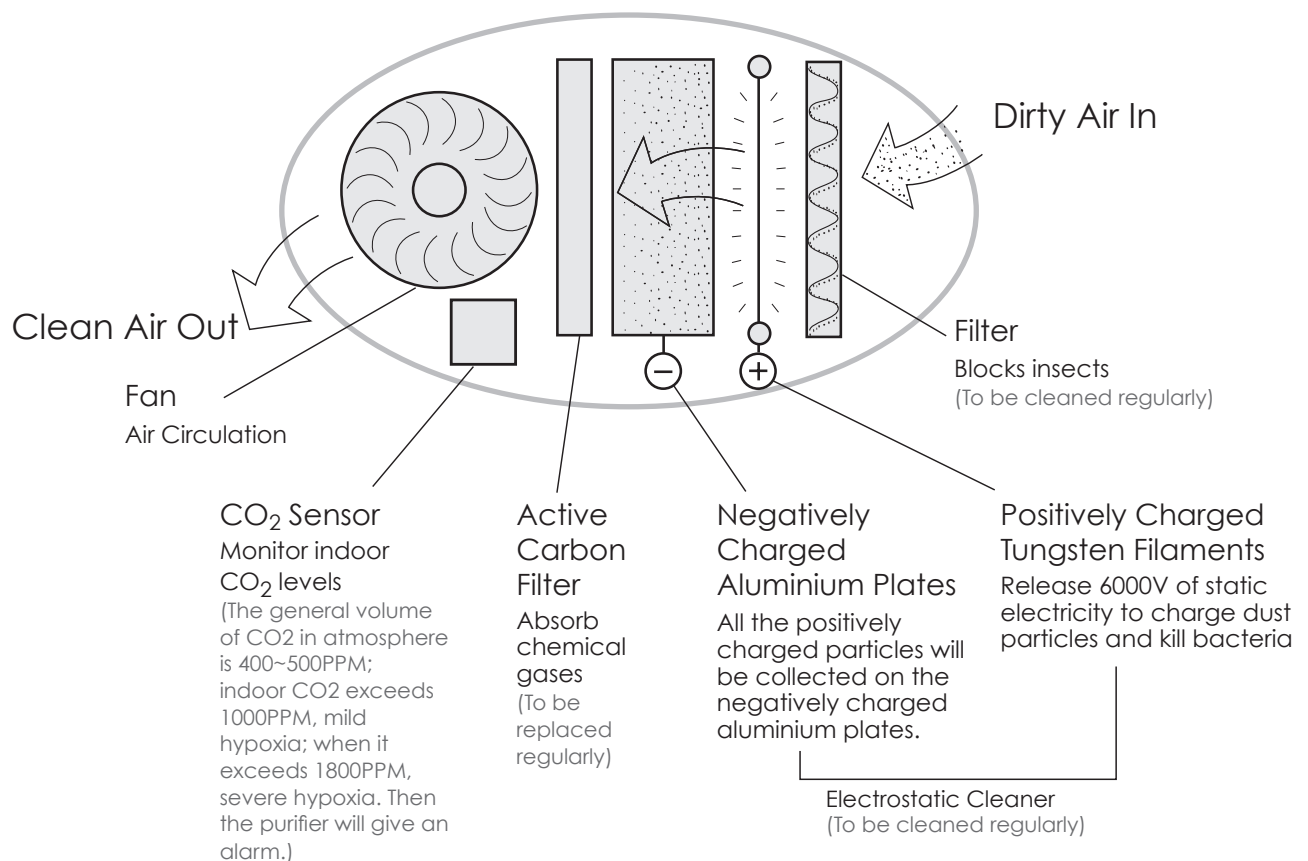
BROAD Air Purifier is the only product with four functions in the world — **Electrostatic Dust Cleaning, Electrostatic Bacteria Killing, Active Carbon Detoxification** and **Carbon Dioxide Monitoring** (BROAD patented).

**Electrostatic Dust Cleaning:** Tungsten filaments constantly release high voltage static electricity that charges all dust particles with positive charge, which will then be absorbed by negatively charged aluminum plates. The merit of electrostatic cleaner is to filter infinite micro dust. Its PM2.5 filter efficiency is up to 90%.

**Electrostatic Bacteria Killing:** Tungsten filaments release about 6000V static electric charge, killing bacteria and virus instantaneously, preventing the spreading of various airborne diseases.

**Active Carbon Detoxification:** The active carbon sheet absorbs formaldehyde, benzene, nicotine and many other types of VOC.

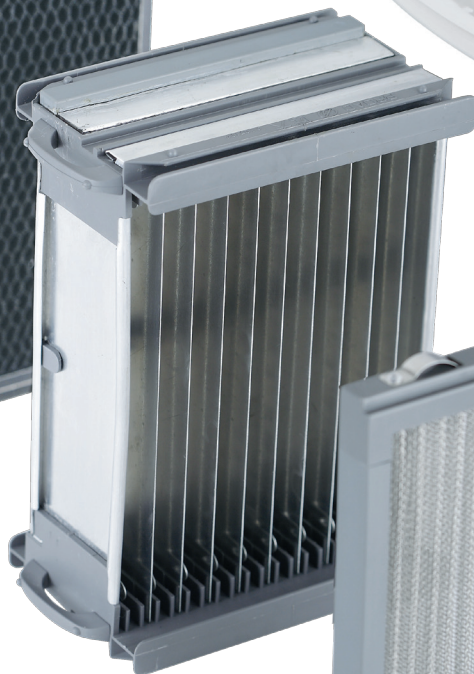
**Carbon Dioxide Monitoring:** The CO<sub>2</sub> sensor monitors the indoor CO<sub>2</sub> concentration level to inform customers indoor oxygen deficiency.







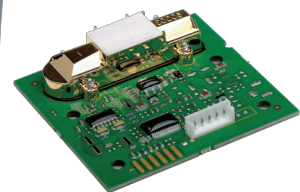
Active Carbon Filter



Electrostatic Cleaner



Filter



CO<sub>2</sub> Sensor



# USE & WASHING TIPS

Just plug in the power BROAD air purifier can start to work, it's very simple. It's appropriate for the machine to work all the year around because it has very low power consumption (more detailed information can be seen on the product parameter). It can be turned off when you are on business travel.

To keep the best purification, the electrostatic cleaner needs to be washed when it's full of dust (thickness about 1.5mm). The washing is very simple, and it only takes several minutes to wash by using ultrasonic cleaner or detergents (After washing, the cleaner must be dried).

Active carbon is a consumable material (to be replaced every 1-2 month), which has a competitive price and can be available life-long.

You can also entrust BROAD service department with the service work.

You will have mixed feelings when you set your eyes on the ink-like waste water after washing. How dirty the air is and how lucky our family is.



## PM2.5 TESTING TIPS

1. Use cardboard or plastic sheet shelters the large part of air outlet to make sure that the unfiltered air doesn't leak into the air outlet.
2. Make sure the detecting entrance aims at the air outlet precisely for detecting, then you can get the air data after purification (use BROAD Life Phone or other dust detector instruments).
3. Put the detector in front of the air inlet to get the unpurified air data (purification efficiency=(data before purification-data after purification)/data before purification)
4. Normal filtration rate for RM2.5 is  $\geq 90\%$ , otherwise the cleaner needs to be washed.

## ABOUT OZONE

1. Electrostatic cleaner will release trace amount of ozone which can kill bacteria and make the air fresher. When sunlight is absorbed by plant for photosynthesis, it will produce ozone as well. People could smell a scent of ozone from bed sheets and clothes in the sun, which is so-called sun smell.
2. Ozone is made up of three oxygen molecule, which cannot stay in human body so that no long term hazards can exist. If the air cannot flow from indoors to outdoors, the smell of ozone will be enhanced. Under such a circumstance, we should open the window.
3. According to the international regulation, consistence of ozone less than 0.05PPM is normal.

## ABOUT CRACKLING SOUND

1. There will be cracks and sparkles when bigger dust or mosquitoes enter the electrostatic cleaner, but it is harmless to human body and won't get an electric shock since the current is less than 1ma.
2. The frequency of cracks might warn us the cleaner is full of dust and needs to be cleaned.





Take out the electrostatic cleaner



Use ultrasonic cleaning apparatus  
(can be provided by BROAD)



or detergent (commercially available, can also buy from BROAD) to wash it



# HOME USE SERIES

BROAD Home Use Series Air Purifiers adopt minimalist design with compact shape and little operating noise. They strive to meet the air purification needs of any size living space and can be integrated into a variety of interior design styles.

Every type of air purifier can be carried home from store by hand. Once home, plug and play. Purchase and installation are a piece of cake.

## Notes:

1. The prices are valid till Dec.31, 2014.
2. Warranty: 2 years from the purchase.
3. The applicable area depends on the contamination degree and the situation that if windows are open.
4. As the electrostatic cleaner uses static electricity with nearly no filtration resistance, it costs a little consumption of electricity of 0.05~0.06W/m<sup>3</sup>. It works continuously 24 hours unless no one is at home.



Model		TB400	TB240	TB100	TA400	TA240	TA100
Price (ex-works)	USD	950	700	550	870	650	500
Area Coverage	m <sup>2</sup>	15~30	10~20	6~12	15~30	10~20	6~12
Air Flow	m <sup>3</sup> /h	400	240	100	400	240	100
Power Consumption	W	16~29	12~21	9~14	18~33	13~24	9~14





A SLIGHT TOUCH KEEPS YOU & YOUR FAMILY FAR AWAY FROM AIR POLLUTION.



BREATHING CLEAR AIR EVERYDAY,  
PHYSIOLOGICAL FUNCTIONS GET ENHANCED.  
PURE BLOOD FLOWS THROUGH THE BODY,  
MAKING OUR LIFE MORE COLORFUL.







NO NEED TO TRAVEL,  
CLEAN AIR CAN BE ENJOYED AT HOME.





# LARGE SERIES

BROAD Large Series Air Purifiers with high air volume and wide coverage are applied to larger space. TA1000 and TA2000 can be used for a large house.

## Notes:

1. The prices are valid till Dec.31, 2014.
2. Warranty: 2 years from the purchase.
3. The applicable area depends on the contamination degree and the situation that if windows are open.
4. As the electrostatic cleaner uses static electricity with nearly no filtration resistance, it costs a little consumption of electricity of 0.07~0.14W/m<sup>3</sup>. It works continuously 24 hours unless no one is at home.



Model		TC5000	TA2000	TA1000
Price (ex-works)	USD	5850	210	1300
Area Coverage	m <sup>2</sup>	110~220	40~80	25~50
Air Flow	m <sup>3</sup> /h	5000	2000	1000
Power Consumption	W	82~260	38~100	28~62





BREATHING CLEAN AIR  
CLEAR YOUR MIND  
SHARPEN YOUR THINKING  
FRESHEN YOUR SPIRIT









CONCERNING LIFE  
FROM THE FIRST BREATH.





BROAD Air Purifiers have obtained quality and safety certifications from CE and ETL.



BROAD AIR QUALITY TECH  
远大空品科技有限公司

BROAD Town, Changsha, PRC

TEL +86-731-8408 6688

FAX +86-731-8461 0087

Zip 410138

www.broad.com

Broad Air Purifier

Web [www.broadair.net](http://www.broadair.net)

Purchase Hotline 400-677-6666

Fax +86-731-84086387

Service Hotline 400-883-9333



Paper 100g

2013.09 Version 5 Copies:10,000

BY163 - 09 © 2009