

The effects of nanoe™ have been proven through experiment tests conducted by various universities or laboratories

Panasonic
Homes & Living



- *1 Test Laboratory : Daido University·Test Subject : Pet Odor·Test Methodology : Exposed to charge water particles for 1 week in pet shop·Test Result : 85.6% is deodorized for airborne odor and 74.3% is inhibited for adhering odor
- *2 Test Laboratory : Wuhan University·Test Subject : Influenza virus H1N1, H3N2·Test Methodology : Exposed to charge water particles for 12 hours in 30cu.m. space·Test Result : 99% is inhibited
- *3 Test Laboratory : Japan Food Research Laboratory·Test Subject : Enterohemorrhagic Escherichia coli (O157:H7)·Test Methodology : expose for 1 hour in 45L test box·Test Result : 99.9% is inhibited·Report No.: 208120880-001
Test Subject : Methicillin-resistant Staphylococcus aureus (MRSA)·Test Methodology : expose for 1 hour in 45L test box·Test Result : 99.9% is inhibited·Report No.: 208120880-002
- *4 Test Laboratory : Kitasato Research Center of Environmental Sciences·Test Subject : Influenza virus (H1N1 subtype)·Test Methodology : Exposed to charge water particles in 1cu.m. test space for 2 hours by TCID50 (50% tissue culture infectious dose)·Test Result : 99.9% is inhibited·Report No.: 21_0084_1
Test Subject : Staphylococcus aureus bacterium·Test Methodology : Exposed to charge water particles in 10 cu.m. test space for 4 hours·Test Result : 99% is inhibited·Report No.: 21_0142
- *5 Test Laboratory : Institute of Tokyo Environmental Allergy (ITEA)·Test Subject : Can f 1 (allergy derived from dogs)·Test Methodology : Exposed to charge water particles in 45L test box by ELISA method·Test Result : 99% is inhibited after 1 hour·Report No.: I1M-RPTAPR047_1
Test Subject : Fel d 1 (allergy derived from cats)·Test Methodology : Exposed to charge water particles in 45L test box by ELISA method·Test Result : 98% is inhibited after 2 hour·Report No.: I1M-RPTAPR051_1

Disclaimer

1. Please note that products incorporating nanoe™ technology are not to be used for medical treatment.
2. nanoe™ is not intended to prevent infectious disease.
The technology has been found to be effective in suppressing a number and variety of harmful airborne and adhering substances, including viruses (e.g. H1N1), bacteria (e.g. E.coli), mold fungi and allergens.
For further information and details on test items and conditions please visit Panasonic HP as follows:
<http://www.panasonic.com/global/corporate/technology-design/technology/nanoe.html>
However, nanoe™ does not create an aseptic environment, nor does it guarantee prevention of infection.
3. The information provided herewith is true and accurate as of time of publication. The manufacture, sale and specifications of products may be subject to change.
4. Data supplied regarding the effectiveness of nanoe™ have been obtained through experiments under special conditions using devices which generate electrostatic atomized water, and have not been tested through commercial products with the devices incorporated in them.
5. The actual effects may vary depending upon the specific condition of the room, etc.

Quality Air
For those you love



F-VK655



- Specifications are subject to change without prior notice
- Actual colors may vary slightly from shown.

CATALOG NO: P-AP001H1

Printed in UAE

Panasonic

NEED ADDRESS PANEL



PANASONIC IAQ (INDOOR AIR QUALITY) CONCEPT

Air
18 kg / person-day
15 m³ (Diameter) : Sphere of about 3 m)^{*1}

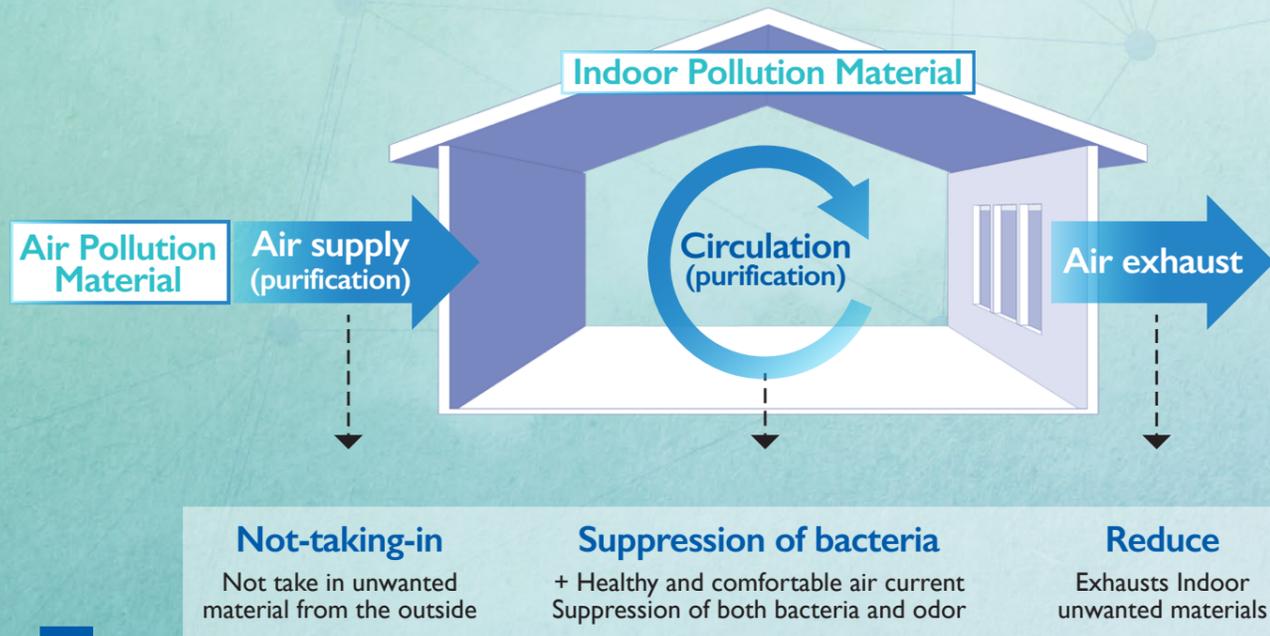
Water 1.2kg/person-day (1.2L)^{*2}

Food Food: 1.3kg/person-day^{*3}

^{*1} "Air and human - from a physiological view point-" 1999 by UCHIYAMA Iwao (The Institute of Public Health of Japan).

^{*2} "Heat stroke environmental health manual (2009)" from Department of Environment of Japan.

^{*3} "Basic data sheet of agriculture forestry and fisheries, Statistics regarding the food self-sufficiency rate" from Ministry of Agriculture, Forestry and Fisheries of Japan.

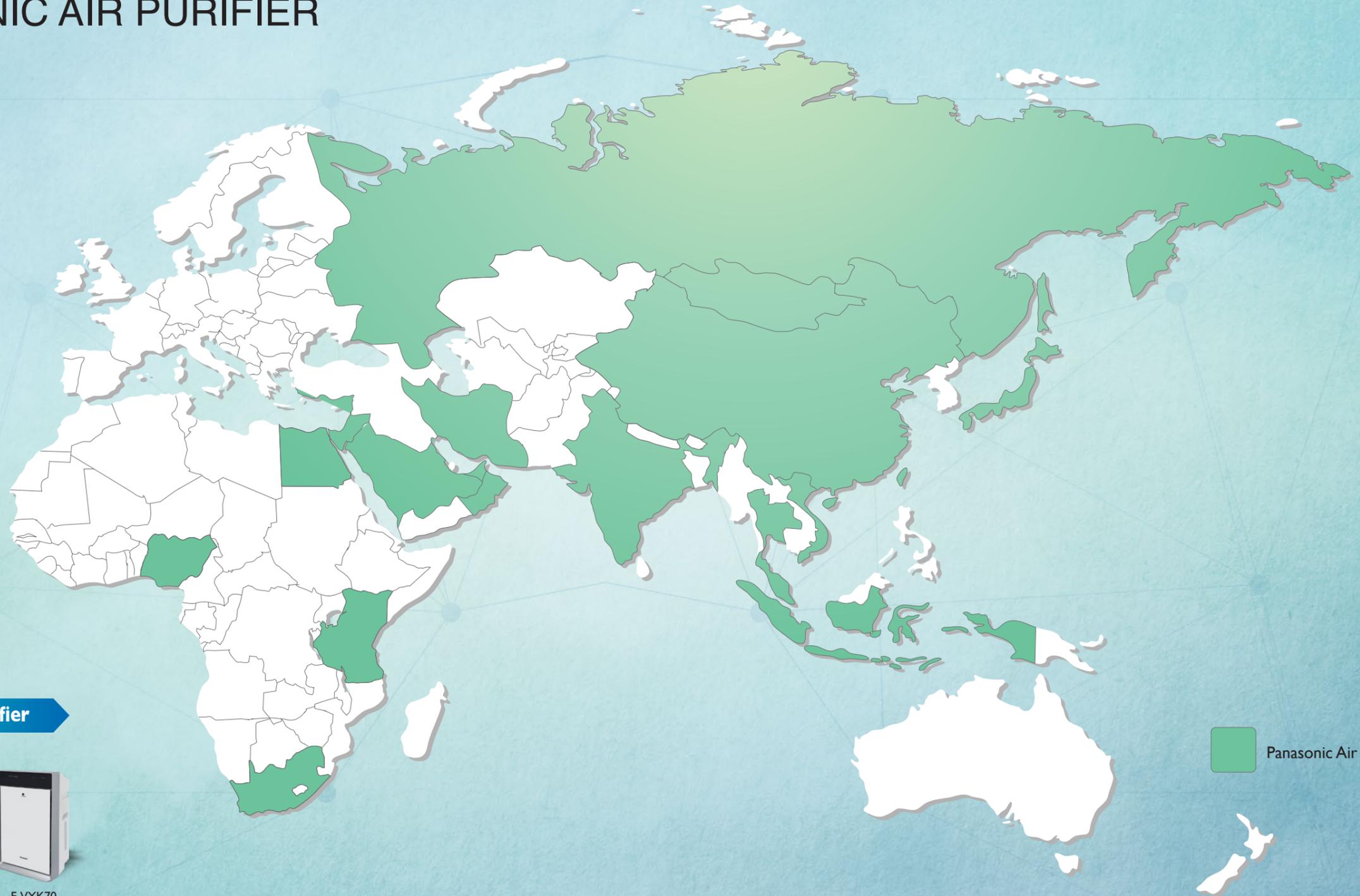


PANASONIC AIR PURIFIER CONCEPT

Keeps out particulate matters and allergens from you and children with advance features

*1 Not available for F-VXM35

MARKET MAP AND PRODUCT LINEUP OF PANASONIC AIR PURIFIER



■ Panasonic Air Purifier Market

Humidifying Air Purifier



F-VXL95M
Middle East

F-VXK90
Middle East
CIS

F-VXK70
Asia
Middle East
CIS



F-VXR50M
Asia
Middle East
CIS

F-VXH50
Asia
Middle East
CIS

F-VK655
Asia
Middle East
CIS

F-VXL40
Asia
Middle East
CIS

F-VXM35
Asia
Middle East
CIS

F-VXF35
Asia
Middle East
CIS

F-VDM35
Asia

Standard Air Purifier



F-PXM55
Asia
Middle East

F-PXL45
Asia
Middle East

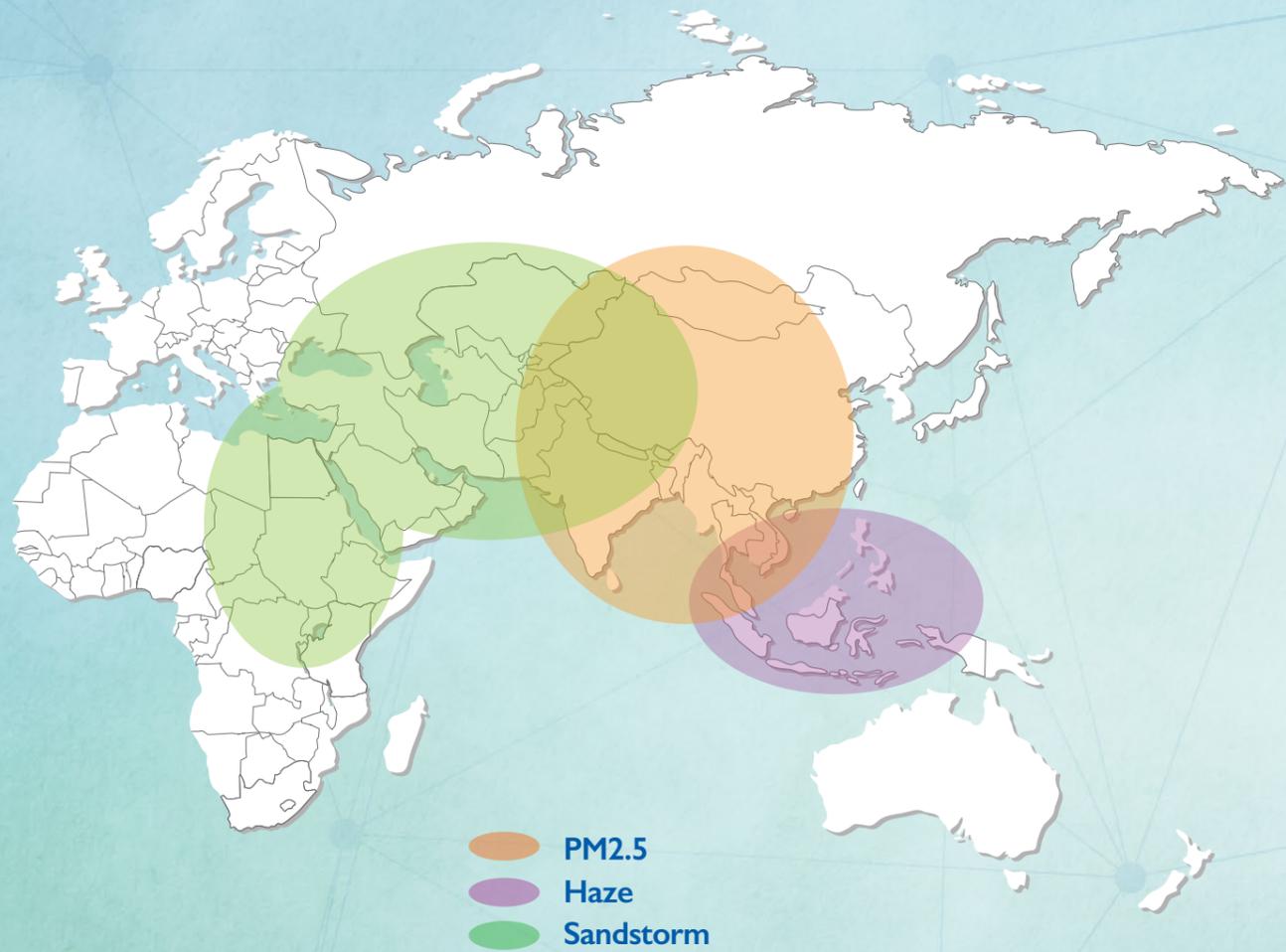
F-PXM35
Asia

F-PXF35
Asia
Middle East

F-PXJ30
Africa
Asia
Middle East

F-PBJ30
Africa
Asia
Middle East

POLLUTION SITUATION



- PM2.5
- Haze
- Sandstorm

PM2.5

An annual average concentration of 10ug/m3 is the long-term guideline value for PM2.5 set by the World Health Organization (WHO). As for latest information, more than 80% of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed the WHO limits.

Haze

In recent years, large scale smoky haze, usually measures hundreds of kilometres across, occurred frequently. It has spread to various countries in South East Asia causing a significant deterioration in air quality. Both Pollutants Standards Index (PSI) and Air Pollutants Index (API) are used to measure air quality. On both indices, a reading above 100 is classified as unhealthy while above 300 is hazardous.

Sandstorm

Massive sandstorm blanketed China and Middle East in past few years. Sand and dust carried by strong winds caused poor visibility and people suffered breathing problems across the countries.

POLLUTANTS AROUND YOU IN DAILY LIFE



VOC : Volatile Organic Compounds

POWERFULLY REMOVES PARTICULATE MATTERS BY INTEGRATION OF CAPTURE, COLLECTION AND SENSING

1- EFFICIENT CAPTURE

NEW HEPA Filter
HEPA Composite Filter
 Maintains a clean space by removing 0.3µm particles up to 99.97% (#1)

2
Direct FRONT Suction
House Dust Catcher
 Direct Front Suction facilitates inhale power with House Dust Catcher near the floor

3
Odor Sensor / Clean Sign
 Air quality monitored and the operation speed is adjusted according to the pollution level

4
ECONAVI (Eco Mode)
 Energy saving operation mode that runs only as it is necessary

5
nanoe™
 Protects your health and maintains your beauty with the unique technology



NEW HEPA Filter
HEPA Composite Filter
 Maintains a clean space by removing 0.3µm particles up to 99.97%(*4)

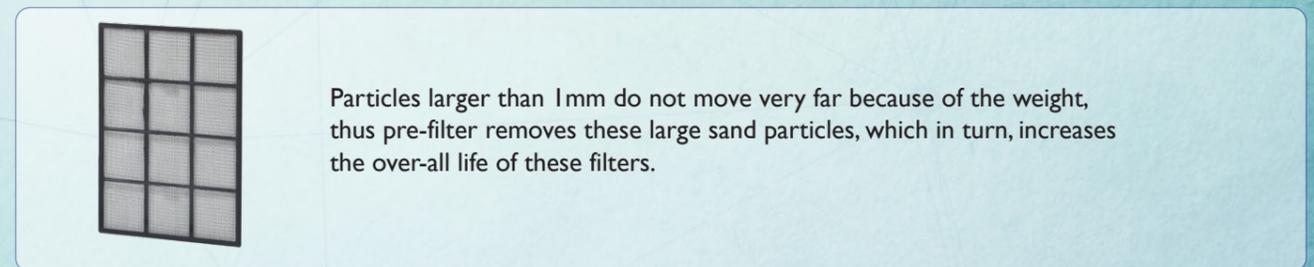


Seal of Approval
 Certification and "Seal of Approval" endorsed by the British Allergy Foundation approves that Panasonic Air Purifiers has significantly reduced allergen content.

6 Stage Filtration



Step 1 - Pre-filter (applicable for F-VXK90M, F-VXK70M, F-VK655M)



Step 2 & 3 - HEPA Composite Filter (applicable for F-VXK90M, F-VXK70M, F-PXL45M, F-VK655M)



(#1) Removal performance of filter only. The performance for whole house would be different.

Inhibits allergens, such as pollens and dusts

HEPA Composite Filter not only can remove 0.3µm particles, it also consists of 3 kinds of technology, Super alleru-buster, Green Tea Catechin and Anti-bacteria Enzyme. It can inhibit 17 kinds of virus, bacteria and allergen up to 99%.



Super alleru-buster

Super alleru-buster can inhibit certain kinds of allergen up to 99% by surrounding and restraining the allergens with the phenolic polymer.



Test Laboratory: Osaka Municipal Technical Research Institute of Japan / Test Methodology: Measure reduction level of tick allergen by Enzyme-linked Immuno Sorbent Assay / Inhibiting Method: Contact with Super alleru-buster / Test Subject: Allergens captured by filter (tick, pollen) / Test Result: 99% or more is inhibited (Report no. 2127)

Green Tea Catechin

Green Tea Catechin can inhibit certain kinds of virus up to 99% by surrounding the viruses with the Catechin



Test Laboratory: Kitasato Research Centre of Environmental Sciences / Test Methodology: Inhibit rate of virus by Plaque method / Inhibiting Method: contact with Catechin / Test Subject: Virus captured by filter / Test Result: 99% or more is inhibited (Report no. 15-0115)

Anti-bacteria Enzyme

Anti-bacteria Enzyme prevents the reproduction of bacteria and molds in order to ensure clean environment



Test Laboratory: Japan Food Research Laboratory / Testing Methodology: Testing of anti-mold function of the filter, using the Harrow method (Report no. 207060074-002)

Step 4 - Deodorization Filter (applicable for F-VXK90M, F-VXK70M, F-VXH50M, F-PXH55M, F-PXL45M & F-VK655M)

10 YEARS^[*1] Super Nano-technology Deodorizing Filter

In addition to deodorization with nanoe™, Panasonic Air Purifier also adopts Super Nano-technology Deodorizing Filter to get rid of offensive odors. The filter removes odors such as smoke from cigarettes and cooking, and can be used up to 10 years^(*).

*3 Years (F-VXF35M/F-PXF35M) *2 Years (F-PXJ30M/F-PBJ30M)



Step 5 - Deformaldehyde Filter (applicable only for F-VK655M)

5 YEARS Deformaldehyde Filter

In addition to the formaldehyde filter - which effectively removes 99% of the formaldehyde^{**}, volatile organic compounds and other harmful gases.

**testing organizations: Guangzhou industrial Microbiology Testing Center



Step 6 - Rotary Humidifying Filter (applicable for – F-VXK90M, F-VXK70M, F-VXF70M, F-VXH50M, F-VK655M, F-VXL40M, F-VXF35M, F-VXL95M)

The new Panasonic air purifier possesses the humidifying function, incorporated with the hydration property of nanoe™, it can help restore the moisture back to the skin.

10 YEARS^[*1] The FUSION filter adapts double raschel knit material

Sufficient humidifying capacity

It retains lots of moisture in the space between the 3D structure of raschel knit, enables quick water vaporisation due to the excellent filtration performance.



Easy Cleaning

Cleaning is required only once a month to maintain the performance



Long Life**

The material is durable to wear and repetitive washing. It can be used for up to 10 years^(*) without replacement.

* Dirt level varies according to water quality. Please clean the filter if there is any foul smell, even within 1 month.
** The lifetime may vary depending on the actual condition of usage

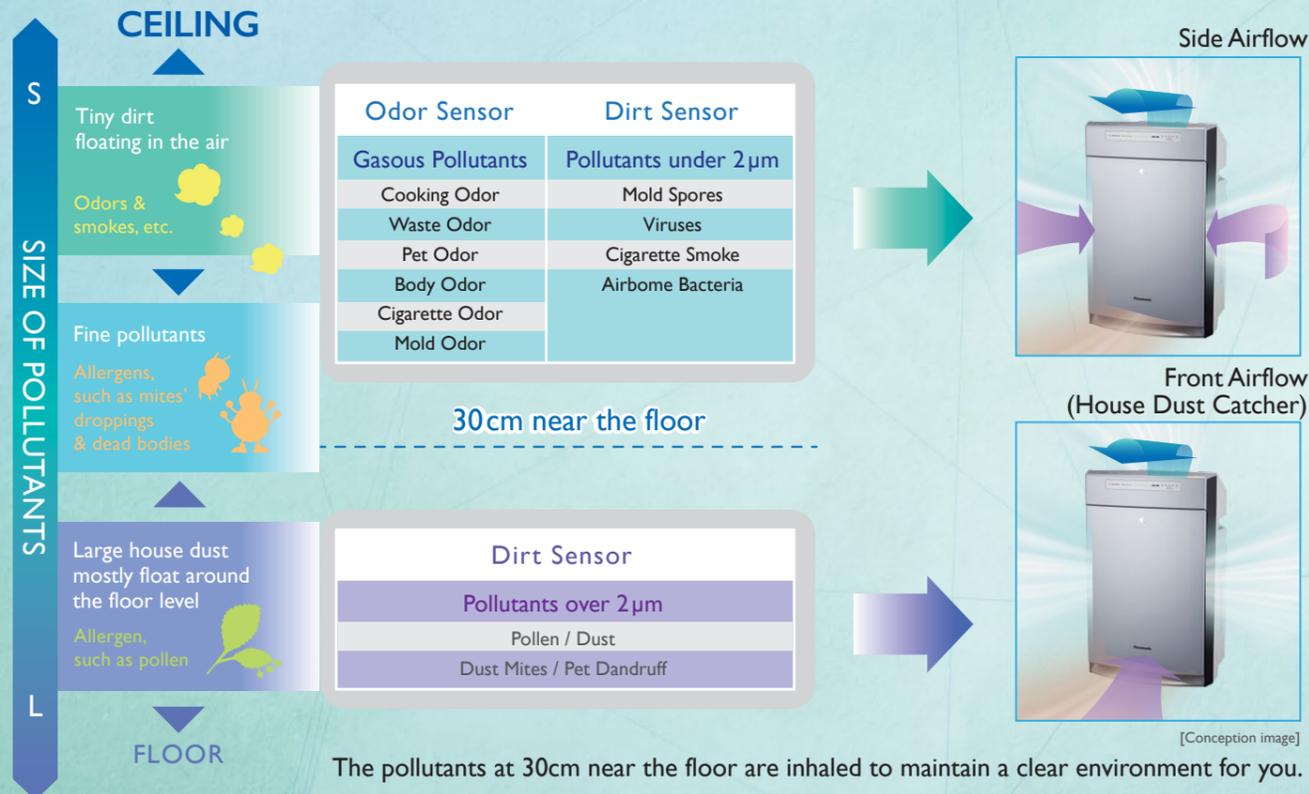
2 - POWERFUL COLLECTION



3D Circulation Airflow

Direct FRONT Suction

Usually, various types of pollutants appear at different positions between the ceiling and the floor in the room. In response, the 3D circulation airflow is divided into two mode - "Side Airflow" and "Front Airflow" to remove pollutants accordingly.



The pollutants at 30cm near the floor are inhaled to maintain a clear environment for you.

Immediate • Smooth • Efficient

With Direct Front Suction, Panasonic Air Purifiers can effectively absorb the pollutants by House Dust Catcher at bottom and Side Airflow



3 - SMART SENSING

The odor sensor monitors the surrounding air quality and adjusts the fan speed to remove the pollutants. The pollution level can be recognized with the clean sign display.



4 - ENERGY SAVING

Eco operation mode runs only when necessary

Pollution level varies according to your daily activities. You need to change the speed manually or automatically by sensors in order to clean the polluted environment effectively.

Mechanism of (ECONAVI) (Eco Mode)

Checking for Pollutants by odor sensor & house dust sensor

Search — Patrol operation

Detecting pollutants at the interval of 10 minutes per hour under Medium speed operation

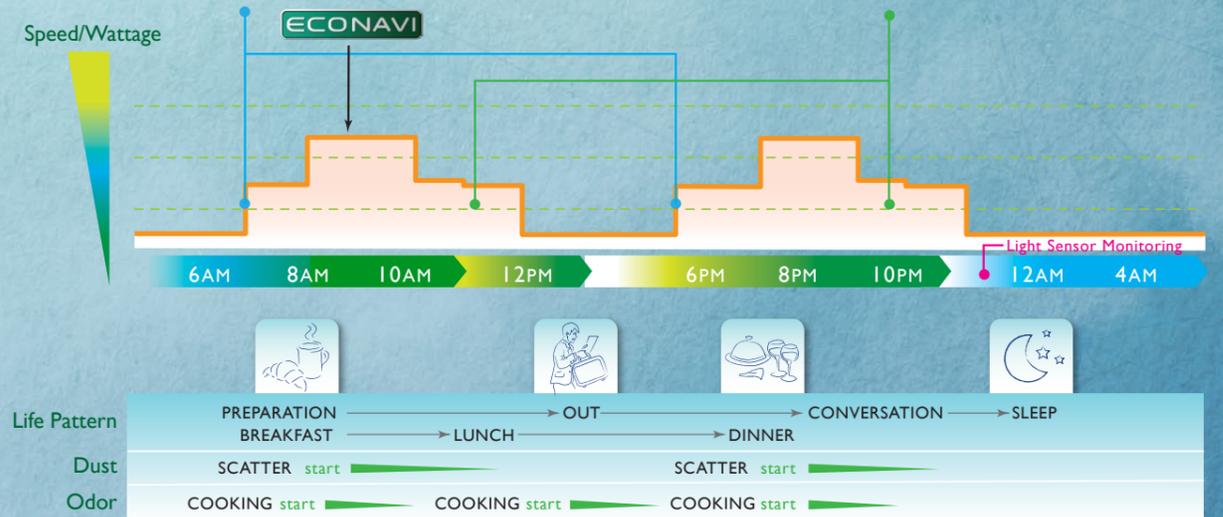
Learning Pollution Pattern Studying the pollution timeline and intensity

Learn — Learning operation

Memorizing pollution pattern in the house and automatically develop operation pattern, that can minimize the pollution before it spreads throughout the house.

The air purifier switches to higher notch automatically before pollutants spread around

The air purifier continues to run at higher notch for minutes after pollutants are cleared



5 - ACTIVE ATTACK



Introduction of Panasonic Unique nanoe™ Technology

Experiments have proven the benefits of nanoe™ generated with the nanoe device by cutting-edge nano-technology.

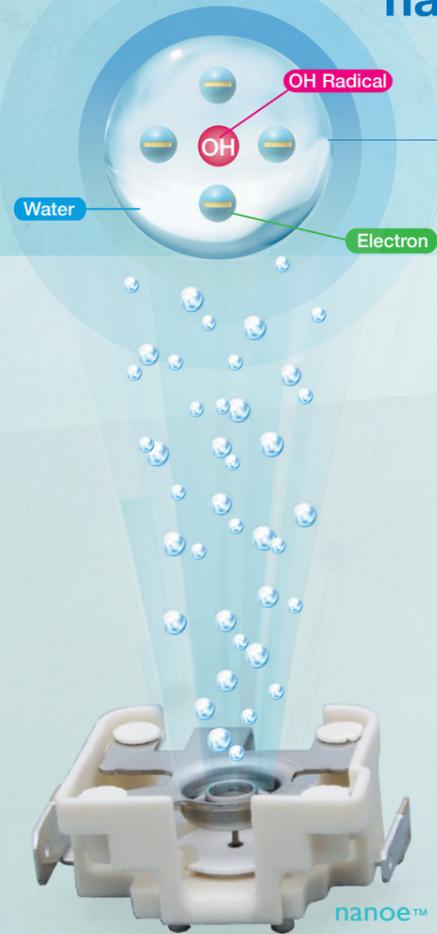
What is nanoe™?

nano-technology + electric = nanoe™



nanoe™ wrapped in water molecule

A nanoe™ is a fine (5 to 20 nm) and weakly acidic water particle with a reactive substance and an electric charge.



nanoe™ is water-wrapped capsule with plentiful OH radicals.

Its effectiveness of bacteria removal#1 depends on the number of OH radical#2, which is generated at the rate of 480 billion per second.

- #1 Bacteria: the effect resulted in 25 cu.m. enclosed test space for 4 hours, not at actual usage space. (*1)
- Virus: the effect resulted in 1 cu.m. enclosed test box for 2 hours, not at actual usage space. (*2)
- #2 Based on the ESR test methodology, applicable in the air purifier launched after Sep 2011.

A nanoe™ device can release radicals in water molecules which increase the effectiveness of bacteria and odor removal. Since nanoe™ is generated from moisture in the air, it will not wear out the device. Thus, periodical replacement of device is not necessary.

Characteristics of nanoe™

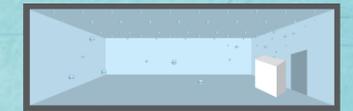
Long Life 6 times longer lifespan than normal ion

nanoe™ contains moisture around 1,000 times more than minus ion. Being wrapped in water molecules, it has a longer lifespan and is able to retain its effectiveness even after traveling for a long distance.

Comparison of distribution after 5 minutes



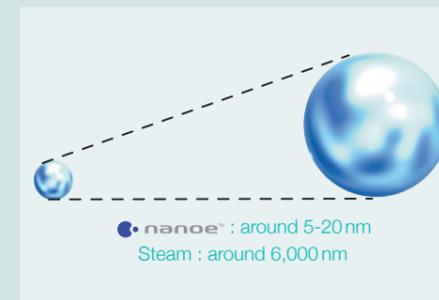
nanoe™
nanoe™ spread to every corner after 5 minutes



normal ion
Ions decay before spreading throughout the room

Microscopic Scale

Only one-billionth of the volume size of a steam particle



nanoe™ is much smaller than steam that can deeply penetrate into cloth fabrics to restrain dirt.

* 1 nm (nanometer) = one billionth of meter

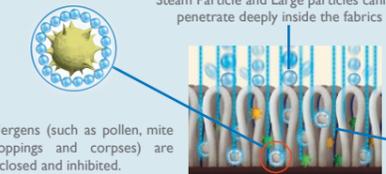
Water-originated

nanoe™ comes from condensed moisture in the air that water replenishment for nanoe™ generation is not required.



- Conditions for generating nanoe™
- Room Temperature : around 5°C~35°C (Dew Point Temp. : around 2°C or over)
 - Room Humidity : around 30%~85%

nanoe™ is tiny enough to penetrate into clothes for inhibiting mold and odors
Steam Particle and Large particles cannot penetrate deeply inside the fabrics



nanoe™
can penetrate deeply inside the fabrics

Safety test of nanoe™ has been conducted

| Purpose | Test Name | Testing Institute |
|------------------------------|---|-----------------------------------|
| Effect on Chromosomes | In Vitro Mammalian Chromosome Aberration Test | Japan Bioassay Research Center#3 |
| Effect on Respiratory System | Repeated Dose 28-day Oral Toxicity Study in Rodents | Life Science Laboratories, Ltd.#4 |

#3 Japan Bioassay Research Center is a test facility compliant with GLP (*3) (Good Laboratory Practice)

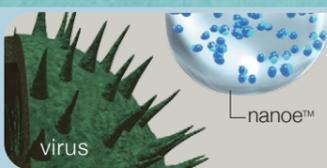
#4 Life Science Laboratories, Ltd. is a registered institute of the Network of Organizations Investigating Accident Causes (*4)

(*3) GLP is a practice intended to promote the quality and validity of test data used for determining the safety of chemicals and chemical products. Test facilities are assessed for compliance with GLP to ensure the reliability of their test data.

(*4) The Network of Organizations Investigating Accident Causes is a network administered by National Institute of Technology and Evaluation under the Ministry of Economy, Trade and Industry.

OH radical possesses the characteristics of removing hydrogen from viruses, bacteria, odors and allergens. Therefore, the more the OH radical, the higher the effectiveness of the anti-virus power.

nanoe™ captures the Virus



OH radical takes away hydrogen (H) from virus



The radical turns into water to inhibit the virus



(*1) [Airborne Bacteria] Test Laboratory: Kitasato Research Centre of Environmental Sciences • Test Methodology: Exposed to charge water particles for 4 hours in 25 cu.m. test room • Test Result: 99% is inhibited • Report No.: 24_0301_1

(*2) [Adhering Virus] Test Laboratory: Kitasato Research Centre of Environmental Sciences • Test Methodology: Exposed to charge water particles for 2 hours in 1 cu.m. by TCID50 (50% tissue culture infectious dose) • Test Result: 99.9% is inhibited • Report No.: 21_0084_1

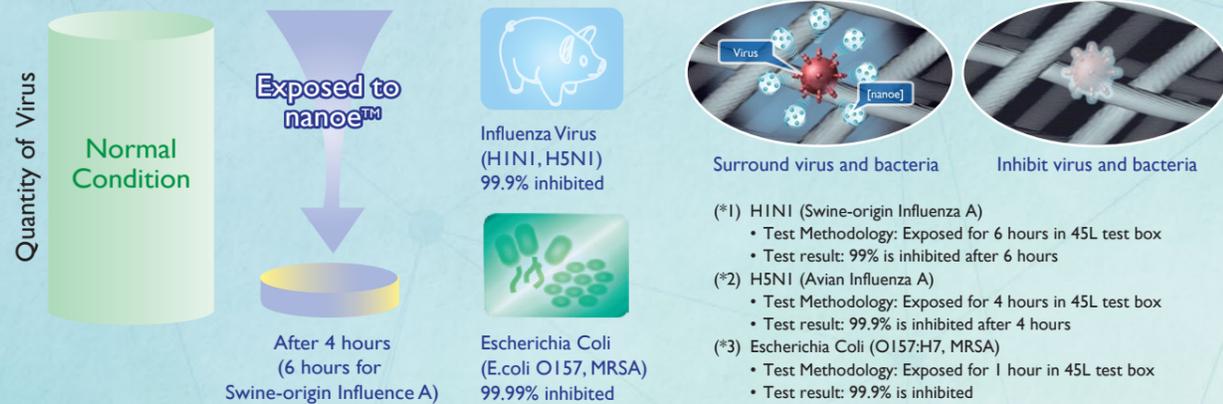


Merits of nanoe™ 3 Main Features

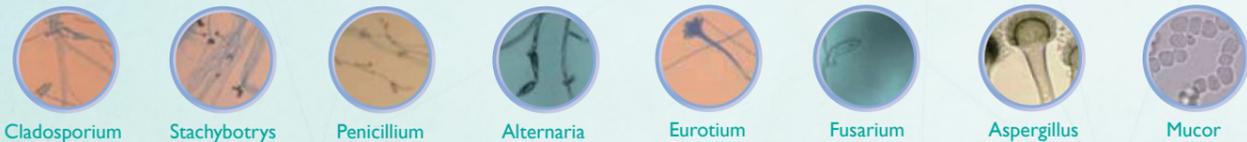


Anti-virus / bacteria

Inhibits 99.9% viruses (H1N1)(*1) and (H5N1)(*2) and 99.99% bacteria (E. Coli O157, MRSA)(*3)

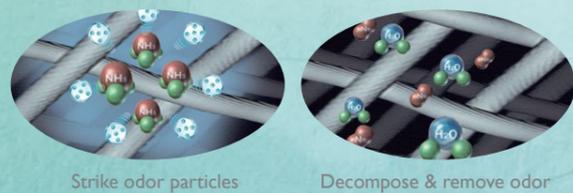


Growth of mold can be inhibited with nanoe™ (*4)



Deodorization

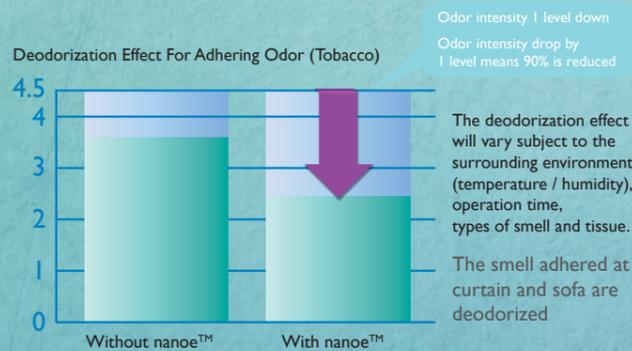
Reduces 90% odor (tobacco smell) after 2 hours



6-level Odor Intensity indication

- 5 Very Strong smell
- 4 Strong smell
- 3 Easily appreciable
- 2 Weak that just able to recognize
- 1 Weak that barely able to smell
- 0 Odorless

6-Level Odor Intensity



Test Laboratory: Panasonic Corporation Analysis Center
 Test Methodology: Verifying with 6-level odor intensity indication in 23 cu.m. test chamber
 Deodorization Method: nanoe™ emit
 Test Subject: Adhering Tobacco Smell
 Test Result: 1.2 level of odor intensity is decreased after 2 hours
 Report No.: BAA33-130125-D01

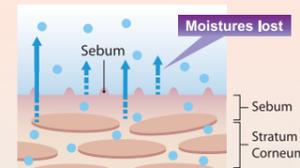


Skin Hydration

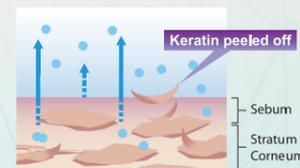
Helps keep the moisture back to the skin

Without nanoe™

After 30 minutes
Moistures escape from the skin and let it become dry and dull

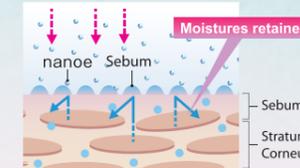


After 28 days
Cracks occur and keratin pieces peel off from the skin



With nanoe™

After 30 minutes
nanoe™ attached on the sebum and form membranes on the skin to prevent the loss of moistures



After 28 days
Skin is hydrated that improves the keratin texture and keeps the skin fresh and moisturized



nanoe™ Lets You Live With Pets Healthfully

Various tests have proven nanoe™ can improve the living environment and health condition of pets.

Jointly verification with Azabu University for inhibiting allergens from pets(*5)

Effect resulted from the test for 1 hour at 45L enclosed container, not at actual usage space
[Jointly verified] Graduate School of Veterinary Science, Azabu University

Jointly verification with Daido University for inhibiting adhering odor in pet shop(*6)

[Jointly verified] Odor Research Center, Graduate School of Informatics, Daido University

Jointly verification with Tokyo University of Agriculture and Technology about health condition for skin and hairs of dog(*7)

[Jointly verified] Faculty of Agriculture, Tokyo University of Agriculture and Technology



(*4) [Cladosporium] Test Laboratory: Panasonic Corporation Analysis Center • Test Methodology: Exposed to charge water particles in 45L test box for 4 hours • Test Result: 99.9% is inhibited • Report No.: E02-110801IN-01, [Cladosporium] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 22 cu.m. test space for 1 hour • Test Result: 99% is inhibited • Report No.: 205061541-001, [Stachybotrys] Test Laboratory: Kitasato Research Center of Environmental Sciences • Test Methodology: Exposed to charge water particles in 45L test box for 8 hours • Test Result: 99.9% is inhibited • Report No.: 22_0465_2, [Penicillium] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 45L test box for 4 hours • Test Result: 99.9% is inhibited • Report No.: 11028760001-01, [Alternaria] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 45L test box for 16 hours • Test Result: 99.2% is inhibited • Report No.: 11038082001-01, [Eurotium] Test Laboratory: Kitasato Research Center of Environmental Sciences • Test Methodology: Exposed to charge water particles in 45L test box for 8 hours • Test Result: 99.9% is inhibited • Report No.: 22_0455, [Fusarium] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 45L test box for 4 hours • Test Result: 99.9% is inhibited • Report No.: 11018692001-02, [Aspergillus] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 45L test box for 8 hours • Test Result: 99.5% is inhibited • Report No.: 11038081001-02, [Mucor] Test Laboratory: Japan Food Research Laboratories • Test Methodology: Exposed to charge water particles in 45L test box for 8 hours • Test Result: 99.9% is inhibited • Report No.: 11038080001-01

(*5) Test Laboratory: ITEA • Test Subject: Can f 1 (allergy derived from dogs), Fel d 1 (allergy derived from cats) • Test Methodology: Exposed to charge water particles in 45L test box by ELISA method • Test Result: (Can f 1) 99% is inhibited after 1 hour, (Fel d 1) 98% is inhibited after 2 hour

(*6) Test Laboratory: Daido University • Test Subject: Pet Odor • Test Methodology: Exposed to charge water particles for 1 week in pet shop • Test Result: 85.6% is deodorized for airborne odor and 74.3% is inhibited for adhering odor

(*7) Test Laboratory: Tokyo University of Agriculture and Technology • Test Subject: Health condition for skin / hairs of dog • Test Methodology: Observe the decrease of allergic symptom of the dog and air purifier is continuously operated for 4 weeks in pet owner house • Test Result: Allergic reaction is reduced during the test period of 4 weeks

ANTI-ALLERGEN

Panasonic Air Purifiers are proven to be capable of reducing allergen content significantly

Some surveys indicate that the allergy rates are increasing throughout the world that around 30% of people are suffering from different extent of influences in their lives. Panasonic Air Purifier has been endorsed by the British Allergy Foundation approving their allergen removal capability that would improve their quality of life of this group of people.



What is an allergen? What is allergy?

Allergens range widely in type and description, including pollen, house dust mite debris, pet dander and mould. An allergy is the response of the body's immune system to normally harmless substances, such as pollens and house dust mite. Whilst in most people these substances (allergens) pose no problem, in allergic individuals their immune system identifies them as 'a threat' and produces an inappropriate response, such as, Allergic Rhinitis, Bronchial Asthma and Atopy Dermatitis.

Allergy is an over-reaction of our body to substances, resulting in immune responses that cause symptoms in person.



- Eye Irritation
- Bloodshot eyes
- Watery eyes
- Runny nose
- Nasal congestion

NANOE™ DEVICE TEST



[Joint testing] Testing facilities conform to Good Laboratory Practice (GLP) Dr. Horst Ruppach, Charles River Laboratories International, Inc.

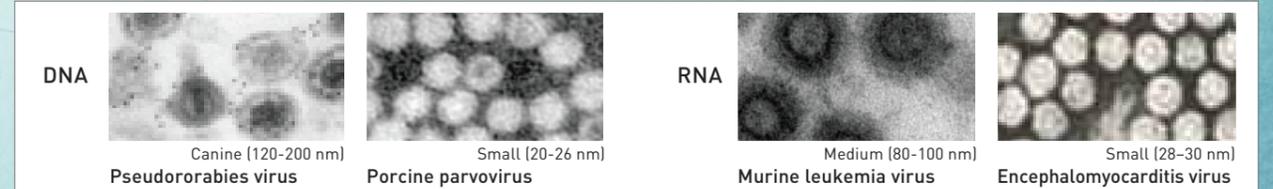
[Test Overview]

A GLP compliance comparison test was conducted for four types of viruses selected based on the virus clearance test (Guideline ICHQ5A, CPMP/BMP/ 269/95, Pharmaceutical Affairs Bureau #329), which is designed for pharmaceutical products. The test compared one group that was exposed to nanoe™ and another group that was not.

[Test Results]

Suppressed 99% of the virus infection value for the four types of viruses in six hours.

[Perspective of Charles River Biopharmaceutical Service GmbH] nanoe™ technology shows the potential to inactivate overall and to a considerable degree, human and animal-derived viruses with broadly varying biophysics. The same is thought to hold true for highly resistant and unknown viruses.



Characteristics of viruses selected based on the Virus Clearance Test Guideline

[Joint testing] Harvard School of Public Health, Harvard University

Dr. Philip Demokritou, Director, Environmental Health Nanoscience Laboratory

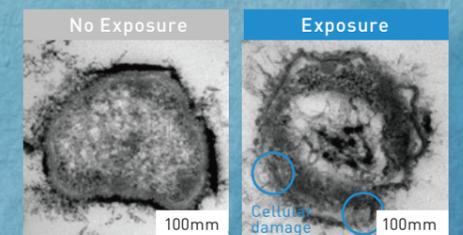
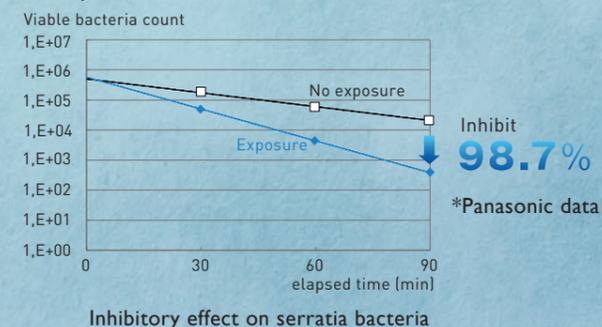
[Test Overview]

Serratia marcescens was exposed to nanoe to verify nanoe™'s inhibitory effect and observe the bacteria's morphology change.

[Test Results]

Inhibited 98.7% of the viable bacteria count of serratia bacteria in 90 minutes.

[Comment by Professor Demokrito] As demonstrated in this research report, nanoe™ produces an inhibitory effect by damaging the cellular walls and membranes of serratia bacteria. Going forward, it is hoped that joint research on nanoe™ technology will continue with Panasonic Corp. to pursue nanoe™'s potential to inhibit bacteria and viruses and in applications to reduce airborne bacteria, prevent hospital-acquired infections and in the food industry.



Results of observing morphological change of serratia bacteria

PRODUCT LINEUP OF PANASONIC AIR PURIFIER

Humidifying Air Purifier

F-VXR50M



Applicable Area (Purification) = 26 m² (280 ft²)
Humidifying Capacity = 350 ml/h

F-VXL95M



Applicable Area (Purification) = 70 m² (753 ft²)
Humidifying Capacity = 870 ml/h

F-VXK90



Applicable Area (Purification) = 66 m² (710 ft²)
Humidifying Capacity = 830 ml/h

F-VXK70*1



Applicable Area (Purification) = 52 m² (560 ft²)
Humidifying Capacity = 700 ml/h

Standard Air Purifier

F-PXM55



Applicable Area (Purification) = 41 m² (441 ft²)

F-VK655



Applicable Area (Purification) = 40 m² (431 ft²)
Humidifying Capacity = 500 ml/h

F-VXL40



Applicable Area (Purification) = 30 m² (323 ft²)
Humidifying Capacity = 350 ml/h

F-VXM35



Applicable Area (Purification) = 26 m² (280 ft²)
Humidifying Capacity = 350 ml/h

F-PXL45



Applicable Area = 33 m² (365 ft²)

F-PXJ30



Applicable Area = 20 m² (215 ft²)

F-PBJ30



Applicable Area = 20 m² (215 ft²)

F-PXM35



Applicable Area (Purification) = 26 m² (280 ft²)

* Available mode is subject to different markets.

Color variation are subject to different countries
*1 Large particle pre-filter is for Middle East & Indonesia only

- Human Activity Sensor
- nanoe™ Purification
- ECO NAVI ECONAVI (Eco Mode)
- Mega Catcher
- Sandstorm Mode

- HEPA Composite Filter
- PM2.5 PM2.5 Indicator
- Humidifying Function
- 3D Circulation Airflow
- Light Sensor

- Clean Sign
- Abs. Absence Mode
- Clothes Refresh Mode
- Sleep Mode
- 2/4 Hour Timer

- Digital Humidity Indicator
- Filter Replace Indicator
- Super Nano-technology Decolorizing Filter
- Humidity Setting
- Large Large Particle Pre-filter

- Illuminating Touch Panel Switch
- Twin Airflow Louver
- Spot Air Mode
- Composite Air Filter
- Silent Auto Mode

- House Dust Catcher
- Remote Control
- Wall Mount Available
- Turbo Mode
- Turbo Timer

- Auto Mode
- Nano Fibre HEPA Composite Filter
- PM2.5 Mode
- Haze Mode
- Direct Front Suction

- Safety Lock

Note:
The calculation of applicable is based on the standard JEM1467 stipulated by Japan Electrical Manufacturers Association. The applicable area is defined as the space area filled with dirty air having dust concentration of 0.1mg/m³ is purified to cleanliness of 0.1mg/m³ regulated in the Building Sanitation Law in 30 minutes under 1 time/hour natural ventilation.

EXPLANATION OF FEATURES

PM2.5 Mode / Haze Mode / Sandstorm Mode

Sandstorm Mode



Sand Storm Mode
Powerful Lower Suction for Large Dust Particles

The operation is subject to the surrounding condition when PM2.5 / Haze / Sandstorm is switched on

| Mode indicator | Operation |
|----------------|---|
| | Runs at maximum speed until indicator light off |
| | Runs at maximum speed for 1 minute |

MEGA CATCHER

F-VXL95M, F-VXK90M, F-VXK70(), F-VXF70() and F-VXH50() only

When pollutants are detected by the sensors, the front panel will be opened according to the pollution level for effective inhale. The front panel slides forward when odor, smoke or fine particles are detected. As there are pollens, dusts and large particles, the panel will slide forward and upward to maximum opening at the bottom for powerful lower suction.



Light Sensor

F-VXL95M, F-VXK90M, F-VXK70(), F-VXH50(), F-VK655H, F-VXL40H, F-PXH55() and F-PXL45() only

Achieves energy saving with optimized operation by auto sensor technology. The light sensor detects the indoor brightness and automatically adjust the brightness of control panel indicators and clean sign, as well as air volume.



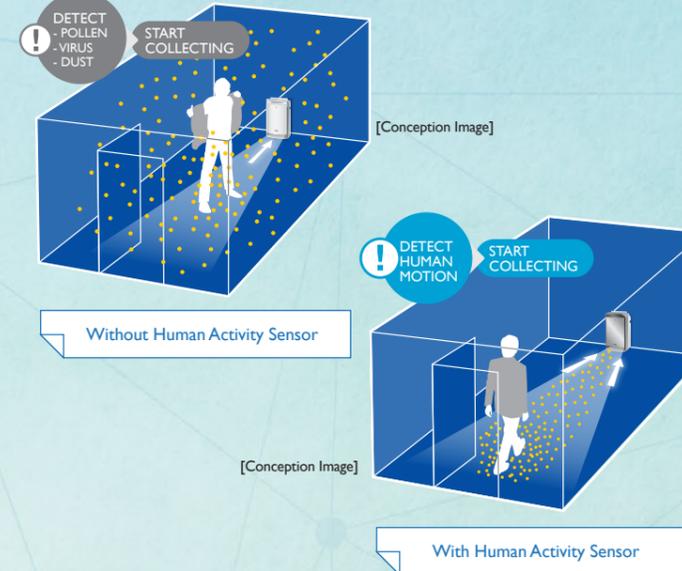
| Indoor Brightness | Bright | Semi-dim | Dim |
|-------------------|---------------|--------------------|-----|
| Top Panel LED | Full Lighting | Semi Lighting | OFF |
| Front Indication | Full Lighting | Semi Lighting | OFF |
| Air Volume (*) | Normal Auto | Auto (1 rank down) | |

(*) Adjustment of air volume is only available for operation under Auto, Full Auto and ECONAVI.
Control of operation is subject to different models

Human Activity Sensor

F-VXL95M, F-VXK90M, F-VXK70 and F-VK655H only

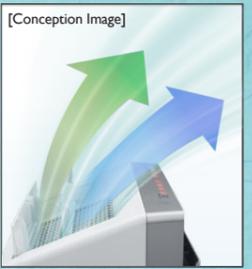
With the sensor, pollutants are collected before they spread around by sensing human motion.



Twin Airflow Louver

F-VXL95M, F-VXK90M and F-VXK70 only

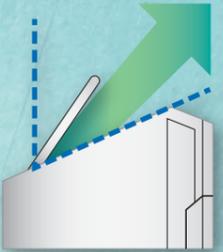
2 ways of airflow are used to suppress the diffusion of airflow for pollutant collecting.



Spot Air Mode

F-VXK90M, F-VXK70 and F-VXH50 only

To quickly clean the air for specific area, such as removal of tobacco smell, the upper louver will stay at your preferred position while speed is preset at Hi-Med notch.



Abs. Absence Cleaning Mode

F-VXL95M only

The product automatically absorbs house dust when there is not any occupant. It helps maintain clean floor with high speed operation when people is out.



Clothes Refresh Mode

F-VXL95M and F-VXL40 only

The product refreshes unpleasant odor of the clothes with high speed operation for 1 hour and switches to previous setting automatically afterward.

A Auto Mode

Except F-PBJ30

The appropriate speed will shift automatically according to the pollution level.

LOCK Caster Lock

F-VXL95M, F-VXK90 and F-VXK70 only

The caster can be locked to avoid the product is moved unintentionally.



Sleep Mode

The product will operate in low speed with display off or dimmed for 8 hours and then turn off automatically, that let you enjoy a comfortable sleep.

Turbo Mode

F-PXM35, F-PXF35, F-PXJ30 and F-PBJ30 only

When the room is polluted, such as during cigarette smoking, this function shifts to maximum speed for 10 minutes to remove the pollutants quickly. It will switch back to previous setting automatically afterward.

LOCK Child Lock

Except F-PXM35, F-PXF35, F-PXJ30 and F-PBJ30

By switch on this function, any alternative selection is ignored to avoid intentional mis-operation.

ARF Auto Resume Function

F-PXM35, F-PXF35, F-PXJ30 and F-PBJ30 only

Product will operate at last operation mode automatically after power failure is resumed.

Seamless Drive

Except F-PXJ30 and F-PBJ30

Seamless drive is equipped for the newly developed DC (direct current) motor to ensure smooth changeover of air volume. With this exclusive function, noise during changeover is unobvious to be heard.



Fill every nook and corner of your home with outdoor-like fresh air!



Our wide range of models suiting to varying needs...



HUMIDIFYING AIR PURIFIER



| Model | F-VXL95M | | | F-VXK90 | | | F-VXR50M | | | F-VXK70 | | | F-VXH50 | | | F-VK655 | | | F-VXL40 | |
|---|------------------------|--------|-----|------------------------|--------|------|------------------------|--------|-----|------------------------|--------|-----|------------------------|--------|-----|------------------------|--------|-----------------|-----------------|-----|
| Applicable Area [m ² (ft ²)] | 71 (764) | | | 66 (710) | | | 40 (431) | | | 52 (560) | | | 40 (431) | | | 40 (431) | | | 30 (323) | |
| nanoe Purification | nanoe™ | | | nanoe™ | | | nanoe™ | | | nanoe™ | | | nanoe™ | | | nanoe™ | | | nanoe™ | |
| Air Purifying | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Low |
| Air Volume [m ³ /min] | 9.3 | 3.1 | 1.1 | 8.7 | 3.1 | 1.1 | 5.1 | 1.9 | 0.9 | 6.8 | 2.8 | 1.2 | 5.1 | 1.9 | 0.9 | 5.5 | 2 | 1 | 4 | 1.1 |
| Power Consumption [W] | 103 | 12 | 6.5 | 88 | 12.5 | 6.8 | 46 | 9 | 6 | 70 | 10 | 6 | 45 | 9 | 6 | 57 | 11 | 8 | 52 | 6.5 |
| Noise [dB(A)] | 55 | 34 | 18 | 55 | 34 | 18 | 51 | 29 | 18 | 54 | 33 | 18 | 51 | 29 | 18 | 52 | 30 | 19 | 49 | 23 |
| Air Purifying & Humidifying | | | | | | | | | | | | | | | | | | | | |
| Humidifying Capacity [ml/h] | 870 | 450 | 300 | 830 | 450 | 270 | 500 | 230 | 150 | 600 | 300 | 150 | 500 | 230 | 150 | 500 | 250 | 150 | 350 | 100 |
| Air Volume [m ³ /min] | 7.6 | 3.6 | 2.0 | 7.4 | 3.6 | 1.8 | 4.9 | 2.3 | 1.3 | 6.0 | 2.8 | 1.2 | 4.9 | 2.3 | 1.3 | 5.3 | 2.5 | 1.5 | 3.7 | 1 |
| Power Consumption [W] | 67 | 17 | 11 | 63 | 18 | 11.8 | 46 | 13 | 9 | 50 | 12 | 8 | 45 | 13 | 9 | 54 | 16 | 12 | 48 | 6.5 |
| Noise [dB(A)] | 54 | 37 | 25 | 54 | 37 | 25 | 51 | 34 | 23 | 52 | 33 | 18 | 51 | 34 | 23 | 51 | 36 | 25 | 49 | 23 |
| HEPA Filter | Nano Fibre HEPA | | | ● | | | HEPA Composite | | | - | | | - | | | ● | | - | | |
| 2 in 1 HEPA Composite and Deodorizing Filter | - | | | - | | | - | | | - | | | - | | | - | | ● | | |
| Deformaldehyde Filter | ● | | | - | | | ● | | | - | | | - | | | ● | | - | | |
| Large Particle Pre-filter | - | | | ● | | | - | | | - | | | - | | | ● | | - | | |
| Filter Replace Indicator / Filter Life Check | - | | | ● | | | - | | | ● | | | - | | | ● | | - | | |
| Motor Type | DC | | | DC | | | ● | | | DC | | | DC | | | DC | | DC | | |
| 3D Circulation Airflow | ● | | | ● | | | DC | | | ● | | | ● | | | ● | | ● | | |
| Twin Airflow Louver | ● | | | ● | | | ● | | | - | | | - | | | - | | - | | |
| Mega Catcher | ● | | | ● | | | - | | | ● | | | ● | | | - | | - | | |
| House Dust Catcher | - | | | - | | | ● | | | - | | | - | | | ● | | - | | |
| ECONAVI (Eco Mode) | ECONAVI | | | ECONAVI | | | - | | | ECONAVI | | | ECONAVI | | | ECONAVI | | ECONAVI | | |
| Auto Mode | ● | | | ● | | | ECONAVI | | | ● | | | ● | | | ● | | ● | | |
| Turbo Mode | - | | | - | | | ● | | | - | | | - | | | - | | - | | |
| PM2.5 Mode | - | | | - | | | - | | | - | | | - | | | - | | - | | |
| Haze Mode | - | | | - | | | - | | | - | | | - | | | - | | - | | |
| Sandstorm Mode | ● | | | - | | | - | | | - | | | - | | | - | | - | | |
| Absence Cleaning Mode | ● | | | - | | | - | | | - | | | - | | | - | | - | | |
| Clothes Refresh Mode | ● | | | - | | | ● | | | - | | | - | | | - | | - | | |
| Sleep Mode (8 hours) | ● | | | ● | | | 2,4,8,Sleep | | | ● | | | ● | | | - | | - | | |
| Spot Air Mode | - | | | ● | | | - | | | - | | | - | | | - | | - | | |
| Sensor | Dirt / Odor / Humidity | | | Dirt / Odor / Humidity | | | Dirt / Odor / Humidity | | | Dirt / Odor / Humidity | | | Dirt / Odor / Humidity | | | Dirt / Odor / Humidity | | Dirt / Humidity | | |
| Human Activity Sensor | ● | | | ● | | | - | | | - | | | - | | | ● | | - | | |
| Light Sensor | ● | | | ● | | | ● | | | - | | | ● | | | ● | | ● | | |
| Clean Sign | ● | | | ● | | | ● | | | ● | | | ● | | | ● | | ● | | |
| PM2.5 Indicator | ● | | | - | | | - | | | - | | | - | | | ● | | ● | | |
| Remote Control | - | | | - | | | - | | | - | | | - | | | - | | - | | |
| Humidity Indicator | Digital Indication | | | Digital Indication | | | - | | | Digital Indication | | | - | | | Digital Indication | | ● | | |
| Humidity Setting | - | | | ● | | | - | | | - | | | - | | | - | | - | | |
| Child Lock | ● | | | ● | | | ● | | | ● | | | ● | | | ● | | ● | | |
| Seamless Drive | ● | | | ● | | | ● | | | ● | | | ● | | | ● | | ● | | |
| Tank Capacity [L] | 4 | | | 4.2 | | | 2.3 | | | 3.4 | | | 2.3 | | | 2.3 | | 1.6 | | |
| Tank Stand | ● | | | ● | | | - | | | - | | | - | | | ● | | - | | |
| Caster Lock | ● | | | - | | | - | | | - | | | - | | | - | | - | | |
| Auto Resume Function | - | | | - | | | - | | | - | | | - | | | - | | - | | |
| Dimension (HxWxD) [mm] | 640 x 398 x 309 | | | 636 x 398 x 297 | | | 560 x 360 x 240 | | | 608 x 390 x 295 | | | 560 x 360 x 240 | | | 772 x 390 x 365 | | | 590 x 330 x 250 | |
| Weight [kg] | 11.8 | | | 11.5 | | | 8.6 | | | 10.2 | | | 8.6 | | | 11.9 | | 7.2 | | |
| Composite Air Filter (Lifespan) | F-ZXLP95Z (3 years) | | | F-ZXKP90Z (10 years) | | | F-ZXMP55Z (10 years) | | | F-ZXFP70Z | | | F-ZXHP55Z (10 years) | | | F-ZXKP55Z (5 years) | | | F-ZXLS40Z | |
| Deodorizing Filter (Lifespan) | F-ZXLD95Z (3 years) | | | F-ZXFD70Z (10 years) | | | F-ZXHD55Z (10 years) | | | F-ZXFD70Z (10 years) | | | F-ZXHD55Z (10 years) | | | F-ZXKD55Z (5 years) | | | - | |
| Humidifying Filter (Lifespan) | F-ZXKE90Z | | | F-ZXKE90Z | | | F-ZXHE50Z (10 years) | | | F-ZXFE70Z | | | F-ZXHE50Z (10 years) | | | F-ZXHE50Z (10 years) | | | F-ZXLE40Z | |
| Large Particle Pre-filter (Lifespan) | - | | | F-ZXKA90Z | | | - | | | - | | | - | | | F-ZXKA55Z | | - | | |
| Deformaldehyde Filter (Lifespan) | - | | | - | | | - | | | - | | | - | | | F-ZXKF55Z (5 years) | | - | | |

(*)1 Large Particle Pre-filter is only for Middle East and Indonesia (*2) Respective mode function will be available for different countries (*3) For F-VXK70A only (*4) For F-VXK70M only (*5) Respective indicator (PM2.5 / Haze / Sandstorm) are available for different markets # Color variation are subject to different countries

STANDARD AIR PURIFIER



| Model | F-PXM55 | | | F-PXL45 | | | F-PXM35 | | | F-PXJ30 | | | F-PBJ30 | | |
|---|----------------------|--------|-----|----------------------|--------|-----|---------------------|--------|-----|----------------------------|--------|-----|---------------------|--------|-----|
| Applicable Area [m ² (ft ²)] | 41 (441) | | | 33 (355) | | | 26 (280) | | | 20 (215) | | | 20 (215) | | |
| nanoe Purification | nanoe™ | | | nanoe™ | | | nanoe™ | | | nanoe™ | | | - | | |
| Air Purifying | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Medium | Low | High | Medium | Low |
| Air Volume [m ³ /min] | 5.3 | 2.0 | 0.9 | 4.5 | 2.3 | 1.0 | 3.5 | 2.0 | 1.0 | Specification at 220V 50Hz | | | | | |
| Power Consumption [W] | 49 | 11 | 7 | 42 | 13 | 6.5 | 20 | 9 | 6 | 2.8 | 1.8 | 0.8 | 2.8 | 1.8 | 0.8 |
| Noise [dB(A)] | 52 | 32 | 18 | 52 | 39 | 22 | 44 | 32 | 18 | 44 | 35 | 21 | 44 | 35 | 21 |
| HEPA Filter | ● | | | ● | | | - | | | - | | | - | | |
| 2 in 1 HEPA Composite and Deodorizing Filter | - | | | - | | | - | | | - | | | - | | |
| Deformaldehyde Filter | - | | | - | | | - | | | - | | | - | | |
| Large Particle Pre-filter | - | | | - | | | - | | | - | | | - | | |
| Filter Replace Indicator / Filter Life Check | ● | | | ● | | | ● | | | ● | | | ● | | |
| Motor Type | DC | | | DC | | | DC | | | AC | | | AC | | |
| 3D Circulation Airflow | ● | | | ● | | | ● | | | ● | | | ● | | |
| Twin Airflow Louver | - | | | - | | | - | | | - | | | - | | |
| Mega Catcher | - | | | - | | | - | | | - | | | - | | |
| House Dust Catcher | ● | | | ● | | | ● | | | ● | | | ● | | |
| ECONAVI (Eco Mode) | ECONAVI | | | ECONAVI | | | - | | | - | | | - | | |
| Auto Mode | ● | | | ● | | | ● | | | ● | | | - | | |
| Turbo Mode | - | | | - | | | - | | | - | | | ● | | |
| PM2.5 Mode | ● (*2) | | | - | | | - | | | - | | | - | | |
| Haze Mode | ● (*2) | | | - | | | - | | | - | | | - | | |
| Sandstorm Mode | ● (*2) | | | - | | | - | | | - | | | - | | |
| Absence Cleaning Mode | - | | | - | | | - | | | - | | | - | | |
| Clothes Refresh Mode | - | | | - | | | - | | | - | | | - | | |
| Sleep Mode (8 hours) | ● | | | ● | | | ● | | | ● | | | ● | | |
| Spot Air Mode | - | | | - | | | - | | | - | | | - | | |
| Sensor | Dirt / Odor | | | Dirt / Odor | | | Odor | | | Odor | | | - | | |
| Human Activity Sensor | - | | | - | | | - | | | - | | | - | | |
| Light Sensor | ● | | | ● | | | - | | | - | | | - | | |
| Clean Sign | ● | | | ● | | | ● | | | ● | | | - | | |
| PM2.5 Indicator | ● (*5) | | | ● | | | - | | | - | | | - | | |
| Remote Control | - | | | - | | | - | | | - | | | - | | |
| Humidity Indicator | - | | | - | | | - | | | - | | | - | | |
| Humidity Setting | - | | | - | | | - | | | - | | | - | | |
| Child Lock | ● | | | ● | | | - | | | - | | | - | | |
| Seamless Drive | ● | | | ● | | | ● | | | - | | | - | | |
| Tank Capacity [L] | - | | | - | | | - | | | - | | | - | | |
| Tank Stand | - | | | - | | | - | | | - | | | - | | |
| Caster Lock | - | | | - | | | - | | | - | | | - | | |
| Auto Resume Function | - | | | - | | | - | | | - | | | - | | |
| Dimension (HxWxD) [mm] | 580 x 300 x 205 | | | 404 x 516 x 221 | | | 520 x 300 x 189 | | | 540 x 311 x 210 | | | 540 x 311 x 210 | | |
| Weight [kg] | 5.8 | | | 5.9 | | | 4.8 | | | 4.3 | | | 4.2 | | |
| Composite Air Filter (Lifespan) | F-ZXMP55Z (10 years) | | | F-ZXLP45Z | | | F-ZXMP35Z (3 years) | | | F-ZXJP30Z (3 years) | | | F-ZXJP30Z (3 years) | | |
| Deodorizing Filter (Lifespan) | F-ZXFD35Z (3 years) | | | F-ZXHD55Z (10 years) | | | F-ZXLD45Z (3 years) | | | F-ZXFD35X (3 years) | | | F-ZXJD30Z (3 years) | | |
| Humidifying Filter (Lifespan) | - | | | - | | | - | | | - | | | - | | |
| Large Particle Pre-filter (Lifespan) | - | | | - | | | - | | | - | | | - | | |
| Deformaldehyde Filter (Lifespan) | - | | | - | | | - | | | - | | | - | | |