

Panasonic

Purify The Air Your
Loved Ones Breathe



nanoeX™



Panasonic air purifiers are proven capable of allergen content significantly

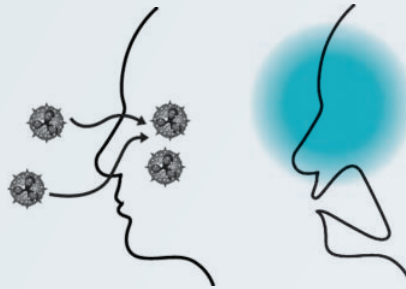


Some surveys indicate that the allergy rates are increasing throughout the world that around 30% of people are suffering from different extent of influences in their lives. Panasonic Air Purifier has been endorsed by the British Allergy Foundation approving their allergen removal capability that would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



What is allergen?

Allergy is an over-reaction of our body against allergens by our immune system that acts as protective function of our body originally.



- Eye Irritation
- Bloodshot
- Watery Eyes
- Runny Nose
- Nasal Congestion

Three major allergies

Allergy	Causes and Symptom
Allergy Rhinitis	House dust, mites, pollens attached to mucous membrane cause runny nose, nasal congestion, sneezing, eye irritation and bloodshot
Bronchial Asthma	It is developed from allergies that are cause by mites, house dusts and pollen, etc.
Atopy Dermatitis	It is a skin reaction mainly with rash and itchiness that is caused by some stimulus

Important of Indoor Air Quality (IAQ)

IAQ
INDOOR AIR QUALITY

It's the Air that human consume the most in a day

WATER

1.2kg / person • day

1.2ℓ^{*2}

FOOD

1.3kg / person • day

1.3ℓ^{*3}

18kg / person • day

15m³*1 (diameter : sphere of about 3m)



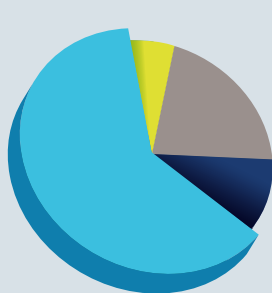
*1. "Air and Humans - From a Physiological Viewpoint" (1999) by UCHIYAMA Iwao (National Institute of Public Health of Japan)

*2. "Heat Stroke Environmental Health Manual (2009)" from the Ministry of the Environment, Government of Japan

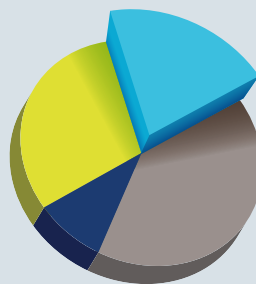
*3. "Basic Data Sheet of Agriculture, Forestry, and Fisheries, Statistics Regarding The Food Self-Sufficiency Rate" from Ministry of Agriculture, Forestry and Fisheries of Japan

Division of time spent indoors

- Urban Indoor
- Urban Outdoor
- Rural Outdoor
- Rural Indoor



Developed Countries
(23% of Population)



Developing Countries
(77% of Population)

1. Indoor VS Outdoor

Peoples spend the majority of their time indoors.

2. Developed VS Developing

About 77% of world population lives in developing countries.

3. Urban VS Rural

Nearly 50% of world population lives in urban area.

Pollution situation

PM2.5

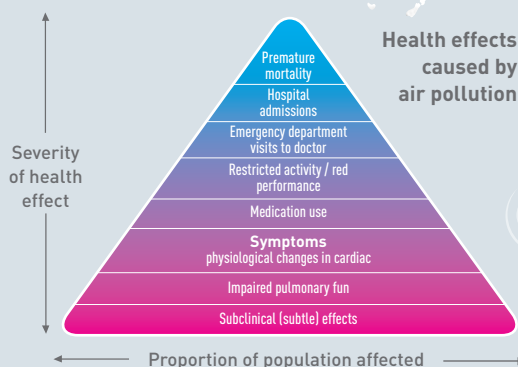
An annual average concentration of 10µg/m³ is the Long-term guideline value for PM2.5 set by the World Health Organization (WHO). As for latest information, more than 80% of people living in urban areas that monitor air pollution are exposed to air quality level that exceed the WHO limits.

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.



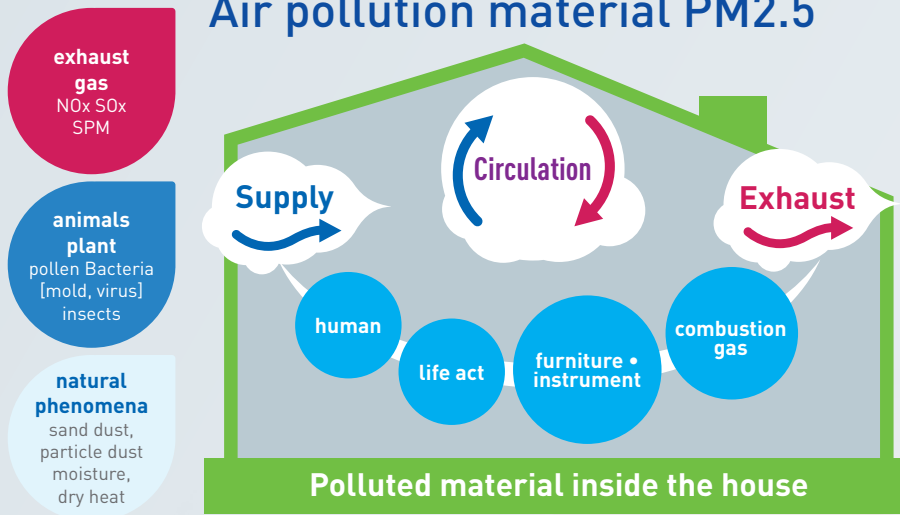
**PM2.5
Haze**



We propose to improve IAQ by optimized “supply”, “circulation” and “exhaust” products from the residential house to commercial building.



Air pollution material PM2.5



Common Indoor Air Pollutants

Specified substances in IAQ guidelines of major countries*	
Chemical Factor	Formaldehyde, VOCs, Ozone, PM2.5, Nicotine, Mercury, Dust
Physical Factor	Water Vapor (humidity), Heat (temperature), Sand Dust, Air Flow
Biological Factor	Stink, Bacterial
Others	
	Insect, Allergen, Virus, Plant Pollen



Pollutants that can cause potential health effects

IAQ Country Guidelines

* Pollutants specified in any of the IAQ guidelines (14 countries and regions, WHO, WHO Europe) (14 countries and regions: California, Canada, United Kingdom, Germany, Switzerland, Poland, Norway, Finland, Australia, China, South Korea, Singapore, Japan)



Panasonic Air Purifier Concept

A creation for bringing you
a cleaner and healthier
breathing experience.

1 Active Purification

2 Efficient Capture

3 Powerful Collection

4 Intelligent Sensing

5 Eco Operation



F-VXM50ASM



F-PXU70AWM



F-VXV70AWM



F-PXV50AKM



F-PXM55AAM



F-VXM35ASM



F-PXM35ASM



F-PXJ30AHM

1. Active purification

nanoe™

nano-technology + electric



nanoe™ X Has Stronger Effect Than nanoe™

- Faster air purification speed
- Greater efficiency for inhibiting viruses and bacteria
- Increases deodorisation strength

Microscope Scale

One-billionth the volume of a steam particle.



Purification Beyond Filter

Besides the airborne pollutants floating around the room that can be trapped by the filter, there are also adhered pollutants that cannot be filtered as they are trapped inside fabric or stuck on item's surface inside the room.

Due to its microscopic size, the emitted nanoe™ & nanoe™ X is able to spread around the room and penetrate deep to effectively inhibit the adhered pollutants.

Safety of nanoe™ & nanoe™ X has been verified

Purpose	Test Name	Test Institute
Effect on Chromosomes	Chromosome abnormality test using cultured cells	Japan Bioassay Research Center ^(#1)
Effect on Respiratory System	Repeated administration toxicity test	Life Science Research Laboratory ^(#2)
Toxicological and Carcinogenic Impact	Chronic toxicity and carcinogenicity combined test	Food and Drug Safety Center, Hatano Research Institute ^(#1)
Effect on DNA	Comet assay	Food and Drug Safety Center, Hatano Research Institute ^(#1)

#1 The Japan Bioassay Research Center and the Food and Drug Safety Center, Hatano Research Institute are compliant with GLP (Good Laboratory Practice) (*1)

#2 Life Science Laboratories, Ltd. Is a registered institute of the Network of Organizations Investigating Accident Causes (*2)

(*1) 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.

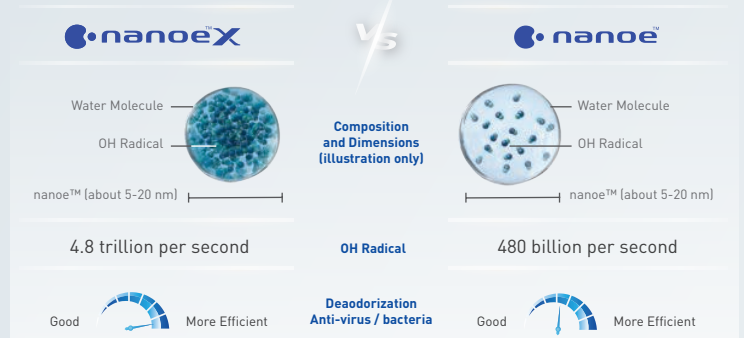
(*2) The Network of Organizations Investigating Accident Causes is a network administered by National Institute of Technology and Evaluation under the Ministry of Economy, Trade and Industry.

What is nanoe™?

Panasonic's Unique Technology

nanoe™ comprises fine (5–20 nm), weakly acidic water particles that are reactive and hold an electric charge. nanoe™ also possesses anti-virus/bacteria, deodorisation, and skin hydration properties.

* 1 nm (nanometer) = one billionth of meter



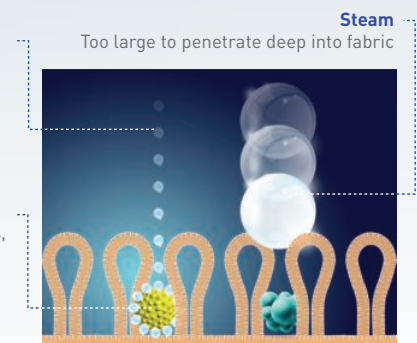
nanoe™

nanoe™ X

The nano-scale allows them to penetrate deep into fabric to prevent bacteria and unpleasant odors

Allergens (e.g., pollen, mites, and mite droppings) are captured and inhibited

Even odor particles in fabric can be thoroughly removed



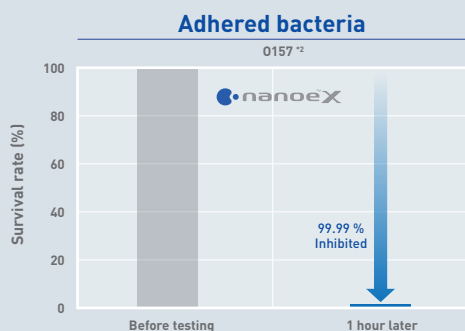
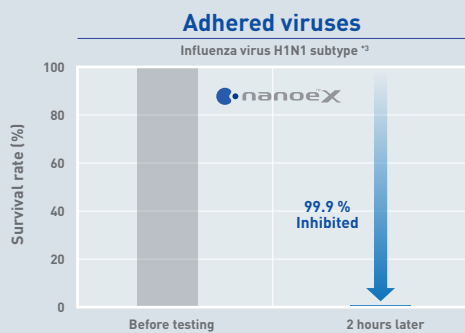
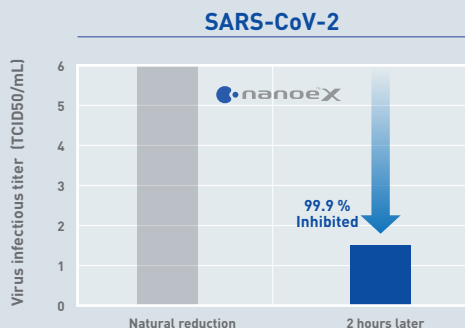


Merits of nanoe™ & nanoe™ X



Anti-virus/bacteria

Inhibits viruses (99.9%) and bacteria (99.99%)



Novel Coronavirus (COVID-19)

[Testing organization] TEXCELL (France)
 [Testing method] Exposed to a nanoe™ device at 15cm distance in 45L enclosed box for 2 hours
 [Test substance] novel coronavirus (SARS-CoV-2)
 [Test results] Over 99.99% of activity is inhibited (1140-01 A1)

Influenza virus H1N1 subtype

[Testing organization] Kitasato Research Center for Environmental Science
 [Testing method] Measured the number of viruses adhered to a cloth in an approximately 1m³ airtight test room
 [Inhibition method] nanoe™ released
 [Test substance] Adhered virus
 [Test results] Inhibited by at least 99.9% in 2 hours (21_0084_1)

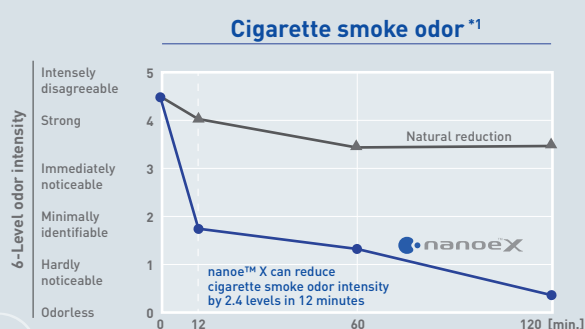
E. Coil (O157)

[Testing organization] Japan Food Research Laboratories
 [Testing method] Measured the number of bacteria adhered to a cloth in an approximately 45L airtight test room
 [Inhibition method] nanoe™ released
 [Test substance] Adhered bacteria
 [Test results] Inhibited by at least 99.99% in 1 hour (208120880_001)



Deodorization

Reduces strong cigarette smoke odor to hardly noticeable in only 1 hour



Deeply penetrates into cloth fabrics for inhibiting odor

Cigarette Smoke Odor

[Testing organization] Panasonic Product Analysis Center
 [Testing method] Verified using the six-level odor intensity scale method in an approximately 23m³ test room
 [Deodorization method] nanoe™ released
 [Test substance] Surface-attached cigarette smoke odor
 [Test results] Odor intensity reduced by 2.4 levels in 12 mins. (4AA33-160615-N04)



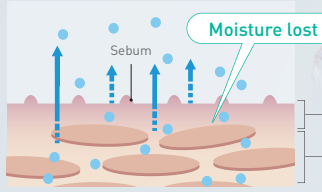
Skin and hair hydration

Helps keep the moisture back to the skin

Without nanoe™ X

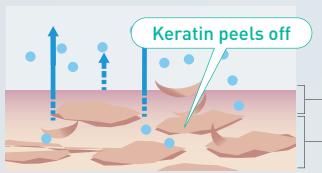
After 15 minutes

Moisture escapes from the skin, allowing it to become dry and dull



After 28 days

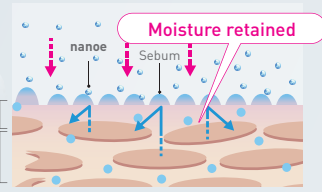
Cracks occur in the skin and keratin peels off



With nanoe™ X

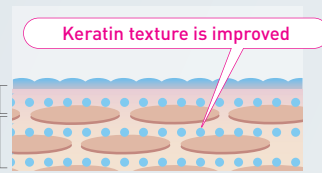
After 15 minutes

nanoe™ attaches to the sebum and forms a membrane over the skin, preventing moisture loss



After 28 days

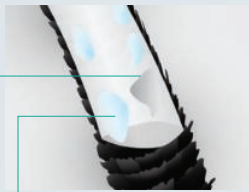
Skin is hydrated, keeping it fresh and moisturized



- [Testing organization] Panasonic Product Analysis Center [Testing method] Rest period: 90 minutes, nanoe™ exposure time: 60 minutes, retention: 60 minutes. 8 women aged 30-49 with dry to normal skin [Test results] Change in skin moisture content equivalent to a 20% point increase from 30% to 50% in environmental humidity (USG-KT-14K-012-TM)
- [Testing organization] FCG Research Institute, Inc. [Testing method and test results] Of 20 women 40 ± 2 years old, 10 women used a nanoe™ generating device at home for 28 days, while the other 10 women used a device with no nanoe™ generating device for 28 days at home (19104)

Without nanoe™ X

Frizzy Hair



Area difficult to lengthen even with shampooing

Lengthened area due to hydration during shampooing

The hair's moisture balance fails, leading to frizzy hair. Difficulty reflecting light, gloss is reduced, and texture is grainy.



With nanoe™ X

Non-Frizzy Hair

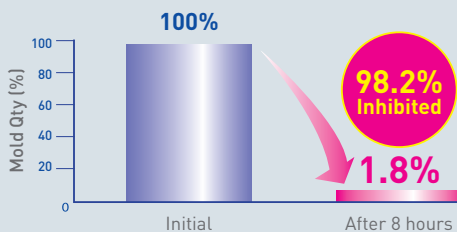
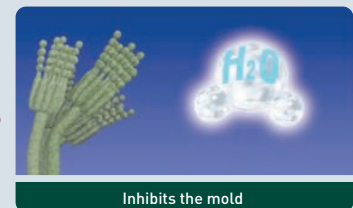
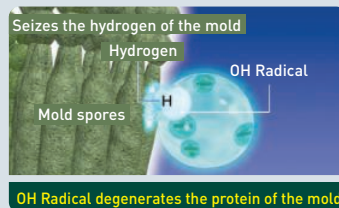
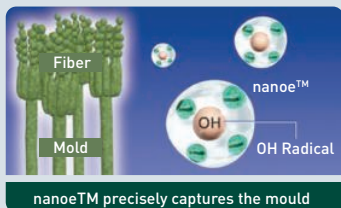


Helps the hair achieve a proper moisture balance, making for shiny hair that reflects light and allows fingers to be run through it smoothly.

- [Testing organization] Panasonic Product Analysis Center [Testing method and test results] Approximately 46m³ sized test room, room temperature 25 °C, humidity 40%. Bundles (6 bundles) of hair were suspended 2m from a nanoe™ generating device, with repeated operation of the nanoe™ generating device: 8 hours on and 16 hours off [Method] nanoe™ released [Test substance] Hair (USD-KS-15S-009-TM) Individual results may vary based on usage and seasonal/environmental variables (e.g., temperature and humidity)



































Other merits of nanoe™ X

Inhibits Mold



- Test Laboratory : Panasonic Electric Work Analysis Centre Co. Ltd.
 - Test Methodology : Direct expose in 45L test box
 - Inhibiting Method : nanoe™ emit
 - Test Subject : Cladosporium (Mold)
 - Test Result : 99% is inhibited after 8 hours
- [Report No. E02-080303IN-02]

Substances to be inhibited with Panasonic air purifier

		Filter - Composite Air Filter - Super Nano-technology Deodorizing Filter									
Pollutants	 Virus	 Airborne Bacteria	 Virus	 Airborne Bacteria	 Mold	 Dust	 Cigarette Ash	 Diesel Fumes	 Adhering Bacteria	 Mold (8 kinds)	 Diesel Fumes
	Allergens	 Sweet Vernal Grass	 White Birch	 Black Alder	 Beech	 Mugwort	 Pyroglyhidaer's Droppings	 Pyroglyhidaer's Corpses	 Dermatophagoides Farinae's Corpses	 Wheat Flour	
 Dermatophagoides Farinae's Ordures		 Cedar	 Hinoki	 Ragweed	 Orchard Grass	 Allergens from Dogs	 Allergens from Cats				
Odor		 Pet Odor	 Body Odor	 Ammonia Odor	 Garbage Stench	 Food Smell	 Cigarette Smell				

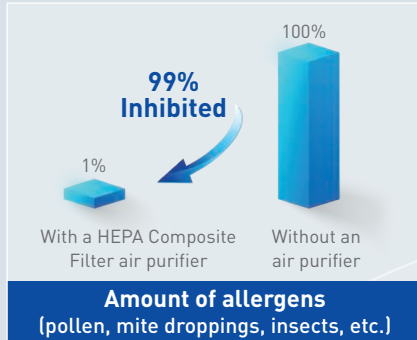
The effects of nanoe™ had been proven through experiment tests conducted by various organizations or laboratories

	Category	Test Laboratory	Test Item	Result	Report No.
1.	Virus	Japan Food Research Laboratories	Influenza Virus H1N1	Inhibited by 99.9% after 4 hours	208040534-001
2.	Bacteria	Japan Food Research Laboratories	Enterohemorrhagic Escherichia Coli (O157)	Inhibited by 99.9% after 1 hour	208120880-001
3.		Panasonic Electric Works Analysis Center Co. Ltd.	Escherichia Coli	Inhibited by 99.9% after 1 hour	E02-080303IN-01
4.		Japan Food Research Laboratories	Staphylococcus Aureus (MRSA)	Inhibited by 99.9% after 1 hour	208120880-002
5.		Kitasato Research Center of Environment Sciences	Staphylococcus Aureus (MRSA)	Inhibited by 99.9% after 4 hours	21_0142
6.		Odor	Panasonic Electric Works Analysis Center Co. Ltd.	Tobacco Smell	Deodorized after 30 minutes
7.	Panasonic Electric Works Analysis Center Co. Ltd.		Methyl Mercaptan (Raw Garbage)	Deodorized after 15 minutes	E02-080219MH-01
8.	Allergen	Panasonic Electric Works Analysis Center Co. Ltd.	Pollen	Inhibited by 99% after 2 hours	E02-080303IN-03
9.		Panasonic Electric Works Analysis Center Co. Ltd.	Cladosporium (Mold)	Inhibited by 99.7% after 24 hours	E02-080303IN-02
10.		Panasonic Electric Works Analysis Center Co. Ltd.	Tick	Inhibited by 98% after 2 hours	E02-080204IN-02
11.	Beauty Effect	FCG Research Institute, Inc.	Hydration	Improved after 28 days	19104

2. Efficient capture

HEPA Composite Filter

- Comprises three innovative technologies: Super alleru-buster, Green Tea Catechin, and Anti-bacteria Enzyme
- Inhibits viruses, bacteria, and 17 kinds of allergen by up to 99% ^{*1}
- Effectively removes up to 99% of PM0.003 particles ^{*2}



PM stands for Particulate Matter. PM2.5 refers to the tiny particles with diameter 2.5 micrometer or less in the air. PM0.003 is about 800 times smaller than PM2.5. They are tiny enough to travel deeply into respiratory tract, reaching the lung and cause health impacts. Panasonic air purifier equipped with HEPA Composite Filter can eliminate these particles efficiently to protect your health.

PM0.003

SUPER alleru-buster
Inhibits allergens by up to 99%

Green Tea "Catechin"
Inhibits viruses by up to 99%

Anti-bacteria Enzyme
Prevents bacteria reproduction

Inhibited Allergens

Pyroglyphidaer's				Dermatophagoidea Farinae's											
Mite Droppings	Mite Corpses	Mite Ordures	Mite Corpses	Cedar	Hinoki	Ragweed	Orchard Grass	Sweet Vernal Grass	White Birch	Black Alder	BeechMugwort	Dog Dandruff	Cat Dandruff	Mold	Wheat Flour

*1 • Super alleru-buster (Report no. 2127)

Test Laboratory: Osaka Municipal Technical Research Institute of Japan. Test Methodology: Measure reduction level of tick allergens by Enzyme-linked Immuno Sorbent Assay. Inhibit Method: Contact with Super alleru-buster. Test Subject: Allergens captured by filter (tick, pollen, etc.). Test Results: 99% or more is inhibited.

• Catechin (Report no. 15-0115)

Test Laboratory: Kitasato Research Centre of Environmental Sciences. Test Methodology: Inhibit rate of virus using the Plaque method. Inhibit Method: Contact with Green Tea Catechin. Test Subject: Virus captured by filter. Test Results: 99% or more is inhibited.

• Anti-bacteria Enzyme (Report no. 207060074-002)

Test Laboratory: Japan Food Research Laboratory. Test Methodology: Testing of the filter's anti-mold function using the Harrow method

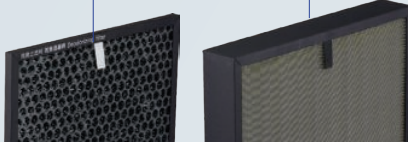
*2 • PM0.003 particle (UN2-200911-T5599900-136)

Test Laboratory: IUTA. Test Subject: NaCl aerosol. Test Results: 3 nm particle removal efficiency >99.99%

De-formaldehyde Technology

Super Nano-technology Deodorizing Filter

HEPA Composite Filter



With the additive substance, the formaldehyde is removed by means of chemical decomposition.

3-steps to Eliminate Formaldehyde Contamination

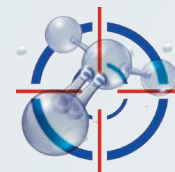
Using the 3-step process, the formaldehyde contaminants are removed by chemical decomposition, activated carbon adsorption, and trapping.



The porous activated carbon efficiently traps the formaldehyde contaminants.



The additive strengthens the trapping stability of the activated carbon against the contaminants.



3. Powerful collection

Direct Front Suction



Immediate

Smooth

Efficient

The unique and powerful Direct Front Suction draws the air into the unit at product front for filtration of air pollutants.

Mega Catcher



It maximizes the suction capacity by enlarging the lower suction intake, so as to achieve maximum inhale of large pollutants near the floor.

3D Circulation Airflow

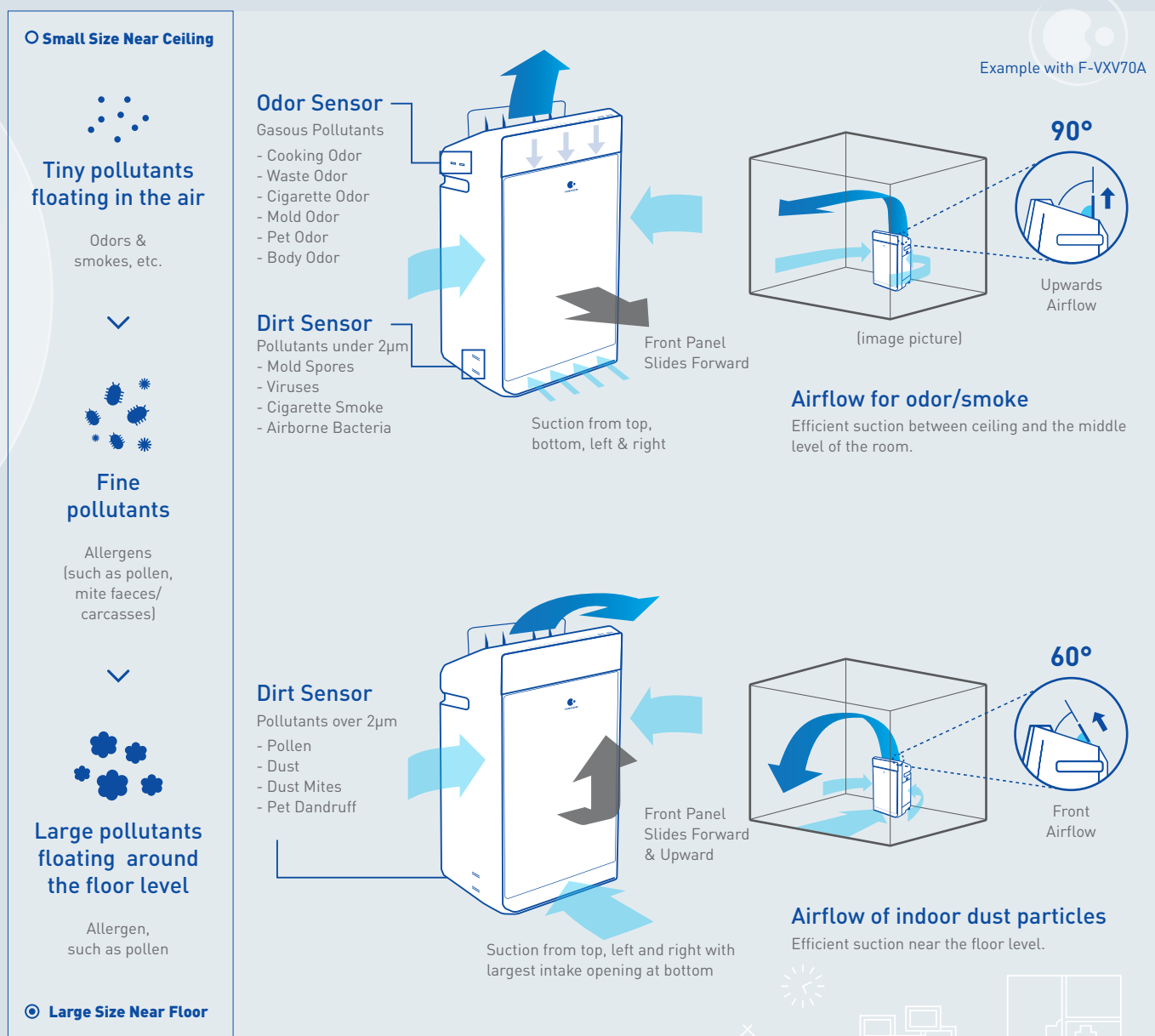


Our indoor environment may contain a lot of air pollutants, some are closer to the ceiling and some are closer to the floor. In response, the 3D circulation airflow is divided into two modes, namely "Side Airflow" and "Front Airflow", to remove pollutants accordingly.

House Dust Catcher



House Dust Catcher can effectively inhale large pollutant over $2\mu\text{m}$, such as dust particles and allergenic substances, with its frontal intake opening.



4. Intelligent sensing

Using high-tech sensors and precise control programs, it analyses room conditions and adjusts the operation accordingly. When the odour sensor and house dust sensor detect the corresponding pollutants, the fan speed or operation mode will be changed to remove the pollutants efficiently. The pollution level is identified with the indicator.

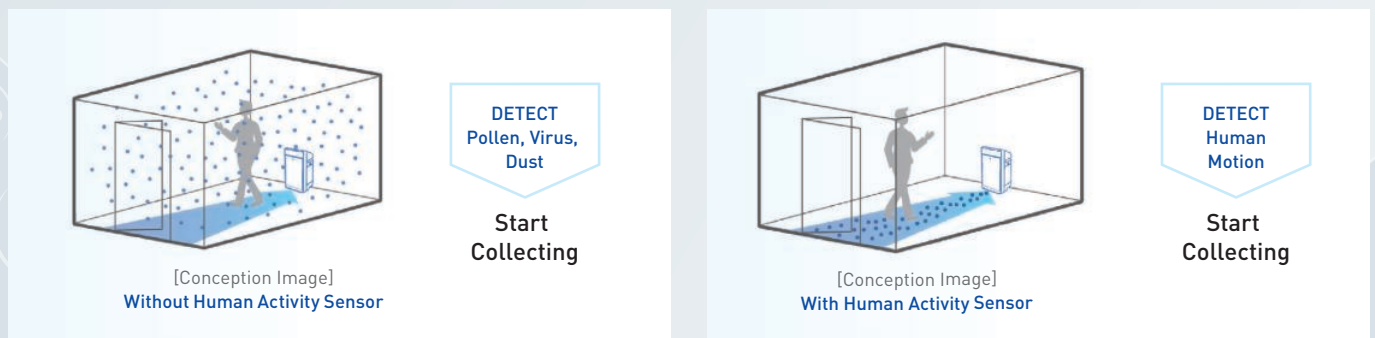
The brightness of the indicators on the control panel is adjusted accordingly to the indoor brightness sensed by the light sensor for comfortable sleeping environment.



Human Activity Sensor



Automatically adjust the air volume when an action of a person or pet is detected. It predicts generation of indoor dust and operates before indoor air pollutants disperse around the space.



Light Sensor

Achieves energy saving with optimized operation by auto sensor technology. The light sensor detects the indoor brightness and automatically adjust the fan speed as well as the brightness of control panel indicators.

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



5. Eco operation & other features

ECONAVI

Intelligent Sensors analyse room conditions, detect pollution level and human movements. Base on sensor analysis, The operation mode will be adjusted accordingly using precise control programs to remove pollutants efficiently without unconscious waste of energy.

Mechanism of **ECONAVI**

Checking for Pollutants by Odor Sensor Dirt Sensor

SEARCH

Detecting pollutants at the interval of 5 minutes per hour under Medium speed operation



PATROL OPERATION

Learning Pollution Pattern

LEARN

Allow machine-learning of the pollution timeline and intensity so as to automatically develop operation pattern, that can minimize the pollution before it spreads throughout the house.

PATTERNED OPERATION



Spot Air Mode

To quickly clean the air for a specific area, such as removal of cigarette smoke, the upper louver will stay at your preferred position while the speed is set by default at Hi-Med.

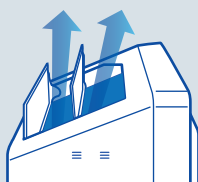


Sleep Mode

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.

Twin Airflow Louver

2 ways of airflow are used to suppress the diffusion of airflow for inhale of air pollutants.



Child Lock

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

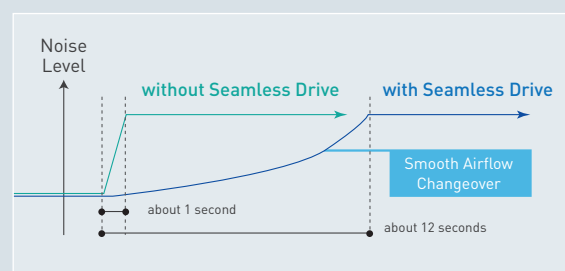
Caster Lock

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



Seamless Drive

Seamless drive is equipped for the newly developed DC (direct current) motor to ensure smooth changeover of airflow. With this exclusive function, noise during changeover is hardly noticeable.



Humidifying Series



F-VXV70AWM



Features

- DC Motor
- 3D Circulation Airflow
- Twin Airflow Louver
- Auto Mode
- Sleep Mode (8 hours)
- Spot Air Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	6.7	2.7	1.1
Power Consumption [W]	66	11	6
Noise [dB(A)]	54	33	18
Air Purifying & Humidifying			
Humidifying Capacity [ml/h]	700	400	250
Air Volume [m ³ /min]	6.3	3.1	1.9
Power Consumption [W]	58	15	10
Noise [dB(A)]	53	36	25

- Sensor : Dirt/Odor/Humidity
- Human Activity Sensor
- Light Sensor
- Clean Sensor
- Humidity Indicator
- Humidity Setting

Coverage Area [m² (ft²)]
52 (560)

Dimension (H x W x D)
636mm x 398mm x 265mm

Weight
10.2 kg

Colour
White

- Child Lock
- Seamless Drive
- Tank Stand
- Caster Lock
- Tank Capacity : 3.5 Liter



F-VXR50ASM



Features

- DC Motor
- 3D Circulation Airflow
- Twin Airflow Louver
- Auto Mode
- Sleep Mode (8 hours)
- Spot Air Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	5.1	1.9	0.9
Power Consumption [W]	45	9	6
Noise [dB(A)]	51	29	18
Air Purifying & Humidifying			
Humidifying Capacity [ml/h]	500	230	150
Air Volume [m ³ /min]	4.9	2.3	1.3
Power Consumption [W]	46	13	9
Noise [dB(A)]	51	34	23

- Sensor : Dirt/Odor/Humidity
- Light Sensor
- Clean Sensor
- Humidity Indicator
- Child Lock

Coverage Area [m² (ft²)]
40 (431)

Dimension (H x W x D)
560mm x 360mm x 240mm

Weight
8.6 kg

Colour
Silver

- Filter Replace Indicator
- Seamless Drive
- Tank Capacity : 3.5 Liter
- HEPA Composite Filter



F-VXM35ASM



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher
- Clean Sensor
- Auto Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	3.5	1.6	0.9
Power Consumption [W]	41	9	5
Noise [dB(A)]	49	31	22
Air Purifying & Humidifying			
Humidifying Capacity [ml/h]	350	170	100
Air Volume [m ³ /min]	3.4	1.6	0.9
Power Consumption [W]	40	11	8
Noise [dB(A)]	49	31	22

- Humidifying Function
- Humidity Indicator
- Sleep Mode (8 hours)
- Super Nanoe-Technology Deodorizing Filter

Coverage Area [m² (ft²)]
26 (280)

Dimension (H x W x D)
560mm x 360mm x 200mm

Weight
7.8 kg

Colour
Silver

- Filter Replace Indicator
- Child Lock
- Tank Capacity : 2.1 Liter

Non-Humidifying Series



F-PXU70AWM



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher
- PM2.5 Indicator

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	7	3.1	1.1
Power Consumption [W]	36	10.5	6.5
Noise [dB(A)]	48	32	18

- Auto Mode
- Sensor : Dirt/Odor/Humidity
- Light Sensor

Coverage Area [m² (ft²)]
52 m²

Dimension (H x W x D)
560mm x 362mm x 280mm

Weight
8.0 kg

Colour
White

- Child Lock
- Seamless Drive
- Filter Replace Indicator

Non-Humidifying Series



F-PXM55AAM



nanoe™
INTELLIGENT ECO SENSORS
ECONAVI



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher
- Auto Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	5.3	2.0	0.9
Power Consumption (W)	49	11	7
Noise [dB(A)]	52	32	18

Coverage Area [m² (ft²)]
41 (441)

Dimension (H x W x D)
580mm x 300mm x 195mm

Weight
5.8 kg

Colour
Dark Blue

- Sleep Mode (8 hours)
- Sensor : Dirt/Odor
- Light Sensor
- Clean Sensor

- Child Lock
- Seamless Drive



F-PXV50AKM

nanoeX



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher
- Auto Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	5.0	2.5	1.1
Power Consumption (W)	29	10	6.0
Noise [dB(A)]	47	33	19

Coverage Area [m² (ft²)]
36 (388)

Dimension (H x W x D)
550mm x 340mm x 208mm

Weight
6.2 kg

Colour
White

- Sensor : Dirt
- Filter Replace Indicator
- Turbo Mode
- Clean Sensor

- Seamless Drive



F-PXM35ASM



nanoe™



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher
- Auto Mode

Specifications

	High	Medium	Low
Air Purifying			
Air Volume [m ³ /min]	3.5	2.0	1.0
Power Consumption (W)	20	9	6
Noise [dB(A)]	44	32	18

Coverage Area [m² (ft²)]
26 (280)

Dimension (H x W x D)
520mm x 300mm x 189mm

Weight
4.8 kg

Colour
Sliver

- Sleep Mode (8 hours)
- Filter Replace Indicator
- Super Nanoe-Technology Deodorizing Filter

- Turbo Mode
- Clean Sensor



F-PXJ30AHM



nanoe™



Features

- DC Motor
- 3D Circulation Airflow
- House Dust Catcher

Specifications

	High	Medium	Low
Specification at 220V 50Hz			
Air Purifying			
Air Volume [m ³ /min]	2.8	1.8	0.8
Power Consumption (W)	30	22	15
Noise [dB(A)]	44	35	21

Coverage Area [m² (ft²)]
20 (215)

Dimension (H x W x D)
540mm x 311mm x 210mm

Weight
4.3 kg

Colour
White

- Auto Mode
- Turbo Mode
- Sleep Mode (8 hours)

- Sensor : Odor
- Clean Sensor

Cleaning

1

Composite air filter / HEPA composite filter
(Twice a month or so)
Clean the black side (front side) with a vacuum cleaner.

- Delicate. Do not apply too much pressure.
- The back (white) side is free of maintenance.
- Never wash the filter with water.

2

Humidifying filter
Wash the humidifying filter twice a month with water.

3

Main unit and front panel
(Once a month or so)
Wipe off any dust and dirt using a damp cloth.

- Do not wipe it with a hard cloth or too much force. Otherwise, the surface may be damaged.
- Wipe the power plug with a dry cloth.

Polish, Thinner, Bleach, Alkaline Detergent, Kerosene Alcohol

Be sure to disconnect the power plug before cleaning the unit

- Do not use the detergents shown above.
- When using chemically treated cloth, be sure to follow the instructions carefully.

*Applicable for all models.

Placement



Do not put the product in the following places:

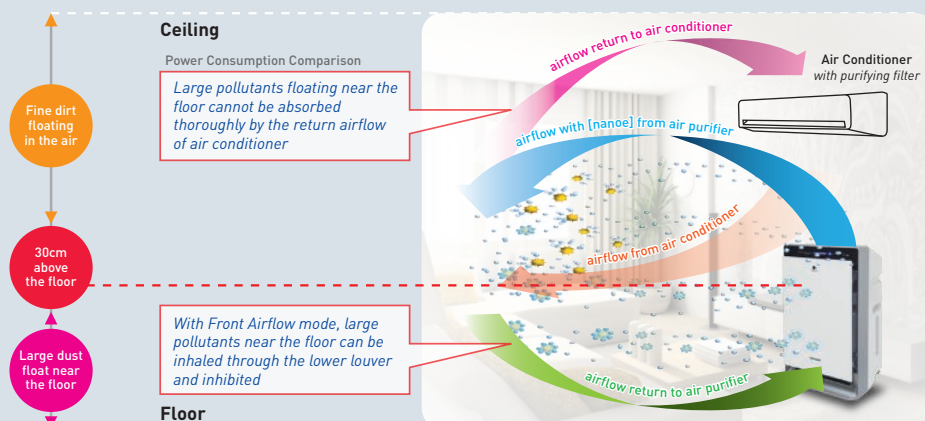
- Where the product will be exposed to direct sunlight or direct blowing of air conditioner. (Otherwise, deformation, degeneration, discolor and malfunction may be caused.)
- Where window or other objects may obstruct the humidity sensor. (Otherwise, the humidity sensor may not work normally)
- Near a TV set or radio (Otherwise, visual disturbances or noises may be caused)
Keep it 1 m or above away from such devices.
If the power plug is inserted into the same outlet as that of these devices, visual disturbances or noises may be caused. In this case, insert the power plug into another outlet.



It would be effective if placed here!

- Place it low on the floor as a countermeasure against pollen. Since pollen or dust is likely to float in the air near the floor, we recommend you put the product on the flat floor in the room.
- To circulate the air efficiently around the room. To prevent the air inlet or the air outlet from being blocked, install the equipment with its left, right and the top about 30 cm or more away from walls or furniture, curtains etc. To ensure efficient use of the product, keep its back at least 1 cm away from the wall.

Air purifier & Air conditioner



Humidifying Series



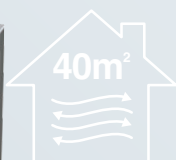
F-VXV70AWM



Recommended Area:
Studio apartment,
SOHO, classroom,
auditorium, gymnasium,
library, smoking room



F-VXM50ASM



Recommended Area:
Master bedroom,
dining hall, restaurant,
office, hotel suite



F-VXM35ASM



Recommended Area:
Bedroom, dining hall,
hotel suite, office



Non-Humidifying Series



F-PXU70AWM



Recommended Area :
Studio apartment,
SOHO, classroom,
auditorium, gymnasium,
library, smoking room



F-PXM55AAM



Recommended Area:
Master bedroom,
dining hall,
hotel suite, office



F-PXV50AKM



Recommended Area:
Master bedroom,
dining hall,
hotel suite, office



F-PXM35ASM



Recommended Area:
Bedroom, dining hall,
hotel suite, office



F-PXJ30AHM







































Recommended Area :
Baby room,
kids playroom,
study room

HUMIDIFYING AIR PURIFIER



Model	White			Sliver			Sliver			White		
	F-VXV70AWM			F-VXR50ASM			F-VXM35ASM			F-PXU70AWM		
Applicable Area [m ² (ft ²)]	52 (560)			40 (431)			26 (280)			52 (560)		
nanoe Purification	nanoeX			nanoe™			nanoe™			nanoeX		
	High	Medium	Low	High	Medium	Low	High	Medium	Low	High	Medium	Low
Air Purifying												
Air Volume [m ³ /min]	6.7	2.7	1.1	5.1	1.9	0.9	3.5	1.6	0.9	7	3.1	1.1
Power Consumption [W]	66	11	6	46	9	6	41	10	6	36	10.5	6.5
Noise [dB(A)]	54	33	18	51	29	18	50	31	22	48	32	18
Air Purifying & Humidifying												
Humidifying Capacity [ml/h]	700	400	250	500	230	150	350	170	100			
Air Volume [m ³ /min]	6.3	3.1	1.9	4.9	2.3	1.3	3.5	1.6	0.9			
Power Consumption [W]	58	15	10	46	13	9	40	11	8			
Noise [dB(A)]	53	36	25	51	34	23	50	31	22			
Particle Filter	HEPA Composite			HEPA Composite			HEPA Composite			HEPA Composite		
Filter Replace Indicator / Filter Life Check	•			•			•			•		
Motor Type	DC			DC			DC			DC		
3D Circulation Airflow	•			•			•			•		
Twin Airflow Louver	•			-			-			-		
Mega Catcher	•			•			-			-		
House Dust Catcher	-			-			•			•		
ECONAVI	ECONAVI			ECONAVI			-			-		
Eco Mode	-			-			•			-		
Auto Mode	•			•			•			•		
Turbo Mode	-			-			-			-		
Sleep Mode (8 hours)	•			•			•			-		
Spot Air Mode	•			•			-			-		
Sensor	Dirt / Odor / Humidity			Dirt / Odor / Humidity			Dirt / Odor / Humidity			Dirt / Odor		
Human Activity Sensor	•			-			-			-		
Light Sensor	•			•			-			•		
Clean Sign	•			•			•			-		
PM2.5 Indicator	-			-			-			•		
Remote Control	-			-			-			-		
Humidity Indicator	•			•			•			-		
Humidity Setting	•			-			-			-		
Child Lock	•			•			•			•		
Seamless Drive	•			•			•			•		
Tank Capacity [L]	3.5			2.3			2.1			-		
Tank Stand	•			-			-			-		
Caster Lock	•			-			-			-		
Dimension (H x W x D) [mm]	636 x 398 x 265			560 x 360 x 240			560 x 360 x 200			560 x 362 x 280		
Weight [kg]	10.2			8.6			7.8			8		
HEPA Complete Filter / Composite Filter	F-ZXKP70Z			F-ZXMP55Z			F-ZXMP35Z			F-ZXTP70Z		
Deodorizing Filter	F-ZXFD70Z			F-ZXHD55Z			F-ZXFD35Z			F-ZXTD70D		
Humidifying Filter	F-ZXKE90Z			F-ZXHE50Z			F-ZXCE50X			-		
Large Particulate Pre-filter	-			-			-			-		
Formaldehyde Filter	-			-			-			-		

NON-HUMIDIFYING AIR PURIFIER

							
		Blue	White	Sliver	White		
Model	Asia	F-PXM55AAM	F-PXV50AKM	F-PXM35ASM	F-PXJ30AHM		
 Applicable Area [m ² (ft ²)]		41 (441)	36 (388)	26 (280)	20 (215)		
 nanoe Purification							
Air Purifying		High Medium Low	High Medium Low	High Medium Low	High Medium Low		
Air Volume [m ³ /min]		5.3 2.0 0.9	5.0 2.5 1.1	3.5 2.0 1.0	2.8 1.8 0.8		
Power Consumption [W]		49 11 7	29 10 6.0	20 9 6	30 22 15		
Noise [dB(A)]		52 32 18	47 33 19	44 32 18	44 35 21		
Air Purifying & Humidifying							
Humidifying Capacity [ml/h]							
Air Volume [m ³ /min]							
Power Consumption [W]							
Noise [dB(A)]							
Particle Filter		HEPA Complete Filter	HEPA Complete Filter	HEPA Complete Filter	HEPA Complete Filter		
Filter Replace Indicator / Filter Life Check		•	•	•	•		
 Motor Type		DC	DC	DC	AC		
 3D Circulation Airflow		•	•	•	•		
 Twin Airflow Louver		-	-	-	-		
 Mega Catcher		-	-	-	-		
 House Dust Catcher		•	•	•	•		
 ECONAVI			-	-	-		
 Eco Mode		-	-	-	-		
 Auto Mode		•	•	•	•		
 Turbo Mode		-	-	•	•		
 Sleep Mode (8 hours)		•	-	•	•		
 Spot Air Mode		-	-	-	-		
 Sensor		Dirt / Odor	Dirt	Odor	Odor		
 Human Activity Sensor		-	-	-	-		
 Light Sensor		•	-	-	-		
 Clean Sign		•	•	•	•		
 PM2.5 Indicator		Haze Mode	•	-	-		
 Remote Control		-	-	-	-		
 Humidity Indicator		-	-	-	-		
 Humidity Setting		-	-	-	-		
 Child Lock		•	-	•	-		
 Seamless Drive		•	•	•	-		
 Tank Capacity [L]		-	-	-	-		
 Tank Stand		-	-	-	-		
 Caster Lock		-	-	-	-		
 Dimension (H x W x D) [mm]		580 x 300 x 205	550 x 340 x 208	520 x 300 x 189	540 x 311 x 210		
 Weight [kg]		5.8	6.2	4.8	4.3		
HEPA Complete Filter / Composite Filter		F-ZXMP55Z	F-ZXTS50Z	F-ZXMP35Z	F-ZXJP30Z		
Deodorizing Filter		F-ZXHD55Z	-	F-ZXFD35X	F-ZXJD30Z		
Humidifying Filter		-	-	-	-		
Large Particulate Pre-filter		-	-	-	-		
Formaldehyde Filter		-	-	-	-		

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



- *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 deodorised 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.: 11M-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.: 11M-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://panasonic.net/technology/nanoe/experiment.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.