

more than just fresh air
for your health & beauty



Air is an Essential Part of Our Lives

WATER
1.2 kg(L)/person-day*2

FOOD
1.3 kg/person-day*3

AIR
18 kg/person-day
15 m³ (Sphere diameter about 3 m)*1



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

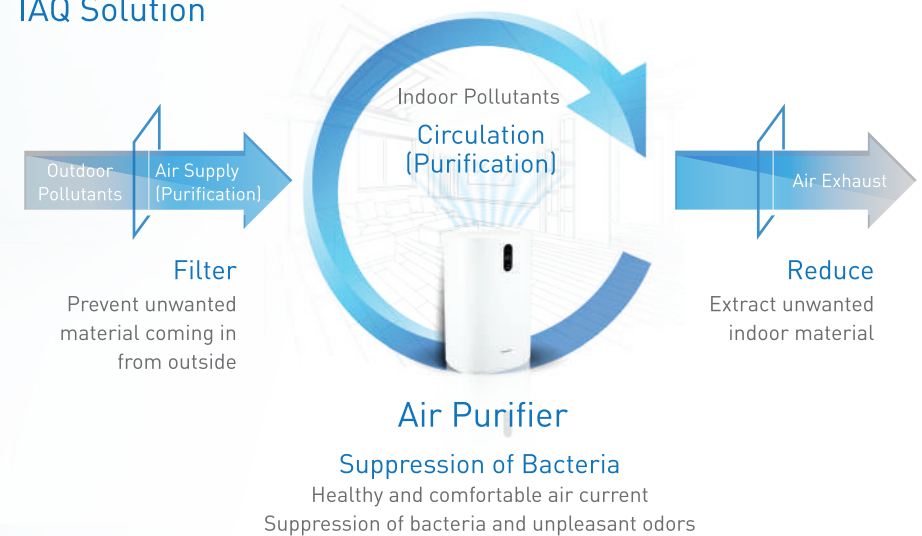
*2. "Heat Stroke Environmental Health Manual (2009)" from the Ministry of the Environment, Government of Japan

*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

What is Indoor Air Quality?

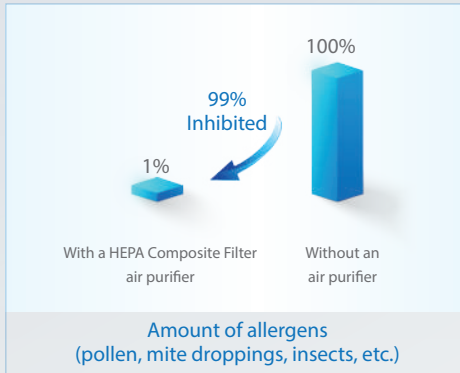
Indoor air quality (IAQ) indicates the quality of air in buildings such as homes, offices, public facilities, and schools. The quality of this air is vital to us leading healthy and comfortable lives.

IAQ Solution



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		Dermatophagoides Farinae's			Other Allergens											
Mite Droppings	Mite Corpses	Mite Ordures	Mite Corpses	Cedar	Hinoki	Ragweed	Orchard Grass	Sweet Vernal Grass	White Birch	Black Alder	Beech	Mugwort	Dog Dandruff	Cat Dandruff	Mold	Wheat Flour

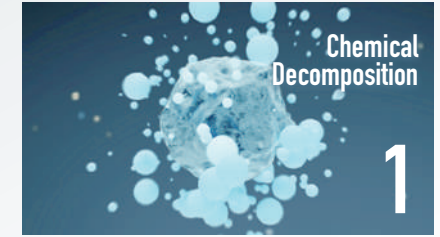
*1 • Super alleru-buster (Report no. 2127)
Test Laboratory: Osaka Municipal Technical Research Institute of Japan. Test Methodology: Measure reduction level of tick allergens by Enzyme-linked Immuno Sorbent Assay. Inhibit Method: Contact with Super alleru-buster. Test Subject: Allergens captured by filter (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.

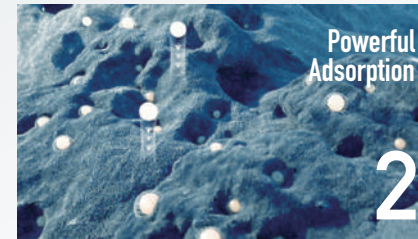
• Anti-bacteria Enzyme (Report no. 207060074-002)
Test Laboratory: Japan Food Research Laboratory. Test Methodology: Testing of the filter's anti-mold function using the Harrow method

*2 • PM0.003 particle (UN2-200911-15599900-136)
Test Laboratory: IUTA. Test Subject: NaCl aerosol. Test Results: 3 nm particle removal efficiency >99.99%

De-formaldehyde Technology



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



The porous activated carbon efficiently traps the formaldehyde contaminants.



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

3-steps to Eliminate Formaldehyde Contamination

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



What is nanoe™X?

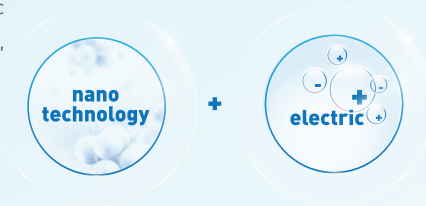
Panasonic's Unique Technology

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

* 1 nm (nanometer) = one billionth of meter



nano-technology + electric



nanoe™ 10x Faster

- 10x faster air purification speed
- Greater efficiency for inhibiting viruses and bacteria
- Increases deodorization strength

nanoe™X	VS	nanoe™
Water Molecule —	Composition and Dimensions (illustration only)	Water Molecule —
OH Radical —		OH Radical —
nanoe™ (about 5-20 nm)		nanoe™ (about 5-20 nm)
4.8 trillion per second	OH Radical	480 billion per second
Good More Efficient	Deodorization Anti-virus / bacteria	Good More Efficient

nanoe™X and nanoe™ Characteristics

Longer Life

Coated in water, nanoe™X and nanoe™ have six times longer life spans than ordinary air ion technology.

Ordinary Air Ion Technology
Dissipates in 100 seconds

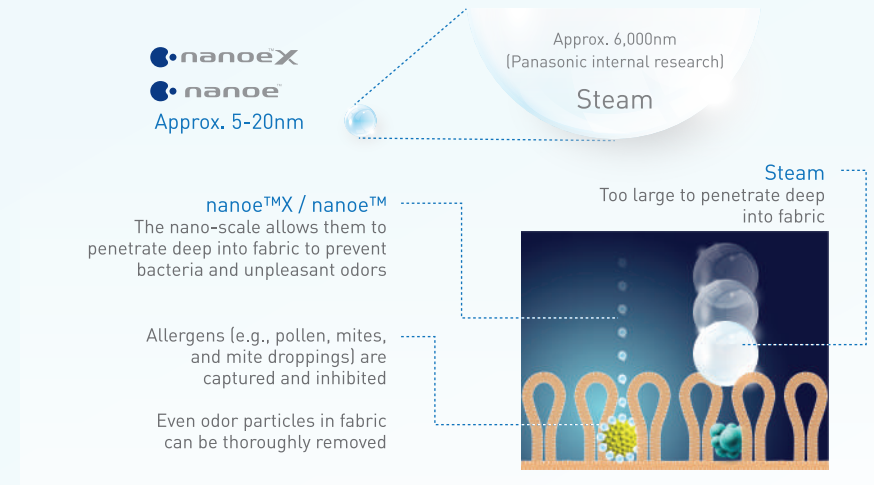


nanoe™X
nanoe™
After 100 seconds



Microscope Scale

One-billionth the volume of a steam particle.



Safety of nanoe™X and nanoe™ 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.

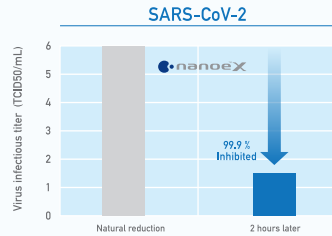


Merits of nanoe™X – 3 main Features



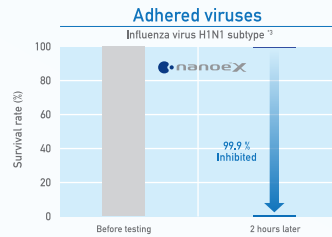
Anti-virus/bacteria

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



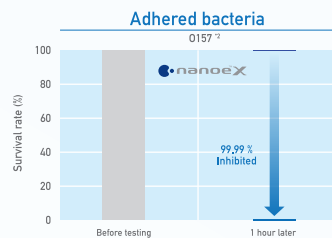
Novel Coronavirus (COVID-19)

[Testing organization] TEXCELL (France)
 [Testing method] Exposed to a nanoe™X 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™X released
 [Test substance] Adhered virus
 [Test results] Inhibited by at least 99.9% in 2 hours (21_0084_1)



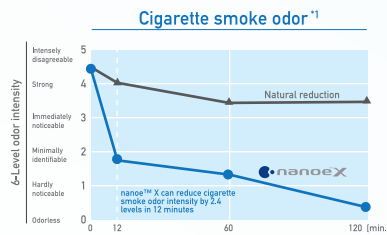
E. Coli (O157)

[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™X 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™X 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

Moisture lost

After 28 days
Cracks occur in the skin and keratin peels off

Keratin peels off

With nanoe™X

After 15 minutes
nanoe™X attaches to the sebum and forms a membrane over the skin, preventing moisture loss

Moisture retained

After 28 days
Skin is hydrated, keeping it fresh and moisturized

Keratin texture is improved

- [Testing organization] Panasonic Product Analysis Center [Testing method] Rest period: 90 minutes, nanoe™X 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™X generating device at home for 28 days, while the other 10 women used a device with no nanoe™X 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

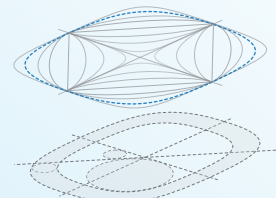
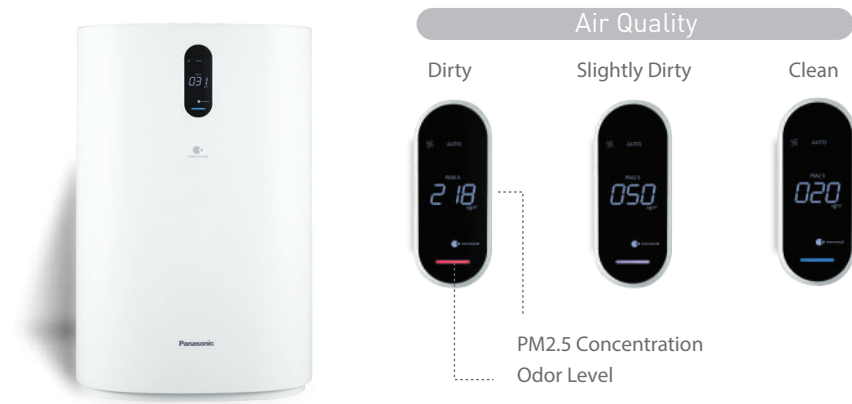
Non-Frizzy Hair

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™X generating device, with repeated operation of the nanoe™X generating device: 8 hours on and 16 hours off [Method] nanoe™X released [Test substance] Hair [USD-K5-15S-009-TM]
 Individual results may vary based on usage and seasonal/environmental variables (e.g., temperature and humidity)

PM2.5/Odor Indicator

The PM2.5 and odor indicator lets you to see the air quality easily and in real-time



"Superellipse" Design

Thanks to the aesthetics of "Superellipse", both art and functionality are achieved. The elegant and streamline look will really enhance your home.

AIR PURIFIER F-PXU70A/F-PXU70M



Applicable Area: 52 m² | Dimensions: H 560 x W 362 x D 280 mm | Weight: 8 kg

Air Purification

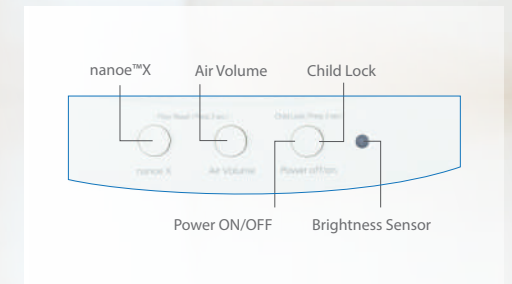
nanoe™X
HEPA Composite Filter
Super Nano-technology Deodorizing Filter
De-Formaldehyde Function

Other Features

PM2.5 / Odor Sensor
Brightness Sensor
Child Lock

Indicator

LCD Indication Panel
PM2.5 Concentration Digital Indicator
Odor Level Indicator
Filter Replacement Indicator



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

Note:

The calculation of applicable area is based on the standard JEM1467, as stipulated by the Japan Electrical Manufacturers Association. The applicable area is defined as the area filled with dirty air, 30 mins under 1 air change per hour of natural ventilation, as specified under the Building Sanitation Law.