

# Panasonic



GENERAL CATALOGUE  
2024 / 2025



heating & cooling solutions

## Editorial

Panasonic – leading the way in Heating and Cooling. With 65 years of experience, selling to more than 120 countries around the world, Panasonic is one of the leaders in the heating and cooling sector.

**Bringing nature's balance indoors.**

nanoe™ X, technology with the benefits of hydroxyl radicals that have the capacity to inhibit pollutants, viruses, and bacteria and deodorise.



**Heating, cooling, and refrigeration solutions with natural refrigerant.**

Following Panasonic's Environmental Vision 2050, natural refrigerant heat pump technology has been integrated across a wide range of heating, cooling and refrigeration solutions, meeting both residential and commercial needs.




## Aquarea

Aquarea is a ground breaking low energy system for heating and domestic hot water production: delivering outstanding performance, even at extreme outdoor temperatures.

**New Aquarea T-CAP M Series.**

The new M Series offers more application choices with different indoor units, a brand-new control module or the outdoor unit as a stand-alone system. The M Series is ideal for any application, including retrofit, as it delivers impressive performance even in extreme outdoor conditions, with a maximum water outlet temperature of 75 °C at -15 °C.



**New Big Aquarea T-CAP M Series, for centralised heating and DHW.**

The new Big Aquarea M Series offers a flexible, compact and energy-efficient solution for central heating and/or domestic hot water installations in multi-family or commercial buildings.




## Domestic

Panasonic has developed a range of domestic products designed for you and your clients.


**Etherea: a very welcome addition to your home.**

The smart, Etherea comes with the nanoe™ X (Generator Mark 3) and built-in Wi-Fi which enables advanced smart control and voice assistant, now with an easier and quicker set-up.



**Wall-mounted TZ super-compact.**

The perfect air conditioner for the smallest spaces in your home, now comes with nanoe™ X technology, to improve protection 24/7. The built-in Wi-Fi enables now an easier set-up.




## Commercial air to air - PACi

The commercial range is continuously being improved to offer the optimal solutions. High performance, silent operation and a wide range of indoor units and connectivity available.


**PACi NX Series.**

This series for absolute ease of refurbishment. Having 3 wired power and communications makes the replacement old systems with 3 wiring connections simple and easy.



**CONEX. Devices and apps.**

CONEX provides comfort and control for varying user needs. Accessible, flexible and scalable with different controllers and apps. Perfectly meeting requirements of modern controls for end user, installer and service.




## Commercial VRF Systems - ECOi and ECO G

Panasonic provides an extensive range of solutions for medium and large sized buildings, combining the best options to satisfy all needs and site restrictions.

**Mini ECOi LZ2 Series R32.**

Outstanding efficiency in a compact body and continuous operation even at extreme ambient temperatures.



**nanoe™ X.**

nanoe™ X is a perfect solution to improve indoor air quality in your commercial environment. Taking the benefits of hydroxyl radicals, indoor environment can be a cleaner and more pleasant place to be, whether at work, hotels, shops and restaurants etc.



## Ventilation

Panasonic ventilation solutions for maximum savings and easy integration.



### Air handling unit connection kit for PACi, ECOi and ECO G.

Air handling unit (AHU) connection kit connects outdoor units to air handling systems. Combines air conditioning and fresh air in just one solution.



### Energy recovery ventilation.

Panasonic energy recovery ventilations (ERV) help to improve your comfort and energy saving plan. Introducing ERV range (ZY1G) which has extended line-up and comes with F7 grade filter as a standard.



## Control and connectivity

From the individual remote controller for the residential single units up to the newest technology capable of controlling your building anywhere in the world.



### Panasonic AC Smart Cloud.

Panasonic AC Smart Cloud provides building mapping, remote monitoring, error notification and schedule setting for site managers. Panasonic AC Service Cloud help maintenance companies to manage multiple sites with remote checking and advance failure prediction functions.



### Panasonic AC Service Cloud.

Panasonic AC Service Cloud provides to maintenance company a unique tool to deliver advanced maintenance to increase response time, reduce sites visits and allocate better the resources.



## Chillers and heat pumps, fan coils, water source heat pumps and rooftops

Panasonic solutions to suit a variety of commercial and industrial applications. Our systems provide the optimal performance in any climatic condition.



### ECOi-W AQUA-G BLUE R290. A revolutionary solution.

ECOi-W AQUA-G BLUE powered by R290, a natural refrigerant. It delivers both sustainability and efficiency in one innovative package.



### AC SELECT. Use AC SELECT to choose and configure your hydronic solution.

Panasonic online selection tool offers an easy and quick solution to specify all the hydronics ranges and rooftops at required conditions.



## Refrigeration

Panasonic CO<sub>2</sub> condensing units - CR Series with natural refrigerant. Natural refrigerant solution for showcases and cold rooms. Reliable quality - made in Japan.



### Refrigeration.

CR Series is an ideal solution for supermarkets, convenience stores and gas stations. Let's choose the sustainable green solution by Panasonic.



### Reliable CO<sub>2</sub> technology by Panasonic.

CR Series are made in Japan with an excellent quality control established by skilled factory team. 2-stage rotary compressor by Panasonic delivers powerful performance more than 20 years and spit cycle technology enhances cooling effect.



## Dimensions



## Wiring diagrams



### Quality Management System Certificate



ISO 9001: 2015  
Panasonic Appliances Air-Conditioning  
Malaysia. Sdn.Bhd.  
Cert. No.: QMS 00413



GB/T 19001-2016/ISO 9001: 2015  
Panasonic Appliances Air-Conditioning  
(GuangZhou) Co., Ltd.  
Registration Number: 01218030835R8L

### Environmental Management System Certificate



ISO 14001: 2015  
Panasonic Appliances Air-Conditioning  
Malaysia Sdn.Bhd.  
Cert. No.: EMS 00109

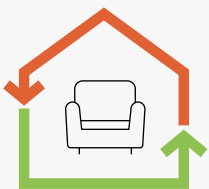


GB/T 24001-2016/ISO 14001: 2015  
Panasonic Appliances Air-Conditioning  
(GuangZhou) Co., Ltd.  
Registration Number: 02118E10944R7M



# Panasonic environmental vision 2050

To achieve “a better life” and “a sustainable global environment,” Panasonic will work towards creation and more efficient utilisation of energy which exceeds the amount of energy used, aiming for a society with clean energy and a more comfortable lifestyle.



## Energy used < Energy created

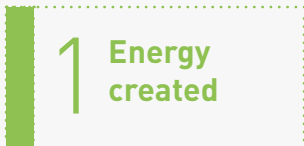
One initiative in the Panasonic environmental vision 2050 is offering products with greater energy efficiency. In 2018, we celebrated the 60th anniversary of our Heating & Cooling Solutions business. Our expertise gained over the years has helped us launch a range of products that contribute to a more carbon-free society.

### Current status of energy used and energy created

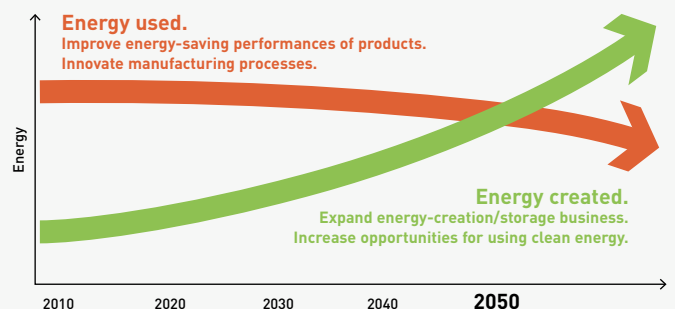
Energy used by Panasonic business activities and products.



Clean energy created and / or made available by Panasonic products, etc.



### Working to realise environmental vision 2050



# Heating and cooling solution with R290 natural refrigerant

Following Panasonic's Environmental Vision 2050, Panasonic presents an advanced, high-energy-saving heating and cooling solution utilising the natural refrigerant R290 with a low GWP of 3. These solutions not only minimise environmental impact but also enhance energy efficiency and comfort in heating and cooling.



**Aquarea M and L Series (5 - 300 kW\*).**



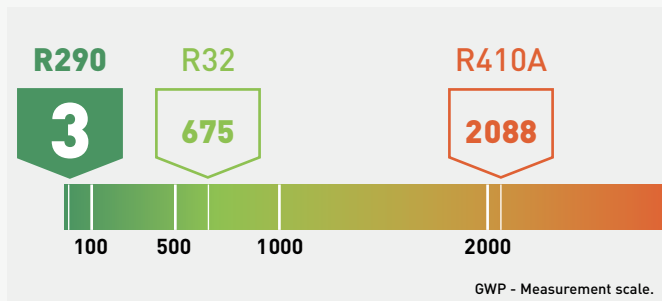
**ECOi-W AQUA-G BLUE (50 - 640 kW\*).**

The R290 refrigerant technology has been integrated across a wide range of heating and cooling solutions, meeting both residential and commercial needs. These solutions are available in capacities from 5 to 640 kW\*.

\* Cascade control required.

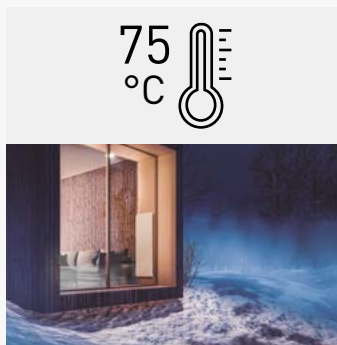
## Contributing to a decarbonised society.

Natural refrigerant R290 has low Global Warming Potential (GWP) of just 3 (R32:675 and R410A: 2088), helping reduce CO<sub>2</sub> emissions and environmental impact. It's a green alternative solution for any residential and commercial projects and delivers outstanding performance, aligning with Panasonic vision of a carbon-free society and our GREEN IMPACT plan.

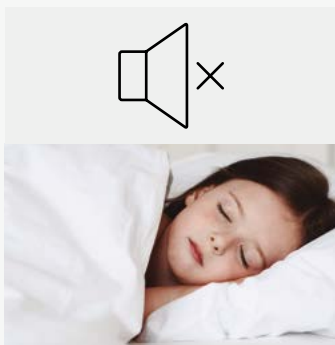


## Industry leading Panasonic technology with natural refrigerant R290.

Panasonic's heating and cooling solution with R290 natural refrigerant, is not only a 'green solution' but also delivers outstanding performance to meet the demands of the most challenging projects. An ideal solution with high performance and quality, coupled with minimized environmental impact, making it a worthwhile investment for the future.



**High water outlet temperature up to 75 °C.**



**Quiet operation.**



**High quality, made in Europe.**



**Range from 5 to 80 kW, boost capacity up to 640 kW with a cascade control.**

\* The specification varies depending on the series. Please check the detailed information on each product page.



## Case studies

Panasonic, your partner with the knowledge and experience to realize your projects, both at the national and international levels, implementing them on time and within budget. Solutions that not only cut costs but are also efficient, environmentally friendly, user-friendly, reliable, and innovative.



Arctic Treehouse Hotel.  
Rovaniemi, Lapland, Finland.  
**RAC multi.**

The multi system for extremely cold weather is installed in the cosy Arctic Glasshouse to ensure comfort and air quality in the lounge and 2 bedrooms of the cabin on the coldest days.



**Single family house.**  
Höllviken, Sweden.  
**Aquarea with natural refrigerant R290.**

Aquarea L Series with R290 replaced an old heating system, providing comfort in cold weather and reducing energy costs. Being connected to the Aquarea Service Cloud, the heat pump can be monitored remotely by a service company.



**Amandiers.**  
Sports complex.  
Carrierre sur Seine, France.  
**ECOi-W.**

Panasonic ECOi-W series air cooled heat pumps were installed in a large indoor tennis court within the sports complex, along with 100 m<sup>2</sup> of photovoltaic panels for renewable energy.



**Weinbuch Butcher's Shop.**  
Shop - Restaurant.  
Öpfingen, Germany.  
**VRF, Domestic and Refrigeration.**

The entire meat production cold rooms are equipped with Panasonic CO<sub>2</sub> condensing units, and ECOi EX systems for cooling and a part of the heating for areas such as the Bistro, production facility, and Drive-in stations.



As a global company, Panasonic offers European coverage for support, providing financial, logistical, and technical resources to develop comprehensive and wide-ranging solutions at both national and international levels. This ensures timely and budget-conscious implementation.



Belfast Grand Opera House.  
Public building.  
Belfast, United Kingdom.  
**PACi, VRF and Control.**



Varna Wave Building.  
Residential building.  
Varna, Bulgaria.  
**Aqueara and Aqueara Smart Cloud.**



Passivhouse in Miño.  
Residential passive house.  
Miño, Spain.  
**Aqueara.**



Flumen Plus.  
Residential passive house building.  
Zaragoza, Spain.  
**PACi.**



Hotel Moxy Oriente.  
Hotel.  
Lisboa, Portugal.  
**PACi, VRF and Control.**



Gutenfels.  
Hotel.  
Kaub, Germany.  
**Aqueara and Aqueara Smart Cloud.**



Maison Tirel Guerin.  
Hotel- Restaurant.  
Saint Méloir-des- Ondes, France.  
**Mini ECOi.**



Crosslight House.  
Residential building.  
Mulazzano, Italy.  
**PACi and nanoe™ X.**



Gurewicz Spa Resort.  
Hotel- Restaurant - Spa.  
Otwock, Poland.  
**PACi, VRF and Control.**



Nobelhorst.  
Residential building.  
Almere, Nederland.  
**Aqueara.**



Bofrost.  
Home sales of frozen and fresh food specialities  
Montirone (BS), Italy.  
**Refrigeration.**



Hungarian Cédrus Liget. A complex facility including apartments, offices and commercial units.  
Szeged, Hungary.  
**ECOi-W, ECOi and ERV.**



Stemcell Technologies.  
Global biotechnology company.  
Saint-Egrève, France.  
**Refrigeration.**



South Lodge.  
Luxury 5 star Hotel and Spa.  
West Sussex, United Kingdom.  
**PACi, Control and nanoe™ X.**



Pervalkos Jūra.  
Residential.  
Pervalka, Lithuania.  
**Aqueara.**



Thon Hotel Harstad.  
Hotel.  
Harstad, Norway.  
**PACi, VRF and Refrigeration.**

# A desire to create things of value



**"Recognising our responsibilities as industrialists, we will devote ourselves to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world."**  
 Panasonic Corporation's Basic Management Objective, formulated in 1929 by the company's founder, Konosuke Matsushita.



**1958**  
 First room air conditioner launched for domestic installation.

**1975**  
 Panasonic becomes one of the first Japanese air conditioner manufacturers in Europe.

**1985**  
 Introduces first GHP (gas heat pump) VRF air conditioner.

**2008**  
 World's first air conditioner equipped with nanoe™.

**2012**  
 New Panasonic GHP units. The gas-driven VRF Systems are ideal for projects where power restrictions apply.

**1971**  
 Starts production of absorption chillers.

**1982**  
 Panasonic launches the first highly efficient air to water heat pump in Japan.

**1989**  
 Introduces world's first simultaneous 3-Pipe heating / cooling VRF System.

**2010**  
 New Aquarea. Panasonic introduces Aquarea, an innovative new, low-energy system in Europe.





# Vitalize the future with air

These are times of exceptional challenge.

If the world is to move forward confidently, it must overcome the serious threats of the new global pandemics and the degrading of the environment. It must find ways large and small to reduce the stresses that affect people's health and the stability of their communities.

At Panasonic, we're utilizing the power of air to create positive change.

Air that benefits body and mind.

Air that energizes the places where people gather to work and play.

Air that reduces our burden on the Earth.

With more than a century of research and expertise to guide us, we're using air to open a more hopeful and vital future for all.



<p><b>2016</b> New VRF Systems ECOi EX with extraordinary energy saving performance.</p>	<p><b>2019</b> Panasonic introduces a new Chiller Series which is named as ECOi-W.</p>	<p><b>2021</b> Mini VRF R32 up to 10 HP. Outstanding efficiency in a compact body.</p>	<p><b>2023</b> Aquarea Heat Pumps with natural refrigerant R290.</p>	<p><b>Looking ahead</b></p>
<p><b>2015</b> CO<sub>2</sub> condensing units in Europe. The ideal solution for supermarkets, shops and gas stations.</p>	<p><b>2018</b> The first Hybrid System with VRF and GHP in Europe. — Opening heat pump production line in Czech Republic, Europe.</p>	<p><b>2020</b> nanoe™ X, technology with the benefits of hydroxyl radicals. Improving protection 24/7. Built-in nanoe™ X technology expanded to commercial solutions.</p>	<p><b>2022</b> ECOi-W R32, the new range of sustainable chiller solutions to suit a variety of commercial and industrial applications.</p>	<p><b>2024</b> ECOi-W AQUA-G BLUE. Air to water reversible heat pumps. Powered by R290, a natural refrigerant.</p>



# Bringing nature's balance indoors



nanoe™ X, technology with the benefits of hydroxyl radicals.

In today's health-conscious world, we care about taking exercise, we care about what we eat and what we touch, we also care about what we breathe – and technology exists to bring good outdoor air, indoors.



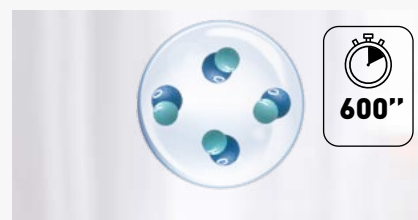
**Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and more pleasant place to be, whether at home, work, or visiting hotels, shops and restaurants etc.**

## A naturally occurring process

Hydroxyl radicals are unstable molecules looking to react with other elements like hydrogen, capturing it. Thanks to this reaction, hydroxyl radicals have the potential to inhibit the growth of pollutants such as bacteria, viruses, moulds, and odours, breaking them down and neutralising the unpleasant effects. This naturally occurring process has major benefits to improve indoor environments.



Hydroxyl radicals in nature.

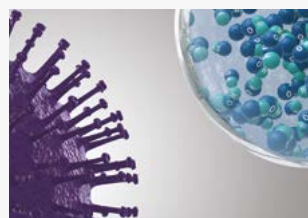


Hydroxyl radicals contained in water.

**By creating hydroxyl radicals contained in water, nanoe™ X technology significantly boosts their effectiveness, increasing hydroxyl radicals lifetime from less than a second in nature, to more than 600 seconds – 10 minutes so that nanoe™ X can spread easily around the room.**

**Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment**

Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.



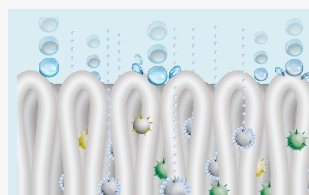
## The well-being benefits of nature are well known – but do you know the power of hydroxyl radicals?

### What is unique about nanoe™ X?

Hydroxyl radicals inhibit pollutants, certain types of viruses, and bacteria to clean and deodorise. Thanks to this advanced technology, even tightly woven fabrics can be treated using this solution, meaning that curtains, blinds, carpets and furniture can all benefit from this technology to inhibit hazardous substances – including on hard surfaces and, of course, the air that we breathe.



#### Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

#### Longer lifespan.



2 | Contained in tiny water particles, nanoe™ X has a long lifespan, which is about 600 seconds, to spread easily around the room.

#### Huge quantity.



3 | nanoe X Generator Mark 3 produces 48 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

#### Maintenance-free.

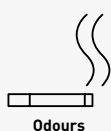


The image shows nanoe X Generator Mark 3.

4 | No service and maintenance required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titanium.

### 7 effects of nanoe™ X – Panasonic unique technology

#### Deodorises



Odours

#### Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances

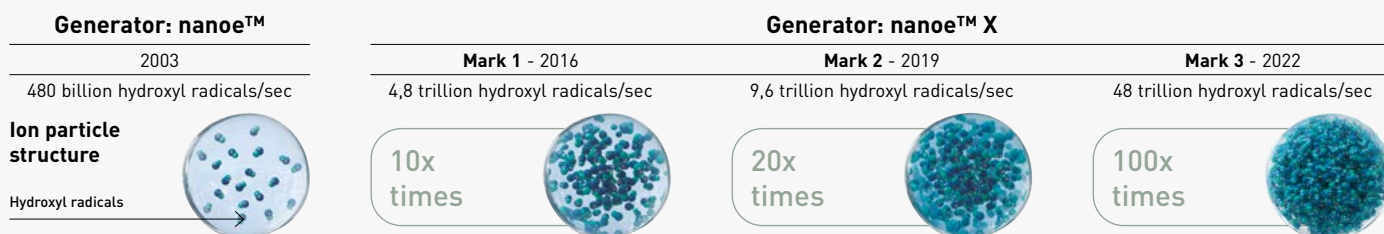


Skin and hair

\* Refer to <https://aircon.panasonic.eu> for more details and validation data.

### First nanoe™ device was developed by Panasonic in 2003

Introducing nanoe X Generator Mark 3, the latest of the continuously evolving nanoe™ X technology, it has the largest amount of hydroxyl radical in the history of nanoe™ (48 trillion hydroxyl radical per second, 100 times the traditional nanoe™). The increased number of hydroxyl radical, which are the key to nanoe™ effectiveness, means you can expect an even higher level of performance.



nanoe™ X, internationally-validated technology in testing facilities.

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Japan and China.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed. Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.


**Panasonic heat pump with nanoe™ X technology verified against SARS-CoV-2**

Virus SARS-CoV-2: 91,4% inhibited. Test conducted by TEXCELL (France), using a gauze saturated with SARS-CoV-2 virus solution exposed to Panasonic heat pump with nanoe™ X in a space of 6,7 m<sup>3</sup> over 8 hours. Test report: 1140-01 C3. Performance of nanoe™ X might differ in real life environment.


	Tested contents	Generator	Result	Capacity	Time	Testing organisation	Report No.	
Airborne	Virus	Influenza (H1N1)	98,3% inhibited	30 m <sup>3</sup>	1,5 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2003WT8888-00889	
		Bacteriophage ΦX174	99,2% inhibited	Approx. 25 m <sup>3</sup>	6 h	Kitasato Research Center for Environmental Science	24_0300_1	
	Bacteria	Staphylococcus aureus	99,7% inhibited	Approx. 25 m <sup>3</sup>	4 h	Kitasato Research Center for Environmental Science	24_0301_1	
Adhering	Virus	SARS-CoV-2	91,4% inhibited	6,7 m <sup>3</sup>	8 h	Texcell (France)	1140-01 C3	
		SARS-CoV-2	99,9% inhibited	45 L	2 h	Texcell (France)	1140-01 A1	
		Bacteriophage ΦX174	99,8% inhibited	Approx. 25 m <sup>3</sup>	8 h	Japan Food Research Laboratories	13001265005-01	
		Xenotropic murine leukemia virus	99,999% inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—	
		Coxsackie virus (CA16)	99,9% inhibited	30 m <sup>3</sup>	4 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2002WT8888-00439	
		Bacteriophage	Mark 3	98,81% inhibited	Approx. 139,3 m <sup>3</sup>	4 h	SGS Inc	SHES210901902584
	Bacteria	MS2 Phage Virus	Mark 3	99,99% inhibited	Approx. 25 m <sup>3</sup>	2 h	Shokukanen, Inc.	227131N
		Staphylococcus aureus	Mark 1	99,9% inhibited	20 m <sup>3</sup>	8 h	Danish Technological Institute	868988
	Pollen	Cedar pollen	Mark 3	99% inhibited	Approx. 24 m <sup>3</sup>	12 h	Panasonic Product Analysis Center	H21YA017-1
		Ambrosia pollen	Mark 1	99,4% inhibited	20 m <sup>3</sup>	8 h	Danish Technological Institute	868988
	Odours	Cigarette smoke odour	Mark 1	Odour intensity reduced by 2,4 levels	Approx. 23 m <sup>3</sup>	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04
			Mark 3	Odour intensity reduced 1,7 levels	Approx. 139,3 m <sup>3</sup>	0,5 h	SGS Inc	SHES210901902478

Licensed in VDI 6022

Certification of a HVAC system under VDI 6022 guarantees that the system fulfills the market's strictest hygiene requirements.



**VDI 6022 – Part 5<sup>1)</sup> Certification.**  
**Avoidance of allergenic exposure.**  
 Inhibits a wide range of harmful bacteria, viruses, mould, pollen and allergens.



**VDI 6022 – Part 1<sup>1)</sup> & 1.1<sup>2)</sup> Certification.**  
**Ventilation and indoor-air quality.**  
 Panasonic nanoe™ X technology improving indoor air quality.

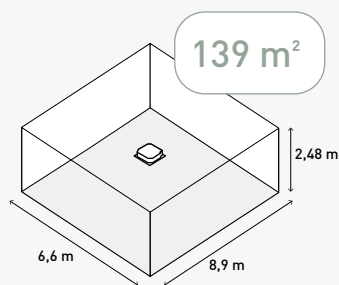
1) Certification mark only valid for nanoe X Generator Mark 3. 2) Certification mark only valid for nanoe X Generator Mark 2 and Mark 3.

Effectiveness in large space with Generator Mark 3

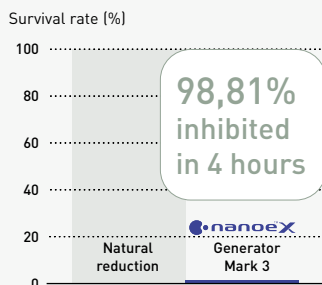
**Inhibits virus.**

An air conditioner equipped with nanoe X Generator Mark 3 inhibits activity of adhered virus (Bacteriophage) by 98,81% in 4 hours<sup>1)</sup>.

Test ambient.



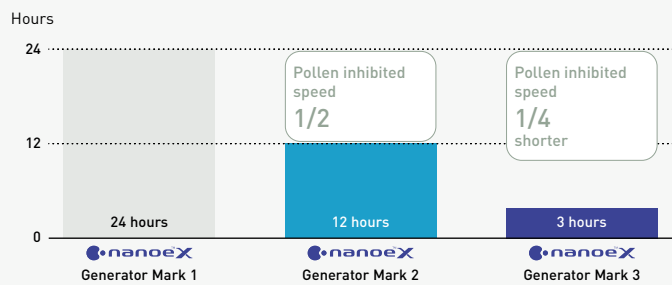
**Test result (bacteriophage).**



**Inhibits pollen.**

The result of nanoe X Generator Mark 3. Inhibits pollen in 1/4 the time of nanoe X Generator Mark 2<sup>2)</sup>.

**Comparison of time required to inhibit 99% of cedar pollen<sup>3)</sup>.**



1) Testing organisation: SGS Inc / Test subject: Adhered Bacteriophage / Test volume: Approx. 139 m<sup>3</sup> large space (6,6 x 8,9 x 2,48 m). Test result: Inhibited 98,81% in 4 hours. Test report no.: SHES210901902583.  
 2) Effect after 3 hours in a test space of approx. 24 m<sup>3</sup>. The figures are not the results of testing in an actual operating space. 3) nanoe X Generator Mark 1: [Testing organisation] Panasonic Product Analysis Center [Test method] ELISA method of measuring allergens adhering to fabric in a test room (approx. 24 m<sup>3</sup>) [Method of inhibition] Release of nanoe™ [Target] Adhered allergen (cedar pollen) [Test Result] Inhibition of 99% or more in 24 hours (4AA33-151001-F01). nanoe X Generator Mark 2: [Testing organisation] Panasonic Product Analysis Center, [Test method] ELISA method of measuring allergens adhering to fabric in a test room (approx. 24 m<sup>3</sup>) [Method of inhibition] Release of nanoe™ [Target] Adhered allergen (cedar pollen) [Test Result] Inhibition of 99% or more in 12 hours confirmed (L19YA009). nanoe X Generator Mark 3: [Testing organisation] Panasonic Product Analysis Center [Test method] ELISA method of measuring allergens adhering to fabric in a test room (approx. 24 m<sup>3</sup>) [Method of inhibition] Release of nanoe™ [Target] Adhered allergen (cedar pollen) [Test Result] Inhibition of 99% or more in 3 hours (H21YA017-1).

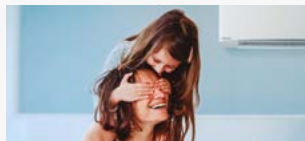


## Where is nanoe™ X technology used?

Since 2003, nanoe™ has become a part of people's lives in Japan and other regions.

Such technology can be found in diverse applications for cleaning air and surfaces, inside trains, elevators, cars, home appliances and personal beauty ... as well as in air conditioning.

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment for residential applications as well as for commercial spaces and, it is a solution that does not require filters or maintenance and can work independently from heating or cooling.



Home



Shop



Gym



Hotel



Office



Clinic



Restaurant



Hospital

It has been adopted in people's homes as well as in public facilities where improved air quality is desired, such as offices, hospitals, healthcare centres and hotels etc.

## nanoe™ X: improving protection 24/7



## Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment

### Home.

Built-in nanoe X Generator Mark 3.



**Wall-mounted Etherea.**  
CS-XZ\*\*ZKEW-H.  
4 capacities: 2,0 - 4,2 kW.  
CS-XZ\*\*ZKEW.  
4 capacities: 2,0 - 5,0 kW.  
CS-(M)Z\*\*ZKE(W).  
7 capacities: 1,6 - 7,1 kW.

Built-in nanoe X Generator Mark 2.



**Aquaarea EcoFlex ducted unit.**  
S-71WF3E.

Built-in nanoe X Generator Mark 1.



**Wall-mounted TZ super-compact.**  
CS-(M)TZ\*\*ZKE(W).  
8 capacities: 1,6 - 7,1 kW.



**Floor console.**  
CS-Z\*\*UFEAW.  
4 capacities: 2,0 - 5,0 kW.

Built-in nanoe™.



**Wall-mounted VZ Heatcharge.**  
CS-VZ\*\*SKE.  
2 capacities: 2,5 - 3,5 kW.

### Commercial.

PACi NX. Built-in nanoe X Generator Mark 1.



**4 way 90x90 cassette - PU3.**  
S-\*\*\*PU3E.  
7 capacities: 3,6 - 14,0 kW.

PACi NX. Built-in nanoe X Generator Mark 2.



**Wall-mounted - PK3.**  
S-\*\*\*PK3E.  
5 capacities: 3,6 - 10,0 kW.



**4 way 60x60 cassette - PY3.**  
S-\*\*\*PY3E.  
4 capacities: 2,5 - 6,0 kW.



**Ceiling - PT3.**  
S-\*\*\*PT3E.  
7 capacities: 3,6 - 14,0 kW.



**Adaptive ducted unit - PF3.**  
S-\*\*\*PF3E.  
7 capacities: 3,6 - 14,0 kW.

Big PACi NX. Built-in nanoe X Generator Mark 3.



**High static pressure hide-away.**  
S-\*\*\*PF3E.  
2 capacities: 20,0 and 25,0 kW.

VRF. Built-in nanoe X Generator Mark 3.



**U2 type 4 way 90x90 cassette.**  
S-\*\*\*MU2E5BN.  
11 capacities: 2,2 - 16,0 kW.



**Y3 type 4 way 60x60 cassette.**  
S-\*\*\*MY3E.  
6 capacities: 1,5 - 5,6 kW.



**F3 type adaptive duct.**  
S-\*\*\*MF3E5BN / AN.  
12 capacities: 1,5 - 16,0 kW.

VRF. Built-in nanoe X Generator Mark 1.



**G1 type floor console.**  
S-\*\*\*MG1E5N.  
5 capacities: 2,2 - 5,6 kW.

Ventilation. Built-in nanoe X Generator Mark 1.



**Ceiling mounted air-e.**  
FV-15CSD1G.  
1 capacity.

## nanoe™ X: improving protection 24/7

## 100% Panasonic, the DNA of Japanese craftsmanship

Applying advanced technologies that truly make life better, we live by an unparalleled commitment to product quality.

Panasonic is building on the Japanese tradition of uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.





At Panasonic, we believe that the best air conditioner is one that works quietly and effectively in the background whilst minimising its impact on the environment.

People who use our products can look forward to long years of high-quality performance without the need for constant service. As part of our rigorous design and development process, Panasonic air conditioners undergo a variety of stringent tests to ensure their effectiveness and long-term reliability. Tests for durability, waterproofing, shock resistance, and noise are conducted on component parts or on the finished products themselves.

As a result of all of these time consuming efforts, Panasonic air conditioners meet industrial standards and regulations in every country where they are sold.

### International Standard Quality

To uphold the company's reputation around the world, Panasonic strives continuously to offer quality with minimized environmental impact.



#### Reliable parts that meet or exceed industrial standards.

In every country where they are sold, Panasonic air conditioners comply with all required industrial standards and regulations. In addition, Panasonic conducts stringent testing to ensure the reliability of parts and materials. The strength of the resin material used in a propeller fan is confirmed by a tension test.



#### Compliance with RoHS / REACH substance restrictions.

Panasonic products and used materials strictly comply with chemical substance restrictions as defined by RoHS or REACH. During the development and production of parts, stringent inspections are conducted on over 100 materials to ensure that no hazardous substances are included.



#### Sophisticated production process.

Panasonic's air conditioner production lines employ state-of-the-art factory automation technologies to ensure products are manufactured with high attention to quality to meet expectations of reliability and trustworthiness.

### Durability

At Panasonic we know the importance of a long service life with minimal maintenance. That's why we subject our air conditioners to a wide range of stringent durability tests.



#### Long-term durability test.

To ensure durability and stable operation for many years, we conduct a long-term continuous operation test under conditions that are much more severe than actual operating conditions.



#### Compressor reliability test.

After the continuous operation test, we remove the compressor from a selected outdoor unit, disassemble it, and examine the internal mechanisms and parts for potential failure. This helps ensure reliable long-term performance under harsh conditions.



#### Waterproofing test.

The unit - which is subject to rain and wind - complies with IPX4 waterproof specifications. Contact sections on printed circuit boards are resin-potted to prevent adverse effects caused by exposure to water (an unlikely occurrence).

## A globally trusted air conditioning brand

Panasonic – leading the way in Heating and Cooling.

With more than 50 years of experience, selling to more than 120 countries around the world, Panasonic is one of the leaders in the heating and cooling sector.

With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide.





From, for and by Europe.

**Panasonic R&D Centers in Europe.**

The European Research and Development Centers of Panasonic in Germany and Italy are focused on technology development for intelligent and environmentally friendly future solutions.

**Our European factories.**

In 2018 Panasonic initiated the production of air to water heat pumps in its factory in Pilsen, Czech Republic. And in 2023 Panasonic started the production of air to water and water to water chillers and heat pumps, fan coils, water source heat pumps and rooftops in its Italian and French factories.

Keeping an excellent combination of highly skilled human resources and production automation the big demand growth foreseen in Europe can be met with outstanding quality standards.

**More than 40 years of experienced organization in Europe.**

At Panasonic, we know that the best is always yet to come. This is why our air conditioning and heat pump solutions are constantly upgraded. Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, and has the ambition to not only meet but also exceed their requirements. Our Technology and Design teams anticipate the needs of tomorrow. We look to produce smaller, quieter, efficient solutions - with better technological features - that can reduce energy consumption while providing suitable temperature conditions for the user.



Italy



France



Czech

**43 Training Center in 22 countries in Europe**

**The Panasonic PRO Academy.**

Heating and Cooling business is changing rapidly, new technologies, new regulations, new solutions that require continuous update for professionals. Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive training programme with 43 Training Center in 22 countries in Europe.

