

# ETHEREA STYLISH AND OUTSTANDING FEATURES





Etherea with nanoe™ X air-purifying system: outstanding efficiency A+++, comfort (Super Quiet technology only 19dB(A)) and healthy air combined with a breakthrough design.

— ETHEREA —

## 1 Built-in WLAN

Ready to connect the unit to internet to be controlled by smartphone with Panasonic Comfort Cloud App. Control, monitor, easy schedule with easy interface.

## 2 Even cleaner air with nanoe™ X

New nanoe™ X is an outstanding air purifying bringing much higher performance for better indoor air quality.

## 3 Simple but elegant design

To suit European interior, we design the indoor to be simple and clean. Elegant finishing with white matt or silver color.

## 4 New infrared control

Enjoy innovative design at your fingertips with the new stylish and sleek Backlit Sky Controller. Bigger screen and easier to use.

### Etherea. Perfect outside, perfect inside

#### The Etherea has an astonishingly slim design.

A breakthrough design that combines perfectly with the most modern environments. We have selected the best materials and processes for a refined design. And now they're available in an elegant metallic or matt silver and matt or gloss white.

#### Get the best for your health with Etherea and nanoe™ X.

Using nanoe™ X with nano-technology, nano-sized electrostatic atomised water particles purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as certain types of bacteria, viruses and mould thus ensuring a cleaner living environment.

### Etherea performance: highest energy class

Economical, environment-friendly operation high SCOP (Seasonal Coefficient of Performance).

Original Panasonic Inverter technology and a high performance compressor provide top-class operating efficiency. This lets you enjoy lower electricity bills while contributing to environmental protection.



### Enjoy innovative design at your fingertips with the new stylish and sleek Backlit Sky Controller

With fast access to key operations and a smooth gliding cover revealing more options, controlling your settings has become simple and intuitive. With a width of 58,9mm and a length of 164,7mm, the Sky Controller fits comfortably into your hand.

#### Backlit led screen

The Sky Controller reveals its settings in a better light thanks to the new backlit screen. Now you can adjust your settings without having to switch on the lights.

#### Distinctive sliding cover

A smooth sliding cover does not only enhance the remote's clean lines, but keeps the buttons free from dirt and smudges.

#### Precise temperature control

With the Sky Controller's 0,5°C temperature control, enjoy more precise temperature regulation and experience greater comfort.





# NANOE™ X. QUALITY AIR FOR LIFE



**1 Deodorises**  
nanoe™ X deodorises strong and unpleasant odours that cause uneasiness so you can enjoy a more pleasant living space for greater well-being.

**2 Inhibits certain Bacteria & Viruses**  
nanoe™ X inhibits the growth of certain allergens, bacteria and viruses in your home, maintaining a cleaner home for your children.

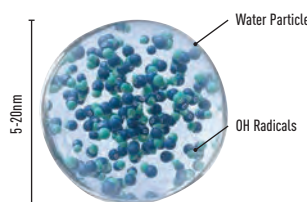
**3 Moisturing Skin**  
Helps retain the moisture of the skin.

## nanoe™ X deodorises and inhibits certain bacteria and viruses

nanoe™ X contains **10X times** <sup>1)</sup> more OH radicals.

The newly developed nanoe™ X device produces 10x times more OH radicals (4800 billion) <sup>1)</sup> than regular nanoe™ device. Greater amounts of OH radicals contained in nanoe™ X lead to outstanding effects in bacteria, viruses and allergens inhibition as well as deodorisation. A fresher and cleaner home awaits you.

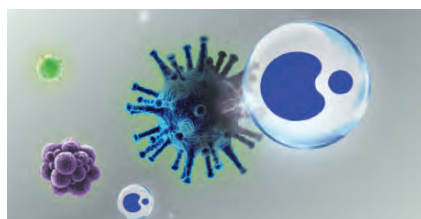
1) Based on Panasonic Survey.



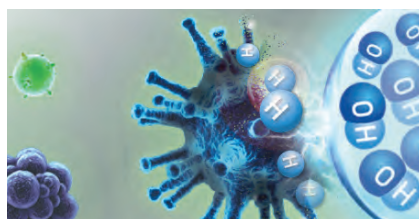
**4800 BILLION  
OH RADICALS /  
PER SECOND**



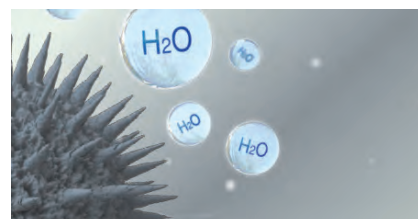
## How nanoe™ X keeps air fresh and clean



nanoe™ X reaches bacteria.



OH radicals take away hydrogen from bacteria.



OH radicals transform hydrogen in bacteria to water and inhibit bacterial activity.



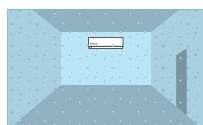
No matter where you are on planet earth, air is an essential part in your life. We're working to help every person enjoy better health and comfort by nanoe™ Xair purifier technologies.



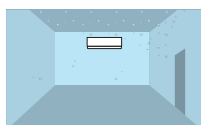
## Characteristics of nanoe™ X Technology

**1. Long Life.** 6 times longer lifespan than general negative ion. nanoe™ X contains moisture around 1000 times more than general negative ion. Being contained in water particles, it has a longer lifespan and is able to spread for a long distance.

### Comparison of distribution in the room



nanoe™ X.  
nanoe™ X spreads to every corner.

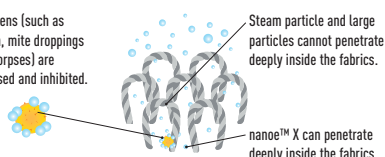


General negative ion.  
Ions decay before spreading throughout the room.

**2. Water-originated.** nanoe™ X comes from condensed moisture in the air so that water replenishment for nanoe™ X generation is not required.

nanoe™ X is tiny enough to penetrate into clothes for inhibiting mould and deodorizing.

Allergens (such as pollen, mite droppings and corpses) are enclosed and inhibited.



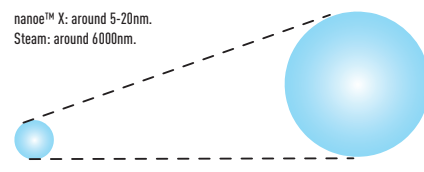
Steam particle and large particles cannot penetrate deeply inside the fabrics.

nanoe™ X can penetrate deeply inside the fabrics.

**3. Microscopic Scale.** With the size of one-billionth of a meter, nanoe™ X is much smaller than steam. It can deeply penetrate into cloth fabrics to deodorize.

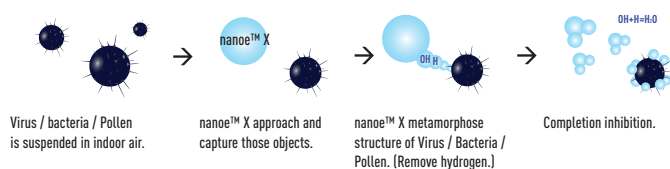
\* 1nm (nanometer) = one billionth of meter.

nanoe™ X: around 5-20nm.  
Steam: around 6000nm.



## How does nanoe™ X technology help you?

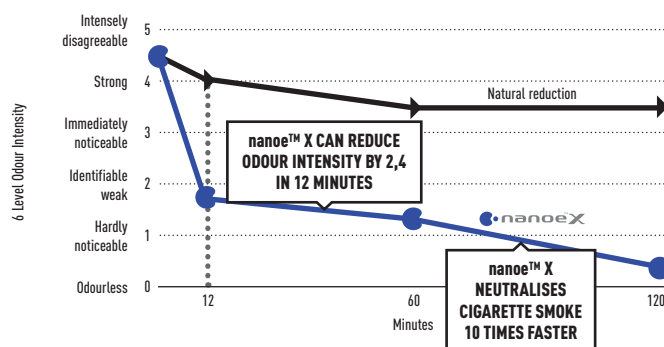
**1. Virus / Bacteria / Pollen inhibition.** Inhibits certain virus. Influenza virus 99.9% inhibited.



### The effectiveness of nanoe™ X.

Tested contents		Result (deactivate)	Testing condition		Tested laboratory / company	Report doc No.
			Size	Time		
Airborne	Virus (Coliphage)	99%	10m <sup>2</sup>	6h	Kitasato research center for Environmental science	KRCES 24_0300_1
	Bacteria (Staphylococcus aureus)	99%	10m <sup>3</sup>	4h	Kitasato research center for Environmental science	KRCES 21_0142
Adhesive	Virus (Coliphage)	99%	10m <sup>2</sup>	8h	Japan food research laboratories	13001265005-01
	Virus (Influenza)	99.9%	1m <sup>3</sup>	2h	Kitasato research center for Environmental science	KRCES 21_0084_1
	Bacteria (Staphylococcus aureus)	99%	10m <sup>2</sup>	8h	Japan food research laboratories	13044083003-01
	Tobacco odour	Deodorized in 2h	10m <sup>2</sup>	2h	Panasonic analysis center	BAA33-130125-D01
	Cedar pollen	99%	45L	2h	Panasonic analysis center	E02-080303IN-03

**2. Deodorization.** Deodorization effect works with the smell adhered at objects like sofa and curtains. Reduce 90% Odour (tobacco smell) after 120 minutes.



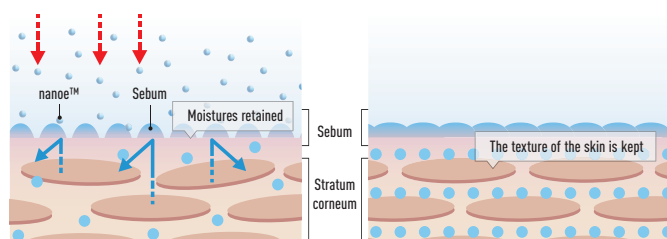
### Deodorization effect for adhering odour (tobacco).

Odour is reduced by 2.4 in only 12 minutes, and almost disappear after 2 hours.

The deodorization effect will vary subject to the surrounding environment (temperature / humidity), operation time, types of smell and clothes.

• Test Laboratory: Panasonic Corporation Analysis Center. • Test Methodology: Verifying with 6-level odour intensity indication in 10m<sup>2</sup> test room. • Deodorization Method: nanoe™ X emit. • Test Subject: Adhering Tobacco Smell. • Test Result: 1.2 level of odour intensity is decreased after 120 minutes. • Report No.: 4AA33-160615-N04.

**3. Moisturing Skin.** Helps retain the moisture of the skin.



Test Laboratory: FCG Research Institute Inc. Report no. 19104.

## Reliable technology chosen by the world.

The cutting edge technology of Panasonic's nanoe™ purifying technology has been chosen by Lexus to equip its vehicles for clean indoor air.





## New Wall Mounted Etherea Inverter+ Silver / Pure White Matt • R32 GAS

ETHEREA



### Etherea with nanoe™ X air-purifying system

The nanoe™ X revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of certain airborne and adhesive micro-organisms like bacteria, viruses and mould.

#### Technical focus

- **NEW!** Built-in WLAN Panasonic Comfort Cloud for internet control
- R32 gas is more environmentally friendly than R410A
- nanoe™ X air purifying system, 99% effective to certain airborne and adhesives mould, viruses, bacteria and pollen allergen
- Aerowings to control air draft direction
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- Super Quiet! Only 19dB(A), equivalent to night-time in the countryside
- More powerful airflow to quickly reach the desired temperature
- Wired control (Optional)

Kit Silver			KIT-XZ20-VKE	KIT-XZ25-VKE	KIT-XZ35-VKE	—	KIT-XZ50-VKE	—
Kit Pure White Matt			KIT-Z20-VKE	KIT-Z25-VKE	KIT-Z35-VKE	KIT-Z42-VKE	KIT-Z50-VKE	KIT-Z71-VKE
Cooling capacity	Nominal (Min - Max)	kW	2,05 [0,75 - 2,40]	2,50 [0,85 - 3,20]	3,50 [0,85 - 4,00]	4,20 [0,85 - 5,00]	5,00 [0,98 - 6,00]	7,10 [0,98 - 8,50]
EER <sup>1)</sup>	Nominal (Min - Max)	W/W	4,56 [3,13 - 4,32]	4,81 [3,54 - 4,05]	4,07 [3,54 - 3,70]	3,39 [3,27 - 3,18]	3,55 [3,50 - 3,08]	3,27 [2,33 - 2,93]
SEER <sup>2)</sup>			7,50 <b>A++</b>	8,50 <b>A++</b>	8,50 <b>A++</b>	6,90 <b>A++</b>	7,90 <b>A++</b>	6,50 <b>A++</b>
Pdesign (cooling)		kW	2,10	2,50	3,50	4,20	5,00	7,10
Input power cooling	Nominal (Min - Max)	kW	0,45 [0,24 - 0,56]	0,52 [0,24 - 0,79]	0,86 [0,24 - 1,08]	1,24 [0,26 - 1,57]	1,41 [0,28 - 1,95]	2,17 [0,42 - 2,90]
Annual energy consumption <sup>3)</sup>		kWh/a	98	103	144	213	222	382
Heating capacity	Nominal (Min - Max)	kW	2,80 [0,70 - 4,00]	3,40 [0,80 - 5,00]	4,00 [0,80 - 5,50]	5,30 [0,80 - 6,80]	5,80 [0,98 - 8,00]	8,60 [0,98 - 10,20]
Heating capacity at -7°C		kW	2,38	2,95	3,20	4,11	4,80	6,31
COP <sup>1)</sup>	Nominal (Min - Max)	W/W	4,52 [3,89 - 4,04]	4,79 [4,44 - 3,97]	4,35 [4,44 - 3,72]	3,68 [4,21 - 3,51]	4,03 [2,88 - 3,16]	3,66 [2,45 - 3,46]
SCOP <sup>2)</sup>			4,70 <b>A++</b>	5,10 <b>A++</b>	5,10 <b>A++</b>	4,00 <b>A+</b>	4,70 <b>A++</b>	4,20 <b>A+</b>
Pdesign at -10°C		kW	2,10	2,70	2,80	3,60	4,20	5,50
Input power heating	Nominal (Min - Max)	kW	0,62 [0,18 - 0,99]	0,71 [0,18 - 1,26]	0,92 [0,18 - 1,48]	1,44 [0,19 - 1,94]	1,44 [0,34 - 2,53]	2,35 [0,40 - 2,95]
Annual energy consumption <sup>3)</sup>		kWh/a	626	741	769	1260	1251	1833
Indoor unit Silver			CS-XZ20VKEW	CS-XZ25VKEW	CS-XZ35VKEW	—	CS-XZ50VKEW	—
Indoor unit Pure White Matt			CS-Z20VKEW	CS-Z25VKEW	CS-Z35VKEW	CS-Z42VKEW	CS-Z50VKEW	CS-Z71VKEW
Power source		V	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Air volume	Cool / Heat	m <sup>3</sup> /min	9,9/10,7	10,2/11,2	11,0/12,0	11,2/12,0	19,1/20,5	19,8/21,5
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	4,1
Sound pressure <sup>4)</sup>	Cool (Hi / Lo / Q-Lo)	dB(A)	37/24/19	39/25/19	42/28/19	43/31/25	44/37/30	47/38/30
	Heat (Hi / Lo / Q-Lo)	dB(A)	38/25/19	41/27/19	43/33/19	43/35/29	44/37/30	47/38/30
Dimension	H x W x D	mm	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	9	10	10	10	12	13
Outdoor unit			CU-Z20VKE	CU-Z25VKE	CU-Z35VKE	CU-Z42VKE	CU-Z50VKE	CU-Z71VKE
Air volume	Cool / Heat	m <sup>3</sup> /min	26,9/24,1	28,7/27,2	30,6/30,6	31,3/30,9	39,8/36,9	44,7/45,8
Sound pressure <sup>4)</sup>	Cool / Heat (Hi)	dB(A)	45/46	46/47	48/50	49/51	47/47	52/54
Dimension <sup>5)</sup>	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	27	31	31	31	42	50
Piping connections	Liquid pipe	Inch (mm)	1/4 [6,35]	1/4 [6,35]	1/4 [6,35]	1/4 [6,35]	1/4 [6,35]	1/4 [6,35]
	Gas pipe	Inch (mm)	3/8 [9,52]	3/8 [9,52]	3/8 [9,52]	1/2 [12,70]	1/2 [12,70]	5/8 [15,88]
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 30	3 ~ 30
Elevation difference (in/out) <sup>6)</sup>		m	15	15	15	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5	7,5	10
Additional gas amount		g/m	10	10	10	10	15	25
Refrigerant (R32) / CO <sub>2</sub> Eq.		kg / T	0,70 / 0,473	0,85 / 0,574	0,85 / 0,574	0,89 / 0,601	1,15 / 0,776	1,37 / 0,925
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

#### Accessories

**CZ-CAPRA1** RAC interface adapter for integration into P-Link

#### Accessories

**CZ-RD514C** Wired remote controller for Wall Mounted and Floor Console

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1m in front of the main body and 0,8m below the unit. For outdoor unit 1m in front and 1m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.



SEER and SCOP: For KIT-XZ25-VKE, KIT-XZ35-VKE, KIT-Z25-VKE and KIT-Z35-VKE. SUPER QUIET: For KIT-XZ20-VKE, KIT-XZ25-VKE, KIT-XZ35-VKE, KIT-Z20-VKE, KIT-Z25-VKE and KIT-Z35-VKE. INTERNET CONTROL: Built-in WLAN.