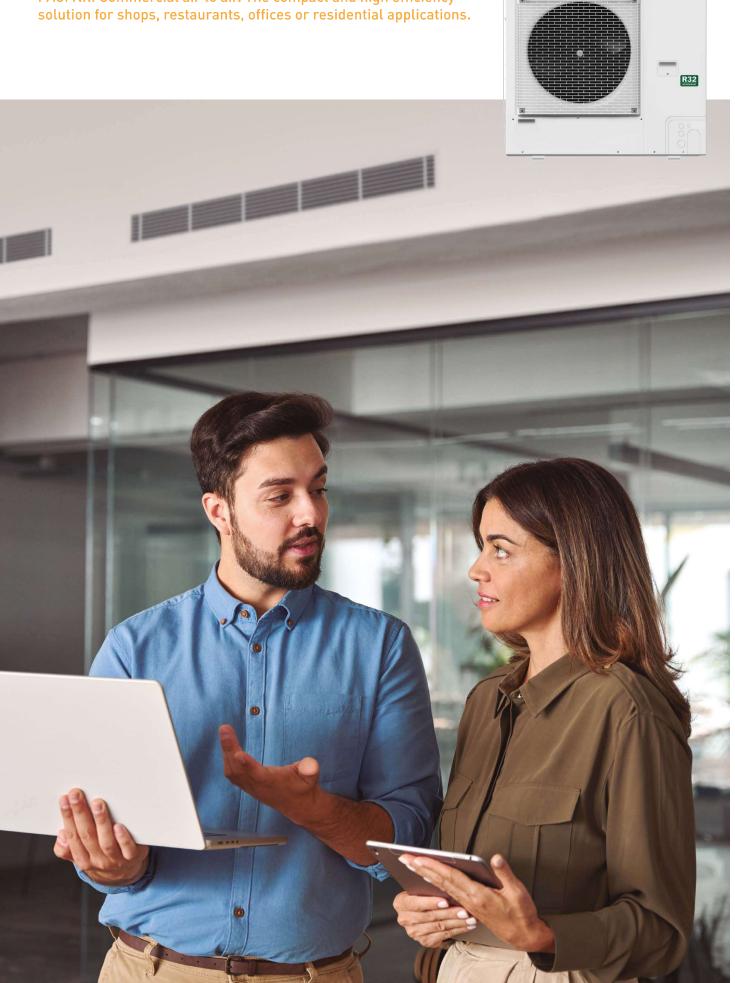
Panasonic GENERAL INDEX

Highlighted features

PACi NX: Commercial air to air. The compact and high efficiency



Great savings and improved comfort. Panasonic has developed an impressive range of highly efficient Commercial air conditioners, with our highly efficient Inverter compressor technology to optimise performance.

A wide range for industry, office or residential application. With configuration from 1:1 to 4:1, Panasonic can offer the most comfortable climate with solutions designed for every environment.

The diverse array of connectivity and control systems allows you to manage your units whether locally or remotely. Receive real-time status updates and maintenance alerts, while optimising costs and energy usage.

Energy saving



Refrigerant R32.

Our heat pumps containing R32 refrigerant show a drastic reduction in the value of Global Warming Potential (GWP).



Exceptional seasonal cooling efficiency based on the ErP regulation.

Higher SEER ratings mean greater efficiency and year-round cooling



Exceptional seasonal heating efficiency based on the ErP regulation.

Higher SCOP ratings mean greater efficiency and year-round heating savings!



Intelligent human activity sensor and sunlight sensor technologies that can detect and reduces the waste of energy by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.



Inverter Plus system.

Inverter Plus system classification highlights Panasonic's highest performing systems.



Inverter.

The Inverter range provides greater efficiency and comfort. Provides more precise temperature control. without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.



High efficiency compressor.

Panasonic Big PACi NX has compressors that operate with a wider Hz range realize a more efficient operation throughout the year.



Panasonic R2 rotary compressor.

Designed to withstand extreme conditions, it delivers high performance and efficiency.



Better efficiency and value for low temperature applications.

On an energy efficiency scale from D to A+++, the PACi NX Water Heat Exchanger provide A+++ rated heating.

High performance and indoor air quality



Down to -20 °C in cooling mode.

The air conditioner works in cooling mode when the outdoor temperature of -20 °C.



Down to -20 °C in heating mode.

The air conditioner works in heat pump mode when the outdoor temperature is as low as -20 °C.



nanoe™ X.

Technology with the benefits of hydroxyl radicals has the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise.



Super Quiet.

With Super Quiet technology our devices are quieter than a library (30 dB(A)).



DC fan.

Safe and precise.



Filter included.

Hide-away with filter included.



Bluefin.

Panasonic Big PACi NX has extended the life of its condensers with an original anti-rust coating.



Large fan.

Panasonic Big PACi NX large fan provides larger air flow rate and very quiet operation at low speed.



More comfort with Aerowings.

Panasonic's Aerowings feature incorporates two blades that concentrate the air flow to cool or heat in the shortest possible time by distributing the air evenly throughout the room. For wall-mounted YKEA.



Up to 46 °C in cooling mode. PACi NX with Water Heat

Exchanger system works in cooling mode at outdoor temperature up to 46 °C.



R410A/R22 renewal.

The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing high efficiency R32 systems.



5 Years compressor warranty.

We guarantee the outdoor unit compressors in the entire range for five years.



High connectivity



Panasonic AC Smart Cloud.

The AC Smart Cloud from Panasonic allows you to have complete control of all your installations. In a simple click, receive status updates from all your units in real-time, preventing breakdowns and optimising costs.



Internet control.

A next generation system providing user-friendly control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone or tablet via Wi-Fi.



BMS connectivity.

The communication port can be CONNECTIMITY integrated into the indoor unit and provides easy connection to, and control of, your Panasonic air conditioner to your home or Building Management System.



Domestic integration to S-Link -CZ-CAPRA1.

Can connect RAC range to S-Link. Full control is now possible.



Advanced control.

A touch screen remote controller is included as a standard. Clean design, easy operation and quick access to all menus.

Panasonic (< GENERAL INDEX

Product quality and safety

All Panasonic air conditioners undergo strict quality and safety tests before sale. This rigorous process includes obtaining all necessary safety approvals, to ensure that all air conditioners we sell are not only built to the highest market standards, but are also completely safe.





COMMERCIAL COMMERCIAL INDEX

Professional air conditioners with R32 refrigerant.

Panasonic recommends R32, with lower Global Warming Potential (GWP). Compared to R22 and R410A, R32 has a low potential impact on global warming. Panasonic takes action in helping to protect the environment. In line with the European

countries participating in the Montreal Protocol, protecting the ozone layer and preventing global warming, Panasonic is leading the switch to R32.

Installation innovation.

- · Extremely easy to install, practically the same as R410A
- Single substance refrigerant, which makes it easier to recycle and reuse

Environmental innovation.

- · Zero impact on the ozone layer
- 75% less impact on global warming

Economic and energy consumption innovation.

- · Lower cost and greater savings
- Higher energy efficiency than R410A

PACi NX Elite: Top-tier commercial air conditioning.

The PACi NX Elite range has been expanded to include the Big PACi NX models 20,0-25,0 kW.

Outstanding performance at extreme ambient temperatures with very high energy efficiency both in heating and cooling. Fans, fan motors, compressors and heat exchangers engineered for maximum savings result in higher seasonal efficiencies, which ranks as one of the best in the industry, ensuring reduced CO₂ emissions, energy consumption and operating costs.

From 3.6 to 25.0 kW.

- · Meeting all necessary approvals to ensure quality and safety
- Top class SEER: 8,9 A+++ / SCOP: 5,1 A+++ at 3,6 kW (in 90x90 cassette)
- · A compact outdoor unit featuring a single fan across all the capacities
- Long piping allowance, maximum 100 m 1)
- Wide operation range, up to 52 °C in cooling and down to -20 °C in heating
- · Auto restart after power outage
- Twin, triple and double-twin connections
- Water Heat Exchanger ² and AHU connection compatibility

1) For models $10.0 \sim 25.0$ kW. 2) For models 20.0 - 20.5 kW.









PACi NX Standard: For economy and value.

With high quality design and engineering, the PACi NX Standard are the perfect solutions for projects which demand quality on a limited budget. In addition, compact and lightweight design makes them ideal for installations with limited space including small commercial and residential applications. The slim and lightweight outdoor unit design enables installation even in very challenging locations.

From 2,5 to 14,0 kW.

- · Extended range of outdoor units starting from 2,5 kW
- Great balance of system cost and performance
- Top class SEER / SCOP in the standard Inverter category SEER: 8,1 A++ / SCOP: 4,8 A++ at 3,6 kW (in 90x90 cassette)
- · Variety of individual and central controllers which provides full flexibility
- Compact outdoor units, small footprint and lightweight
- · Twin connection possible from 10,0 to 14,0 kW
- · Operation range, up to 43 °C in cooling and down to -15 °C in heating







PACi NX Series. The next generation is here

NX Series with R32 refrigerant has been developed to meet the demand of easy refurbishment with 3 wire method.

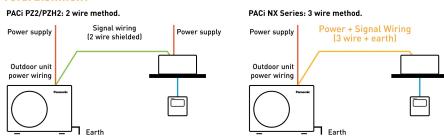
Integrated with IoT solutions and includes nanoe™ X function as standard.



•nanoe**™**

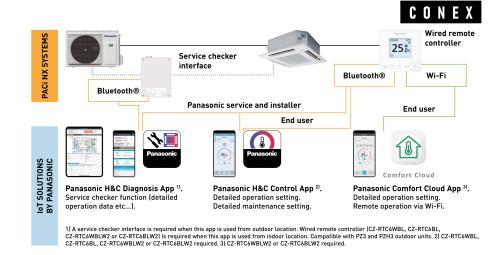
PACi NX Series for absolute ease of refurbishment

This series have been developed with 3 wire power and communication. It makes it simple and easy to replace old systems with 3 wire connections, which is prevalent in many systems.



CONEX with IoT integration
The wired remote controller series is fully integrated with IoT solutions developed by Panasonic.
Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

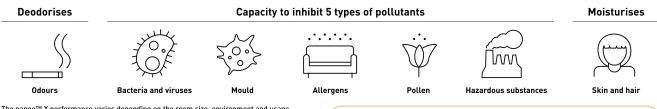




Let Panasonic take care of indoor air quality

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. This unique technology is equipped to provide better air quality whether residential or commercial.

7 effects of nanoe™ X - Panasonic unique technology.



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.

REFER TO PAGE 14 FOR MORE DETAILS AND VALIDATION DATA

Increasing the efficiency The PACI NX Series have

The PACi NX Series have improved seasonal efficiencies in both heating and cooling versus the previous generation.

Energ	y class	¹⁾ and	seaso	nal ef	ficienc	y valu	e (η _{s,c} /	'η _{s,h}) ²	1														
	Wall-mounted - PK4				4 way cassette - PY3				4 way cassette - PU3			Ceiling - PT3				Adaptive ducted - PF3				Hide-away - PE4			
	Elite Standard		Elite Standard		Standard Elite		ite	Standard		Elite S		Stan	Standard E		Elite Stand		dard	Elite		Standard		Elite	
kW	(*)		(*)		*		(*)	(**)	*		(*)	(**)	*		*		*		(*)	(**)	*	(C)	
2,5			A++	A+			A++	A++															
3,6	A++	A++	A++	A+	A++	A++	A++	A+	A+++	A+++	A++	A++	A++	A++	A++	A+	A++	A+	A+	A+			
5,0	A++	A++	A++	A+	A++	A++	A++	A+	A+++	A++	A++	A++	A++	A++	A++	A+	A++	A+	A++	A+			
6,0	A++	A++	A++	A++	A++	A+	A++	A+	A++	A++	A++	A++	A++	A++	A++	A++	A++	A+	A++	A+			
7,1	A++	A++	A+	A+					A++	A++	A++	A++	A++	A++	A+	A+	A++	A++	A+	A+			
10,0	A++	A+	A++	A+					A++	A++	A++	A+	A++	A+	A++	A+	A++	A+	A++	Α			
12,5									304,3%	186,0%	267,0%	157,0%	278,4%	175,6%	241,7%	147,4%	281,7%	165,0%	257,4%	142,6%			
14,0									286,6%	181,2%	257,0%	152,2%	263,3%	169,3%	228,8%	145,3%	275,9%	162,6%	252,2%	140,6%			
20,0																					237,8%	146,0%	
25,0																					213,0%	145,0%	

¹⁾ Energy label scale from A+++ to D for models below 12,0 kW (EU regulation 626/2011). 2) $\eta_{s,c}/\eta_{s,h}$ values for models above 12,0 kW (EN 14825).

Panasonic GENERAL INDEX

PACi NX Elite Series 4



The compact chassis newly designed with one fan up to 25,0 kW, will fit in limited installation space.

- \cdot A compact outdoor unit featuring a single fan across all the capacities up to 25,0 kW
- With the unit weighting only 66 kg*, it is easy to carry and easy to install
- * For model 7,1 kW.



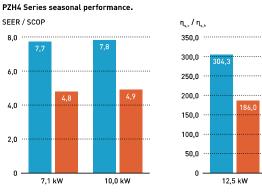
PACi NX Elite from 7,1 to 14,0 kW

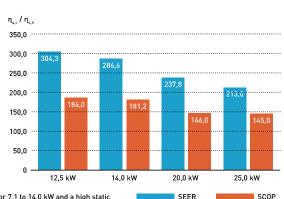


Highly efficient performance in a compact body

One fan outdoor units keep the excellent seasonal performance by optimizing the layers of the heat exchanger. As a result, PZH4 Series provide the equivalent high seasonal performance to conventional 2 fan models.







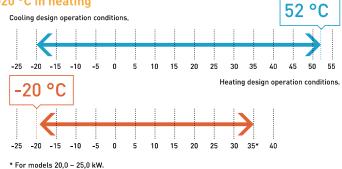
* Performance tested with a 4 way 90x90 cassette for 7,1 to 14,0 kW and a high static pressure hide-away 20,0-25,0 kW.

Extended operation range up to 52 °C in cooling and down to -20 °C in heating

Upgraded PACi NX Elite Series are capable of working even in the challenging ambient conditions. Cooling operation is possible when outdoor temperature is as low as -20 °C* or as high as 52 °C.

Heating operation can also be utilized at outdoor temperatures down to -20 $^{\circ}\text{C}$ when outdoor temperature is as low as -20 $^{\circ}\text{C}$.

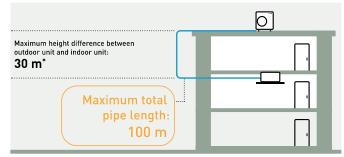
* For models 10,0 \sim 14,0 kW with pipe length up to 30 m.



Long piping allowance maximum 100 m*

Increased piping length gives great design flexibility to adapt various building types and sizes.
Piping length: 100 m (10,0 to 25,0 kW), 60 m (7,1 kW)

* For models 10,0 ~ 25,0 kW.



^{* 15} m if the outdoor unit is below the indoor unit.

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.













Intuitive control with stylish design

- · Simple operation at a glance
- · Clean face with full flat and LCD display
- · Compact body, only 86x86 mm

Control comfort with your smartphone

- Flexible control options with IoT integration
- · Panasonic H&C Control App for daily remote control operation
- · Panasonic Comfort Cloud App for remote operation 24/7/365

Easy maintenance with service support app

- · Quick and easy app set-up for system setting
- · Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data
- * The use of apps depends on the remote controller

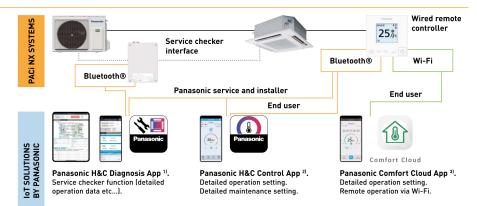
CONEX with IoT integration



The wired remote controller series is fully integrated with IoT solutions developed by Panasonic.

Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.





1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6WBL, CZ-RTC6WBL, CZ-RTC6WBLW2 or CZ-RTC6BLW2) is required when this app is used from indoor location. Compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6WBL, CZ-RTC6WBLW2 or CZ-RTC6BLW2 required.

White model	CZ-RTC6W	CZ-RTC6WBL	CZ-RTC6WBLW2
Black model	CZ-RTC6	CZ-RTC6BL	CZ-RTC6BLW2
Wired connection compatible with	PACi NX, ECOi, GHP	PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	_	_	✓
Panasonic H&C Control App	_	✔ PACi NX, ECOi, GHP	✔ PACi NX only
Panasonic H&C Diagnosis App 1)	_	✔ PACi NX only ²	✔ PACi NX only ²
Outdoor unit settings (remote controller connected to indoor unit)	✔ PACi NX only ²⁾	✔ PACi NX only ²⁾	✔ PACi NX only ²

Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC2 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling, and error alerts.







Advanced smartphone control

Control PACi NX, ECOi, and ECO G indoor units with your smartphone whenever and wherever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor. This scalable solution is ideal for one system, one site or multiple locations. Coupling the adapter with the already feature rich systems, makes it an ideal solution for residential and commercial applications.

From 1 to 200 units

User can control up to 10 different sites, with up to 20 units / groups per site. Additionally, one adaptor can be connected to 1 indoor or to a group of up to 8 indoors.

Voice control compatible

Registering the unit to Panasonic Comfort Cloud App makes it compatible with the most popular voice assistants.

Multi user

The Panasonic Comfort Cloud App allows multi-user access control, whilst allowing user restriction to specific units.

Easy scheduling

Complex weekly scheduling made simple. Not only for one unit, but across multiple sites, and from a smartphone.

Energy monitor

See the estimated power consumption and compare with other periods, to see how energy consumption can be further reduced. Check list of units that provides consumption*.

* Function available depending on the model.

Error codes

Error code notification through the App, provides early notification and allows for faster repair.

Connection diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit via T10 connector and R1/R2 terminal connectors.



Wireless LAN

Download free app: Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately) Panasonic Cloud Server is designed, operated and managed by Panasonic.







Comfort Cloud





Input Voltage	12 V DC (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (HxWxD)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operating range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included)

Bringing nature's balance indoors



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

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.



What is unique about nanoe™ X?

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

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.



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



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 Titatium.

7 effects of nanoe™ X - Panasonic unique technology

Deodorises

Capacity to inhibit 5 types of pollutants





Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances



Moisturises

Skin and hair

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

First nanoe™ device was developed by Panasonic in 2003

Generator: nanoe™

2003

480 billion hydroxyl radicals/sec

Ion particle structure





4,8 trillion hydroxyl radicals/sec

10x

times

Mark 1 - 2016

20x

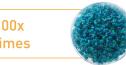
times

Mark 2 - 2019

9,6 trillion hydroxyl radicals/sec

Generator: nanoe™ X





Mark 3 - 2022

48 trillion hydroxyl radicals/sec



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.

		Tested contents	Generator	Result	Capacity	Time	Testing organisation	Report No.	
Airborne	Virus	Influenza (H1N1)	Mark 2	98,3% inhibited	30 m³	1,5 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2003WT8888-00889	
	VIFUS	Bacteriophage ФX174	Mark 1	99,2% inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1	
	Bacteria	Staphylococcus aureus	Mark 1	99,7% inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	24_0301_1	
		SARS-CoV-2	Mark 1	91,4% inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3	
		SARS-CoV-2	Mark 1	99,9% inhibited	45 L	2 h	Texcell (France)	1140-01 A1	
		Bacteriophage ФX174	Mark 1	99,8% inhibited	Approx. 25 m³	8 h	Japan Food Research Laboratories	13001265005-01	
	Virus	Xenotropic murine leukemia virus	Mark 1 99,999% inhibited		45 L	6 h	Charles River Biopharmaceutical Services GmbH	_	
Adhering		Coxsackie virus (CA16)	Mark 2	99,9%inhibited	30 m³	4 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2002WT8888-00439	
		Bacteriophage	Mark 3	98,81% inhibited	Approx. 139,3 m³	4 h	SGS Inc	SHES210901902584	
		MS2 Phage Virus	Mark 3	99,99% inhibited	Approx. 25 m³	2 h	Shokukanken, Inc.	227131N	
	Bacteria	Staphylococcus aureus	Mark 1	99,9% inhibited	20 m³	8 h	Danish Technological Institute	868988	
		Cedar pollen	Mark 3	99%inhibited	Approx. 24 m³ 12 h		Panasonic Product Analysis Center	H21YA017-1	
	Pollen	Ambrosia pollen Mark 1		99,4% inhibited	20 m³	8 h	Danish Technological Institute	868988	
		O'constitution of the section of the	Mark 1	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04	
	Odours	Cigarette smoke odour	Mark 3	Odour intensity reduced 1,7 levels	Approx. 139,3 m³	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 11 Certification.

Avoidance of allergenic exposure.

Inhibits a wide range of harmful bacteria, viruses, mould, pollen and allergens.



VDI 6022 - Part 1 ¹⁾ & 1.1 ²⁾ Certification.

Ventilation and indoor-air quality.

Panasonic nanoe $^{\text{TM}}$ 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.

nanoe™ X: improving protection 24/7.

Acts to clean your air, so that the indoor environment can be a cleaner and more pleasant place to be all day long. nanoe $^{\text{TM}}$ X works together with heating or cooling function when you are at home and can work independently when you are away. Give the air conditioning the strength to increase the protection at home with nanoe $^{\text{TM}}$ X technology and convenient control via the Panasonic Comfort Cloud App.

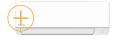
Cleans the air when you are away.

Leave the $nanoe^{TM}$ mode ON to inhibit certain pollutants and deodorise before you return home.

Improves your environment when you are at home.

Enjoy a cleaner, comfortable space with loved ones.

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



Wall-mounted.
Built-in nanoe X Generator Mark 3.



Ceiling.
Built-in nanoe X Generator Mark 2.



4 Way 60x60 cassette. Built-in nanoe X Generator Mark 2.



Adaptive ducted unit.
Built-in nanoe X Generator Mark 2.



4 Way 90x90 cassette.

Built-in nanoe X Generator Mark 1.



High static pressure hide-away. Built-in nance X Generator Mark 3.



Ceiling mounted air-e nanoe X Generator.
Built-in nanoe X Generator Mark 1.

Panasonic

PACi NX 4 way 90x90 cassette - PU3

These cassettes offer upgraded nanoe $^{\text{TM}}$ X and Econavi technologies to make the room air more comfortable and healthy and to increase the energy efficiency.



Improved indoor air quality with nanoe™ X and fresh air intake

- nanoe[™] X technology equipped as standard for improved indoor air quality
- · Internal cleaning function for the unit with nanoe $^{\text{TM}}$ X
- High external fresh air intake volume with optional kit (CZ-FDU3 + CZ-ATU2)

Superior energy efficiency and comfort

- High seasonal efficiency both in heating and cooling, maximum SEER: 8,9 A+++ / SCOP: 5,1 A+++*
- Econavi: Intelligent sensors to increase energy savings and comfort
- Super Quiet operation down to 27 dB(A)
- * For 3,6 kW model.

Easy installation

- Light weight, easy piping and integrated drain pump for quick installation
- Wired remote controller CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®