## **Panasonic**



RESIDENTIAL AIR CONDITIONERS 2021









## **Panasonic**



24-hour nanoe™ X Protection Against COVID-19

# Attacking with technology

24-hour Protection

Secure 24-hour nanoe $^{TM}$  X protection for the whole family.





Test results: novel coronavirus activity inhibited

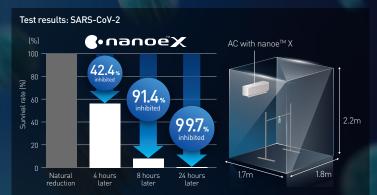
Test of an air conditioner with nanoe™ X

#### **Overview**

The objective of this test was to determine if nanoe<sup>™</sup> X inhibits the activity of the SARS-CoV-2 virus. Gauze saturated with SARS-CoV-2 virus solution was exposed to an air conditioner with nanoe<sup>™</sup> X from a distance of 0.7 m in a 6.7 m3 room for 8 hours. Over 91% of the activity of the SARS-CoV-2 virus was inhibited.

#### Details

(1) Testing organisation: Texcell (France), (2) Test subject: novel coronavirus (SARS-CoV-2), (3) Test volume



Notes: [1] The virus infectious titer was measured and used to calculate the inhibition rate. [2] This verification was designed to generate basic research data on the effects of nance<sup>31</sup> X on the novel coronavirus in laboratory conditions. Actual effects will vary depending on the environment and usage of the product.

Notes: Photograph is for illustrative purpos

A Better Life, A Better World

QUALITY AIR FOR LIFE

## Why do you need nanoe™ Technology?















substances, moulds, and pollen - keeping your loved ones away from allergies or diseases.



#### REDUCES ODOUR TO KEEP YOUR HOME FRESH

•nance decodorises and reduces strong, adhesive odours by deeply penetrating into fabrics, resulting to lasting freshness in your living space.

#### MOISTURISES YOUR SKIN AND HAIR

**C•nance**✓ water particles help achieve proper moisture balance, resulting in smooth, hydrated skin and hair.





# PURIFIES THE AIR, AND REMOVES DUST PARTICLES

releasing negative ions that capture dust particles (PM 2.5). These particles are carried back and trapped at the filter.

## How does it keep your home clean all day and night?



## For total air purification, a filter is not enough. You need a life-changing TECHNOLOGY.

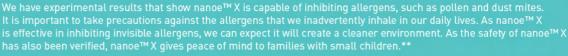
#### Professor Masafumi Mukamoto

Various types of moulds enter house along with people and air. Even if preventive action is taken in our everyday lives, it is often very difficult to inhibit the growth of mould, especially in humid environments. With nanoe™ X, we have experimental results\* that show we can inhibit the growth of the types of mould commonly found in various places in the house. As nanoe™ X is also capable of inhibiting invisible bacteria and viruses that exist in our living environment, we can expect it will deliver a clean environment. I recommend that equipment incorporation nanoe™ X technology be placed in buildings where cleanliness is required,

## Professor

Azabu University School of Veterinary Medicine Department of Veterinary Medicine

We have experimental results that show nanoe™ X is capable of inhibiting allergens, such as pollen and dust mites.



<sup>\*</sup>Experimental results show that nanoe™ X is effective in inhibiting the growth of the following types of mould commonly found in homes: Cladosporium, Aspergillus, Penicillium, Alternaria, Fusarium, Eurotium, Mucor, and Stachybotrys.



- nanoe™ X
- SKYWING Unique Top Flap Design
- iAutoX Fast Cooling
- Inverter
- Xtra Quiet 18dB (CS-VU9UKQ)
- R32 Refrigerant

#### **SPECIFICATIONS**

MODE	L NO	).		CS-VU9UKQ	CS-VU12UKQ	CS-VU18UKQ
( ): Outd	loor Unit			[CU-VU9UKQ]	[CU-VU12UKQ]	[CU-VU18UKQ]
Techn	ical Da	ta	Unit			
Cooling			HP	1.0	1.5	2.0
Capacit	у	(min-max)	kJ/h	9,000 (3,020-12,960)	12,240 (3,670-16,200)	18,720 (3,960-20,880)
Power I	nput (m	nin-max)	W	490 (215-900)	820 (245-1,200)	1,450 (290-1,670)
EER (mi	n-max)		kJ/hW	18.37 (14.05-14.40)	14.93 (14.98-13.50)	12.91 (13.66-12.50)
		Indoor (Lo/Q-Lo)	dB (A)	26/18	28/19	36/33
Noise L	evel	Outdoor (Hi)	dB (A)	47	48	49
Power 9	Source	V / Ph	ase Hz		230 V, 1Ø Phase - 60 Hz	
Refrige	rant			R32	R32	R32
Physic	al Data	1				
	Unit Dir	mension(WxHxD) mm		950 x 306 x 280	950 x 306 x 280	950 x 306 x 280
	Packag	aging Dimension(WxHxD) mm		1,040 x 330 x 390	1,040 x 330 x 390	1,040 x 330 x 390
Indoor	Net We	et Weight kg		12	12	12
	Gross V	ross Weight kg		15	15	15
	Unit Dir	limension(WxHxD) mm		780 x 542 x 289	780 x 542 x 289	824 x 619 x 299
	Packag	ing Dimension(WxHx	D) mm	890 x 600 x 400	890 x 600 x 400	960 x 680 x 420
Outdooi	Net We	ight	kg	30	30	33
	Gross V	Veight	kg	31	31	36
Refrigerant Pipe Diameter		Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35
		Gas Side	mm	ø 9.52	ø 12.70	ø 12.70
Pipe		Max. Pipe Length	m	20	20	30
Extensi	on	Max. Elevation Length m		15	15	20

## PREMIUMUM GNVERTER AERO SERIES (XU Model)





- nanoe™ X
- Inverter
- AEROWINGS Multi-directional Flaps R32 Refrigerant
- iAutoX Fast Cooling

#### **SPECIFICATIONS**

	0110							
LNO			CS-XU9VKQ	CS-XU12VKQ	CS-XU18VKQ	CS-XU24VKQ	CS-XU30VKQ	
( ): Outdoor Unit			[CU-XU9VKQ]	[CU-XU12VKQ]	[CU-XU18VKQ]	[CU-XU24VKQ]	[CU-XU30VKQ]	
cal Da	ta	Unit						
		HP	1.0	1.5	2.0	2.5	3.0	
,	(min-max)	kJ/h	9,180 (3,020-11,520)	11,880 (3,670-15,120)	18,720 (3,960-21,600)	21,600 (4,030-25,560)	29,520 (4,140-36,000)	
nput (m	nin-max)	W	640 (225-880)	840 (260-1,180)	1,260 (290-1,680)	1,550 (320-2,000)	2,300 (350-3,200)	
-max)		kJ/hW	14.34 (13.42-13.09)	14.14 (14.12-12.81)	14.86 (13.66-12.86)	13.94 (12.59-12.78)	12.83 (11.83-11.25)	
	Indoor (Lo/Q-Lo)	dB (A)	26	28	36	37	37	
evel	Outdoor (Hi)	dB (A)	47	48	50	50	53	
ource	V / PI	nase Hz	230 V, 1Ø Phase - 60 Hz					
ant			R32	R32	R32	R32	R32	
al Data	a							
Unit Dir	mension(WxHxD)	mm	919 x 295 x 199	919 x 295 x 199	1,120 x 302 x 241	1,120 x 302 x 241	1,120 x 302 x 241	
Packag	ckaging Dimension(WxHxD) mm		960 x 240 x 360	960 x 240 x 360	1,190 x 290 x 380	1,190 x 290 x 380	1,190 x 290 x 380	
Net We	ight	kg	9	9	12	12	13	
Gross V	Veight	kg	10	10	14	14	15	
Unit Dir	mension(WxHxD)	mm	650 x 511 x 230	780 x 542 x 289	824 x 619 x 299	875 x 695 x 320	875 x 795 x 320	
Packag	ing Dimension(WxH	xD) mm	780 x 580 x 350	890 x 600 x 400	960 x 680 x 420	1,050 x 760 x 460	1,050 x 900 x 490	
Net We	ight	kg	20	27	32	41	55	
Gross Weight kg		22	29	35	45	65		
Refrigerant Liquid Side mm		mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35	ø 6.35	
meter	Gas Side	mm	ø 9.52	ø 12.70	ø 12.70	ø 15.88	ø 15.88	
	Max. Pipe Length	m	20	20	30	30	30	
n	Max. Elevation Le	ngth m	15	15	20	20	20	
	nput (min-max)  evel  ource ant al Data Unit Dir Packag Net We Gross V Unit Dir Packag Net We Gross V unit Dir	cal Data  (min-max)  nput (min-max)  n-max)  evel Indoor (Lo/Q-Lo) Outdoor (Hi)  fource V/Pi  rant al Data  Unit Dimension(WxHxD)  Packaging Dimension(WxH Net Weight Gross Weight Unit Dimension(WxHxD)  Packaging Dimension(WxHxD)  Packaging Dimension(WxHxD)  Packaging Dimension(WxHxD)  Packaging Dimension(WxHxD)  Packaging Dimension(WxHxD)  Ret Weight Gross Weight  ant Liquid Side meter Gas Side  Max. Pipe Length	Cal Data Unit  Cal Data Unit  (min-max) kJ/h  (min-max) kJ/hW  (min-max) k	CS-XU9VKQ   [CU-XU9VKQ]	CS-XU9VKQ   CS-XU12VKQ   CS-X	CS-XU9VKQ   CS-XU12VKQ   CS-XU18VKQ   CS-X	CS-XU24VKQ	

#### DELUXE SINVERTER AERO SERIES (XPU Model)





- nanoe™ X
- AEROWINGS Multi-directional Flaps R32 Refrigerant

- Inverter
- Easy install and maintenance

#### **SPECIFICATIONS**

MODEL NO.				CS-XPU9WKQ	CS-XPU12WKQ	CS-XPU18WKQ
( ): Outdoor Unit				[CU-XPU9WKQ]	[CU-XPU12WKQ]	[CU-XPU18WKQ]
Techn	ical Da	ta	Unit			
Cooling			HP	1.0	1.5	2.0
Capacit	y	(min-max)	kJ/h	9,140 (3,020-11,160)	11,020 (3,670-13,680)	18,000 (3,960-19,440)
Power I	nput (m	nin-max)	W	670 (220-885)	750 (245-1,170)	1,550 (290-1,800)
EER (mi	n-max)		kJ/hW	13.64 (13.73-12.61)	14.69 (14.98-11.69)	11.61 (13.66-10.80)
	- 1	Indoor (Lo/Q-Lo)	dB (A)	26	28	34
Noise L	evel	Outdoor (Hi)	dB (A)	47	48	51
Power S	Source	V / Pha	ase Hz		230 V, 1Ø Phase - 60 Hz	
Refrige	rant			R32	R32	R32
Physic	al Data	9				
	Unit Dir	imension(WxHxD) m		779 x 290 x 209	779 x 290 x 209	779 x 290 x 209
	Packag	kaging Dimension(WxHxD) mm		861 x 364 x 255	861 x 364 x 255	861 x 364 x 255
ndoor	Net We	ight	kg	8	8	9
	Gross V	oss Weight		9	9	10
	Unit Dir	imension(WxHxD) mm		650 x 511 x 230	780 x 542 x 289	824 x 619 x 299
. Packa	Packag	ing Dimension(WxHx	D) mm	784 x 578 x 347	891 x 603 x 396	958 x 680 x 416
Outdoor	Net We	ight	kg	18	23	29
	Gross V	Weight	kg	20	25	32
Refrigerant Liquid		Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35
		Gas Side	mm	ø 9.52	ø 9.52	ø 12.70
Pipe		Max. Pipe Length	m	20	20	30
Extension		Max. Elevation Length m		15	15	20

## How does it SAVE ENERGY?

**Energy Saving** 





HIGHER Cooling Capacity

REDUCE **Energy Costs** 

**ECO** Friendly





Intelligently Balances **Energy Savings and** Comfort

\*Comparison of ECO Mode & normal mode by using 1.5HP Inverter Model.

## How does it provide FAST COOLING COMFORT?

Air Flow

SKYWING **Wider Cooling Coverage** 



AEROWINGS

Concentrated Airflow, Further



BIG FLAP **Long Airflow** 







35% Faster Cooling

Comparison of 1.5HP Premium Inverter with iAUTO-X mode and Standard non-Inverter model with cooling mode.





True Comfort Is Just a Touch Away

\* Comparison of 1.5HP Non-Inverter model with iAUTO Mode and Cooling

## STANDARD SINVERTER (PU Model)





Inverter

• iAuto (CS-PU24VKQ)

• Big Flap

• R32 Refrigerant

• ECO+A.I. (CS-PU9/12/18WKQ)

MODEL NO.				CS-PU9WKQ	CS-PU12WKQ	CS-PU18WKQ	CS-PU24VKQ
( ): Outdoor Unit				[CU-PU9WKQ]	[CU-PU12WKQ]	[CU-PU18WKQ]	[CU-PU24VKQ]
Techn	ical Da	ta	Unit				
Cooling			HP	1.0	1.5	2.0	2.5
Capacit	у	(min-max)	kJ/h	9,140 (3,020-11,160)	11,020 (3,670-13,680)	18,000 (3,960-19,440)	21,600 (4,030-24,120)
Power I	nput (m	nin-max)	W	670 (220-885)	750 (245-1,170)	1,550 (290-1,800)	1,780 (320-2,000)
EER (mi	n-max)		kJ/hW	13.64 (13.73-12.61)	14.69 (14.98-11.69)	11.61 (13.66-10.80)	12.13 (12.59-12.06)
		Indoor (Lo/Q-Lo)	dB (A)	26	28	34	37
Noise L	evel	Outdoor (Hi)	dB (A)	47	48	51	50
ower S	Source	V/P	hase Hz		230 V, 1Ø Ph	ase - 60 Hz	
Refrige	rant						
Physic	cal Data	9		R32	R32	R32	R32
	Unit Di	Dimension(WxHxD)		779 x 290 x 209	779 x 290 x 209	779 x 290 x 209	1,102 x 302 x 244
	Packag	aging Dimension(WxHxD) mm		861 x 364 x 255	861 x 364 x 255	861 x 364 x 255	1172 x 378 x 290
ndoor	Net We	Veight kg		8	8	9	12
	Gross V	ross Weight kg		9	9	10	14
	Unit Di	Dimension(WxHxD) mm		650 x 511 x 230	780 x 542 x 289	824 x 619 x 299	824 x 619 x 299
	Packag	ckaging Dimension(WxHxD) mm		784 x 578 x 347	891 x 603 x 396	958 x 680 x 416	960 x 680 x 420
Outdoo	Net We	eight kg		18	23	29	35
Gross Weight		kg	20	25	32	38	
Dina Diamatan		mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35	
		mm	ø 9.52	ø 9.52	ø 12.70	ø 15.88	
Pipe		Max. Pipe Length	m	20	20	30	30
Extensi	on	Max. Elevation Length m		15	15	20	20

## STANDARD NON-INVERTER (PN Model)



- Big Flap
- iAuto
- R32 Refrigerant

#### **SPECIFICATIONS**

OI CUITIO	INTI IUNG					
MODEL	NO.		CS-PN9UKQ	CS-PN12UKQ	CS-PN18UKQ	CS-PN24UKQ
( ): Outdoor			[CU-PN9UKQ]	[CU-PN12UKQ]	[CU-PN18UKQ]	[CU-PN24UKQ]
Technica	l Data	Unit				
Cooling		HP	1.0	1.5	2.0	2.5
Capacity	(min-max)	kJ/h	9,000	12,060	18,180	24,120
ower Inpu	ut (min-max)	W	840	1,080	1,730	2,190
EER (min-m	nax)	kJ/hW	10.7	11.2	10.5	11.0
	Indoor (Lo/Q-Lo)	dB (A)	26	29	39	42
Noise Leve	Outdoor (Hi)	dB (A)	49	50	55	60
Power Sou	ırce V/F	Phase Hz		230 V, 1Ø P	hase - 60 Hz	
Refrigerant			R32	R32	R32	R32
Physical	Data					
Ur	nit Dimension(WxHxD)	mm	799 x 290 x 197	799 x 290 x 197	1,102 x 302 x 244	1,102 x 302 x 244
Pa	Packaging Dimension(WxHxD) mm		871 x 354 x 234	871 x 354 x 234	1,172 x 378 x 290	1,172 x 378 x 290
ndoor Ne	et Weight	kg	8	8	12	12
Gr	ross Weight	kg	9	9	14	14
Ur	nit Dimension(WxHxD)	mm	650 x 511 x 230	780 x 542 x 289	824 x 619 x 299	875 x 695 x 320
Pa	ackaging Dimension(Wx	HxD) mm	780 x 580 x 350	890 x 600 x 400	960 x 680 x 420	1,050 x 760 x 460
Outdoor Net	et Weight	kg	21	29	35	54
Gr	ross Weight	kg	23	31	38	58
Refrigeran	nt Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35
	eter Gas Side	mm	ø 9.52	ø 12.70	ø 12.70	ø 15.88
Pipe	Max. Pipe Length	n m	20	20	30	30
Extension	Max. Elevation L	ength m	15	15	20	20





**AEROWINGS** 



3 INDOOR UNITS OUTDOOR UNIT

#### ADVANTAGES OF MULTI-SPLIT AIR CONDITIONING SYSTEM:

Space-Saving

**Independent Operation Control** 

Flexible Installation

#### SPECIFICATIONS: Indoor

MODEL NO.		CS-S9TKZW	CS-S12TKZW	CS-S18TKZW	CS-S24TKZW
( ): Outdoor Unit		1 unit	1 unit	1 unit	1 unit
Technical Data	Unit				
HP		1.0	1.5	2.0	2.5
Power Source	V / Phase Hz		230 V, 1Ø PI	hase - 60 Hz	
Cooling Capacity	kJ/h	10,080	11,520	18,000	21,600
Fan Output	W	40	40	30	30
Sound Pressure (Lo)	dB (A)	29	32	38	39
Moisture Removal	L/h	1.6	1.8	2.7	3.3
Air	m³/min	9.8	11.0	19.3	20.3
Circulation	ft³/min	345	390	680	715
Refrigerant		R410A	R410A	R410A	R410A
Physical Data					
Dimensions (W x H x D)	mm	919 x 295 x 199	919 x 295 x 199	1,120 x 302 x 241	1,120 x 302 x 241
Net Weight Indoor	kg	9	9	12	12
Refrigerant Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35
Pipe Diameter Gas Side	mm	ø 9.52	ø 9.52	ø 9.52	ø 12.70

## MULTI-SPLIT

CU-2S18PKZ

2 Rooms



2.8

Either unit

Either unit

3.2

3.2

It is possible to have a combination of wall-mounted models (CS-S9, S12TKZW) for the (CU-2S18PKZ) Outdoor Unit Ports.

• A minimum of 2 indoor units must be connected.

CU-3S27KKZ

#### Indoor Units: Possible Combination Patterns (Must be within capacity range)

Rooms





Port B

4.0

6.0 6.0

6.0

• It is possible to have a combination of wall-mounted models (CS-S9, S12, S18, S24TKZW) for the (CU-3S27KKZ) Outdoor Unit Ports.

· A minimum of 2 indoor units must be connected.

#### SPECIFICATIONS: Outdoor

MODEL	NO.		DUAL-SPLIT	TRIPLE-SPLIT
( ): Outdoor	- Unit		CU-2S18PKZ	CU-3S27KKZ
Technica	al Data	Unit		
Power Sou	ırce V/	Phase Hz	230 V, 1Ø PI	hase - 60 Hz
Cooling Ca	apacity	kJ/h	18,000 (5,400-21,600)	27,000 (10,080~32,400)
Power Out	tput	W	1,400 (250~1,750)	2,060 (520~2,830)
EER		dB (A)	12.86	13.11
System Cu	ırrent	L/h	6.4	9.6
Sound Pre	ssure Level	m³/min	49	49
Refrigeran	nt	ft³/min	R410A	R410A
Physical	Data			
Dimension	ns (W x H x D)	mm	824 (+70) x 619 x 299	875 (+95) x 795 x 320
Net Weigh	t		37	68
Pipe	Chargless Pipe Length n		20	30
	D: 1 11 ( )	1 Room	20	25
Extension	Pipe Length (max)	Total	30	60
	Elevation Length (max)	m	10	15

## PB SERIES

## **POWERFUL AIR FLOW**

#### **SPECIFICATIONS**



01 0011 101					
MODEL ( ): Outdoor (			S-38PB2Q6 [U-38PS2Q6]	S-43PB2Q6 [U-43PS2Q6]	S-48PB2Q6 [U-48PS2Q6]
Technical D	ata	Unit			
HP			4.5	5.0	6.0
Power Sour	ce	V / Phase Hz		230 V, 1Ø Phase - 60 Hz	
Cooling Cap	acity	kcal/h	40,320 (14,400-42,120)	44,280 (14,400-45,720)	51,480 (22,680-55,440)
Power Input		W	4,080	4,600	5,150
EER		kJ/hW	9.88	9.63	10.0
Current		А	19.7	22.2	24.9
Air Flow	Indoor (Hi)	m³/min	32	32	32
	Indoor (Lo)	dB (A)	44	44	44
Noise Level	Outdoor	dB (A)	54	55	56
Refrigerant			R410A	R410A	R410A
Physical Da	ita				
Dimensions	Indoor	mm	600 x 1,880 x 350	600 x 1,880 x 350	600 x 1,880 x 350
(W x H x D)	Outdoor	mm	980 x 996 x 370	980 x 996 x 370	980 x 996 x 370
Net Weight	Indoor	kg	51	51	51
	Outdoor	kg	72	74	81
, , , i = 1	Chargeless L	ength (max) m	30	30	30
Pipe Extension	Pipe Length (	min-max) m	7.5-50	7.5-50	7.5-50
LACCION	Elevation Diff	erence m	30	30	30

## FLOOR STANDING SINVERTER

## **E SERIES**



#### **SPECIFICATIONS**

or con ion	110110		
MODEL  [ ]: Outdoor (	Jnit		CS-E28NFQ [CU-E28NFQ]
Technical D	)ata	Unit	
HP			3.0
Power Source	ce	V / Phase Hz	230 V, 1Ø Phase - 60 Hz
Cooling Cap	acity	kJ/h	25,920 (3,600-27,000)
Power Input		W	2,550
EER		kJ/hW	10.1
Current		А	12.2
Air Flow	Indoor (Hi)	m³/min	16
M-: I I	Indoor (Lo)	dB (A)	33
Noise Level	Outdoor	dB (A)	51
Refrigerant			R410A
Physical Da	ıta		
Dimensions	Indoor	mm	540 x 1,880 x 357
(W x H x D)	Outdoor	mm	998 x 700 x 320
NI_+\W/_!_L+	Indoor	kg	37
Net Weight	Outdoor	kg	46
	Chargeless Le	ength (max) m	7
Pipe Extension	Pipe Length (r	nin-max) m	3-15
LYGHISIOH	Elevation Diffe	erence m	10