

ROOM AIR CONDITIONERS

2018 / 2019

Panasonic



PREMIUM INVERTER



DELUXE INVERTER

- Please read the Installation Instructions carefully before installing the unit, and the Operating Instructions before using it.
- Specifications are subject to change without prior notice.
- The contents of this catalogue are accurate as of January 2017.
- Due to printing considerations, the actual colours may vary slightly from those shown.
- All graphics are provided merely for the purpose of illustrating a point.



Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of other refrigerant.

Authorised Dealer



Panasonic Global Air Conditioner

Global site : aircon.panasonic.com
PROClub : panasonicproclub.global

[airconpanasonicglobal](https://www.youtube.com/channel/UCaRnpanasonicglobal)

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AC-SG-C-18

| |

QUALITY AIR FOR LIFE

We breathe in
18kg of
AIR
 a person a day

At Panasonic Air Conditioners,
 we want to deliver more than just cooling or heating
 solutions. We want to create Total Air Solutions
 that let you enjoy Quality Indoor Air.

We improve the Quality of Air,
 so you can improve the Quality of Life.

FOOD
1.3kg
 a person
 a day

WATER
1.4kg
 a person
 a day

QUALITY AIR FOR LIFE

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PANASONIC'S MOST ADVANCED Air Purification System

Air pollution isn't just an outdoor concern. People are spending more time indoors, making indoor air quality a more serious issue than most people realise.



Quality Air, Better Life For You and Your Family

Panasonic's nanoe™ Technology is a revolutionary air purification system that effective in dust removal, deodorises and deactivates bacteria & viruses to create a fresher and cleaner living environment.

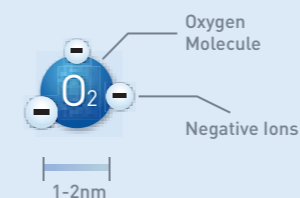
*Applicable to PREMIUM INVERTER and DELUXE INVERTER

nanoe-G

nanoe-G releases negative ions to capture airborne particles in the air.

nanoe-G, Panasonic's original air-purifying and filtering system releases 3 trillion negative ions to remove airborne dust particles as small as PM2.5 and adhesive bacteria and viruses. It then deactivates these trapped particles in the positively-charged filter.

3 trillion^{*1}
Negative Ions



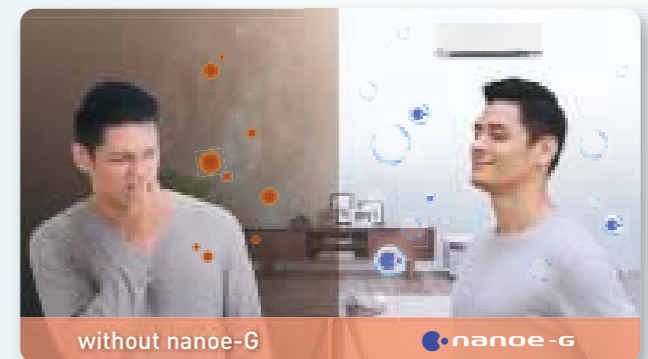
Dust Removal^{*2}

We breathe in large amounts of unseen bacteria, viruses, mites and mould circulating in the air or adhere to surfaces every day.



Deodorises^{*3}

nanoe-G deodorises adhesive odours so you can enjoy a more pleasant living space for greater well-being.



Deactivates Bacteria & Viruses^{*4}

nanoe-G deactivates bacteria and viruses in your home, maintaining a cleaner home for your children.



^{*1} Please refer to page 13
^{*2} Please refer to page 48-49
^{*3,4} Please refer to page 50



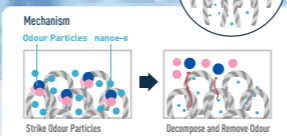
Live in A Breath of Clean Air

nanoe-G air purification system removes microorganisms and dust particles as small as PM2.5 from the air by trapping them in the filter for deactivation. Purify your living environment for better breathing.

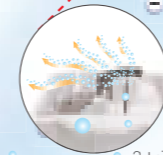
1 AIRBORNE



2 ADHESIVE



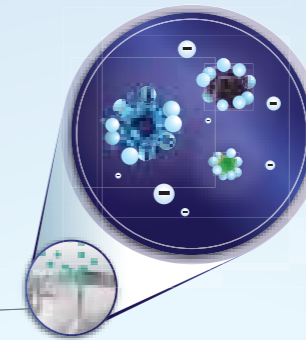
3 IN-FILTER DEACTIVATION



3 trillion* nanoe-G negative ions released from the generator.

Remark:
* 3 trillion is the simulated number of nanoe-G negative ions under the mentioned conditions. Actual measured nanoe-G negative ions at the centre of the room (13m²): 100k/cc calculated number of nanoe-G negative ions in the entire room assuming they are evenly distributed.

Natural Ion Wind spreads nanoe-G negative ions that are released from the nanoe-G generator.



nanoe-G generators produces 3 trillion negative ions from the atomised electrode. Then, natural ion wind spreads the negative ions that are released from the nanoe-G generator to attach to airborne dust particles.

How nanoe-G Is Generated

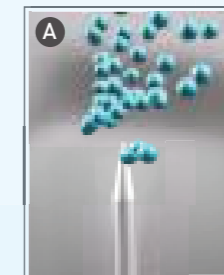


1 nanoe-G generator releases 3 trillion nanoe-G negative ions.



2 nanoe-G negative ions spread to the filter using natural ion wind.

How nanoe-G Removes Dust Particles



nanoe-G ion generator releases negative ions.



Negative ions attach to dust particles.



These particles are being carried back to the air filter.



Deactivates 99%⁴ bacteria and viruses trapped in the filter.

⁴ Please refer to Pg51

1 Removes Airborne Particles (Up To 99%^{1 2})

Removes airborne particles down to PM2.5¹. These particles² include bacteria, viruses and mould.

^{1 2} Please refer to Pg 48-49

2 DEACTIVATES ADHESIVE PARTICLES & DEODORISES ADHESIVE ODOURS (Up to 99%³)

Deactivates adhesive micro-organisms and deodorises adhesive odours. Inhibits mould growth that settles on surfaces around you.

³ Please refer to Pg50

3 IN-FILTER DEACTIVATION (Up to 99%⁴)

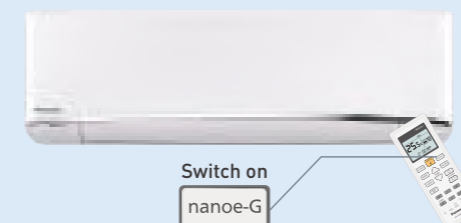
Deactivates bacteria and viruses trapped in the filter.

⁴ Please refer to Pg51

PURIFIES WHEN COOLING IS OFF

nanoe™ Technology is able to function even when the cooling is off to continue purifying your living space.

Switch on nanoe-G mode



¹ Applicable to PREMIUM INVERTER and DELUXE INVERTER



PANASONIC TECHNOLOGY

Energy Saving & Precise Temperature Control

Panasonic's INVERTER reduces power consumption by varying the speed of the compressor according to temperature changes with the aim of minimising the temperature fluctuations so you can enjoy consistent cooling comfort.

THE "BRAIN" OF THE INVERTER

Micro computer determines the most suitable operation mode as time passes and automatically adjusts output power for maximum comfort always.

PAM (Pulse Amplitude Modulation)

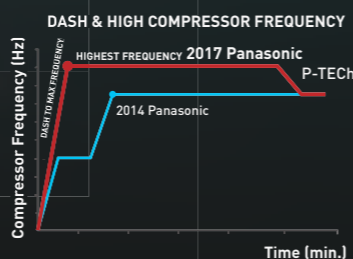
Increases compressor voltage rapidly, to provide powerful cooling to reach the set temperature fast at start up, just like turbo charging a car.

PWM (Pulse Width Modulated Wave)

Stabilises the compressor rotation speed when maintaining the set temperature, like putting a car on cruise control.

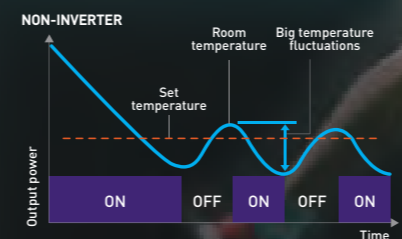
P-TECH – THE POWER BEHIND FAST COOLING

P-TECH enables the compressor to achieve maximum frequency in the shortest time from start up, giving you powerful cooling the moment the air conditioner is switched on.



NON INVERTER

A conventional non-INVERTER air conditioner can only operate at a constant speed which is too powerful to maintain the set temperature. Thus, it switches the compressor on and off repeatedly. This results in wider temperature fluctuations leading to wasteful consumption of energy.

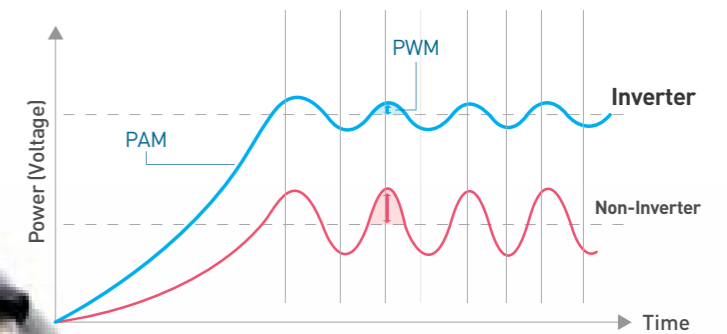


Legend: ■ Output Power
— Temperature

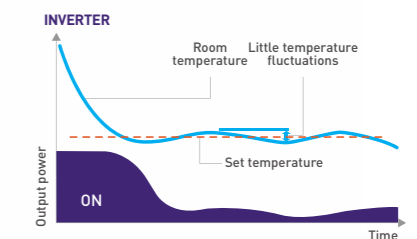
Remark: Energy is wasted by switching the compressor ON and OFF to maintain the set temperature.

Quick Cooling & Constant Comfort

PAM increases the power output to accelerate compressor speed at start up to deliver powerful cool air. Once the set temperature is reached, PWM controls the compressor speed to maintain the set temperature for comfortable ambiance without wasting energy.



The Panasonic INVERTER air conditioner varies the rotation speed of the compressor, providing a precise method of maintaining the set temperature. Thus, Panasonic INVERTER air conditioners give you exceptional energy saving performance while ensuring you stay comfortable at all times.




Legend: ■ Output Power
— Temperature

Remark: Saves energy by varying the rotation speed of the compressor to maintain the set temperature.

INVERTER MULTI-SPLIT TYPE


OUTDOOR

DUAL-SPLIT MODEL

MODELS	CU-2XS20UKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
2 Rooms		Port A 2.8 or 3.2 Either unit Port B 2.8 or 3.2 Either unit

- It is possible to have a combination of wall-mounted models [CS-MXS9, MXS12UKZ] for the [CU-2XS20UKZ] Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

TRIPLE-SPLIT MODEL

MODELS	CU-3XS27UKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
3 Rooms		Port A 2.8 or 3.2 or 4.0 or 5.0 Port B 2.8 or 3.2 or 4.0 or 5.0 Port C 2.8 or 3.2 or 4.0 or 5.0

- It is possible to have a combination of wall-mounted models [CS-MXS9, MXS12, MXS15, MXS18UKZ] for the [CU-3XS27UKZ] Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

QUADRUPLE-SPLIT MODEL

MODELS	Indoor Units: Possible Combination Patterns (Must be within capacity range)
4 Rooms	Port A 2.8 or 3.2 or 4.0 or 5.0 or 6.0 Port B 2.8 or 3.2 or 4.0 or 5.0 or 6.0 Port C 2.8 or 3.2 or 4.0 or 5.0 or 6.0 Port D 2.8 or 3.2 or 4.0 or 5.0 or 6.0

- It is possible to have a combination of wall-mounted models [CS-MXS9, MXS12, MXS15, MXS18, MXS24UKZ], mini cassette models [CS-S12, S18, S24MB4ZW] and slim ducted models [CS-MS9, MS12, MS18, MS24SD3H] for the [CU-4XS30UBZ, 4XS34UBZ] Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

INDOOR

PREMIUM INVERTER SPECIFICATIONS

MODEL	(50Hz)	CS-MXS9UKZ	CS-MXS12UKZ	CS-MXS15UKZ	CS-MXS18UKZ	CS-MXS24UKZ	
Operation		1 unit					
Cooling Capacity	Btu/h	9,550	10,900	13,600	17,100	20,500	
	kW	2.80	3.20	4.00	5.00	6.00	
Electrical Data	Voltage	220 - 240					
Sound Pressure Level	Indoor (H/L)	dB-A	42 / 29	44 / 32	45 / 32	47 / 38	48 / 39
Moisture Removal	L/h	1.6	1.8	2.3	2.7	3.3	
Air Circulation	m³/min	12.1	12.6	13.2	17.6	17.9	
	ft³/min	425	445	465	620	630	
Fan Output	W	40					
Dimensions	Height	296			296		
	Width	870				1,070	
	Depth	236			241		
Net Weight	Indoor	9			12		
	kg						
Refrigerant Pipe Diameter	Liquid Side	ø 6.35					
	Gas Side	ø 9.52			ø 12.70		
Power Supply		Outdoor					

MINI CASSETTE SPECIFICATIONS

MODEL	(50Hz)	CS-S12MB4ZW	CS-S18MB4ZW	CS-S24MB4ZW	
Operation		1 unit			
Cooling Capacity	Btu/h	10,900	17,100	20,500	
	kW	3.20	5.00	6.00	
Electrical Data	Voltage	220 - 240			
Sound Pressure Level	Indoor (H/L)	dB-A	34 / 26	36 / 28	41 / 33
Moisture Removal	L/h	1.8	2.7	3.3	
Air Circulation	m³/min	10.5	11.0	12.8	
	ft³/min	370	390	450	
Fan Output	W	40			
Dimensions	Height	260			
	Width	575			
	Depth	575			
Net Weight	Indoor	18			
Refrigerant Pipe Diameter	Liquid Side	ø 6.35			
	Gas Side	ø 9.52		ø 12.70	
Power Supply		Outdoor			

SLIM DUCTED SPECIFICATIONS

MODEL	(50Hz)	CS-MS9SD3H	CS-MS12SD3H	CS-MS18SD3H	CS-MS24SD3H	
Operation		1 unit				
Cooling Capacity	Btu/h	9,550	10,900	17,100	20,500	
	kW	2.80	3.20	5.00	6.00	
Electrical Data	Voltage	220 - 240				
Sound Pressure Level	Indoor (H/L)	dB-A	35 / 28	35 / 28	41 / 30	41 / 30
Moisture Removal	L/h	1.6	1.8	2.7	3.3	
Air Circulation	m³/min	13.2	13.2	15.5	15.5	
	ft³/min	465	465	545	545	
Fan Output	W	51				
Dimensions	Height	200				
	Width	750				
	Depth	640				
Net Weight	Indoor	19				
Refrigerant Pipe Diameter	Liquid Side	ø 6.35				
	Gas Side	ø 9.52			ø 12.70	
Power Supply		Outdoor				


INVERTER MULTI-SPLIT TYPE

INVERTER MULTI-COMBINATION (CU-4XS34UBZ)

INDOOR UNIT COMBINATION	Cooling	Total	Cooling Capacity [kW]					Power Input [W]		Current [A] [50Hz]		Moisture Removal L/h	
			A	B	C	D	Total	min ~ max	Rated	min ~ max	220V		240V
3 Room	3.2 + 3.2 + 6.0	12.4	1.68	1.68	3.14		6.50	2.90 ~ 10.20	1,330	520 ~ 2,670	6.5	5.9	1.1 + 1.1 + 1.8
	3.2 + 4.0 + 4.0	11.2	1.86	2.32	2.32		6.50	2.90 ~ 9.70	1,420	520 ~ 2,670	6.9	6.3	1.2 + 1.5 + 1.5
	3.2 + 4.0 + 5.0	12.2	1.70	2.13	2.67		6.50	2.90 ~ 10.20	1,330	520 ~ 2,620	6.5	5.9	1.1 + 1.4 + 1.6
	3.2 + 4.0 + 6.0	13.2	1.58	1.97	2.95		6.50	2.90 ~ 10.20	1,330	520 ~ 2,620	6.5	5.9	1.0 + 1.3 + 1.7
	3.2 + 5.0 + 5.0	13.2	1.58	2.46	2.46		6.50	2.90 ~ 10.50	1,330	590 ~ 2,530	6.5	5.9	1.0 + 1.5 + 1.5
	3.2 + 5.0 + 6.0	14.2	1.46	2.29	2.75		6.50	2.90 ~ 10.50	1,330	590 ~ 2,530	6.5	5.9	0.9 + 1.5 + 1.6
	3.2 + 6.0 + 6.0	15.2	1.36	2.57	2.57		6.50	2.90 ~ 10.50	1,330	590 ~ 2,530	6.5	5.9	0.9 + 1.6 + 1.6
	4.0 + 4.0 + 4.0	12.0	2.16	2.16	2.16		6.48	2.90 ~ 9.70	1,420	520 ~ 2,620	6.9	6.3	1.4 + 1.4 + 1.4
	4.0 + 4.0 + 5.0	13.0	2.00	2.00	2.50		6.50	2.90 ~ 10.30	1,330	520 ~ 2,720	6.5	5.9	1.3 + 1.3 + 1.5
	4.0 + 4.0 + 6.0	14.0	1.86	1.86	2.78		6.50	2.90 ~ 10.30	1,330	520 ~ 2,720	6.5	5.9	1.2 + 1.2 + 1.6
4 Room	4.0 + 5.0 + 5.0	14.0	1.86	2.32	2.32		6.50	2.90 ~ 10.50	1,340	590 ~ 2,530	6.5	6.0	1.2 + 1.5 + 1.5
	4.0 + 5.0 + 6.0	15.0	1.73	2.17	2.60		6.50	2.90 ~ 10.50	1,340	590 ~ 2,530	6.5	6.0	1.1 + 1.4 + 1.6
	5.0 + 5.0 + 5.0	15.0	2.16	2.16	2.16		6.48	2.90 ~ 10.50	1,300	640 ~ 2,340	6.3	5.8	1.4 + 1.4 + 1.4
	2.8 + 2.8 + 2.8 + 2.8	11.2	1.63	1.63	1.63	1.63	6.50	2.90 ~ 10.60	1,330	560 ~ 2,770	6.5	5.9	1.0 + 1.0 + 1.0 + 1.0
	2.8 + 2.8 + 2.8 + 3.2	11.6	1.57	1.57	1.57	1.79	6.50	2.90 ~ 10.60	1,330	560 ~ 2,770	6.5	5.9	1.0 + 1.0 + 1.0 + 1.2
	2.8 + 2.8 + 2.8 + 4.0	12.4	1.47	1.47	1.47	2.09	6.50	2.90 ~ 10.60	1,330	560 ~ 2,720	6.5	5.9	0.9 + 0.9 + 0.9 + 1.4
	2.8 + 2.8 + 2.8 + 5.0	13.4	1.36	1.36	1.36	2.42	6.50	2.90 ~ 10.60	1,300	600 ~ 2,440	6.3	5.8	0.9 + 0.9 + 0.9 + 1.5
	2.8 + 2.8 + 2.8 + 6.0	14.4	1.26	1.26	1.26	2.72	6.50	2.90 ~ 10.60	1,300	600 ~ 2,440	6.3	5.8	0.8 + 0.8 + 0.8 + 1.6
	2.8 + 2.8 + 3.2 + 3.2	12.0	1.52	1.52	1.73	1.73	6.50	2.90 ~ 10.60	1,330	560 ~ 2,680	6.5	5.9	1.0 + 1.0 + 1.1 + 1.1
	2.8 + 2.8 + 3.2 + 4.0	12.8	1.42	1.42	1.63	2.03	6.50	2.90 ~ 10.60	1,330	560 ~ 2,680	6.5	5.9	0.9 + 0.9 + 1.0 + 1.3
2.8 + 2.8 + 3.2 + 5.0	13.8	1.32	1.32	1.51	2.35	6.50	2.90 ~ 10.60	1,300	640 ~ 2,440	6.3	5.8	0.8 + 0.8 + 1.0 + 1.5	
2.8 + 2.8 + 3.2 + 6.0	14.8	1.23	1.23	1.41	2.63	6.50	2.90 ~ 10.60	1,300	640 ~ 2,440	6.3	5.8	0.8 + 0.8 + 0.9 + 1.6	
2.8 + 2.8 + 4.0 + 4.0	13.6	1.34	1.34	1.91	1.91	6.50	2.90 ~ 10.60	1,330	560 ~ 2,630	6.5	5.9	0.8 + 0.8 + 1.2 + 1.2	
2.8 + 2.8 + 4.0 + 5.0	14.6	1.25	1.25	1.78	2.22	6.50	2.90 ~ 10.60	1,300	640 ~ 2,390	6.3	5.8	0.8 + 0.8 + 1.1 + 1.4	
2.8 + 2.8 + 4.0 + 6.0	15.6	1.17	1.17	1.67	2.49	6.50	2.90 ~ 10.60	1,300	640 ~ 2,390	6.3	5.8	0.7 + 0.7 + 1.1 + 1.5	
2.8 + 2.8 + 5.0 + 5.0	15.6	1.17	1.17	2.08	2.08	6.50	2.90 ~ 10.60	1,310	700 ~ 2,260	6.4	5.8	0.7 + 0.7 + 1.3 + 1.3	
2.8 + 3.2 + 3.2 + 3.2	12.4	1.46	1.68	1.68	1.68	6.50	2.90 ~ 10.60	1,290	590 ~ 2,630	6.3	5.8	0.9 + 1.1 + 1.1 + 1.1	
2.8 + 3.2 + 3.2 + 4.0	13.2	1.37	1.58	1.58	1.97	6.50	2.90 ~ 10.60	1,290	590 ~ 2,580	6.3	5.8	0.9 + 1.0 + 1.0 + 1.3	
2.8 + 3.2 + 3.2 + 5.0	14.2	1.28	1.46	1.46	2.30	6.50	2.90 ~ 10.60	1,300	640 ~ 2,390	6.3	5.8	0.8 + 0.9 + 0.9 + 1.5	
2.8 + 3.2 + 3.2 + 6.0	15.2	1.20	1.37	1.37	2.56	6.50	2.90 ~ 10.60	1,300	640 ~ 2,390	6.3	5.8	0.7 + 0.9 + 0.9 + 1.6	
2.8 + 3.2 + 4.0 + 4.0	14.0	1.29	1.49	1.86	1.86	6.50	2.90 ~ 10.60	1,290	600 ~ 2,580	6.3	5.8	0.8 + 0.9 + 1.2 + 1.2	
2.8 + 3.2 + 4.0 + 5.0	15.0	1.21	1.39	1.73	2.17	6.50	2.90 ~ 10.60	1,300	650 ~ 2,390	6.3	5.8	0.8 + 0.9 + 1.1 + 1.4	
2.8 + 4.0 + 4.0 + 4.0	14.8	1.22	1.76	1.76	1.76	6.50	2.90 ~ 10.60	1,290	600 ~ 2,580	6.3	5.8	0.8 + 1.1 + 1.1 + 1.1	
3.2 + 3.2 + 3.2 + 3.2	12.8	1.63	1.63	1.63	1.63	6.50	2.90 ~ 10.60	1,290	600 ~ 2,580	6.3	5.8	1.0 + 1.0 + 1.0 + 1.0	
3.2 + 3.2 + 3.2 + 4.0	13.6	1.53	1.53	1.53	1.91	6.50	2.90 ~ 10.60	1,290	600 ~ 2,530	6.3	5.8	1.0 + 1.0 + 1.0 + 1.2	
3.2 + 3.2 + 3.2 + 5.0	14.6	1.42	1.42	1.42	2.24	6.50	2.90 ~ 10.60	1,300	650 ~ 2,350	6.3	5.8	0.9 + 0.9 + 0.9 + 1.5	
3.2 + 3.2 + 3.2 + 6.0	15.6	1.33	1.33	1.33	2.51	6.50	2.90 ~ 10.60	1,300	650 ~ 2,350	6.3	5.8	0.8 + 0.8 + 0.8 + 1.5	
3.2 + 3.2 + 4.0 + 4.0	14.4	1.44	1.44	1.81	1.81	6.50	2.90 ~ 10.60	1,290	600 ~ 2,530	6.3	5.8	0.9 + 0.9 + 1.2 + 1.2	
3.2 + 3.2 + 4.0 + 5.0	15.4	1.35	1.35	1.69	2.11	6.50	2.90 ~ 10.60	1,300	650 ~ 2,350	6.3	5.8	0.9 + 0.9 + 1.1 + 1.4	
3.2 + 4.0 + 4.0 + 4.0	15.2	1.37	1.71	1.71	1.71	6.50	2.90 ~ 10.60	1,300	600 ~ 2,530	6.3	5.8	0.9 + 1.1 + 1.1 + 1.1	

- Specification based on JIS C 9612 standard.
- A minimum of 2 indoor units must be connected.
- Switchable between 8.5amp or 11amp.

CONNECTION OF COOLING MULTI INVERTER

Outdoor Unit	Indoor		
	Type	Maximum Connectable Indoor unit kW	KW
CU-2XS20UKZ 	Wall Mounted  CS-MXS9UKZ CS-MXS12UKZ	6.4	2.8 3.2
CU-3XS27UKZ 	Wall Mounted  CS-MXS9UKZ CS-MXS12UKZ CS-MXS18UKZ CS-MXS15UKZ	13.2	2.8 3.2 4.0 5.0
CU-4XS30UBZ 	Wall Mounted  CS-MXS9UKZ CS-MXS12UKZ CS-MXS18UKZ CS-MXS24UKZ CS-MXS15UKZ	13.4	2.8 3.2 4.0 5.0 6.0
	Mini Cassette  CS-S12MB4ZW CS-S18MB4ZW CS-S24MB4ZW		3.2 5.0 6.0
	Slim Ducted  CS-MS9SD3H CS-MS12SD3H CS-MS18SD3H CS-MS24SD3H		2.8 3.2 5.0 6.0
CU-4XS34UBZ 	Wall Mounted  CS-MXS9UKZ CS-MXS12UKZ CS-MXS18UKZ CS-MXS24UKZ CS-MXS15UKZ	15.6	2.8 3.2 4.0 5.0 6.0
	Mini Cassette  CS-S12MB4ZW CS-S18MB4ZW CS-S24MB4ZW		3.2 5.0 6.0
	Slim Ducted  CS-MS9SD3H CS-MS12SD3H CS-MS18SD3H CS-MS24SD3H		2.8 3.2 5.0 6.0

INVERTER MULTI-SPLIT TYPE

WALL MOUNTED AERO SERIES DELUXE INVERTER TYPE



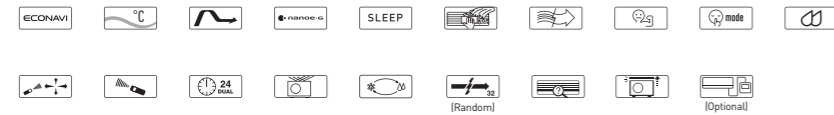
Wireless



Wired (Optional)

CS-S9TKZW | CS-S12TKZW | CS-MS15TKZ
CS-S18TKZW | CS-S24TKZW

COOLING MODELS



MINI CASSETTE



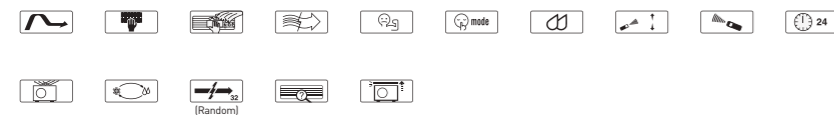
Panel CZ-BT20E



Wireless


CS-S12MB4ZW | CS-S18MB4ZW
CS-S24MB4ZW

COOLING MODELS





OUTDOOR

INVERTER DUAL-SPLIT MODEL



MODELS	CU-2S18PKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
2 Rooms	 	Port A 2.8 or 3.2 Either unit Port B 2.8 or 3.2 Either unit

- 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.

INVERTER TRIPLE-SPLIT MODEL


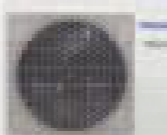
MODELS	CU-3S27MKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
3 Rooms	 	Port A 2.8 or 3.2 or 4.0 or 5.0 Port B 2.8 or 3.2 or 4.0 or 5.0 Port C 2.8 or 3.2 or 4.0 or 5.0

- It is possible to have a combination of wall-mounted models (CS-S9, S12, S18TKZW, CS-MS15TKZ) for the (CU-3S27MKZ) Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

MODELS	CU-3S27KKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
3 Rooms	 	Port A 2.8 or 3.2 or 4.0 or 5.0 or 6.0 Port B 2.8 or 3.2 or 4.0 or 5.0 or 6.0 Port C 2.8 or 3.2 or 4.0 or 5.0 or 6.0

- It is possible to have a combination of wall-mounted models (CS-S9, S12, S18, S24TKZW, CS-MS15TKZ) and mini cassette models (CS-S12, S18, S24MB4ZW) for the (CU-3S27KKZ) Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

INVERTER QUADRUPLE-SPLIT MODEL





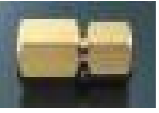
MODELS	CU-4S27NKZ	Indoor Units: Possible Combination Patterns (Must be within capacity range)
4 Rooms	 	Port A 2.8 or 3.2 or 4.0 or 5.0 Port B 2.8 or 3.2 or 4.0 or 5.0 Port C 2.8 or 3.2 or 4.0 or 5.0 Port D 2.8 or 3.2 or 4.0 or 5.0

- It is possible to have a combination of wall-mounted models (CS-S9, S12, S18TKZW, CS-MS15TKZ) for the (CU-4S27NKZ) Outdoor Unit Ports.
- A minimum of 2 indoor units must be connected.

CONNECTION OF COOLING MULTI INVERTER

Outdoor Unit	Indoor		
	Type	Maximum Connectable Indoor unit kW	KW
CU-2S18PKZ 	Wall Mounted  CS-S9TKZW CS-S12TKZW	6.4	2.8 3.2
CU-3S27MKZ 	Wall Mounted  CS-S9TKZW CS-S12TKZW CS-MS15TKZ  CS-S18TKZW	13.2	2.8 3.2 4.0 5.0
CU-3S27KKZ 	Wall Mounted  CS-S9TKZW CS-S12TKZW CS-MS15TKZ  CS-S18TKZW CS-S24TKZW Mini Cassette  CS-S12MB4ZW CS-S18MB4ZW CS-S24MB4ZW	13.2	2.8 3.2 4.0 5.0 6.0 3.2 5.0 6.0
CU-4S27NKZ 	Wall Mounted  CS-S9TKZW CS-S12TKZW CS-MS15TKZ  CS-S18TKZW	13.4	2.8 3.2 4.0 5.0

OPTIONAL ACCESSORIES

■ REMOTE CONTROL		■ FILTER	
Wired Remote Control  CZ-RD514C	Anti-Bacterial Filter  CZ-SA22P	CS-S9TKZW, CS-S12TKZW, CS-S18TKZW, CS-S24TKZW, CS-S28TKZ CS-XS9RKZW, CS-XS12RKZW, CS-XS18RKZW, CS-XS24RKZW, CS-XS28RKZ CS-PS9UKZ, CS-PS12UKZ, CS-PS18UKZ, CS-PS24UKZ CS-MXS9UKZ, CS-MXS12UKZ, CS-MXS15UKZ, CS-MXS18UKZ, CS-MXS24UKZ	
■ PIPE SIZE REDUCER		■ PIPE SIZE EXPANDER	
Use at the indoor unit's connection port		Use at the outdoor unit's connection port	
 CZ-MA1P	 CZ-MA3P	 CZ-MA2P	
CS-S12TKZW, CS-MS15TKZ, CS-S18TKZW CS-S12MB4ZW, CS-S18MB4ZW		CS-S24TKZW CS-MXS24UKZ CS-S24MB4ZW CS-M524SD3H	
		CS-S24TKZW CS-MXS24UKZ CS-S24MB4ZW CS-M524SD3H	

THE SYSTEM OF MODEL NUMBERS FOR SPLIT MODELS

- 1 Model Type
 CS : Split Type (Indoor Unit)
 CU : Split Type (Outdoor Unit)
 CZ : Accessories
- 2 Connection Configuration
 <Indoor Unit>
 W : Multi Split
 <Outdoor Unit>
 n : (n) Rooms Multi
- 3 Function
 XS : Premium Inverter
 S : Deluxe Inverter
 PS : Standard Inverter
 MXS : Premium Inverter Multi
- 4 Capacity
 Value = Capacity (Btu/h) x 1/1000, e.g. 9,000 Btu/h x 1/1000 = 9
- 5 Type
 K : Wall-Mounted Type



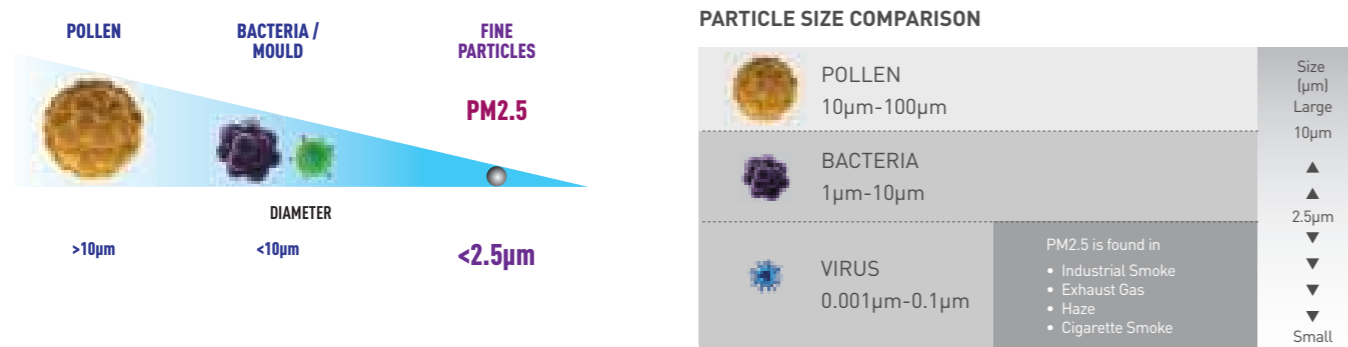
RATING CONDITIONS

	Cooling
Inside air temperature	27°C DB (19°C WB)
Outside air temperature	35°C DB (24°C WB)



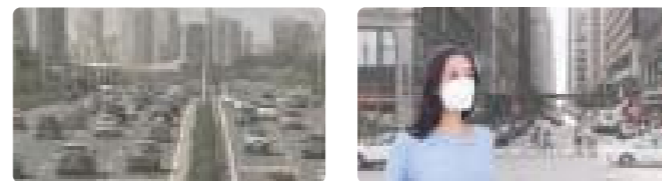
What is PM2.5?

"Particulate matter," also known as PM is made up of a number of components including extremely small particles and liquid droplets. Sized at less than 2.5 micrometers (PM2.5), these particles are said to pose health problems as they can easily enter our lungs.

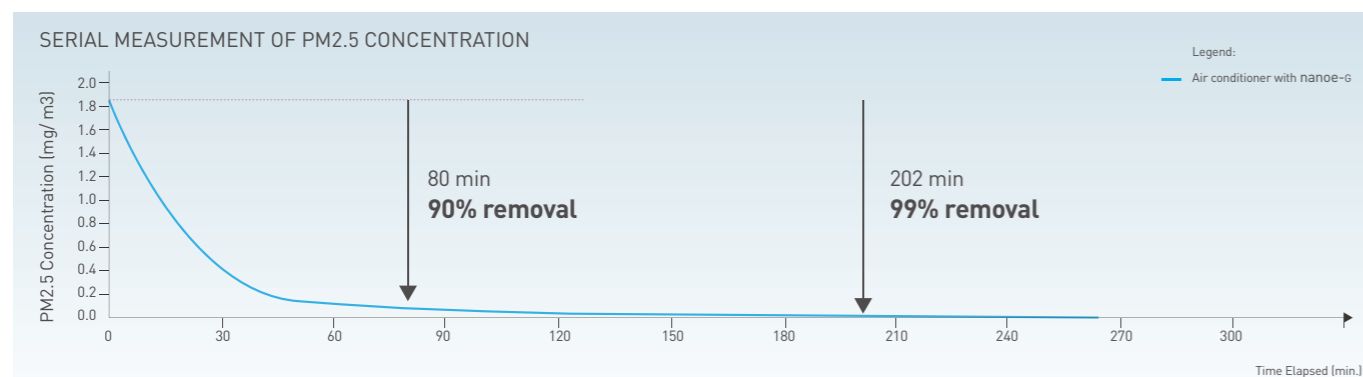


SOURCES OF PM2.5

PM2.5 can be found suspended in the air, including dust, dirt, smoke and liquid droplets. These fine particles come from man-made sources such as the combustion of fossil fuels, open burning and industrial processes as well as natural ones, which include sea sprays and dust carried by strong winds.



PM2.5 REMOVAL EFFICIENCY BASED ON TIME



AIRBORNE

REMOVES UP TO **99%*** PM2.5

*1 PM2.5 Removal was certified by FCG Research Institute, Inc.

- Test Report no.: 25034
- PM2.5: Cigarette Smoke (as PM2.5)

Effectiveness is measured on 0.3µm-2.5µm. (Specific size only)

This removal effect is not proven for all the airborne toxic substances.

All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

REMOVES UP TO **99%*2** BACTERIA, VIRUSES and MOULD

*2 Airborne Removal was certified by Kitasato Research Center for Environmental Science

- KRCES-Bio. Test Report no.: 23_0182
- Bacteria: Staphylococcus aureus (NBRC 12732)
- KRCES-Env. Test Report no.: 22_0008
- Virus: Escherichia coli phage (αX-174 ATCC 13706-B1)
- Influenza (H1N1) 2009 Virus
- KRCES-Env. Test Report no.: 23_0140
- Mould: Penicillium pinophilum (NBRC 6345)

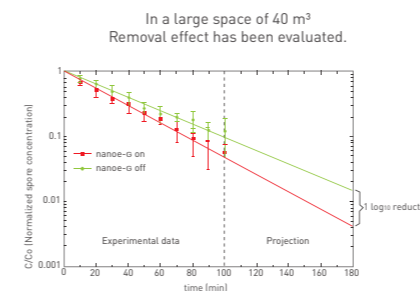
All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.



The Effectiveness of nanoe-G

AIRBORNE

DATA ON REMOVAL OF AIRBORNE BACTERIA WAS PRESENTED BY HARVARD SCHOOL OF PUBLIC HEALTH RESEARCHERS AT NANO-SYMPOSIUM AT KYOTO UNIVERSITY, 2012



The effect after 100 minutes in a 40 m³ test space [about the size of a 10 tatami mats room], not the effect in a space where actually used.

"Performance evaluation of a novel ionizer for air purification applications". Dr. S. Rudnick et al. Harvard School of Public Health, Environmental Health Nanoscience Lab.

nanoe-G

A study of the removal effect of airborne bacteria by using an air-conditioner incorporating nanoe-G was carried out in a large space, and the results were presented at Nano-Symposium jointly held in

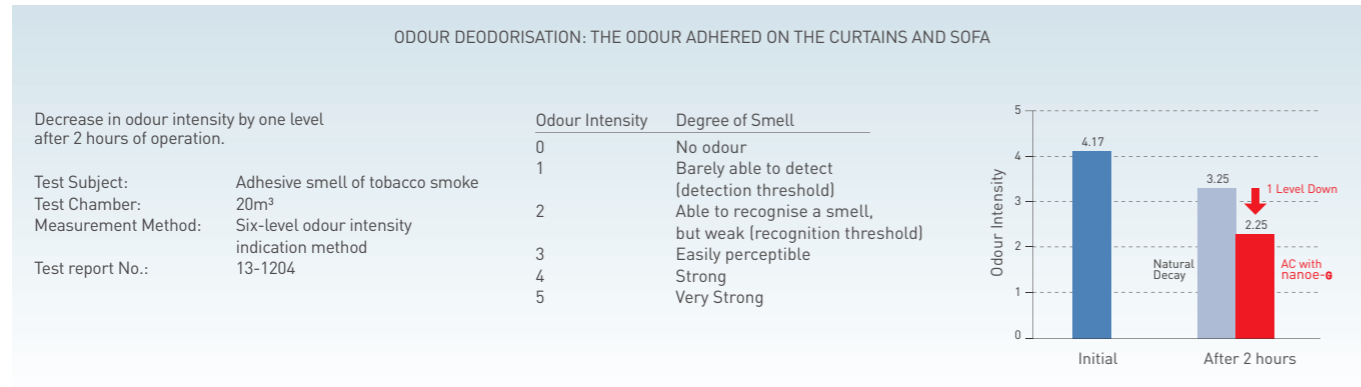
September 2012 by Harvard University and Kyoto University. Test methods: Bacteria removal method: Release of nanoe-G negative ions. Target: Airborne bacteria, Test results: It is estimated that after three hours of operation the nanoe-G will achieve 2.7 log₁₀ reductions, ~ 1 log₁₀ reduction more, as compared to without nanoe-G.

AIRBORNE

TARGET SUBSTANCE	SUBSTANCE NAME	EFFECTIVENESS	TESTING INSTITUTE	TEST REPORT NO	METHOD	RESULT
PM2.5	Cigarette Smoke (as PM2.5)	99%	FCG Research Institute, Inc	Test Report No. 25034	The AC with nanoe-G was operated in a test room (23m ³) and the concentration of PM2.5 was measured by PM2.5 Digital Dust Indicator.	99% removal from the air after 202 minutes of operation.
Bacteria	Staphylococcus aureus (NBRC 12732)	99%	Kitasato Research Center for Environmental Science	KRCES-Bio. Test Report No. 23_0182	The AC with nanoe-G was operated in a test room (25m ³) and aerosol was collected and bacterial count was calculated.	99% removal from the air after 150 minutes of operation.
Virus	Escherichia coli phage (αX-174 ATCC 13706-B1)	99%	Kitasato Research Center for Environmental Science	KRCES-Env. Test Report No. 22_0008	The AC with nanoe-G was operated in a test room (25m ³) and airborne phages were collected and phage count of the collected air was calculated.	99% removal from the air after 120 minutes of operation.
	Influenza (H1N1) 2009 virus	99%	Kitasato Research Center for Environmental Science	KRCES-Env. Test Report No. 22_0008	nanoe-G was operated in a test chamber (200 Litre) and the phages were collected and phage count of the collected air was calculated.	99% removal from the air after 5 minutes of operation.
Mould	Penicillium pinophilum (NBRC 6345)	99%	Kitasato Research Center for Environmental Science	KRCES-Env. Test Report No. 22_0008	nanoe-G was operated in a test chamber (200 Litre) and the influenza viruses were collected and the virus titers were calculated by the Reed and Muench method.	99% removal from the air after 5 minutes of operation.
					In view of health hazard associated with spatial distribution of Influenza (H1N1) 2009 virus, nanoe-G removal effectiveness cannot be tested in large test room (25m ³). When tested in 200 Litre chamber, nanoe-G was able to decrease Influenza (H1N1) 2009 virus (99%) when it was operated for 5 minutes. Additionally when tested in larger test room (25m ³), nanoe-G can remove 99.5% of Coli phage virus when operated for 120 minutes. It was validated that evaluation on the influenza virus could be speculated from the results on the phage according to the test results in a 200 Litre test chamber. It appeared that the air-conditioners in a larger test room (25m ³) would be able to remove the influenza virus as effectively as the phage.	
			Kitasato Research Center for Environmental Science	KRCES-Bio. Test Report No. 23_0140	The AC with nanoe-G was operated in a test room (25m ³) and aerosol was collected and fungal spores count was calculated.	99% removal from the air after 90 minutes of operation.

Remark: All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

ADHESIVE



ADHESIVE

TARGET SUBSTANCE	SUBSTANCE NAME	EFFECTIVENESS	TESTING INSTITUTE	TEST REPORT NO	METHOD	RESULT
Bacteria	<i>Staphylococcus aureus</i> (NBRC 12732)	99%	Japan Food Research Laboratories	Test Report No. 11047933001-02	The AC with nanoe-G was operated in a test space (10m ³) and viable cells were counted by pour plate method.	99% inactivation after 24 hour operation of nanoe-G. (compared to the original condition/ventilation mode)
Virus	<i>Bacteriophage</i> (Phi X 174 NBRC 103405)	99%	Japan Food Research Laboratories	Test Report No. 11073649001-02	nanoe-G was operated in a test box (90 Litre) and phage infectivity titer was determined by plaque technique.	99% inactivation after 120 minutes operation of nanoe-G. (compared to non-operation)
Mould	<i>Cladosporium cladosporioides</i> (NBRC 6348)	Inhibit Mould Growth	Japan Food Research Laboratories	Test Report No. 11047937001-02	nanoe-G was operated in a test box (1m ³) and colonies on the plate were counted.	The growth of the subject was inhibited. (>85% after 7 days)
Odour	Smell of tobacco smoke	Decrease by one level	OMI ODOR-AIR SERVICE Co.Ltd.	Test Report No. 13-1204	The AC with nanoe-G was operated in a test room (20m ³) and the deodorisation effect on a piece of cloth impregnated with odour components of cigarette smoke was evaluated using six-level odour intensity indication method.	Decrease in odour intensity by one level after 120 minutes of operation.

Remark: All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

ADHESIVE

DEACTIVATES UP TO **99%***3 BACTERIA and VIRUSES INHIBITS MOULD GROWTH

** Adhesive Deactivation was certified by Japan Food Research Laboratories

- Test Report number : 11047933001-02 Bacteria : *Staphylococcus aureus* (NBRC 12732)
- Test Report number : 11073649001-02 Virus : Bacteriophage (Phi X 174 NBRC 103405)
- Test Report number : 11047937001-02 Mould : *Cladosporium cladosporioides* (NBRC 6348)

All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.



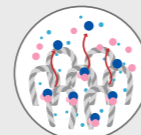
ADHESIVE ODOURS

DEODORISES ADHESIVE ODOUR (TOBACCO SMELL)

Adhesive odour deodorisation was certified by OMI ODOR-AIR SERVICE Co. Ltd.

- Test Report No. 13-1204

All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.



How Does In-filter Deactivation Work?

<p>1. POWER "OFF"</p> <p>The air-conditioner first has to be turned off.</p>	<p>2. FAN OPERATION</p> <p>The fan operation will run automatically for 30 minutes with the flaps slightly open to ensure the internal components are dry and free from condensation.</p>	<p>3. nanoe-G OPERATION</p> <p>Natural Ion Wind spreads nanoe-G negative ions that are released from the nanoe-G generator.</p>	<p>4. DEACTIVATION EFFECT</p> <p>nanoe-G deactivates bacteria and viruses that are trapped in the filter within 2 hours.</p>
<p>Remark: Main power must be switched on for the entire duration.</p>	<p>Remark: The 30-minute fan operation is only applicable when the unit has been operated in COOL /DRY mode.</p> <p>Fan Operation : On Flap : Flaps slightly open nanoe-G LED : On</p>	<p>Remark: Depending on the Air Conditioner's accumulated operation time, nanoe-G In-Filter Deactivation may be activated only once a day.</p> <p>Fan Operation : Off Flap : Closed nanoe-G LED : On</p>	

IN-FILTER DEACTIVATION

TARGET SUBSTANCE	SUBSTANCE NAME	EFFECTIVENESS	TESTING INSTITUTE	TEST REPORT NO	METHOD	RESULT
Bacteria	<i>Staphylococcus aureus</i> (NBRC 12732)	99%	Japan Food Research Laboratories	Test Report No. 12037932001	The test piece impregnated with <i>Staphylococcus aureus</i> was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, viable cells were counted. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	99% of deactivation after 2-hour nanoe-G operation.
	<i>Escherichia coli</i> phage (φX-174 ATCC 13706-B1)	99%	Japan Food Research Laboratories	Test Report No. 12014705001	The test piece impregnated with <i>Escherichia coli</i> phage was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, phage infectivity titer was determined. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	99% of deactivation after 2-hour nanoe-G operation.
Virus	Influenza (H1N1) 2009 Virus	Average 90% on filter (The percentage varies from 78.9% to 96.1% depending on its location)	Kitasato Research Center for Environmental Science	KRCES-Virus Test Report No. 24_0013	The test piece impregnated with Influenza (H1N1) 2009 Virus was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, virus infectivity titer was determined. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	Average 90% deactivation after 2-hour nanoe-G operation. [The percentage varies from 78.9% to 96.1%, depending on its location on filter]

Remark: All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

IN-FILTER DEACTIVATION

DEACTIVATES UP TO **99%***4 BACTERIA and VIRUSES INHIBITS MOULD GROWTH



DEACTIVATES AVERAGE UP TO **90%** INFLUENZA (H1N1) 2009 VIRUS

*4 In-Filter Deactivation was certified by Japan Food Research Laboratories

- Test Report number : 12037932001 Bacteria : *Staphylococcus aureus* (NBRC 12732)
- Test Report number : 12014705001 Virus : *Escherichia coli* phage (φX-174 ATCC 13706-B1)

All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

In-Filter Deactivation was certified by Kitasato Research Center for Environmental Science

- Test Report number : KRCES-Virus Test Report No. 24_0013 Virus : Influenza (H1N1) 2009 Virus

All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

Capacity (Btu/h)

9,000

12,000

18,000

24,000

28,000



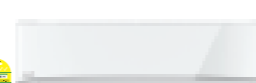
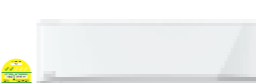



Wall-Mounted
**PREMIUM
INVERTER
SINGLE-SPLIT**
Page 24-25

PREMIUM INVERTER		PREMIUM INVERTER WIDE		PREMIUM INVERTER WIDE		FEATURES
 CS-XS9RKZW [CU-XS9RKZ]	 CS-XS12RKZW [CU-XS12RKZ]	 CS-XS18RKZW [CU-XS18RKZ]	 CS-XS24RKZW [CU-XS24RKZ]	 CS-XS28RKZW [CU-XS28RKZ]	   	








Wall-Mounted
**DELUXE
INVERTER
SINGLE-SPLIT**
Page 26-27

DELUXE INVERTER		DELUXE INVERTER WIDE		DELUXE INVERTER WIDE		FEATURES
 CS-S9TKZW [CU-S9TKZ]	 CS-S12TKZW [CU-S12TKZ]	 CS-S18TKZW [CU-S18TKZ]	 CS-S24TKZW [CU-S24TKZ]	 CS-S28TKZW [CU-S28TKZ]	   	

Wall-Mounted
**STANDARD
INVERTER
SINGLE-SPLIT**
Page 28

STANDARD INVERTER		STANDARD INVERTER WIDE		STANDARD INVERTER WIDE		FEATURES
 CS-PS9UKZ [CU-PS9UKZ]	 CS-PS12UKZ [CU-PS12UKZ]	 CS-PS18UKZ [CU-PS18UKZ]	 CS-PS24UKZ [CU-PS24UKZ]		  	

Wall-Mounted
**PREMIUM
INVERTER
MULTI-SPLIT**
Page 30-39

PREMIUM INVERTER		PREMIUM INVERTER WIDE		PREMIUM INVERTER WIDE		FEATURES
 CS-MXS9UKZ [CU-2XS20UKZ], [CU-3XS27UKZ] [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MXS12UKZ [CU-2XS20UKZ], [CU-3XS27UKZ] [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MXS18UKZ [CU-3XS27UKZ] [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MXS24UKZ [CU-4XS30UBZ], [CU-4XS34UBZ]		   	

Wall-Mounted
**DELUXE
INVERTER
MULTI-SPLIT**
Page 40-46

DELUXE INVERTER		DELUXE INVERTER WIDE		DELUXE INVERTER WIDE		FEATURES
 CS-S9TKZW [CU-2S18PKZ], [CU-3S27MKZ] [CU-3S27KKZ], [CU-4S27NKZ]	 CS-S12TKZW [CU-2S18PKZ], [CU-3S27MKZ] [CU-3S27KKZ], [CU-4S27NKZ]	 CS-S18TKZW [CU-3S27MKZ] [CU-3S27KKZ], [CU-4S27NKZ]	 CS-S24TKZW [CU-3S27KKZ]		   	

Mini Cassette
**MINI CASSETTE
INVERTER
MULTI-SPLIT**
Page 31-39, 40-46

MINI CASSETTE		MINI CASSETTE		MINI CASSETTE		FEATURES
	 CS-S12MB4ZW [CU-3S27KKZ], [CU-4XS30UBZ] [CU-4XS34UBZ]	 CS-S18MB4ZW [CU-3S27KKZ], [CU-4XS30UBZ] [CU-4XS34UBZ]	 CS-S24MB4ZW [CU-3S27KKZ], [CU-4XS30UBZ] [CU-4XS34UBZ]			

Slim Ducted
**SLIM DUCTED
INVERTER
MULTI-SPLIT**
Page 31-39

SLIM DUCTED		SLIM DUCTED		SLIM DUCTED		FEATURES
 CS-MS9SD3H [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MS12SD3H [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MS18SD3H [CU-4XS30UBZ], [CU-4XS34UBZ]	 CS-MS24SD3H [CU-4XS30UBZ], [CU-4XS34UBZ]			

[]: Outdoor Unit Cooling Models