

Building Passion, Building Solutions.

Multi-Split Air Conditioners 2016/2017



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.

Quality Management System Certificate



Certified to ISO 9001:2008
Cert. No.: MY-AR 1010

Certified to ISO 9001: 2008
Panasonic Appliances Air-Conditioning Malaysia
Sdn.Bhd.
Cert. No.: MY-AR 1010

Environmental Management System Certificate



Certified to ISO 14001:2004
Cert. No.: MY-ER0112

Certified to ISO 14001: 2004
Panasonic Appliances Air-Conditioning Malaysia
Sdn.Bhd.
Cert. No.: MY-ER0112

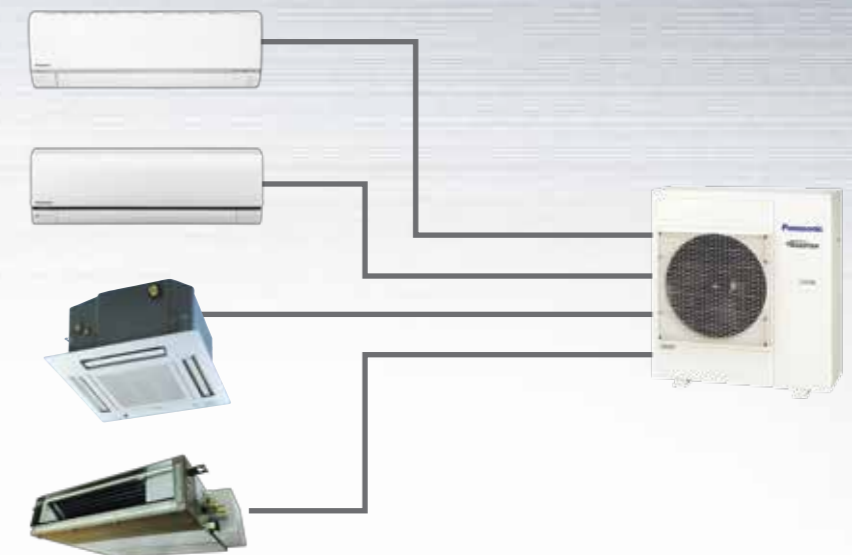
Panasonic Appliances Air Conditioning System Engineering Malaysia (PAPASEMY)

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Authorized Dealer

Panasonic

BUSINESS





Building Passion, Building Solutions.

Panasonic Air Conditioning Systems

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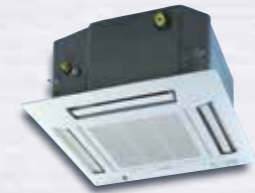
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RAC Adaptor



Wall-Mounted

Panasonic Wall-Mounted types are suitable for residential. These air conditioners giving you greater comfort and energy savings.



Mini Cassette

Panasonic Mini Cassette types are compact in size and particularly suitable for small to medium-sized offices and restaurants.



Slim Ducted

Panasonic Slim Ducted types are available in middle static pressure power. These air conditioners are suitable for applications in concealed or false ceilings such as business centers.

Range of Indoor Units

Capacity		2.8kW	3.2kW	4.0kW	5.0kW	6.0kW	7.0kW
Wall-Mounted (Deluxe Type)		CS-MS9SKH-1	CS-MS12SKH-1	CS-MS15SKH-1	CS-MS18SKH-1	CS-MS24SKH-1	CS-MS28SKH-1
Wall-Mounted (Standard Type)		CS-MPS9SKH-1	CS-MPS12SKH-1	CS-MPS18SKH-1	CS-MPS18SKH-1	CS-MPS24SKH-1	
Mini Cassette			CS-S12MB4Z		CS-S18MB4Z	CS-S24MB4Z	
Slim Ducted		CS-MS9SD3H-1	CS-MS12SD3H-1		CS-MS18SD3H-1	CS-MS24SD3H-1	

ECONAVI AND INVERTER WORK HARD TO SAVE ENERGY

With a Human Activity Sensor and Sunlight Sensor, ECONAVI and INVERTER can monitor human location, movement, absence and sunlight intensity to use energy more efficiently.

ECONAVI SAVES YOU ENERGY BECAUSE IT KNOWS:



AREA SEARCH

Where you are.



ABSENCE DETECTION

When you leave the room.



ACTIVITY DETECTION

When you are less active.



SUNLIGHT DETECTION

Whether it's a sunny day or at night.



TEMPERATURE WAVE

Adapts rhythmic temperature control after detecting low activity level.



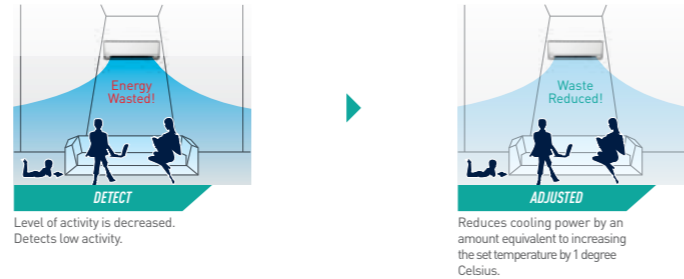
* Econavi only applicable for CS-MS9 / 12 / 15 / 18 / 24 / 28SKH-1.



HOW DOES HUMAN ACTIVITY DETECTION WORK?

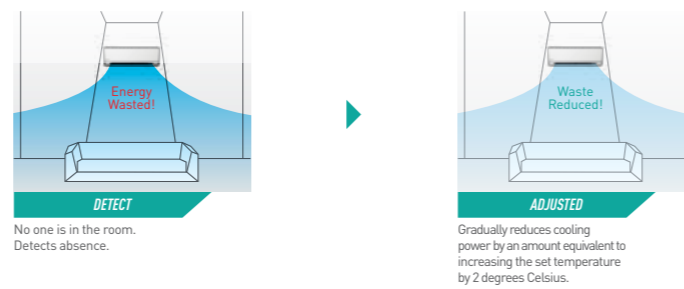
ACTIVITY DETECTION

ECONAVI detects changes in activity levels and reduces the waste of cooling with unnecessary power.



ABSENCE DETECTION

ECONAVI detects human absence in the room and reduces the waste of cooling an empty room.



AREA SEARCH

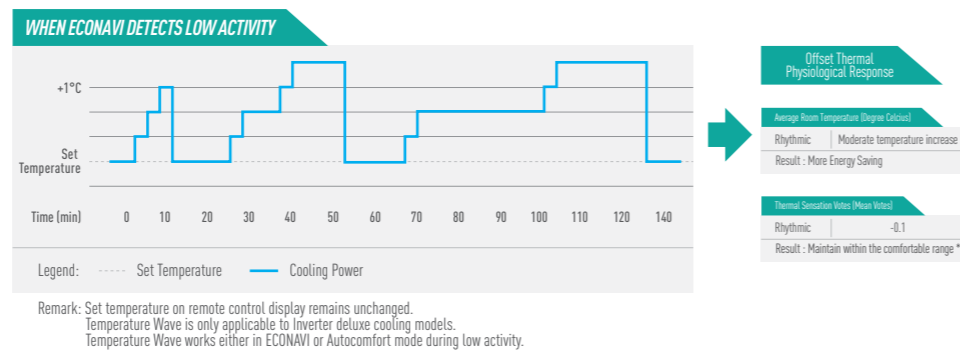
ECONAVI detects changes in human movements and reduces the waste of cooling the unoccupied area of the room.



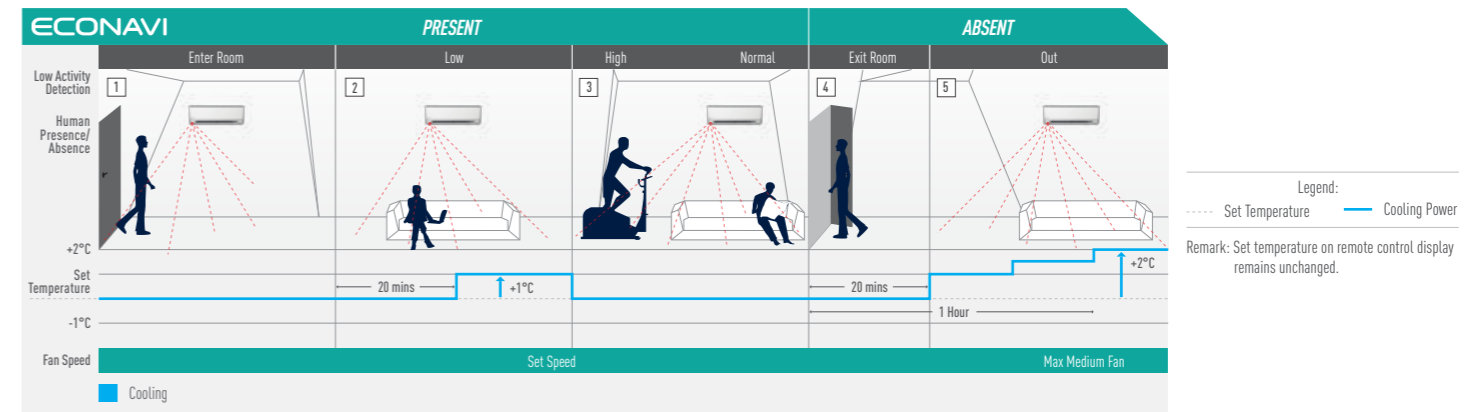
ECONAVI monitors activity and room conditions to detect where energy is normally wasted, then adjusts cooling power accordingly. With Intelligent Eco Sensors, it adjusts to changes in human movement, activity levels, absence and sunlight intensity. With a touch of a button, 5 energy saving features get activated:

TEMPERATURE WAVE

ECONAVI with Temperature Wave incorporates a unique pattern of Temperature Shifting Control to realise even more energy savings without sacrificing comfort.



HOW DOES ECONAVI HUMAN ACTIVITY WORK?



HUMAN ACTIVITY SENSOR

ECONAVI DUAL SENSOR

ECONAVI dual sensor consists of High Precision Sensor and Fresnel Lens. These sensors can detect wasted energy and automatically select an optimum energy-saving operation based on 5 factors – Activity Detection, Absence Detection, Area Search, Temperature Wave and Sunlight Detection.



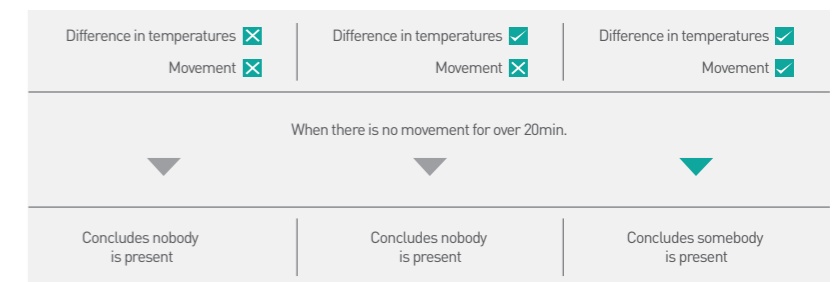
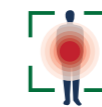
High Precision Sensor

This high precision sensor analyses and judges the detected infrared ray reaction.

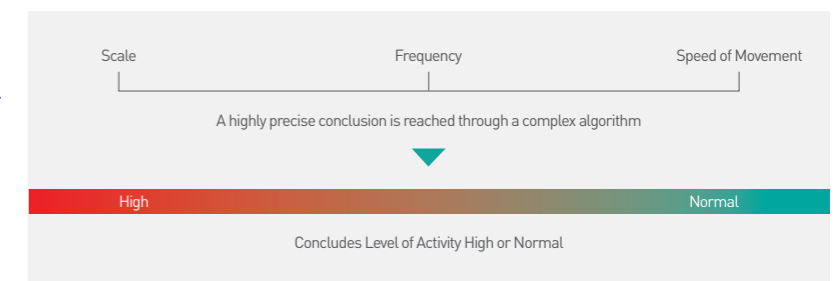
Fresnel Lens

This optimal design directs the infrared rays from the entire room to the sensor.

DETECTING HUMAN PRESENCE



DETERMINING THE LEVEL OF HUMAN ACTIVITY



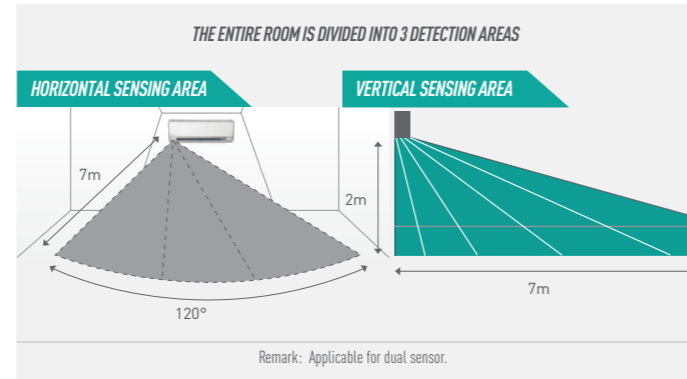
* Only applicable for CS-MS 9 / 12 / 15 / 18 / 24 / 28SKH-1.

HIGH-PRECISION SENSING

All objects emit infrared rays, which although invisible, can be detected as heat by ECONAVI's Human Activity Sensor if it is within the detection zone. When an object moves within its detection zone, ECONAVI compares the object's temperature with the room temperature to determine if it is human, and level of activity based on its movement.

COVERAGE CAPABILITIES

Human Activity Sensor covers a wider area due to its improved area detection function.

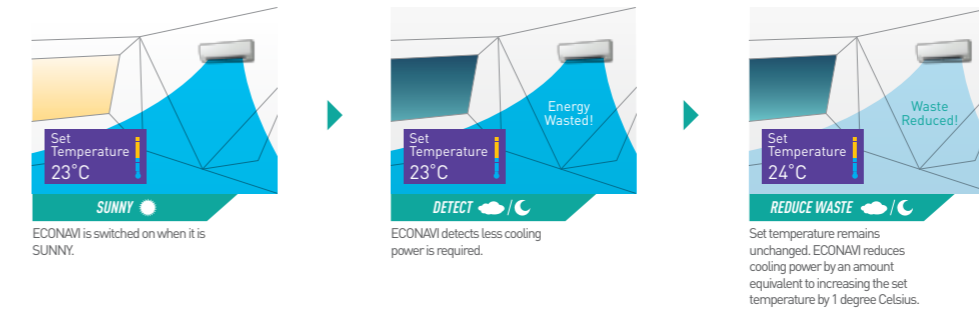


DIFFERENTIATING OBJECTS

OBJECTS	DIFFERENCE IN TEMPERATURE	+	MOVEMENT	DETECTION
Electrical Products	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Concludes it is not human
Small Insects	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Concludes it is not human Both changes may be detected, but they are too small to have any effect on the sensor.
A Rolling Ball	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Concludes it is not human
Pets	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Concludes it is not human* From the difference in temperatures and the nature of the object's movement, ECONAVI can determine if it's human*. <small>*The sensor may deem pets as humans, unless it moves within the detection zone at speeds that are not humanly possible.</small>

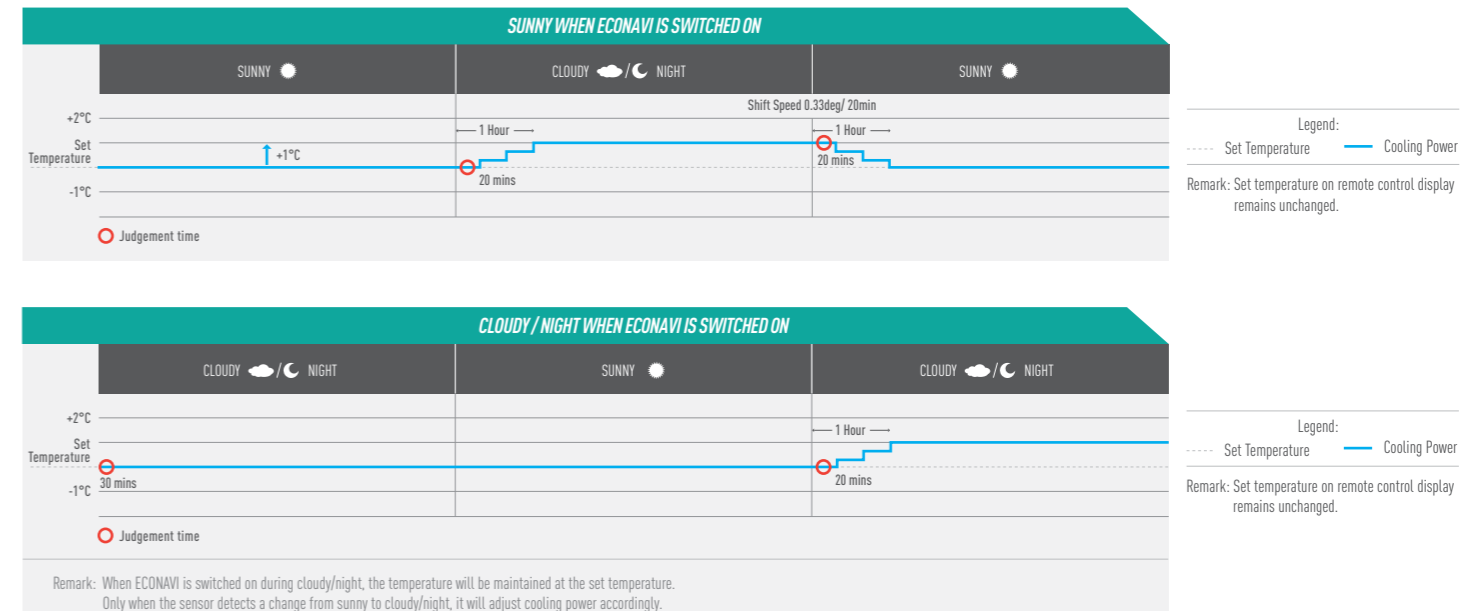
HOW DOES SUNLIGHT DETECTION WORK?

ECONAVI detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces the waste of cooling under less sunlight conditions.



When weather changes from sunny to cloudy/night, ECONAVI detects less sunlight intensity and determines less cooling power is required. If cooling power remains the same, energy will be wasted. ECONAVI detects this waste and reduces cooling power by an amount equivalent to increasing the set temperature by 1 degree Celsius.

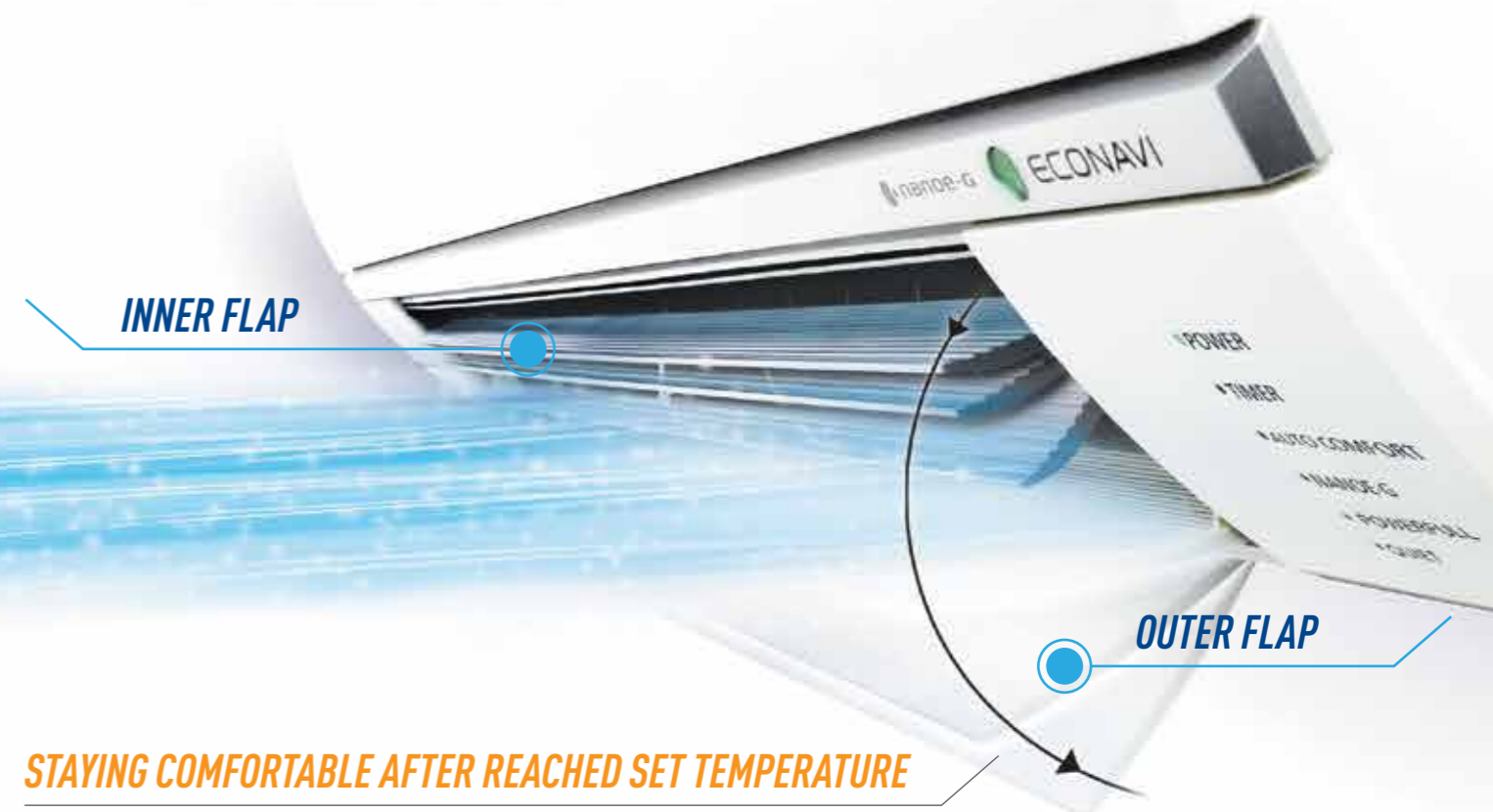
HOW DOES ECONAVI SUNLIGHT SENSOR WORK?



* Only applicable for CS-MS 9 / 12 / 15 / 18 / 24 / 28SKH-1.

HOW DOES SHOWER COOLING WORK?

NEW AEROWINGS

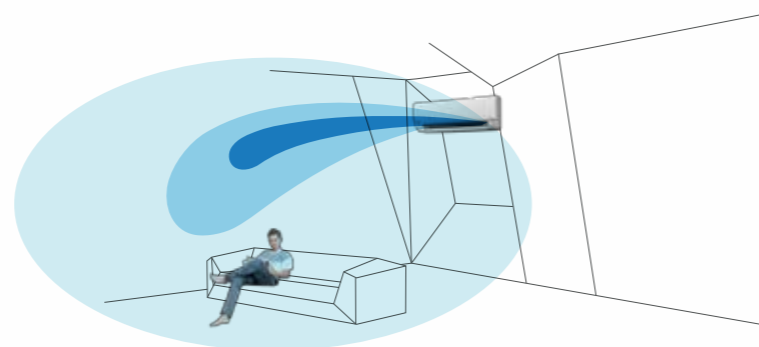


DISPERSED AIRFLOW

AEROWINGS automatically adjusts the inner and outer flap so that airflow is directed upwards along the ceiling.

SHOWER COOLING

Cool air then showers down naturally and spreads over a wider area of room.



STAYING COMFORTABLE AFTER REACHED SET TEMPERATURE

After reaching set temperature, the twin flaps direct airflow towards the ceiling activating the Shower Cooling effect for more comfortable cooling.

CONTINUOUS DIRECT AIRFLOW AFTER REACHING SET TEMPERATURE



If direct airflow continues, you may start to feel too cold.

INDIRECT AIRFLOW AFTER REACHING SET TEMPERATURE

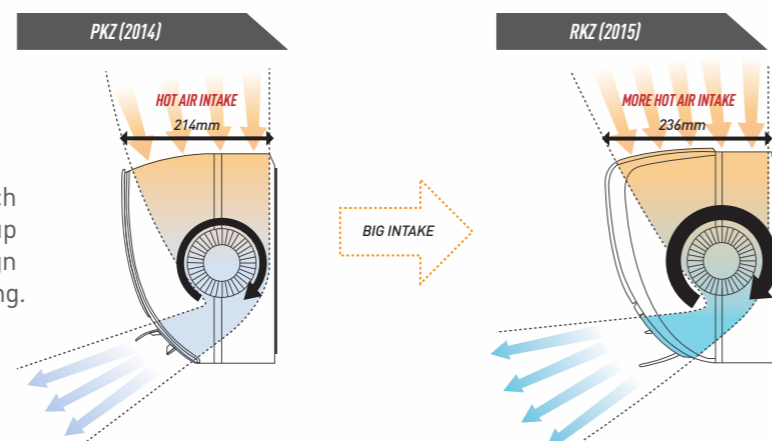


After reaching the set temperature, the twin flaps direct air towards the ceiling to create the Shower Cooling effect. Then, Human Activity Sensor detects the level of activity to keep you comfortable.

NEW DESIGN

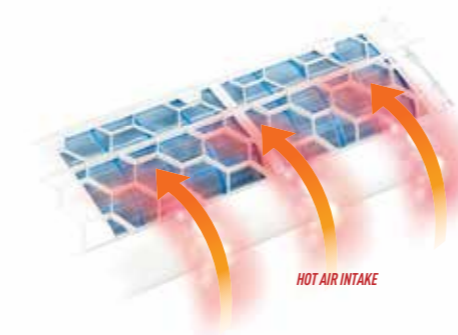
BIGGER INTAKE

Panasonic Air Conditioners feature a new intake grille which is 22 mm wider and improved indoor fan speed that goes up to a super-high fan speed at start up. The new chassis design generates bigger air volume that contributes to faster cooling.



HONEYCOMB INTAKE GRILLE

New Honeycomb Intake Grille has a wider opening to increase the suction of hot air from the room so that the room can be cooled faster. The stronger honeycomb structure also offers the air conditioner better protection.



* AEROWING only applicable for CS-MS9 / 12 / 15 / 18 / 24 / 28SKH-1.

PURIFIES AIR IN YOUR HOME DOWN TO THE SMALLEST DETAIL

nanoe-G releases 3 trillion of fine particles to clean the air in your home environment for fresher and cleaner living.

1 REMOVAL OF AIRBORNE PARTICLES

nanoe-G can effectively remove up to 99% of PM2.5*1 and airborne particles*2 such as bacteria, viruses and mould.

*1 & *2 Please refer to page 16 - 17

2 DEACTIVATION OF ADHESIVE MICRO-ORGANISMS AND DEODORISATION OF ADHESIVE ODOURS

nanoe-G particles are able to deactivate up to 99%*3 of bacteria, viruses and inhibit mould growth that settles on surfaces around you. The odours adhered on the curtains and sofa are deodorised.

*3 Please refer to page X

3 IN-FILTER DEACTIVATION

With In-Filter Deactivation, nanoe-G deactivates 99%*4 of bacteria and viruses trapped inside the filter.

*4 Please refer to page X & X

1 AIRBORNE
 99%^{PM2.5, Bacteria, Viruses & Mould Removal}
 Removal of airborne particles, even those smaller than 2.5 micrometers in size (PM2.5).
 Airborne particles: PM2.5, Bacteria, Viruses, Mould

2 ADHESIVE
 99%^{Bacteria & Viruses Deactivation}
 Deactivates adhesive micro-organisms and deodorises adhesive odours.

3 IN-FILTER DEACTIVATION
 99%^{Bacteria & Viruses Deactivation}
 Deactivates bacteria and viruses trapped in the filter.

nanoe-G catches airborne particles

3 trillion* nanoe-G fine particles released from the generator.

Natural Ion Wind spreads nanoe-G fine particles that are released from the nanoe-G generator.

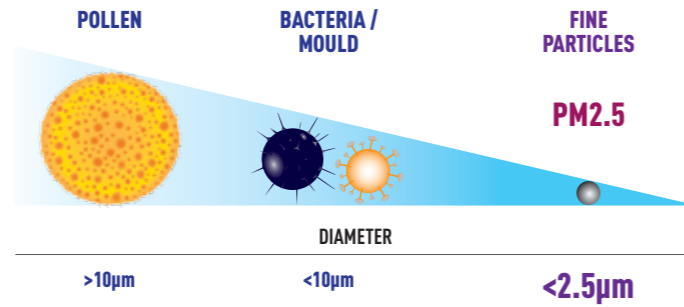
Mechanism
 Odour Particle + nanoe-G → Strike Odour Particles → Decompose and Remove Odour

Remark:
 * 3 trillion is the simulated number of nanoe-G fine particles under the mentioned conditions. Actual measured nanoe-G fine particles at the centre of the room (13m³):100k/cc calculated number of nanoe-G fine particles in the entire room assuming they are evenly distributed.

*Only applicable for CS-MS9 / 12 / 15 / 18 / 24 / 28SKH-1.

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.



PARTICLE SIZE COMPARISON

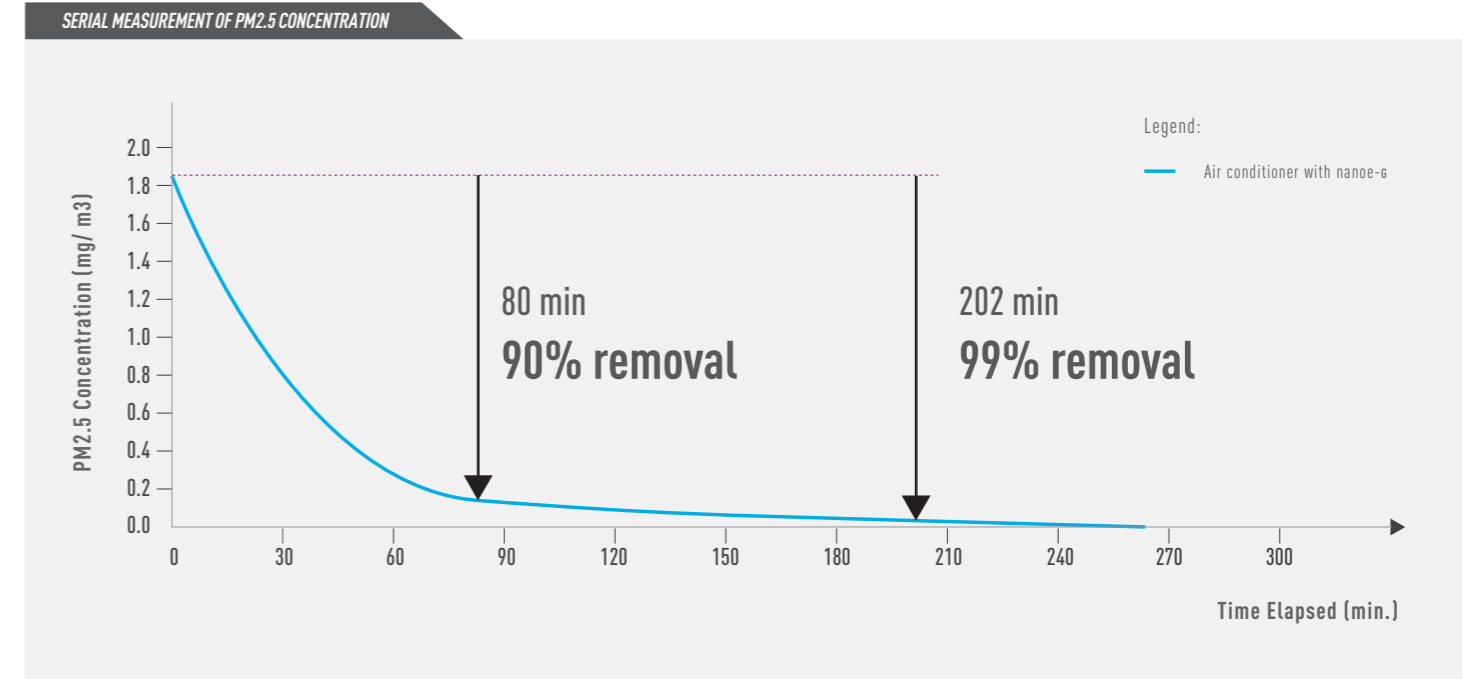
PARTICLE SIZE COMPARISON		Size (µm)
	POLLEN 10µm-100µm	Large 10µm
	BACTERIA 1µm-10µm	2.5µm
	VIRUS 0.001µm-0.1µm	Small
PM2.5 is found in <ul style="list-style-type: none"> Industrial Smoke Exhaust Gas Haze Cigarette Smoke 		

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 **99%*1** PM2.5

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

***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.

***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* (aX-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.

ADVANTAGES OF THE MULTI INVERTER SYSTEM

Indoor unit

A variety of indoor units

Air-quality features
(Wall-Mounted type only)
• nanoe-G

Adjusts the operation settings for each indoor unit independently

Outdoor unit


Space-saving

Single Split Type CU-S10RKH-1

BIG SPACE SAVINGS!
CU-4S27SBH-1

Inverter control
The inverter offers energy-saving efficiency, quick comfort, and flexible power control. Our compressor saves more energy while reducing vibration, noise and unit size.

With a single outdoor unit, control up to 4 indoor units. (Maximum)



DELUXE TYPE WALL MOUNTED



CS-MS9SKH-1 (2.8kW) / CS-MS12SKH-1 (3.2kW) / CS-MS15SKH-1 (4.0kW)



Wireless



CS-MS18SKH-1 (5.0kW) / CS-MS24SKH-1 (6.0kW) / CS-MS28SKH-1 (7.0kW)



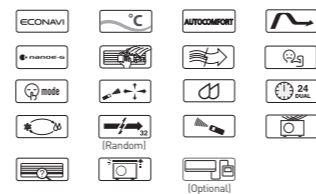
Wired (Optional)

INVERTER

ECONAVI

nanoe-G

COOLING MODELS



STANDARD TYPE WALL MOUNTED



CS-MPS9SKH-1 (2.8kW) / CS-MPS12SKH-1 (3.2kW) / CS-MPS15SKH-1 (4.0kW)



CS-MPS18SKH-1 (5.0kW) / CS-MPS24SKH-1 (6.0kW)



Wireless



Wired (Optional)

INVERTER

COOLING MODELS



MINI CASSETTE



CS-S12MB4Z (3.2kW) / CS-S18MB4Z (5.0kW) / CS-S24MB4Z (6.0kW)



Panel CZ-BT20E



Wireless

INVERTER

COOLING MODELS



SLIM DUCTED



CS-MS9SD3H-1 (2.8kW) / CS-MS12SD3H-1 (3.2kW) / CS-MS18SD3H-1 (5.0kW) / CS-MS24SD3H-1 (6.0kW)



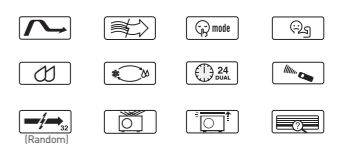
Wireless




Wired (Optional)

INVERTER

COOLING MODELS




Models CU-2S18SKH-1 *Indoor Units: Possible Combination Patterns (Must be within capacity range)*



Port A	2.8	or	3.2
Port B	2.8	or	3.2

• It is possible to have a combination of wall-mounted models [CS-MS9 & 12SKH-1 & MPS9 & 12SKH-1] and Slim Ducted [CS-MS9 & 12D3H-1] for the [CU-2S18SKH-1] Outdoor Unit Ports.
 • A minimum of 2 indoor units must be connected.


Models CU-3S27SBH-1 *Indoor Units: Possible Combination Patterns (Must be within capacity range)*



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-MS9, 12, 15, 18SKH-1 & MPS9, 12, 15, 18SKH-1] and mini cassette [CS-S12, 18MB4Z] and Slim Ducted [CS-MS9, 12, 18SD3H-1] for the [CU-3S27SBH-1] Outdoor Unit Ports.
 • A minimum of 2 indoor units must be connected.


Models CU-3S28SBH-1 *Indoor Units: Possible Combination Patterns (Must be within capacity range)*



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-MS9, 12, 15, 18, 24SKH-1 & MPS9, 12, 15, 18, 24SKH-1] and mini cassette [CS-S12, 18, 24MB4Z] and Slim Ducted [CS-MS9, 12, 18SD3H-1] for the [CU-3S28SBH-1] Outdoor Unit Ports.
 • A minimum of 2 indoor units must be connected.


Models CU-4S27SBH-1 *Indoor Units: Possible Combination Patterns (Must be within capacity range)*



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-MS9, 12, 15, 18SKH-1 & MPS9, 12, 15, 18SKH-1] and mini cassette [CS-S12, 18MB4Z] and Slim Ducted [CS-MS9, 12, 18SD3H-1] for the [CU-4S27SBH-1] Outdoor Unit Ports.
 • A minimum of 2 indoor units must be connected.

Models CU-4S34SBH-1 *Indoor Units: Possible Combination Patterns (Must be within capacity range)*



Port A	2.8	or	3.2	or	4.0	or	5.0	or	6.0	or	7.0
Port B	2.8	or	3.2	or	4.0	or	5.0	or	6.0	or	7.0
Port C	2.8	or	3.2	or	4.0	or	5.0	or	6.0	or	7.0
Port D	2.8	or	3.2	or	4.0	or	5.0	or	6.0	or	7.0

• It is possible to have a combination of wall-mounted models [CS-MS9, 12, 15, 18, 24, 28SKH-1 & MPS9, 12, 15, 18, 24SKH-1] and mini cassette [CS-S12, 18, 24MB4Z] and Slim Ducted [CS-MS9, 12, 18SD3H-1] for the [CU-4S34SBH-1] Outdoor Unit Ports.
 • A minimum of 2 indoor units must be connected.

SPECIFICATIONS - INDOOR (Deluxe Wall Mounted)

MODEL		CS-MS9SKH-1	CS-MS12SKH-1
Operation		1-Unit	1-Unit
Cooling Capacity	Btu/h	9,550	10,900
	kW	2.80	3.20
Electrical Data	Voltage	V	220 - 240
Sound Pressure Level	Indoor (Hi/Lo)	(dB-A)	41 / 29
Moisture Removal		L/h	1.6
Air Circulation (Indoor/Hi)	m ³ /min.	11.2	12.6
	cfm	395	445
Fan Output		W	40
Dimensions	Height	mm	296
	Width	mm	870
	Depth	mm	236
Net Weight Indoor		kg	9
Refrigerant Pipe Diameter	Liquid Side	mm	ø 6.35
	Gas Side	mm	ø 9.52
Power Supply		Outdoor	Outdoor

SPECIFICATIONS - INDOOR (Deluxe Wall Mounted)

MODEL		CS-MS15SKH-1	CS-MS18SKH-1	CS-MS24SKH-1	CS-MS28SKH-1
Operation		1-Unit	1-Unit	1-Unit	1-Unit
Cooling Capacity	Btu/h	13,600	17,100	20,500	23,900
	kW	4.00	5.00	6.00	7.00
Electrical Data	Voltage	V	220 - 240	220 - 240	220 - 240
Sound Pressure Level	Indoor (Hi/Lo)	(dB-A)	45 / 32	47 / 38	48 / 39
Moisture Removal		L/h	2.3	2.7	3.3
Air Circulation (Indoor/Hi)	m ³ /min.	13.3	17.6	17.9	18.4
	cfm	470	620	630	650
Fan Output		W	40	40	40
Dimensions	Height	mm	296	296	296
	Width	mm	870	1,070	1,070
	Depth	mm	236	241	241
Net Weight Indoor		kg	9	12	12
Refrigerant Pipe Diameter	Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35
	Gas Side	mm	ø 9.52	ø 9.52	ø 12.7
Power Supply		Outdoor	Outdoor	Outdoor	Outdoor

SPECIFICATIONS - INDOOR (Standard Wall Mounted)

MODEL			CS-MPS9SKH-1	CS-MPS12SKH-1	CS-MPS15SKH-1	CS-MPS18SKH-1	CS-MPS24SKH-1
Operation			1-Unit	1-Unit	1-Unit	1-Unit	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	V	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240
Sound Pressure Level	Indoor (Hi/Lo)	(dB-A)	40 / 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 (Indoor/Hi)	m ³ /min.		10.1	10.9	11.2	18.1	18.5
	cfm		355	385	395	640	655
Fan Output	W		24	24	24	40	40
Dimensions	Height	mm	290	290	290	290	290
	Width	mm	870	870	870	1,070	1,070
	Depth	mm	214	214	214	240	240
Net Weight Indoor	kg		9	9	9	12	12
Refrigerant Pipe Diameter	Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35	ø 6.35
	Gas Side	mm	ø 9.52	ø 9.52	ø 9.52	ø 9.52	ø 12.7
Power Supply			Outdoor	Outdoor	Outdoor	Outdoor	Outdoor

SPECIFICATIONS - INDOOR (Mini Cassette)

			MINI CASSETTE		
MODEL			CS-S12MB4Z	CS-S18MB4Z	CS-S24MB4Z
Operation			1-Unit	1-Unit	1-Unit
Cooling Capacity	Btu/h		10,900	17,100	20,500
	kW		3.20	5.00	6.00
Electrical Data	Voltage	V	220 - 240	220 - 240	220 - 240
Sound Pressure Level	Indoor (Hi/Lo)	(dB-A)	34 / 26	36 / 28	41 / 33
Moisture Removal	L/h		1.8	2.7	3.3
Air Circulation (Indoor/Hi)	m ³ /min.		10.5	11.0	12.8
	cfm		370	390	450
Fan Output	W		40	40	40
Dimensions	Height	mm	260	260	260
	Width	mm	575	575	575
	Depth	mm	575	575	575
Net Weight Indoor	kg		18	18	18
Refrigerant Pipe Diameter	Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35
	Gas Side	mm	ø 9.52	ø 9.52	ø 12.7
Power Supply			Outdoor	Outdoor	Outdoor

SPECIFICATIONS - INDOOR (Slim Ducted)

MODEL			CS-MS9SD3H-1	CS-MS12SD3H-1	CS-MS18SD3H-1	CS-MS24SD3H-1
Operation			1-Unit	1-Unit	1-Unit	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	V	220 - 240	220 - 240	220 - 240	220 - 240
Sound Pressure Level	Indoor (Hi/Lo)	(dB-A)	35 / 28	35 / 28	41 / 30	41 / 30
Air Circulation (Indoor/Hi)	m ³ /min.		13.2	13.2	15.5	15.5
	cfm		465	465	545	545
Dimensions	Height	mm	200	200	200	200
	Width	mm	750	750	750	750
	Depth	mm	640	640	640	640
Net Weight Indoor	kg		19	19	19	19
Refrigerant Pipe Diameter	Liquid Side	mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35
	Gas Side	mm	ø 9.52	ø 9.52	ø 9.52	ø 12.7
Power Supply			Outdoor	Outdoor	Outdoor	Outdoor

SPECIFICATIONS - OUTDOOR

		DUAL-SPLIT MODEL	TRIPLE-SPLIT MODEL		QUADRUPLE-SPLIT MODEL		
MODEL		CU-2S18SKH-1	CU-3S27SBH-1	CU-3S28SBH-1	CU-4S27SBH-1	CU-4S34SBH-1	
Cooling Capacity	Btu/h (Min ~ Max)	17,100 (5,120-20,500)	25,600 (9,550-27,300)	25,600 (9,550-30,700)	25,600 (9,550-27,300)	34,100 (9,890-37,500)	
	kW (Min ~ Max)	5.00 (1.50-6.00)	7.50 (2.80-8.00)	7.50 (2.80-9.00)	7.50 (2.80-8.00)	10.0 (2.90-11.00)	
EER	Btu/hW	11.96	12.43	12.43	12.43	12.18	
	W/W	3.5	3.64	3.64	3.64	3.57	
Electrical Data	Voltage	V	220 - 240	220 - 240	220 - 240	220 - 240	
	Running Current	A	6.8 - 6.2	10.2 - 9.4	10.1 - 9.2	10.2 - 9.4	13.5 - 12.4
	Power Input (Min ~ Max)	W	1,430 (250-1,780)	2,060 (520-2,650)	2,060 (520-2,830)	2,060 (520-2,530)	2,800 (560-3,460)
Sound Pressure Level	Outdoor (Hi/Lo)	(dB-A)	50	49	49	49	52
Maximum Current	A		12	15.2	15.2	15.2	21.3
Starting Current	A		6.8	10.2	10.1	10.2	13.5
Compressor Output	W		900	1,300	1,300	1,300	1,700
Fan Output	W		40	44	60	44	90
Dimensions	Height	mm	619	695	795	695	999
	Width	mm	824 (+70)	875 (+95)	875 (+95)	875(+95)	940
	Depth	mm	299	320	320	320	340
Net Weight Outdoor	kg		37	57	68	57	76
Pipe Extension**	Chargeless Pipe Length	m	20	30	30	35	45
	Maximum Pipe Length	1 Room	20	25	25	25	25
		Total	30	60	60	60	70
	Maximum Elevation Length	m	10	15	15	15	15
	Additional Refrigerant Gas*	g/m	15	20	20	20	20

* When pipes are not extended from the standard pipe length, the required amount of refrigerant is already in the unit.

INVERTER DUAL-SPLIT MODEL (CU-2S18SKH-1)

Table with 11 columns: INDOOR UNIT COMBINATION, TOTAL, COOLING CAPACITY (kW) (A, B, TOTAL, MIN-MAX), POWER INPUT (W) (RATED, MIN-MAX), CURRENT (A) (240V/50Hz), and MOISTURE REMOVAL L/H. Rows include 1 Room (28, 32) and 2 Room (28+28, 28+32, 32+32).

INVERTER TRIPLE-SPLIT MODEL (CU-3S27SBH-1)

Table with 11 columns: INDOOR UNIT COMBINATION, TOTAL, COOLING CAPACITY (kW) (A, B, C, TOTAL, MIN-MAX), POWER INPUT (W) (RATED, MIN-MAX), CURRENT (A) (240V/50Hz), and MOISTURE REMOVAL L/H. Rows include 1 Room (28, 32, 40, 50), 2 Rooms (28+28, 28+32, 28+40, 28+50, 32+32, 32+40, 32+50, 40+40, 40+50, 50+50), and 3 Rooms (28+28+28, 28+28+32, 28+28+40, 28+28+50, 28+32+32, 28+32+40, 28+32+50, 28+40+40, 28+40+50, 28+50+50, 32+32+32, 32+32+40, 32+32+50, 32+40+40, 32+40+50, 32+50+50, 40+40+40, 40+40+50).

• Specification based on JIS C 9612 standard.
• A minimum of 2 indoor units must be connected.

INVERTER TRIPLE-SPLIT MODEL (CU-3S28SBH-1)

Table with 11 columns: INDOOR UNIT COMBINATION, TOTAL, COOLING CAPACITY (kW) (A, B, C, TOTAL, MIN-MAX), POWER INPUT (W) (RATED, MIN-MAX), CURRENT (A) (240V/50Hz), and MOISTURE REMOVAL L/H. Rows include 1 Room (28, 32, 40, 50, 60), 2 Rooms (28+28, 28+32, 28+40, 28+50, 32+32, 32+40, 32+50, 40+40, 40+50, 50+50, 60+60), and 3 Rooms (28+28+28, 28+28+32, 28+28+40, 28+28+50, 28+28+60, 28+32+32, 28+32+40, 28+32+50, 28+40+40, 28+40+50, 28+40+60, 28+50+50, 32+32+32, 32+32+40, 32+32+50, 32+40+40, 32+40+50, 32+40+60, 32+50+50, 40+40+40, 40+40+50).

• Specification based on JIS C 9612 standard.
• A minimum of 2 indoor units must be connected.

FEATURES COMPARISON

Split Type	Multi-Split Wall-Mounted				Inverter Multi-Combination	
	Deluxe		Standard		Mini Cassette	Slim Ducted
Cooling Models	CS-MS9SKH-1 CS-MS12SKH-1 CS-MS15SKH-1	CS-MS18SKH-1 CS-MS24SKH-1 CS-MS28SKH-1	CS-MPS9SKH-1 CS-MPS12SKH-1 CS-MPS15SKH-1	CS-MPS18SKH-1 CS-MPS24SKH-1	CS-S12MB4Z CS-S18MB4Z CS-S24MB4Z	CS-MS9SD3H-1 CS-MS12SD3H-1 CS-MS18SD3H-1 CS-MS24SD3H-1
COMFORT						
ECONAVI	●	●				
Temperature Wave	●	●				
AUTO COMFORT	●	●				
Inverter Control	●	●	●	●	●	●
Quiet Mode	●	●			●	●
Powerful Mode	●	●			●	●
Soft Dry Operation Mode	●	●	●	●	●	●
Personal Airflow Creation	●	●				
Airflow Direction Control (Up & Down)			●	●	●	
Manual Horizontal Airflow Direction Control			●	●	●	
Automatic Operation Mode (Cooling)	●	●	●	●	●	●
CLEANER AIR						
nanoe-G	●	●				
Anti-Bacterial Filter			●	●		
Odour-Removing Function	●	●	●	●	●	●
Removable, Washable Panel	●	●	●	●	●	●
Anti-Mould, One-Touch Air Filter					●	
CONVENIENCE						
24-Hour Dual ON & OFF Real Setting Timer	●	●				●
24-Hour ON & OFF Real Setting Timer			●	●	●	
LCD Wireless Remote Control	●	●	●	●	●	●
Wired Remote Control	(Optional)	(Optional)	(Optional)	(Optional)	(Optional)	(Optional)
RELIABILITY						
Random Auto Restart (32 Restart Patterns)	●	●	●	●	●	●
Blue Fin Condenser	●	●	●	●	●	●
Long Piping (Numbers indicate the maximum pipe length)	**refer page 13	**refer page 13	**refer page 13	**refer page 13	**refer page 13	**refer page 13
Top-Panel Maintenance Access	●	●	●	●	●	●
Self-Diagnostic Function	●	●	●	●	●	●

FEATURES EXPLANATION

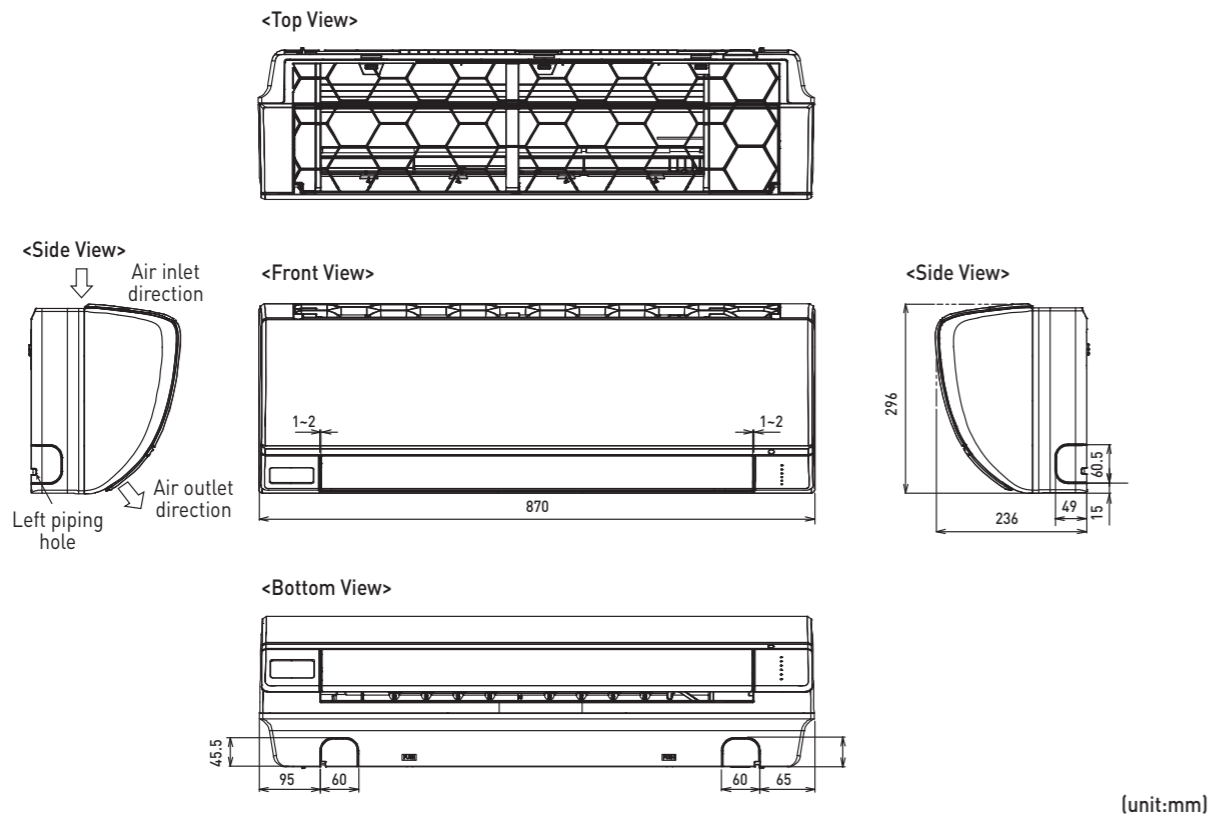
COMFORT			
<p>ECONAVI Detects and reduces waste for more energy savings.</p>	<p>QUIET MODE</p>	<p>AIRFLOW DIRECTION CONTROL (UP & DOWN)</p>	
<p>TEMPERATURE WAVE Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.</p>	<p>POWERFUL MODE</p>	<p>MANUAL HORIZONTAL AIRFLOW DIRECTION CONTROL</p>	
<p>AUTO COMFORT Detects high activity levels and adjusts cooling power to improve comfort.</p>	<p>SOFT DRY OPERATION MODE Starts with cooling to dehumidify, then provides continuous breeze at a low frequency to keep a room dry without much change to the temperature.</p>	<p>AUTOMATIC OPERATION MODE (COOLING)</p>	
<p>INVERTER CONTROL Varies the rotation speed of the compressor for higher energy savings.</p>	<p>PERSONAL AIRFLOW CREATION Vertical and horizontal airflow patterns can be combined as desired to achieve optimum comfort, with operation possible by remote even from a distance.</p>		
CLEANER AIR			
<p>nanoe-G nanoe-e works effectively on airborne particles including PM2.5, adhesive and in-filter micro-organisms such as bacteria, viruses and mould ensuring a cleaner living environment.</p>	<p>ODOUR-REMOVING FUNCTION With this function, there's no unpleasant odor when the unit starts up. That's because the fan remains off momentarily, while the source of the odour inside the air conditioner is suppressed.</p>	<p>REMOVABLE, WASHABLE PANEL</p>	
<p>ANTI-BACTERIAL FILTER The Anti-Bacterial Filter combines three effects in one: anti-allergen, anti-virus and anti-bacteria protection to provide clean air.</p>	<p>The unit must be in cool or dry mode and the fan speed must be set to automatic.</p>	<p>ONE-TOUCH AIR FILTER</p>	
CONVENIENCE			
<p>24-HOUR DUAL ON & OFF REAL SETTING TIMER This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.</p>	<p>24-HOUR ON & OFF REAL SETTING TIMER The exact operating time (hour and minute) of the air conditioner can be set in advance. From here on, the unit will operate in accordance to these preset hours every day until the system is reset.</p>	<p>LCD WIRELESS REMOTE CONTROL</p>	
		<p>WIRED REMOTE CONTROL</p>	
RELIABILITY			
<p>RANDOM AUTO RESTART</p>	<p>LONG PIPING</p>	<p>SELF-DIAGNOSTIC FUNCTION Should a malfunction occur, the unit diagnoses the problem and shows the corresponding alphanumeric code. This allows for quicker servicing.</p>	
<p>BLUE FIN CONDENSER</p>	<p>TOP-PANEL MAINTENANCE ACCESS</p>		

OPTIONAL ACCESSORIES

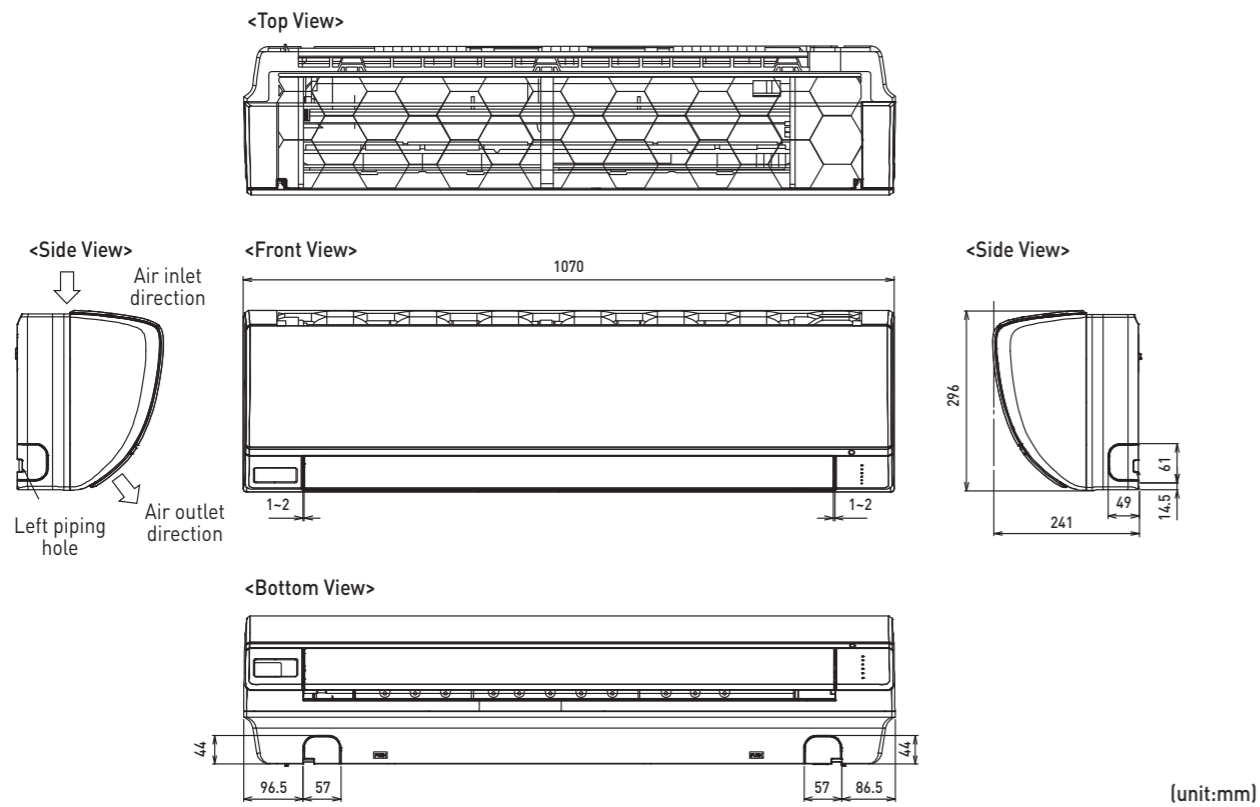
PIPE SIZE REDUCER	PIPE SIZE EXPANDER	RAC INTERFACE ADAPTOR	REMOTE CONTROL
<p>Use at the indoor unit's connection port</p> <p>CZ-MA1P</p>	<p>Use at the outdoor unit's connection port</p> <p>CZ-MA3P</p>	<p>CZ-CAPRA1</p>	<p>Wired Remote Control</p> <p>CZ-RD514C</p> <p>CZ-RD52CP</p>
CS-S12MB4Z, CS-S18MB4Z	CS-S24MB4Z		CS-MS9SKH-1, MS12SKH-1, CS-MS15SKH-1, CS-MS18SKH-1, CS-MS24SKH-1, CS-MS28SKH-1, CS-MPS9SKH-1, MPS12SKH-1, CS-MPS15SKH-1, CS-MPS18SKH-1, CS-MPS24SKH-1, CS-MS9SD3H-1, CS-MS12SD3H-1, CS-MS18SD3H-1, CS-MS24SD3H-1

INDOOR DIMENSIONS

CS-MS9SKH-1 / CS-MS12SKH-1 / CS-MS15SKH-1

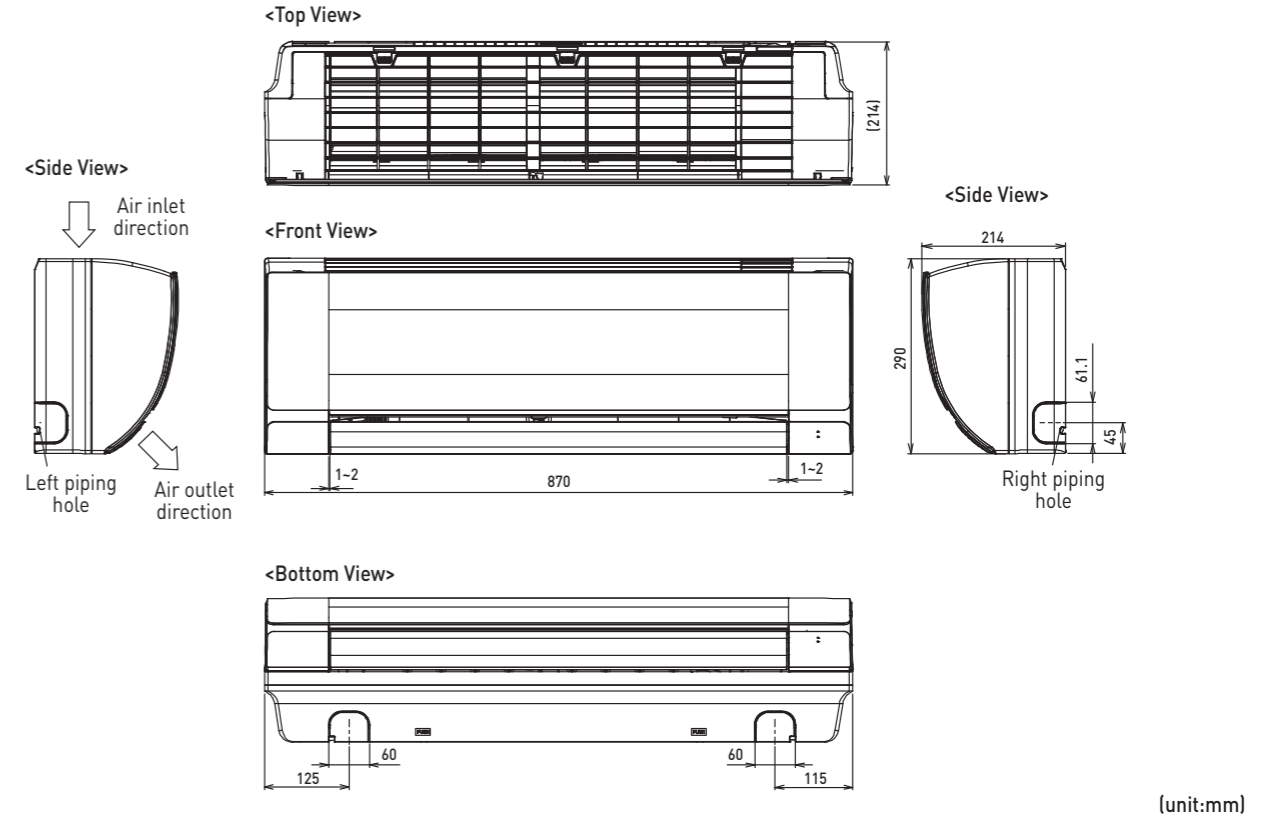


CS-MS18SKH-1 / CS-MS24SKH-1 / CS-MS28SKH-1

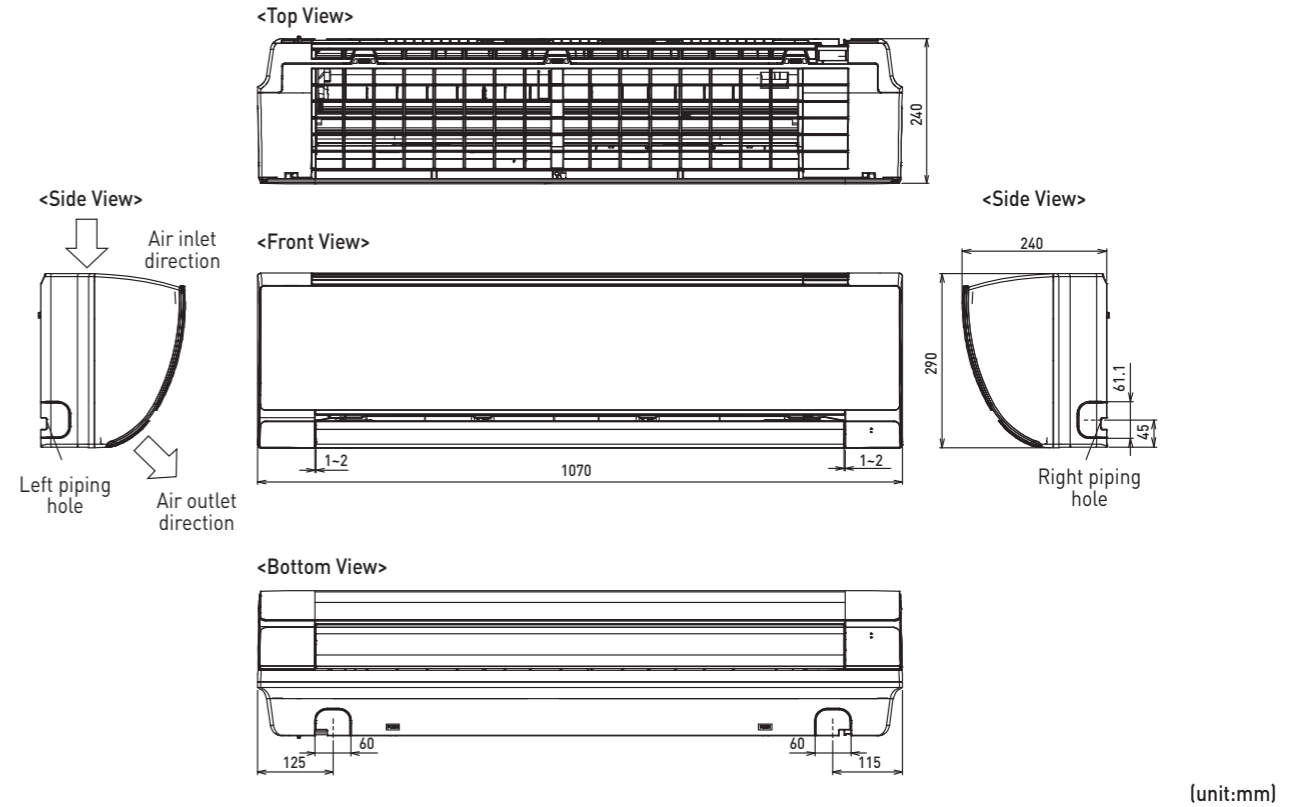


INDOOR DIMENSIONS

CS-MPS9SKH-1 / CS-MPS12SKH-1 / CS-MPS15SKH-1

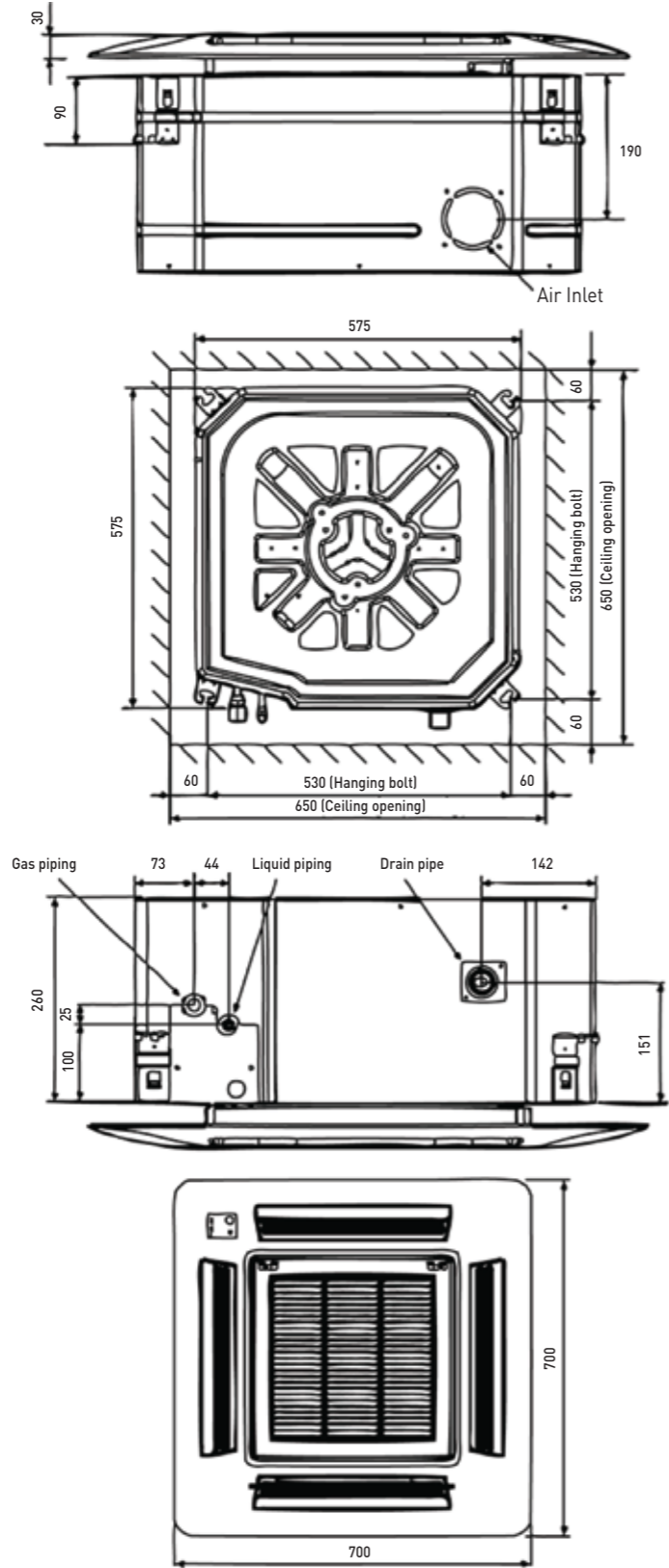


CS-MPS18SKH-1 / CS-MPS24SKH-1



INDOOR DIMENSIONS

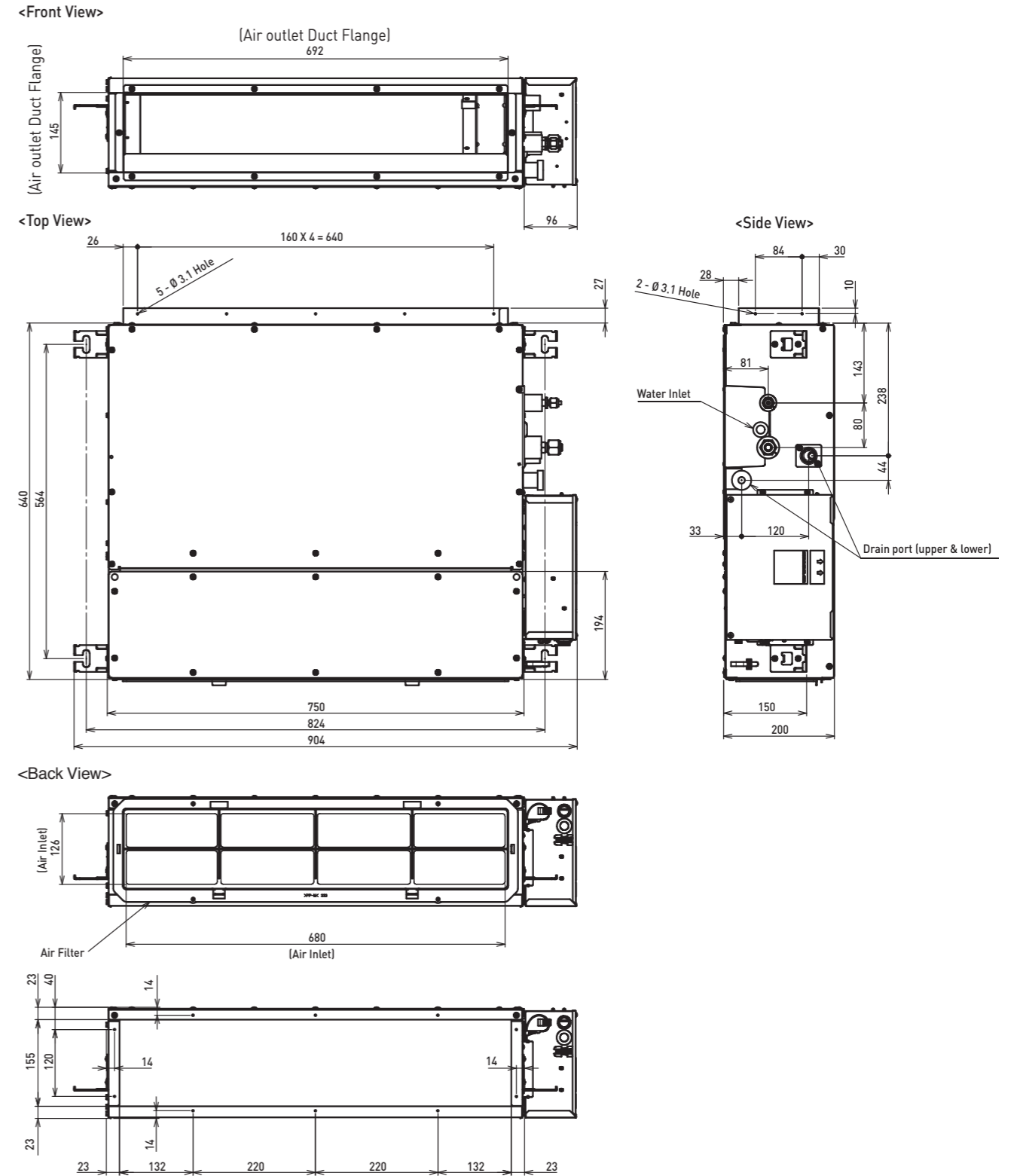
CS-S12MB4Z / CS-S18MB4Z / CS-S24MB4Z



(unit:mm)

INDOOR DIMENSIONS

CS-MS9SD3H-1 / CS-MS12SD3H-1 / CS-MS18SD3H-1 / CS-MS24SD3H-1

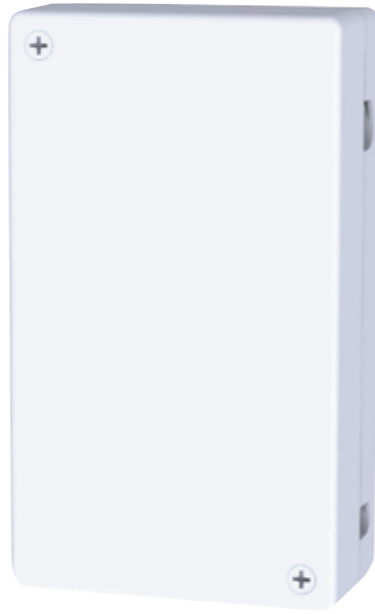


(unit:mm)

SPECIFICATIONS

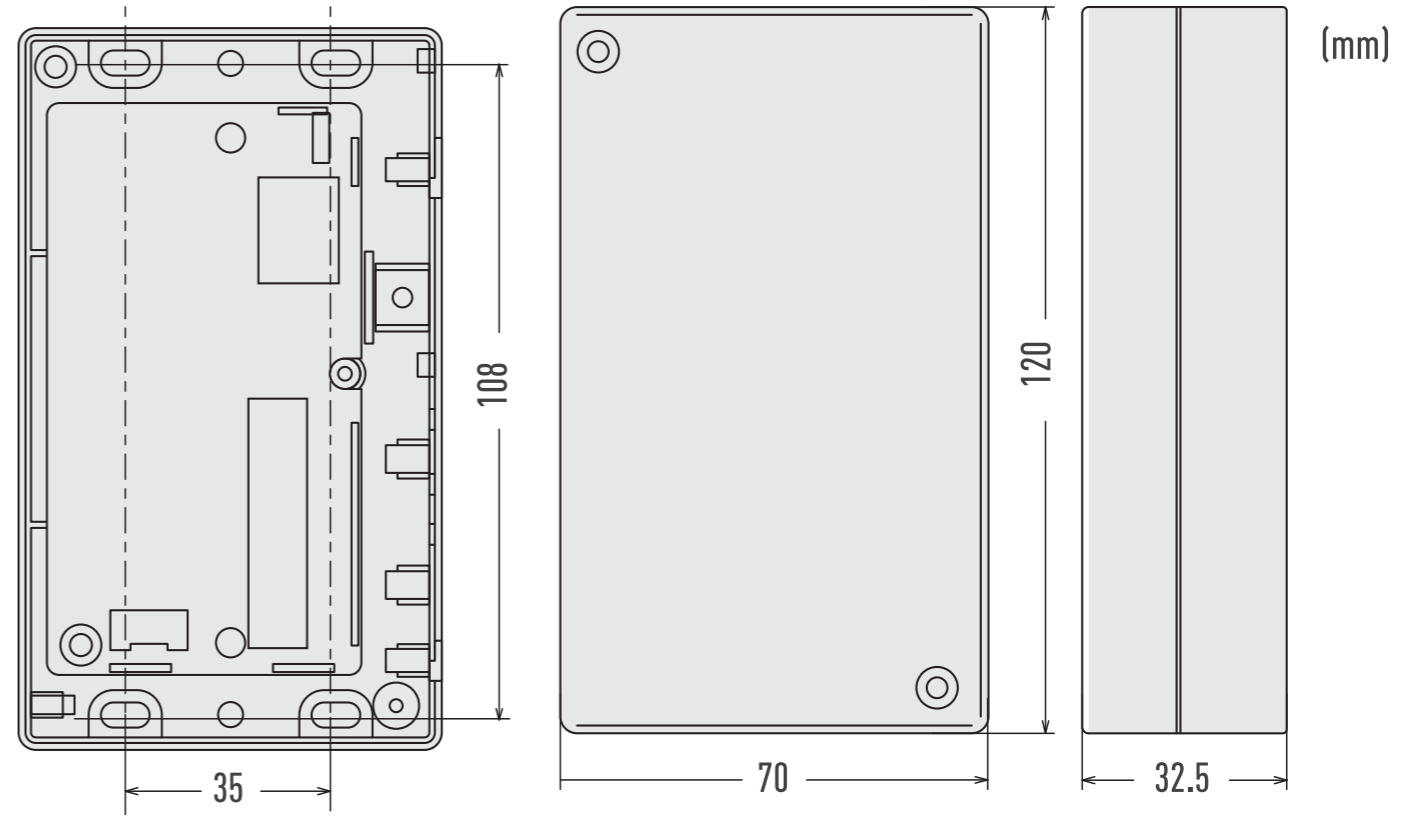
RAC Interface Adaptor

This adaptor serves as an interface required to connect a central control device such as an intelligent controller with a room air conditioner. Using this adaptor can operate or monitor the room air conditioner from the the central control device. Panasonic room air conditioners equipped with the CN-CNT terminal are supported.



Model No.	CZ-CAPRA1
Dimensions (mm)	(H) 120 x (W) 70 x (D) 32.5
Weight	130 g
Power Source	DC12 V (Supplied with room air conditioner) (Connection wiring (1.9m) supplied with adaptor.)

DIMENSIONS



RAC INTERFACE ADAPTER

FSV-EX Series



Central Controller
(System Controller CZ-64ESMC3)



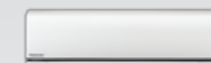
RAC Interface Adaptor



Wall-mounted



Wall-mounted



Slim Low Static Ducted



Slim Low Static Ducted



- Multi-Split Wiring
- Supplied
- P-Link

**Need to control RAC
by Central Controllers**

