

# SINGLE-SPLIT PACKAGED AIR CONDITIONERS 2018 / 2019

**INVERTER**

**Panasonic**  
BUSINESS

**Building Passion,  
Building Solutions.**  
Panasonic Air Conditioning Systems

We face a time in which "quality air" differentiates business. It's a time for Panasonic to fully display its strengths. Our ability to assemble and build superior systems isn't just due to the rich resources we have as a comprehensive electronics manufacturer, but also to Panasonic's 100 years of tradition, where each person thinks and acts on their own initiative while working in a team to reach further heights. We do not compromise. Each of our independent selves is a one stop solution. We face our customers' challenges together with our customers and do all that we can to build effective systems. As a true partner for our customers, we strive to always be at the forefront of business.

- 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 2018.
- 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

PAC INVERTER VN MAY 2018



**Panasonic Sales Vietnam  
(Ha Noi)**

Address: 14th Floor, Charmvit Tower,  
No. 117 Tran Duy Hung Street,  
Trung Hoa Ward, Cau Giay District,  
Hanoi - Viet Nam

**Panasonic Sales Vietnam  
(Ho Chi Minh)**

Address: Floor 7, Etown 1,  
364 Cong Hoa Str., Ward 13,  
Tan Binh Dist, Ho Chi Minh City - Viet Nam  
Care Line: 18001593



**Panasonic Global Air Conditioner**

Global Site : [aircon.panasonic.com](http://aircon.panasonic.com)  
PROClub : [panasonicproclub.global](http://panasonicproclub.global)



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

**nanoe™**  
TECHNOLOGY

**R410A**

QUALITY AIR FOR LIFE



# Extremely Clean Air and Energy-Saving Efficiency

Panasonic packaged air conditioners offer comfortable room environments. They all\* come standard equipped with unique nanoe™ technology that suppresses unpleasant odors and inhibits bacteria and viruses. And they feature a wide lineup of indoor and inverter type outdoor units for use in a variety of locations, such as offices, residences, restaurants, and shops. Panasonic air conditioners provide solutions for comfortable, clean air and energy savings at all times.

\*4-Way Cassette Type only.



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### What's new



New nanoe™ X containing plenty of OH radicals that Inhibits bacteria and virus, deodorizes unpleasant odors and keeps room air clean and fresh.

### 4-Way Cassette **NEW** ///



Provides a neat fit in the ceiling to match modern decor, and uniform cooling throughout the room, plus easy installation.

### Flexible Installation **NEW** ///



Highly efficient inverter operation achieves superior energy-savings. And all models are 1-Fan types for easier installation and construction.



# MODEL LINE-UP

## A Wide Lineup to Fit Your Needs

The wide lineup suits a variety of applications, in offices, classrooms, restaurants, shops, and more. And all outdoor units are now 1-Fan types, making them smaller and lighter than previous models. Installation and construction are also easier.

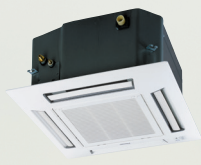
### 4-WAY CASSETTE

NEW



The 4-way direction airflow released through four vanes provides wide and even cooling.

### MINI CASSETTE



Mini Cassette types equipped with the 4-way airflow system are compact in size and particularly suitable for small to medium-sized offices and restaurants.

### CEILING EXPOSED



Providing outstanding energy-saving performance, comfort and long-distance air flow distribution, these units are perfect for retail stores and schools.

### CEILING DUCTED



Offering remarkable overall cooling coverage of the entire building, Ceiling Ducted types are suitable for premises with concealed or false ceilings such as business centres.

### FLOOR STANDING



The floor standing type requires little installation work, and is easy to clean. It provides both heating and cooling.

Capacity (Btu/h)	11,900	16,700-17,100	20,100-20,500	24,200-24,600	29,000	34,100	39,200-42,700	47,800
<b>4-WAY CASSETTE</b> <span>NEW</span> Standard Equipped  P.14-15		 S-18PU2H5-8 	 S-21PU2H5-8 	 S-24PU2H5-8 	 S-30PU2H5-8 	 S-34PU2H5-8 	 S-43PU2H5-8 	 S-48PU2H5-8 
<b>MINI CASSETTE</b> P.16-17	 CS-S12MB4ZW	 CS-S18MB4ZW	 CS-S24MB4ZW					
<b>CEILING EXPOSED</b> P.18-19		 S-18PT2H5-8	 S-21PT2H5-8	 S-24PT2H5-8	 S-30PT2H5-8	 S-34PT2H5-8	 S-43PT2H5-8	 S-48PT2H5-8
<b>CEILING DUCTED</b> P.20-21		 S-18PF2H5-8	 S-21PF2H5-8	 S-24PF2H5-8	 S-30PF2H5-8	 S-34PF2H5-8	 S-43PF2H5-8	 S-48PF2H5-8
<b>FLOOR STANDING</b> <span>NEW</span> P.22				 CS-E28NFQ				
<b>OUTDOOR UNIT</b> <span>NEW</span> 4-WAY CASSETTE / CEILING EXPOSED / CEILING DUCTED P.23		 U-18PS2H5-8	 U-21PS2H5-8	 U-24PS2H5-8	 U-30PS2H5-8	 U-34PS2H5-8	 U-43PS2H5-8	 U-48PS2H5-8
<b>OUTDOOR UNIT</b> MINI CASSETTE / FLOOR STANDING P.22-23	 CU-S12MBZ (Mini Cassette)	 CU-S18MBZ (Mini Cassette)	 CU-S24MBZ (Mini Cassette)	 CU-E28NFQ (Floor Standing)				

ALL 1-FAN TYPE OUTDOOR UNIT





nanoe™ is Panasonic's unique air purifying technology. Introduced in 2003, nanoe™ has brought comfortable, clean air to a wide variety of living environments. By conducting further research & development, Panasonic has now succeeded in developing nanoe™ X, with dramatically increased performance.

## nanoe™ X Improves Air Quality

Panasonic's unique nanoe™ X has an outstanding effect on various air pollutants, including allergens, viruses and bacteria, as well as cigarette and other household odors. It takes reliable air purification performance another step forward.



**Deodorizes unpleasant odors** \*1 \*2 \*3



nanoe™ X works on the substances responsible for odors to deodorize them.

**Inhibits bacteria and virus** \*4 \*5 \*6 \*7 \*8



nanoe™ X suppresses airborne particles including bacteria, viruses and mould.

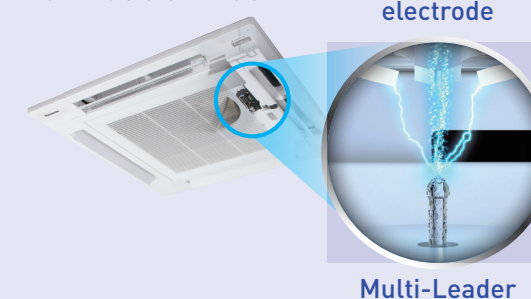
\*1 Adhering odor of cigarette [Effectiveness]: Decrease by 1.7 level [Testing Institute]: Gunma Research Center [Test Report No.]: No. 27055 [Result]: Decrease in odor intensity by 0.7 level after 2 hour of operation.  
 \*2 Floating odor of cigarette [Effectiveness]: Decrease by 0.8level [Test Lab Size]:136.5m3 [Testing Institute]: Panasonic Corporation Product Analysis Center [Test Report No.]: 4AA33-170117-A01 [Result]: Decrease in odor intensity by 0.8 level after 2 hour of operation.  
 \*3 Adhering odor of Meat Grilling [Effectiveness]: Decrease by 0.9 level [Test Lab Size]:67.7m3 [Testing Institute]: Panasonic Corporation Product Analysis Center [Test Report No.]: 4AA33-170203-A03 [Result]: Decrease in odor intensity by 0.9 level after 2 hour of operation.  
 \*4 Mould [Effectiveness]: Inhibit Mould Growth [Testing Institute]: Japan Food Research Laboratories [Test Report No.]: 13044083002-01 [Result]: The growth of the subject was inhibited after 8-hour nanoe™ operation.  
 \*5 Bacteria [Effectiveness]: 99% [Testing Institute]: Kitasato Research Center for Environmental Science [Test Report No.]: KRCEs-Env. Test Report 24\_0301\_1 [Result]: 99% of deactivation after 4-hour nanoe™ operation.  
 \*6 Bacteria [Effectiveness]: 99% [Testing Institute]: Japan Food Research Laboratories [Test Report No.]: 13044083002-01 [Result]: The growth of the subject was inhibited after 8-hour nanoe™ operation.  
 \*7 Viruses [Effectiveness]: 99% [Testing Institute]: Kitasato Research Center for Environmental Science [Test Report No.]: KRCEs-Env. Test Report 24\_0300\_1 [Result]: 99% of deactivation after 6-hour nanoe™ operation.  
 \*8 Viruses [Effectiveness]: 99% [Testing Institute]: Japan Food Research Laboratories [Test Report No.]: 13001265005-01 [Result]: 99% of deactivation after 8-hour nanoe™ operation.

## nanoe™ X Mechanism

Amount of OH radicals increases without increasing amount of ozone, leading to improved effectiveness!

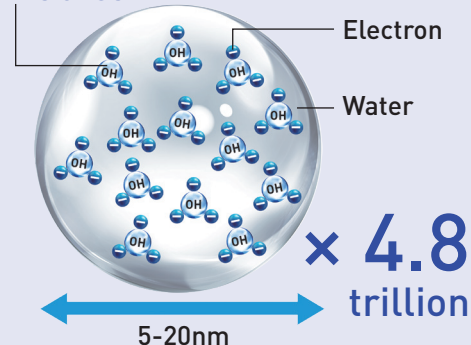
### Generation Mechanism

nanoe™ X is generated from moisture in the air

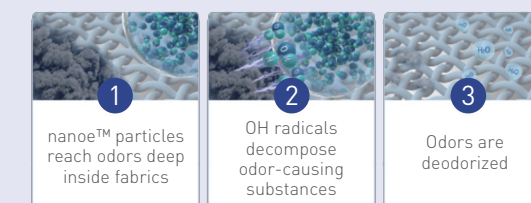


### Structure

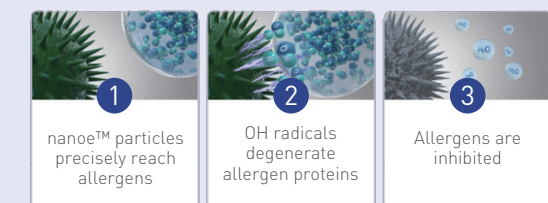
OH radical



### How to Deodorize Odor\*1 \*2 \*3



### How to Inhibit Bacteria, Virus and Mold \*4 \*5 \*6 \*7 \*8



## Also Cleans the Air When Not Air Conditioning

You can also use nanoe™ X in Fan mode when you're not cooling or heating the room. For example, you can use nanoe™ X to effectively suppress bacteria and odors without using excessive electricity when the office is empty or after business hours in a restaurant.

### Business Time



### AC Mode + nanoe™ X

nanoe™ X purifies the room while maintaining the comfort temperature when people are in presence.

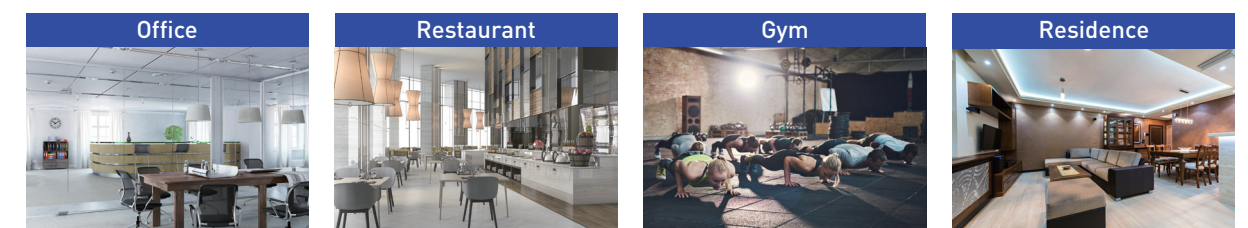
### Closed Time



### FAN Mode + nanoe™ X

After closing shops and facilities, nanoe™ X can perform air purification while they are not in use.

## Case Examples of nanoe™





# 4-Way Cassette NEW



Provides a neat fit in the ceiling to match modern decor, and uniform cooling throughout the room, plus easy installation.



## Powerful Airflow

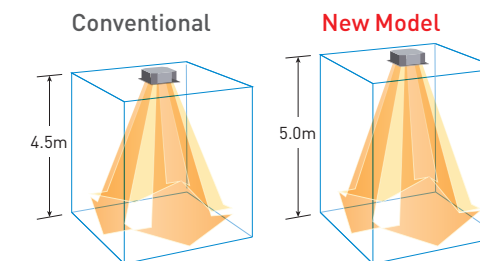
The Twisted 3D Blade Fan with compact design can increase airflow.



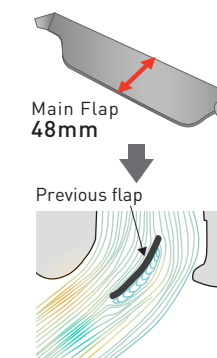
## 4-Way Cassette

### Wide Flap

Adding a sub flap and widening the main flap have reduced turbulence and increased airflow. Also, the wider angle jetting port allows the airflow to reach as far as five meters.

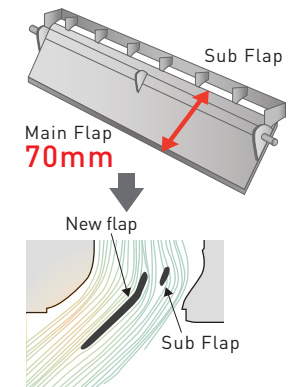


### Conventional



As airflow turbulence is generated, airflow velocity gets lower.

### New Model

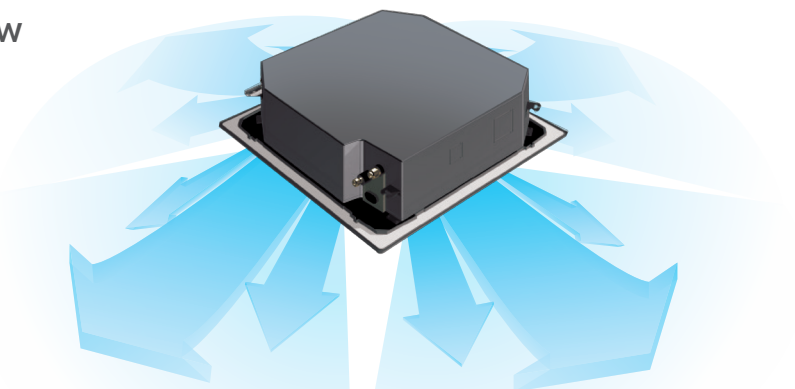


As airflow turbulence is reduced, airflow velocity gets higher.

### 360° Wide & Comfortable Airflow

Air coming out of the centre of the discharge outlets travels farther.

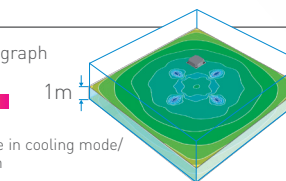
Air is discharged across a wide area from the four sides of the unit. The curves on the room temperature distribution graph expand gently out through 360° in a circle centred on the indoor unit.



### 360° Wide

Temperature distribution by thermograph (cooling operation)

Simulation conditions:  
43PU 4-way ceiling-mounted cassette type in cooling mode/  
Floor area of 225 m<sup>2</sup>/ Ceiling height of 5 m



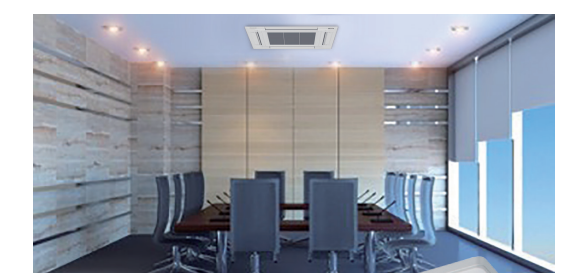
### Ample airflow

Capacity Class (K Btu)	17.1	20.5	24.2	29	34.1	42.7	47.8	AVR
4-Way Cassette	22	23	25	25	32	36.4	36.4	27.9

m<sup>3</sup>/min

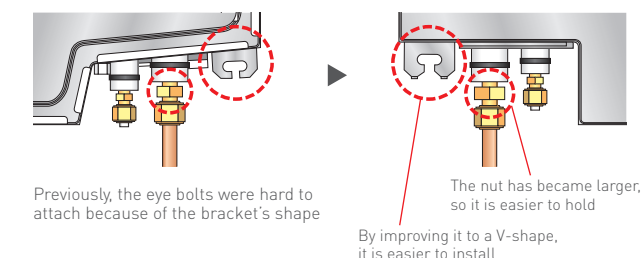
### Flat Horizontal Design

Panasonic believes that one of the most important elements of design is that it doesn't interfere with the overall room interior. The flat horizontal design of the 4-way Cassette achieves an elegant, yet simple form. This design allows it to protrude only 33.5 mm from the ceiling, to blend naturally into a variety of interiors, including offices and restaurants.



### Easy Installation Design

With conventional models, it was difficult to use tools without damaging the interior. This has been redesigned for easier installation.





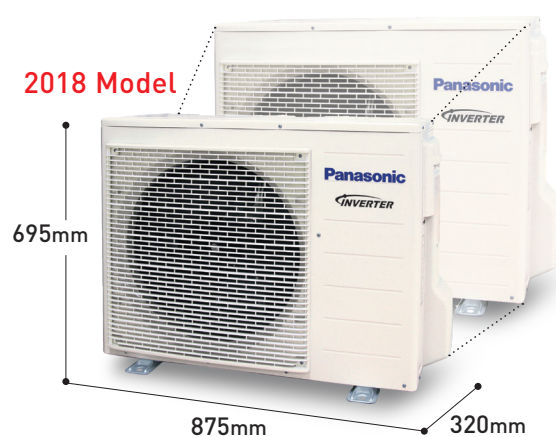
## Space Saving Outdoor Unit

Panasonic's ingeniously designed outdoor units are compact in size to fit into any space and layout. Its smaller size makes it easy to install even in limited spaces. Flexibility in piping allows more freedom in installation leading to a reduced installation costs.

### 18-30kBtu Model

U-18PS2H5 / U-21PS2H5 / U-24PS2H5 / U-30PS2H5

**Conventional Model** (CU-YT19KBH5)  
H795 × W875 × D320



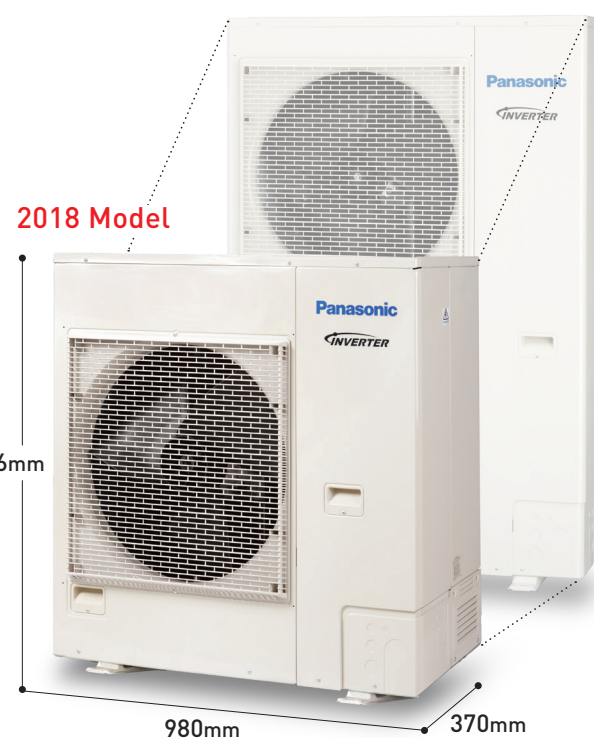
Height	795mm	<b>695mm</b>	↓ 100 mm Shorter
Weight	65kg	<b>41kg*</b>	⬇️ 24kg Lighter

\*18PS/21PS:41kg, 24PS/30PS:43kg

### 34-48kBtu Model

U-34PS2H5 / U-43PS2H5 / U-48PS2H5

**Conventional Model** (CU-YT43KBH5)  
H1,170 × W900 × D320



Height	1,170mm	<b>996mm</b>	↓ 174 mm Shorter
Weight	94kg	<b>74kg*</b>	⬇️ 20kg Lighter

\*34PS:72kg, 43PS:74kg, 48PS:81kg

## Advantages of Panasonic Inverter System



### High Efficiency Energy Performance

The performance of our previous 2-fan models is now achieved by 1-fan models. The Coefficient of Performance has been greatly improved to reduce power consumption.



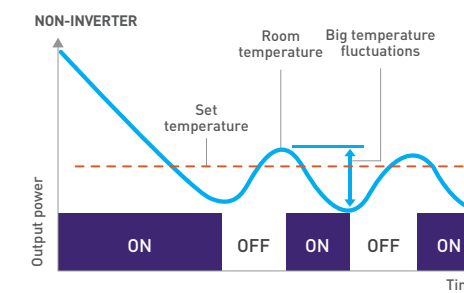
\*4-Way Cassette 18k Btu model



### Inverter Technology

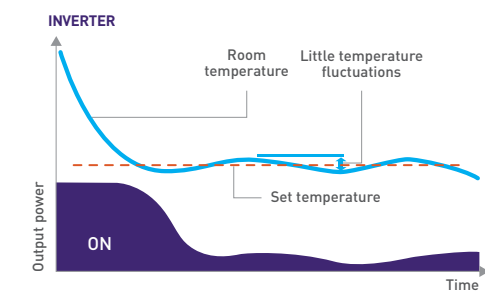
#### Precise Temperature Control

INVERTER prevents wasteful energy consumption by varying the compressor rotation speed to maintain the set temperature.



Legend: ■ Output Power — Temperature  
Remark: Energy is wasted by switching the compressor ON and OFF to maintain the set temperature.

Non-INVERTER air conditioner can only operate at a constant speed which is too powerful to maintain the set temperature. This results in wider temperature fluctuations leading to wasteful consumption of energy.



Legend: ■ Output Power — Temperature  
Remark: Saves energy by varying the rotation speed of the compressor to maintain the set temperature.

The Panasonic INVERTER air conditioner varies the compressor's rotation speed, providing a precise method of maintaining the set temperature and it gives you exceptional energy saving performance.

## Easy Installation

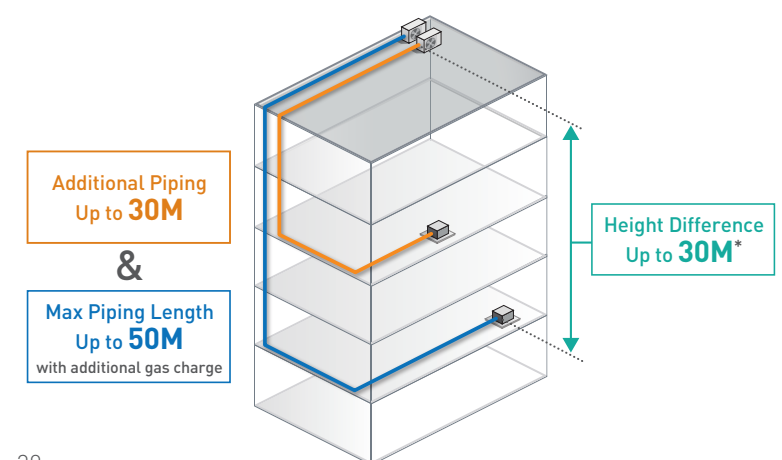
Piping can be extended up to 30m without additional gas charging, and up to 50m with additional gas charging. By giving you more flexibility in positioning the outdoor unit, this gives you a wider range of installation options.

\*For 4-Way Cassette/Ceiling Exposed/Ceiling Ducted

### Refrigerant Charge less Up to 30m

No additional gas charging is needed up to 30m. Installation is easy and hassle-free.

\*For 4-Way Cassette/Ceiling Exposed/Ceiling Ducted



\*4-Way Cassette, Ceiling Exposed and Ceiling Ducted (Capacity Class 17.1/20.5K Btu): 25m



# Remote Controller

## Precise Control, Easy Comfort

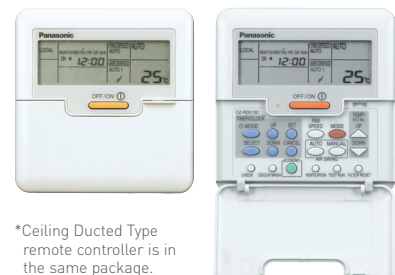
Panasonic Packaged Series Remote Controllers are designed with user comfort in mind. Multiple settings are available so airflow and air quality can be regulated according to preferences. Users can also opt for a wired remote controller equipped with high-performance timer.



### Wired Remote Controller

CZ-RD513C

(For 4-Way Cassette Type and Ceiling Exposed Type)



\*Ceiling Ducted Type remote controller is in the same package.

### Wireless Remote Controller / Receiver

4-Way Cassette Type (Optional)



CZ-RL013UH

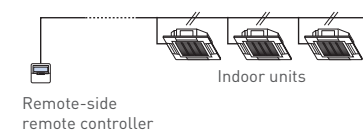
Ceiling Exposed Type (Optional)



CZ-RL013T

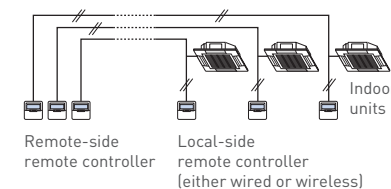
## Settings can be regulated with 3 control options:

### Group Control by a single remote controller



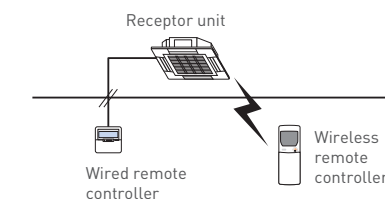
- All indoor units operate in the same mode.

### Separate Control by Twin Remote Controllers



- Each indoor unit can be operated by either of the two remote controllers.
- Apart from the timer setting time, the displays for the two remote controllers are identical.
- The last button pressed has priority (The main or slave attribute is set with the remote controller).

### Common Control by Both Wired and Wireless Remote Controllers



- The last button pressed has priority (using either wired or wireless remote controllers).

## Weekly Timer (For All Models)

- 1.Timer can be set for each day of the week.
- 2.Can be pre-set with: •Max. 6 settings/day •42 settings/week.
- 3.The temperature can also be programmed for optimal comfort.

### Pre-sets for different conditions

Businesses with regular off days	Businesses with varying visitor flows at different timings	Can be set to switch off automatically
Example: Saturday afternoon - CLOSED Sunday - CLOSED	Example: Lunchtime - More visitors, lower temperature	Example: Avoid power wastage even if users forget to turn it off (weekdays)
Mon-Fri On 9:00, Off 18:00 Sat On 9:00, Off 12:00 Sun Not set	Daily Settings On 12:00 23°C On 14:00 28°C	Mon-Fri Off 20:00
▶ Timer settings can be different everyday of the week.	▶ Timing & temperature can be set simultaneously.	▶ Timer can be set for simple shut-off operation.

### Setting the timer

1  
Select  
DAY

2  
Enter  
TIME

\*Simple Timer Mode  
Using the 24-Hour ON/OFF timer, ON/OFF operations can be set at the same time daily.

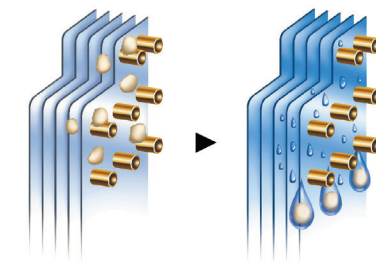
## Odor Wash

(For All Models)



Reduces unpleasant odors caused by the air conditioner's heat exchanger.

### Odor Removing ONE PUSH



When air from the outlet smells musty, moisture in the heat exchanger washes away odors.

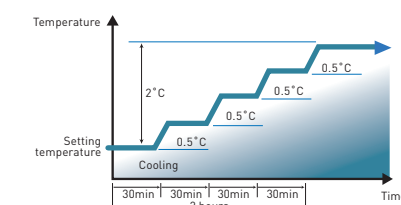
Can be operated with the wireless remote controller.

## Economy Mode

(For All Models)



Saves up to 20%\* energy. The air conditioner determines the stable condition and moderately shifts the set temperature in 0.5-degree steps to regulate the energy-saving operation (max. 2 degrees).



\*During operating in the cooling mode at the remote control set temperature of 25 under the cooling standard temperature conditions.

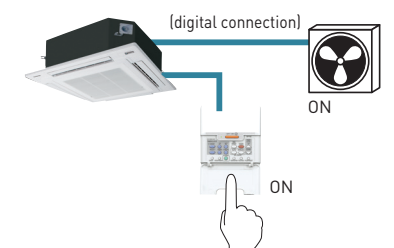
Can be operated with the wireless remote controller.

## Ventilation

(For All Models)



When an external device such as a ventilator is connected to the indoor unit, the ventilator's ON/OFF operations can be controlled by the wired remote controller. You can select from either link-ventilation or independent-ventilation.



Ventilators are not included in the product line-up.  
OPTIONAL : Printed circuit board (Interface Adapter for External Signals CZ-TA31P\*) is needed.

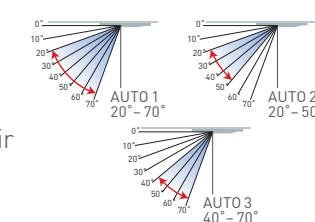
\*Printed Circuit Board

CZ-TA31P

- By connecting to the indoor unit, a separately sold ventilator can be controlled.
- Remote operation control of the indoor unit is enabled (ON/OFF control).
- The condition of the indoor unit (malfunctions, operating status) can be output externally.
- Control in linkage to a total heat exchanger or similar devices is possible.

## Multi Comfort Air Control (For 4-Way Cassette Models)

New control technology gives users a wide selection of more specific airflow angles. Choose from the 3-Pattern Auto Swings to avoid direct exposure to cool air (total 50-degree swing width).

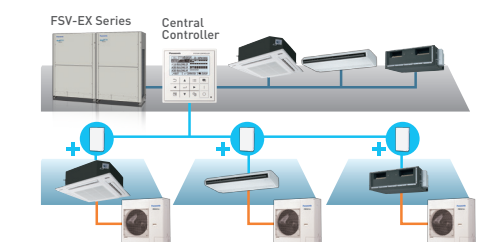


## Central Control Adapter

Using Central Control Adapter along with the existing VRF units, a centralized control system is possible. Temperature management can be achieved by expanding low-to-mid sizes together.



### Even buildings with additional air conditioning systems can be central controlled





# 4-WAY CASSETTE NEW

Indoor Unit | 4-Way Cassette

Model No.  
S-18PU2H5-8 S-34PU2H5-8  
S-21PU2H5-8 S-43PU2H5-8  
S-24PU2H5-8 S-48PU2H5-8  
S-30PU2H5-8



## TECHNICAL FOCUS

- nanoe™ X for Air Purification
- Powerful Airflow
- Wide Flap
- Simplistic Design
- LCD Wireless Remote Controller
- Easy Installation Design



## Accessories

### Panel



CZ-KPU3H

### Selectable Remote Controller



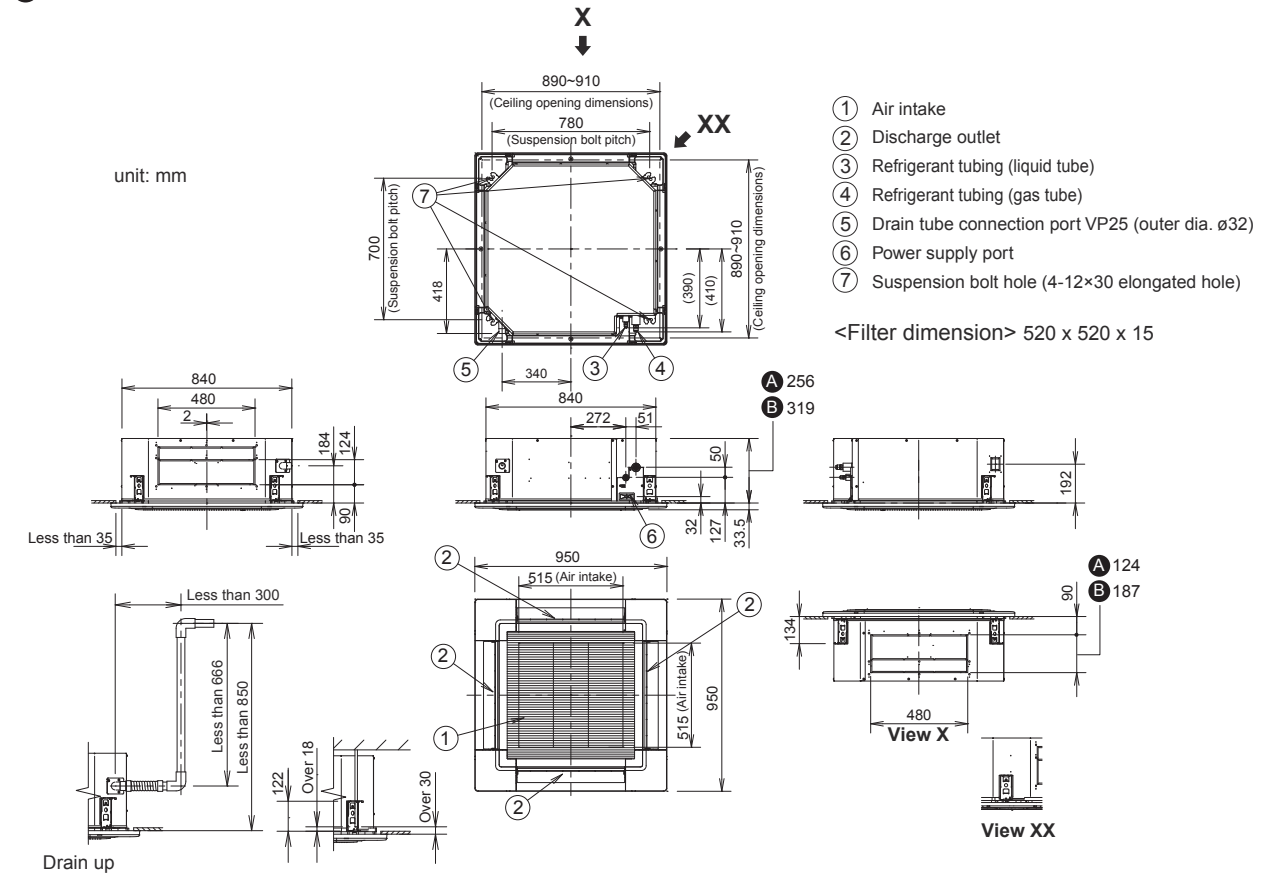
CZ-RD513C



CZ-RL013UH

## Dimensions

- A** (S-18PU2H5-8 / S-21PU2H5-8 / S-24PU2H5-8 / S-30PU2H5-8 )  
**B** (S-34PU2H5-8 / S-43PU2H5-8 / S-48PU2H5-8)



\* Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 30 mm or more (18 mm or more from the lower surface of the body) as shown in the figure. When the suspension bolt length is long, it hits the ceiling panel and installation is not possible.

Capacity [ Btu/h ]			17,100	20,500	24,200	29,000	34,100	42,700	47,800
Power Source			220 V, 1Ø Phase - 50 Hz						
Indoor			S-18PU2H5-8	S-21PU2H5-8	S-24PU2H5-8	S-30PU2H5-8	S-34PU2H5-8	S-43PU2H5-8	S-48PU2H5-8
Outdoor			U-18PS2H5-8	U-21PS2H5-8	U-24PS2H5-8	U-30PS2H5-8	U-34PS2H5-8	U-43PS2H5-8	U-48PS2H5-8
Panel			CZ-KPU3H	CZ-KPU3H	CZ-KPU3H	CZ-KPU3H	CZ-KPU3H	CZ-KPU3H	CZ-KPU3H
Cooling Capacity: Rated [Min-Max]	kW		5.00 [2.00-5.60]	6.00 [2.00-6.30]	7.10 [2.10-8.00]	8.50 [2.10-10.00]	10.00 [3.80-11.20]	12.50 [3.80-13.40]	14.00 [3.80-15.40]
	Btu/h		17,100 [6,820-19,100]	20,500 [6,820-21,500]	24,200 [7,160-27,300]	29,000 [7,160-34,100]	34,100 [13,000-38,200]	42,700 [13,000-45,700]	47,800 [13,000-52,600]
Current: Rated [Max]	A		5.6 [9.5]	7.3 [11.0]	8.8 [13.0]	11.9 [14.5]	13.1 [24.0]	20.4 [26.0]	25.5 [28.0]
Power Input: Rated [Min-Max]	kW		1.19 [0.55-1.70]	1.56 [0.55-1.90]	1.88 [0.65-2.60]	2.54 [0.65-3.30]	2.76 [1.25-4.00]	4.31 [1.25-4.70]	5.39 [1.25-5.90]
	W/W		4.20	3.85	3.78	3.35	2.90	2.60	
COP / EER					12.87	11.42	12.36	9.91	8.87
	Btu/hW		14.37	13.14					
<b>Indoor Unit</b>									
Air Volume			m³/min	22.0	23.0	25.0	25.0	32.0	36.4
Sound Pressure Level (Hi/Lo)			dB [A]	39 / 32	39 / 32	41 / 33	41 / 33	44 / 37	47 / 41
Sound Power Level (Hi/Lo)			dB	54 / 47	54 / 47	56 / 48	56 / 48	59 / 52	62 / 56
Dimension	Indoor (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (HxWxD)	mm	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950
Net Weight	Indoor	kg	21	21	21	21	24	24	24
	Panel	kg	5	5	5	5	5	5	5
<b>Outdoor Unit</b>									
Sound Pressure Level			dB [A]	48	48	48	49	53	56
Sound Power Level			dB	64	64	64	64	67	70
Dimension			Outdoor (HxWxD)	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370
Net Weight			kg	41	41	43	43	72	81
Piping Connection	Gas Pipe	mm (inch)	15.88 [5/8]	15.88 [5/8]	15.88 [5/8]	15.88 [5/8]	15.88 [5/8]	15.88 [5/8]	15.88 [5/8]
	Liquid Pipe	mm (inch)	9.52 [3/8]	9.52 [3/8]	9.52 [3/8]	9.52 [3/8]	9.52 [3/8]	9.52 [3/8]	9.52 [3/8]
Pipe Length			Min-Max	m	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Elevation Difference			m	25	25	30	30	30	30
Maximum Chargeless Length			Max	m	30	30	30	30	30
Additional Gas			g/m	50	50	50	50	50	50
Operating Range, Outdoor			Min-Max	°C	16-43	16-43	16-43	16-43	16-43



# MINI CASSETTE

Indoor Unit | Mini Cassette

Model No.  
CS-S12MB4ZW  
CS-S18MB4ZW  
CS-S24MB4ZW



## TECHNICAL FOCUS

- 4-Way Airflow System
- LCD Wireless Remote Controller
- Random Auto Restart
- Removable Washable Panel
- 24 Hours Real On Off Timer
- Dew Prevention Control
- Anti Freezing Control



## Accessories

### Panel



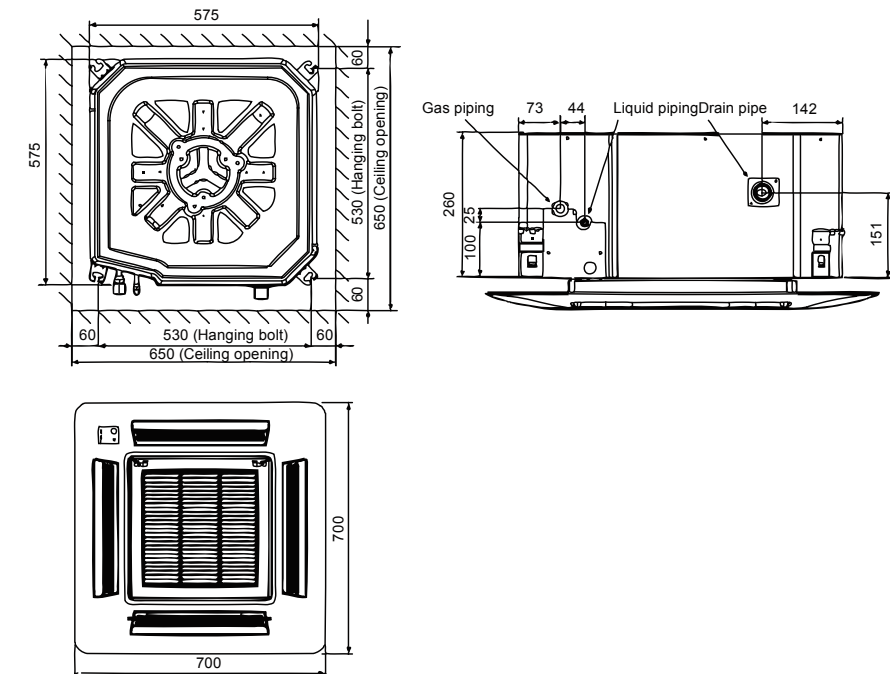
CZ-BT20EW

### Selectable Remote Controller

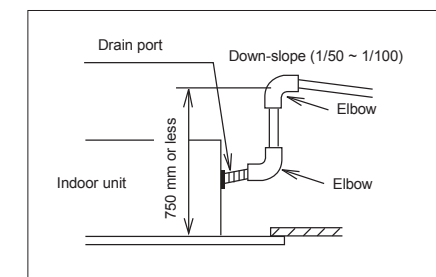


A wireless remote controller is in the same package with the indoor unit.

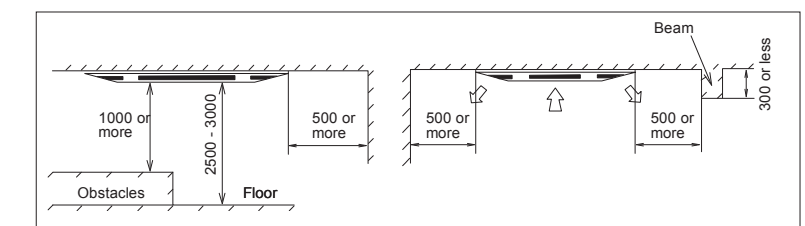
## Dimensions



### When raising the drain head above the unit



### Required space for installation



unit: mm

Capacity [ Btu/h ]		11,600	16,000	19,400
Power Source	V/Phase Hz	220-240 V, 1Ø Phase - 50 Hz		
Indoor		CS-S12MB4ZW	CS-S18MB4ZW	CS-S24MB4ZW
Outdoor		CU-S12MBZ	CU-S18MBZ	CU-S24MBZ
Panel		CB-BT20EW-1	CB-BT20EW-1	CB-BT20EW-1
Cooling Capacity: Rated [Min-Max]	kW	3.40 [0.93-4.40]	4.70 [0.98-5.60]	5.70 [0.98-6.60]
	Btu/h	11,600 [3,170-15,000]	16,000 [3,340-19,100]	19,400 [3,340-22,500]
Current: Rated	A	4.8-4.5	6.3-5.9	8.5-7.9
Power Input: Rated [Min-Max]	kW	0.98 [0.26-1.33]	1.34 [0.27-1.65]	1.82 [0.30-2.15]
	W/W	3.47	3.51	3.13
COP / EER	Btu/hW	11.84	11.94	10.66
<b>Indoor Unit</b>				
Air Volume	m <sup>3</sup> /min	10.5	11.3	12.8
Sound Pressure Level* [Hi/Low/Q-Lo]	dB [A]	34 / 26 / 23	38 / 28 / 25	41 / 33 / 30
Dimension	Indoor [H×W×D]	mm	260 × 575 × 575	260 × 575 × 575
	Panel [H×W×D]	mm	51 × 700 × 700	51 × 700 × 700
Net Weight	Indoor	kg	18.0	18.0
	Panel	kg	2.5	2.5
<b>Outdoor Unit</b>				
Sound Pressure Level [Hi]	dB [A]	47-48	49-50	49-50
Dimension	Outdoor [H×W×D]	mm	540 × 780 × 289	695 × 875 × 320
Net Weight		kg	31.0	44.0
Piping Connection	Gas Pipe	mm (inch)	12.70 [1/2]	12.70 [1/2]
	Liquid Pipe	mm (inch)	6.35 [1/4]	6.35 [1/4]
Pipe Length	Min-Max	m	3.0-15.0	3.0-20.0
Elevation Difference		m	15.0	15.0
Maximum Chargeless Length	Max	m	7.5	10.0
Additional Gas		g/m	15	20
Operating Range, Outdoor	Min-Max	°C	16-43	16-43



# CEILING EXPOSED

Model No.

S-18PT2H5-8    S-34PT2H5-8  
S-21PT2H5-8    S-43PT2H5-8  
S-24PT2H5-8    S-48PT2H5-8  
S-30PT2H5-8



## TECHNICAL FOCUS

- Random Auto Restart
- Auto Fan Mode
- Weekly Timer (Wired Remote Controller only)
- 24-Hour On/Off Real Setting Timer
- Odor Wash
- Economy Mode
- Dry Mode Function
- Self-Diagnostic Function
- Selectable Thermo Sensor  
(Wired Remote Controller Only)



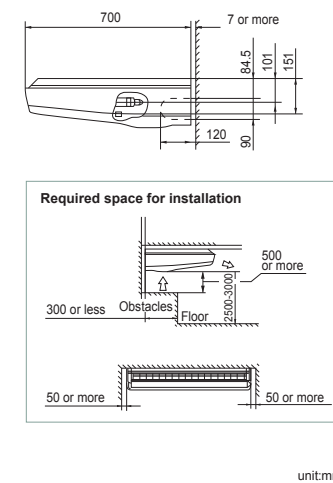
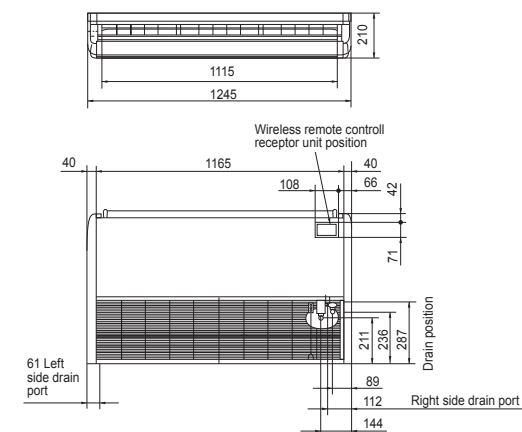
## Accessories

### Selectable Remote Controller

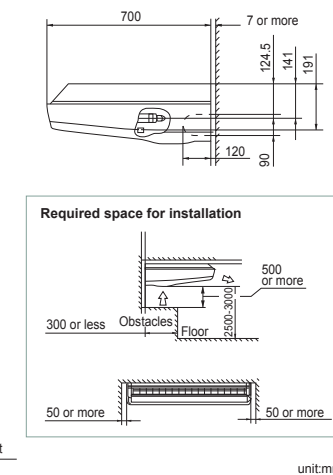
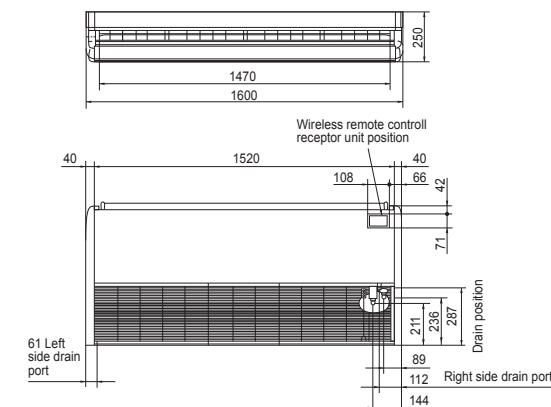


CZ-RD513C    CZ-RL013T

## Dimensions (S-18PT2H5-8 / S-21PT2H5-8 / S-24PT2H5-8)



## Dimensions (S-30PT2H5-8 / S-34PT2H5-8 / S-43PT2H5-8 / S-48PT2H5-8)



Capacity ( Btu/h )		17,100	20,500	24,200	29,000	34,100	41,000	47,800
Power Source	V/Phase Hz	220 V, 1Ø Phase - 50 Hz						
Indoor		S-18PT2H5-8	S-21PT2H5-8	S-24PT2H5-8	S-30PT2H5-8	S-34PT2H5-8	S-43PT2H5-8	S-48PT2H5-8
Outdoor		U-18PS2H5-8	U-21PS2H5-8	U-24PS2H5-8	U-30PS2H5-8	U-34PS2H5-8	U-43PS2H5-8	U-48PS2H5-8
Cooling Capacity: Rated (Min-Max)	kW	5.00 (2.00-5.60)	6.00 (2.00-6.30)	7.10 (2.00-8.00)	8.50 (2.00-10.00)	10.00 (3.80-11.20)	12.00 (3.80-12.70)	14.00 (3.80-15.40)
	Btu/h	17,100 (6,820-19,100)	20,500 (6,820-21,500)	24,200 (6,820-27,300)	29,000 (6,820-34,100)	34,100 (13,000-38,200)	41,000 (13,000-43,300)	47,800 (13,000-52,600)
Current: Rated (Max)	A	6.6 (9.5)	8.7 (11.0)	11.1 (13.0)	13.0 (14.5)	15.3 (24.0)	21.0 (26.0)	26.3 (28.0)
Power Input: Rated (Min-Max)	kW	1.40 (0.60-1.90)	1.85 (0.60-2.10)	2.37 (0.70-2.80)	2.77 (0.70-3.50)	3.23 (1.30-4.00)	4.44 (1.30-4.80)	5.56 (1.30-5.80)
	W/W	3.57	3.24	3.00	3.07	3.10	2.70	2.52
COP / EER	Btu/hW	12.21	11.08	10.21	10.47	10.56	9.23	8.60
Indoor Unit								
Air Volume	m <sup>3</sup> /min	17.0	17.0	18.0	29.0	29.0	31.0	32.0
Sound Pressure Level (Hi/Lo)	dB [A]	43 / 39	43 / 39	45 / 41	47 / 43	47 / 43	49 / 45	50 / 46
Sound Power Level (Hi/Lo)	dB	58 / 54	58 / 54	60 / 56	62 / 58	62 / 58	64 / 60	65 / 61
Dimension	Indoor (H×W×D)	mm	210 × 1,245 × 700	210 × 1,245 × 700	210 × 1,245 × 700	250 × 1,600 × 700	250 × 1,600 × 700	250 × 1,600 × 700
Net Weight		kg	33	33	43	43	48	48
Outdoor Unit								
Sound Pressure Level	dB [A]	48	48	48	49	53	54	56
Sound Power Level	dB	64	64	64	64	67	68	70
Dimension	Outdoor (H×W×D)	mm	695 × 875 × 320	695 × 875 × 320	695 × 875 × 320	996 × 980 × 370	996 × 980 × 370	996 × 980 × 370
Net Weight		kg	41	41	43	72	74	81
Piping Connection	Gas Pipe	mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
	Liquid Pipe	mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Pipe Length	Min-Max	m	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Elevation Difference		m	25	25	30	30	30	30
Maximum Chargeless Length	Max	m	30	30	30	30	30	30
Additional Gas		g/m	50	50	50	50	50	50
Operating Range, Outdoor	Min-Max	°C	16-43	16-43	16-43	16-43	16-43	16-43



# CEILING DUCTED

Indoor Unit | Ducted

Model No.

S-18PF2H5-8    S-34PF2H5-8  
S-21PF2H5-8    S-43PF2H5-8  
S-24PF2H5-8    S-48PF2H5-8  
S-30PF2H5-8



## TECHNICAL FOCUS

- Auto Fan Mode
- Random Auto Restart
- Dry Mode Function
- Weekly Timer
- 24-Hour On/Off Real Setting Timer
- Odor Wash
- Economy Mode
- Self-Diagnostic Function
- Selectable Thermo Sensor



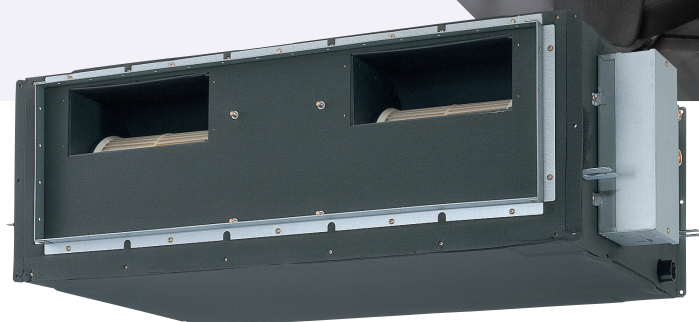
## Accessories

### Remote Controller



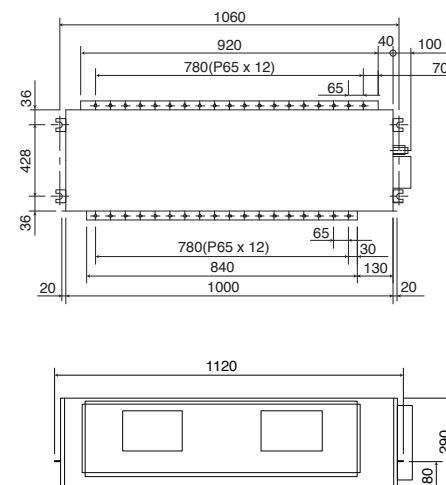
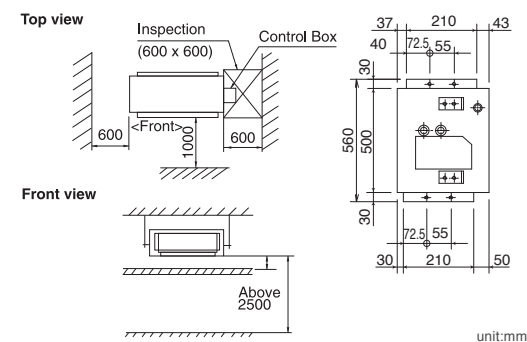
CZ-RD513C

A remote controller is in the same package with the indoor unit.



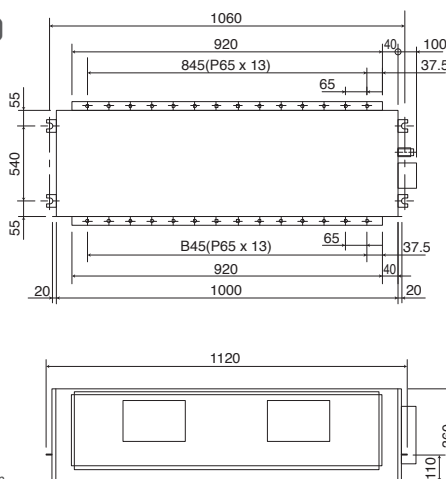
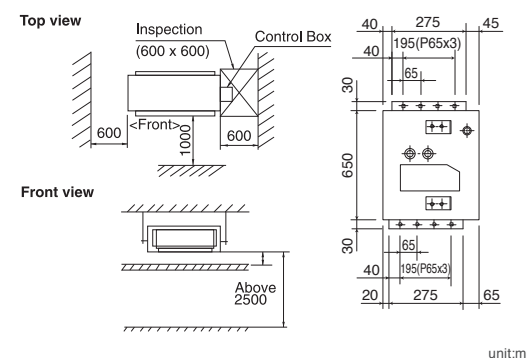
## Dimensions (S-18PF2H5-8 / S-21PF2H5-8 / S-24PF2H5-8 / S-30PF2H5-8)

Required space for installation



## Dimensions (S-34PF2H5-8 / S-43PF2H5-8 / S-48PF2H5-8)

Required space for installation



Capacity [ Btu/h ]		17,100	20,500	24,200	29,000	34,100	39,200	47,800
Power Source	V/Phase Hz	220 V, 1Ø Phase - 50 Hz						
Indoor		S-18PF2H5-8	S-21PF2H5-8	S-24PF2H5-8	S-30PF2H5-8	S-34PF2H5-8	S-43PF2H5-8	S-48PF2H5-8
Outdoor		U-18PS2H5-8	U-21PS2H5-8	U-24PS2H5-8	U-30PS2H5-8	U-34PS2H5-8	U-43PS2H5-8	U-48PS2H5-8
Cooling Capacity: Rated (Min-Max)	kW	5.00 (2.00-5.60)	6.00 (2.00-6.30)	7.10 (2.00-8.00)	8.50 (2.00-9.20)	10.00 (3.80-11.20)	11.50 (3.80-12.00)	14.00 (3.80-15.40)
	Btu/h	17,100 (6,820-19,100)	20,500 (6,820-21,500)	24,200 (6,820-27,300)	29,000 (6,820-31,400)	34,100 (13,000-38,200)	39,200 (13,000-41,000)	47,800 (13,000-52,600)
Current: Rated (Max)	A	6.9 (9.5)	7.9 (11.0)	10.4 (13.0)	13.1 (14.5)	14.5 (24.0)	22.1 (26.0)	27.7 (28.0)
Power Input: Rated (Min-Max)	kW	1.48 (0.60-1.90)	1.69 (0.60-2.10)	2.22 (0.70-2.80)	2.80 (0.80-3.50)	3.06 (1.30-4.00)	4.67 (1.30-5.10)	5.84 (1.30-5.80)
COP / EER	W/W	3.38	3.55	3.20	3.04	3.27	2.46	2.40
	Btu/hW	11.55	12.13	10.90	10.36	11.14	8.39	8.18
External Static Pressure	Pa (mm Aq)	69 (7)	69 (7)	69 (7)	69 (7)	98 (10)	98 (10)	98 (10)
<b>Indoor Unit</b>								
Air Volume	m³/min	22.0	22.0	22.0	22.0	45.0	45.0	45.0
Sound Pressure Level (Hi/Lo)	dB (A)	45 / 39	45 / 39	45 / 39	45 / 39	49 / 45	49 / 45	49 / 45
Sound Power Level (Hi/Lo)	dB	60 / 54	60 / 54	60 / 54	60 / 54	64 / 60	64 / 60	64 / 60
Dimension	Indoor (H×W×D)	mm	290 × 1,100 × 500	290 × 1,100 × 500	290 × 1,100 × 500	360 × 1,100 × 650	360 × 1,100 × 650	360 × 1,100 × 650
Net Weight	kg	31	31	31	31	43	43	43
<b>Outdoor Unit</b>								
Sound Pressure Level	dB (A)	48	48	48	49	53	54	56
Sound Power Level	dB	64	64	64	64	67	68	70
Dimension	Outdoor (H×W×D)	mm	695 × 875 × 320	695 × 875 × 320	695 × 875 × 320	996 × 980 × 370	996 × 980 × 370	996 × 980 × 370
Net weight	kg	41	41	43	43	72	74	81
Piping Connection	Gas Pipe	mm (inch)	15.88(5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
	Liquid Pipe	mm (inch)	9.52(3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Pipe Length	Min-Max	m	7.5 - 50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Elevation Difference	m	25	25	30	30	30	30	30
Maximum Chargeless Length	Max	m	30	30	30	30	30	30
Additional Gas	g/m	50	50	50	50	50	50	50
Operating Range, Outdoor	Min-Max	°C	16 - 43	16-43	16-43	16-43	16-43	16-43



# FLOOR STANDING NEW

Indoor Unit | Floor Standing

Model No.  
CS-E28NFQ



## TECHNICAL FOCUS

- Auto Movable Panel
- Power Monitor Display
- Odor-removing Function
- Self Diagnosis
- Child Lock Function



## Accessories

### Wireless Remote Controller

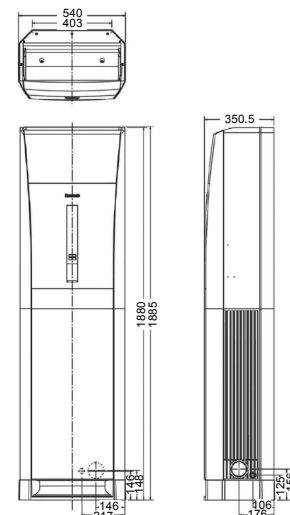


A wireless remote controller is in the same package with the indoor unit.

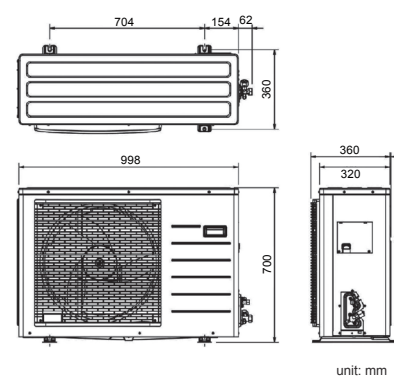
<b>Capacity ( Btu/h )</b>		<b>24,600</b>
Power Source	V/Phase Hz	230 V, 10 Phase - 50 Hz
<b>Indoor</b>		<b>CS-E28NFQ</b>
<b>Outdoor</b>		<b>CU-E28NFQ</b>
Cooling Capacity: Rated (Min-Max)	kW	7.2 (1.0-7.5)
	Btu/h	24,600 [3,410-25,600]
Heating Capacity: Rated (Min-Max)	kW	8.30 (1.00-10.35)
	Btu/h	28,320 [3,410-35,310]
Current: Rated (Max)	A	12.2 [14.8]
Cooling: Power Input: Rated (Min-Max)	kW	2.55 (0.21-2.60)
Cooling: COP / EER	W/W	2.82
	Btu/hW	9.64
Moisture Removal	L/h	4.2
	Pt/h	7.39
<b>Indoor Unit</b>		
Cooling: Air Volume (Air Circulation) (Hi)	m <sup>3</sup> /min	16
Cooling: Sound Pressure Level (H/L/Q-Lo)	dB (A)	43 / 36 / 33
Dimension	Indoor (HxWxD)	mm
Net Weight	kg	37
<b>Outdoor Unit</b>		
Sound Pressure Level	dB (A)	51
Dimensions	Outdoor (HxWxD)	mm
Net Weight	kg	46
Piping Connection	Gas Pipe	mm (inch)
	Liquid Pipe	mm (inch)
Pipe Length	Min-Max	m
Elevation Difference		m
Maximum Chargeless Length	Max	m
Additional Gas		g/m

## Dimensions

Indoor Unit CS-E28NFQ



Outdoor Unit CU-E28NFQ



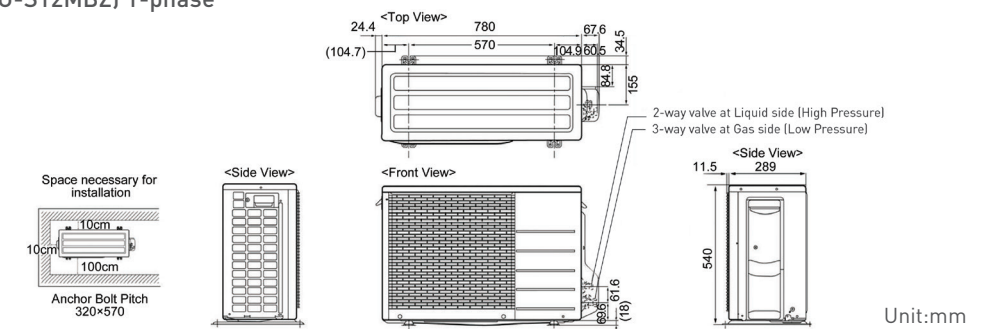
unit: mm

# OUTDOOR UNITS

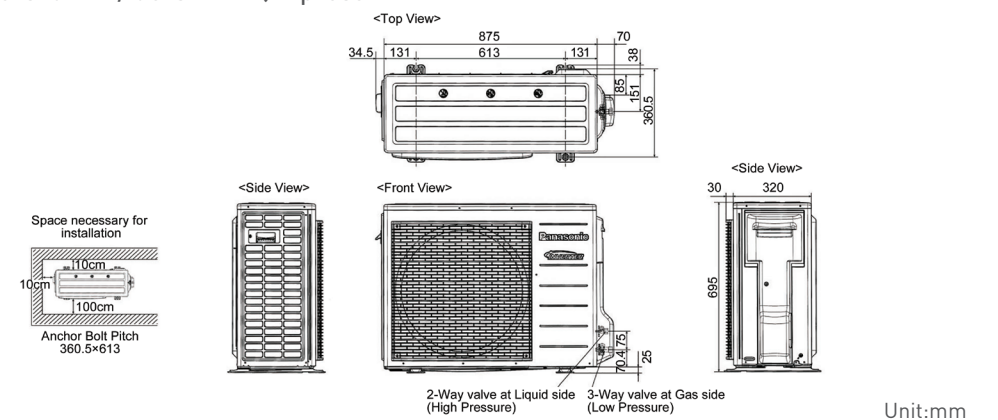
Outdoor Units

MINI CASSETTE

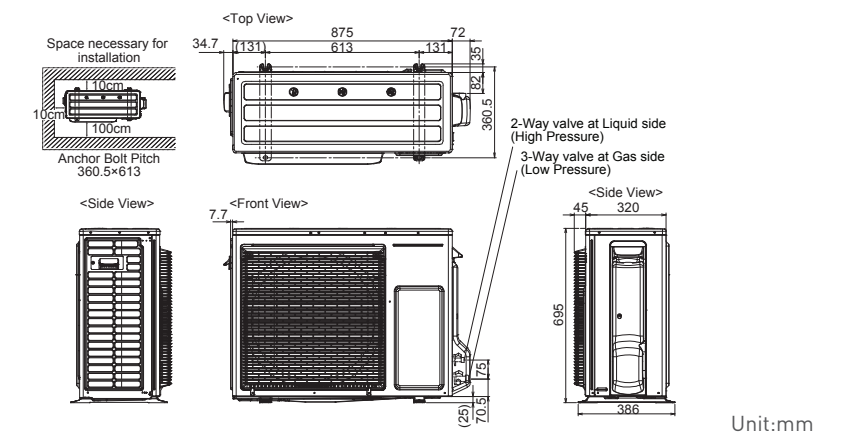
Dimensions (CU-S12MBZ) 1-phase



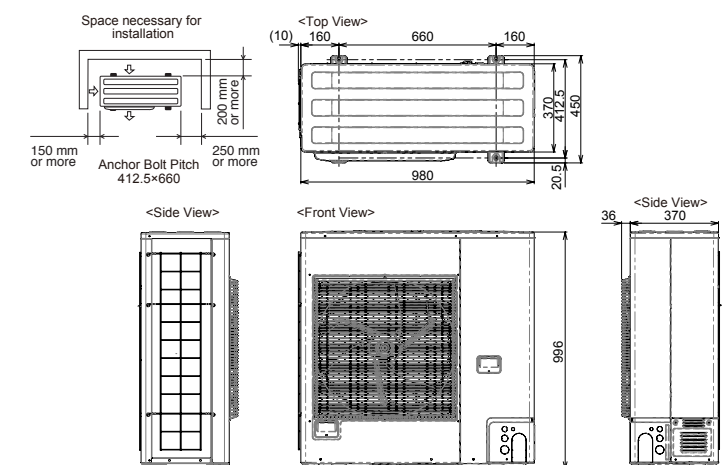
Dimensions (CU-S18MBZ / CU-S24MBZ) 1-phase



Dimensions (U-18PS2H5-8 / U-21PS2H5-8 / U-24PS2H5-8 / U-30PS2H5-8) 1-phase



Dimensions (U-34PS2H5-8 / U-43PS2H5-8 / U-48PS2H5-8) 1-phase



Unit:mm

4-WAY CASSETTE / CEILING EXPOSED / CEILING DUCTED NEW