



Panasonic

RESIDENTIAL & LIGHT COMMERCIAL AIR CONDITIONING



QUALITY AIR FOR LIFE

Panasonic Air Conditioning Designed To Care For Your Projects

Since the sale of Panasonic’s first room air conditioner in 1958, we have worked towards providing products and solutions that create comfortable and healthy living spaces for users. In addition to comfort, we have always championed in the consideration of installation ease, diversity of installation environments, and the needs of all stakeholders. Consequently, Panasonic has developed smart control management solutions allowing you to synergistically control and monitor the systems’ energy consumptions, hence removing the restrictions of traditional systems.



Outdoor Unit

P. 6 - 9



The new model debuts with R32 refrigerant. Its compact body allows installation even in narrow spaces.

Splittable Ducted

P. 10 - 11



The new High Static Pressure design splits the unit into 3 components for flexible installation.

Smart Control Management Solutions

P. 40 - 47



Panasonic’s Smart Control Management Solutions allow multiple sites to be monitored simultaneously. Control each sites Indoor Air Quality and power consumption all from your portable devices.

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Product Line-up

For Medium Sized Project

Cooling Capacity		6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	16.0kW	18.0kW	20.0kW	22.4kW
Indoor Unit	Ducted High Static Pressure Model Page 14-17 for 6.0kW - 16.0kW ECONAVI ready	S-60PE1R5B	S-71PE1R5B	S-100PE1R5B	S-125PE1R5B	S-140PE1R5B	S-160PE1R5A			
	Splittable Ducted High Static Pressure Model Page 12-13 for 18kW - 22.4kW							S-180PE3R5 NEW	S-200PE3R5 NEW	S-224PE3R5 NEW
	Ducted Mid Static Pressure Model Page 18-21 ECONAVI ready	S-60PF1E5B	S-71PF1E5B	S-100PF1E5B	S-125PF1E5B	S-140PF1E5B				
	4-Way Cassette * Panel is provided as an option (CZ-KPU3/CZ-KPU3A) Page 22-27 nanoeX ECONAVI ready	S-60PU2E5B	S-71PU2E5B	S-100PU2E5B	S-125PU2E5B	S-140PU2E5B				
	Under Ceiling Page 28-31 ECONAVI ready	S-60PT2E5B	S-71PT2E5B	S-100PT2E5B	S-125PT2E5B	S-140PT2E5B				
	Wall Mounted Page 32-33 ECONAVI ready			S-100PK2E5B						
Outdoor Unit	R410A Model Page 6 - 9 R410A DRED ready							U-160PE2R8A*	U-180PE2R8A*	U-200PE2R8A* U-224PE2R8A*
	R32 Compact Model Page 6 - 9 R32 DRED ready									

For Small Sized Project

Cooling Capacity		2.5/2.6 kW	3.4/3.7 kW	4.8/5.0 kW
Indoor Unit	Ultra Slim Ducted Page 34-39	CS-E9SD3RW	CS-E12SD3RW	CS-E18SD3RW
	Bulkhead Ducted Page 34-39	CS-E9QD3RW	CS-E12QD3RW	CS-E18QD3RW
	Mini Cassette Page 34-39	CS-E9SB4RW	CS-E12QB4RW	CS-E18QB4RW
Outdoor Unit	R410A Model Page 34-39 R410A DRED ready	CU-E9SD3R CU-E9QD3R CU-E9SB4R	CU-E12SD3R CU-E12QD3R CU-E12QB4R	CU-E18SD3R CU-E18QD3R CU-E18QB4R

Outdoor Unit

The Panasonic outdoor unit has been designed with all stakeholders front of mind. The new R32 compact unit has been intuitively designed with a single fan body, allowing prodigiously powerful performance to be installed in even the tightest of spaces.



NEW R32 Compact Model

Compact Design

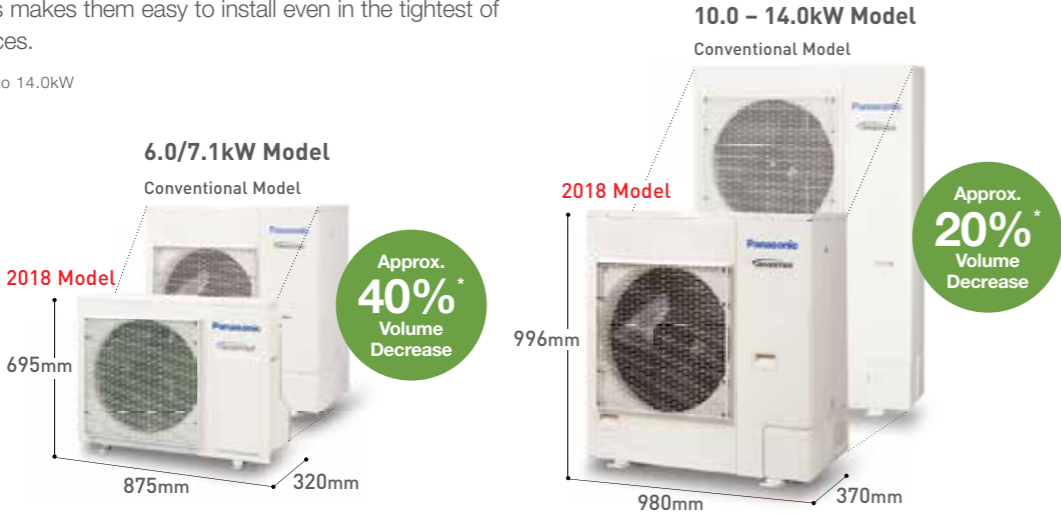
Whilst maintaining its powerful performance, the new R32 compact unit is even smaller. This enables them to be installed in a vast variety of even tighter places.

Industry-leading Small Body with All 1-fan Models*

R32 Compact

Panasonic's ingeniously designed R32 outdoor units are compact in size to fit into any space and layout. This makes them easy to install even in the tightest of places.

*Up to 14.0kW



* Comparison between U-60PZ2R5 and U-60PE1R5A

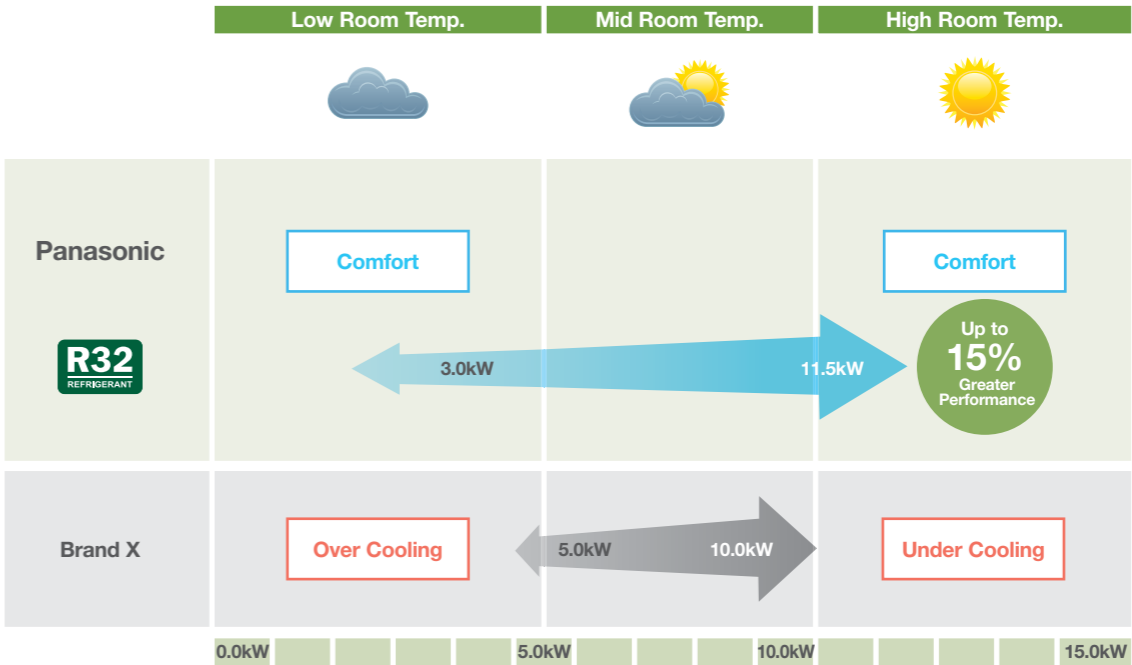
* Comparison between U-100PZ2R5 and U-100PE1R5A

Precise Temperature Control

Constant Comfort Air Conditioning

R32 Compact

Another advantage of Panasonic Premium Inverter technology includes its ability to ensure precise temperature control and offer a wider power output range to perform in even the most extreme conditions in Australia, ensuring constant comfort.



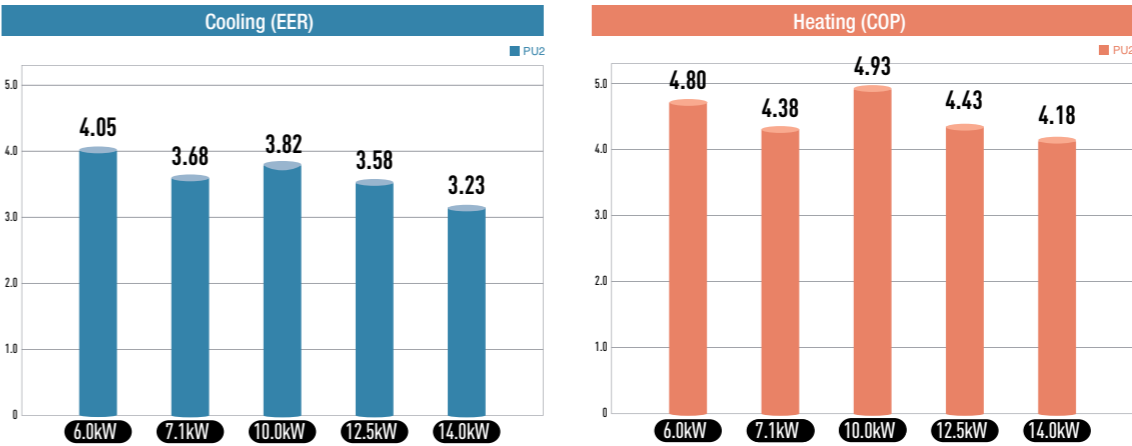
Graph shows each models' 10.0kW Inverter High Static Pressure Ducted systems performance range during cooling.

Energy Saving Technology

High EER and COP Value

R32 Compact

The use of energy saving design for the structure of fans, fan motors, compressors and heat exchangers resulted in high EER and COP value which ranked as one the top class in the industry.

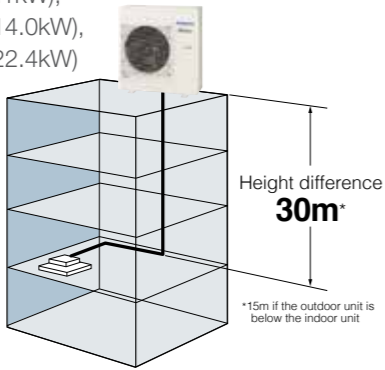


* The graph shows 4-way cassette R32 models' values

Other Advanced Technology

Increased Piping Length for Greater Design Flexibility

Adaptable to various building types and sizes
Max. piping length :
40m (6.0kW, 7.1kW),
50m (10.0kW-14.0kW),
50m (16.0kW-22.4kW)



R32 Compact

R410A

Product Quality and Safety

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



Quiet Mode

Quiet mode reduces outdoor operating sound by 2dB. External input signal is also available.

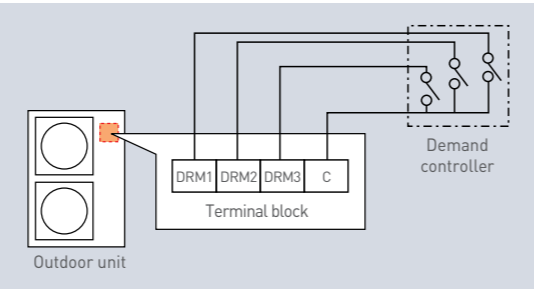
R32 Compact

R410A

Demand Response Compliant

Panasonic air conditioners are equipped with a Demand Response Enabling Device (DRED) which complies to both AS 4755 and AS 3823. Panasonic continues to design and develop products that are tailored to local needs and requirements.

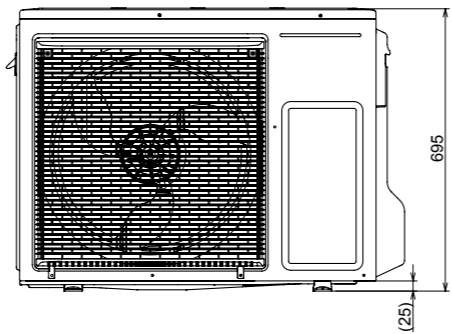
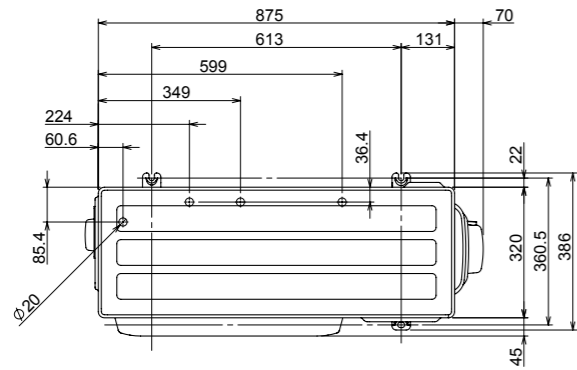
The Equipment Energy Efficiency (E3) program has been supporting the development of DRED standards for air-conditioners which should comply with AS 4755. The functionality will be required for all installations in the very near future.



Demand control terminal is available to control 0-50-75-100% of capacities.

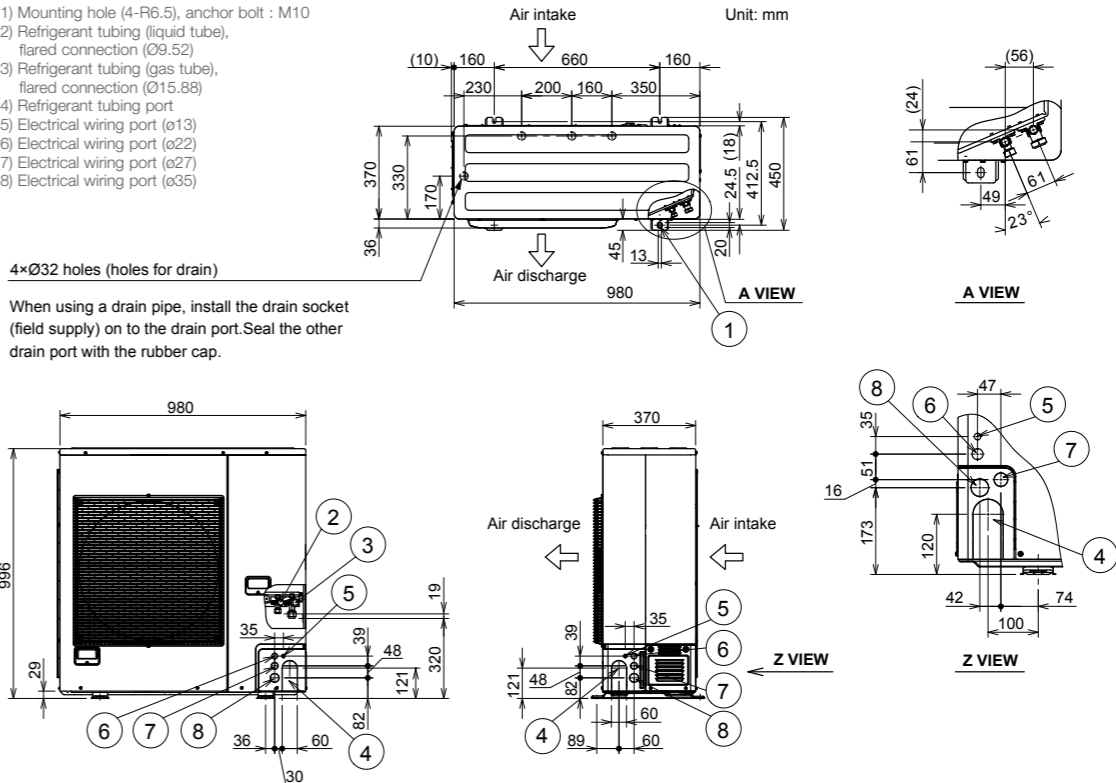
Outdoor Unit Dimensions

R32 Compact Model Dimensions (6.0kW – 7.1kW)



R32 Compact Model Dimensions (10.0kW – 14.0kW)

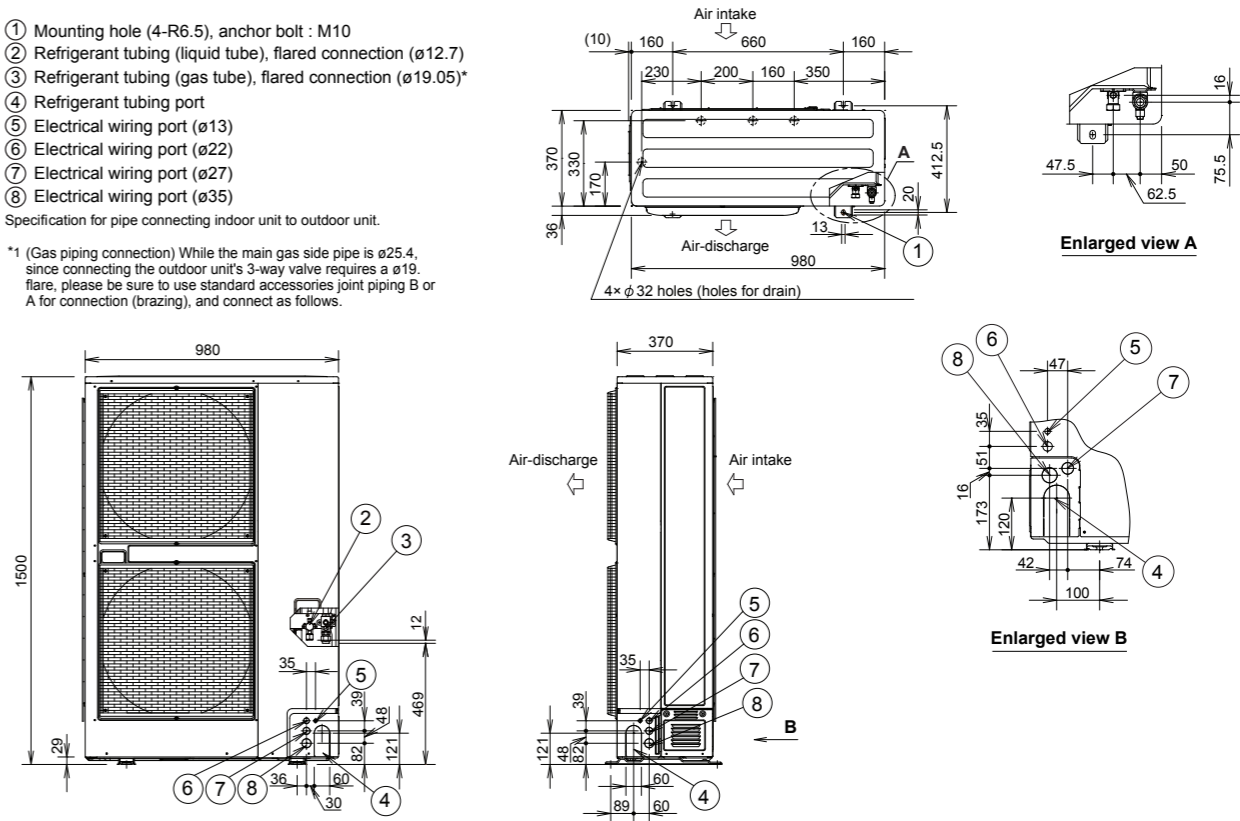
- 1) Mounting hole (4-R6.5), anchor bolt : M10
- 2) Refrigerant tubing (liquid tube), flared connection (Ø9.52)
- 3) Refrigerant tubing (gas tube), flared connection (Ø15.88)
- 4) Refrigerant tubing port
- 5) Electrical wiring port (ø13)
- 6) Electrical wiring port (ø22)
- 7) Electrical wiring port (ø27)
- 8) Electrical wiring port (ø35)



R410A Model Dimensions (16.0kW – 22.4kW)

- ① Mounting hole (4-R6.5), anchor bolt : M10
- ② Refrigerant tubing (liquid tube), flared connection (ø12.7)
- ③ Refrigerant tubing (gas tube), flared connection (ø19.05)*
- ④ Refrigerant tubing port
- ⑤ Electrical wiring port (ø13)
- ⑥ Electrical wiring port (ø22)
- ⑦ Electrical wiring port (ø27)
- ⑧ Electrical wiring port (ø35)

Specification for pipe connecting indoor unit to outdoor unit.
*1 (Gas piping connection) While the main gas side pipe is ø25.4, since connecting the outdoor unit's 3-way valve requires a ø19. flare, please be sure to use standard accessories joint piping B or A for connection (brazing), and connect as follows.



Splittable Ducted

Create comfort faster. The newly designed high static pressure ducted model is improved for a more flexible installation. By dividing the unit into 3 components, the burden of installation is reduced.

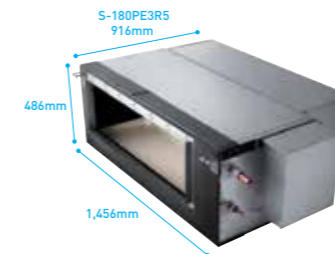
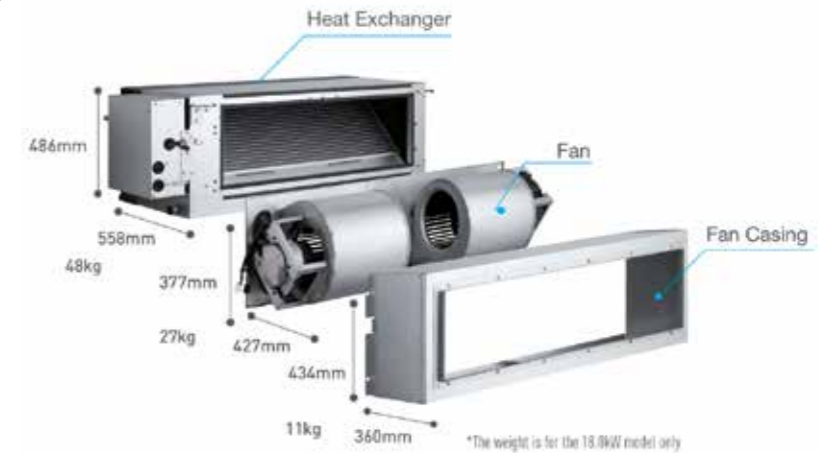
* In the case of the S-180PE3R5, S-200PE3R5, and S-224PE3R5.



Easy Installation Design

Fits the Roof-space and Your Needs

The newly designed high static pressure ducted consists of 3 components, the heat exchanger, the fan and the fan casing. For easy installation, the unit has been designed to be lifted into the roof via return air grille, separated, and easily reassembled when in position.



Compared to conventional models, the new Panasonic splittable ducted weighs in at approximately 10%* lighter. This notion is further emphasised by the unit's ability to split into three components, the heaviest of which totals at 48kg.

* Comparison between S-180PE3R5 and S-180PE2R5B

Powerful Air for Quick Comfort

Top Grade of Airflow Volume

Providing powerful air, Panasonic's splittable ducted has increased the rate of airflow by 16%, reaching up to 1,400 l/s. Its powerful airflow enables faster room temperature control.

Previous Model



1,200 l/s

New Model



1,400* l/s

* Comparison between S-224PE3R5 and S-224PE2R5B



Max.200Pa Static Pressure Setting

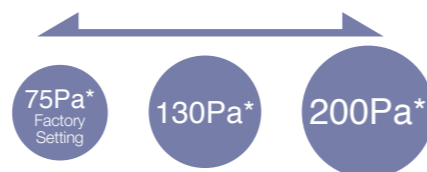
A maximum static pressure setting of a powerful 200Pa enables the use of long ducts for installation in a wide range of spaces. Ideal for large-scale houses, offices and restaurants.



* In case of S-224PE3R5

3-step Static Pressure Set Up

You can select between the three Static Pressure modes of 200Pa / 130Pa / 75Pa for extra installation flexibility.



* In case of S-224PE3R5

New Ducted Model Key Factors

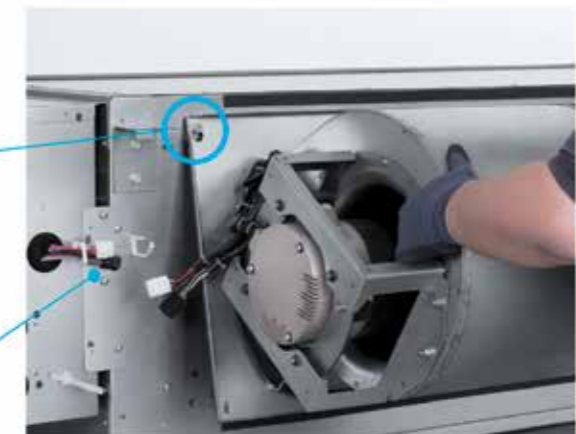
Bell Shaped Keyhole for Weight Support

Part of the keyhole is newly designed with a bell shape to reduce the burden of installation. It also enables temporary attachment.



2 Wire Connectors for Easy Installation

With only 2 wire connectors, installation has become much easier and faster.



12 Bolts & Screws for Easy Assembly

Only 12 screws and bolts need to be attached, allowing for a shorter installation time.

Easy Assembly Steps

Assembly takes three easy steps, even in limited spaces.



Indoor Unit

High Static Pressure

Splittable Ducted

High static and large airflow ducted for exceptional installation flexibility.

NEW



S-180PE3R5
S-200PE3R5
S-224PE3R5



CZ-RTC5B



CZ-RTC4

- 
Self-diagnosing
Function
- 
Automatic
Fan
Operation
- 
Mild dry
- 
Automatic
Restart
Function
- 
DC Motor

Technical focus

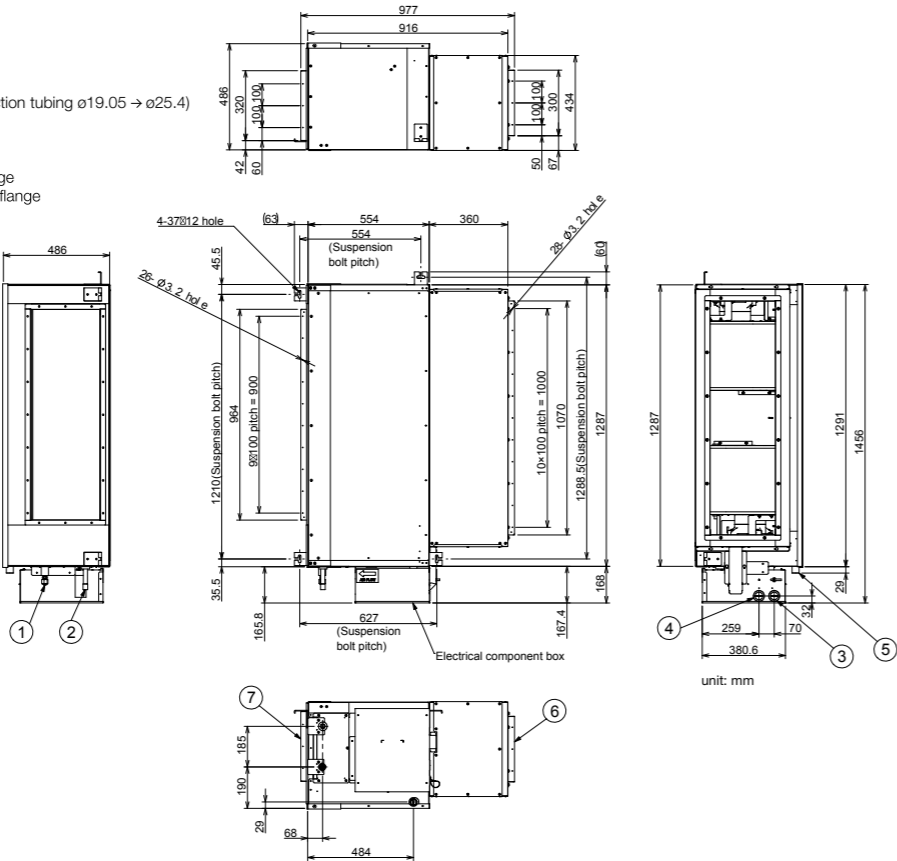
- Easy installation with splittable chassis design
 - Maximum 200Pa static pressure setting*
 - Design flexibility thanks to high static pressure and large air volume
- Low power input
 - Accurate temperature control to reduce cold drafts during operation
 - DC motor equipped

* In case of S-224PE3R5

HIGH STATIC PRESSURE SPLITTABLE DUCTED

Dimensions (18.0kW – 22.4kW)

- 1 Refrigerant liquid tubing (Flare)
Type 180 : ø9.52
Type 200/224 : ø12.7
- 2 Refrigerant gas tubing (Brazing)
ø19.05
(Type 200/224 (30 - 50m) : Connection tubing ø19.05 → ø25.4)
- 3 Power supply port
- 4 Communication port
- 5 Drain port 25A
- 6 Air intake duct connecting side flange
- 7 Air discharge duct connecting side flange



Specifications of R410A Model



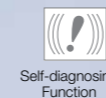
Capacity		18.0kW	20.0kW	22.4kW
Model Name	Indoor Unit	S-180PE3R5	S-200PE3R5	S-224PE3R5
	Outdoor Unit	U-180PE2R8A	U-200PE2R8A	U-224PE2R8A
Cooling capacity :	kW	18.0 (5.4-20.0)	20.0 (6.3-22.4)	22.4 (6.3-25.0)
		20.0 (5.6-22.4)	22.4 (7.1-25.0)	25.0 (7.1-28.0)
Heating capacity	BTU/h	61,400 (18,400-68,200)	68,200 (21,500-76,400)	76,400 (21,500-85,300)
		68,200 (19,100-76,400)	76,400 (24,200-85,300)	85,300 (24,200-95,500)
EER : COP	Cooling : Heating W/W	3.02 : 3.53	3.12 : 3.61	3.00 : 3.52
Total power input	Cooling : Heating kW	5.96 : 5.66	5.99 : 6.20	6.21 : 7.10
Indoor Unit				
Power source	Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
	V	240V	240V	240V
Current	Cooling : Heating A	3.00 : 3.00	3.20 : 3.20	4.10 : 4.10
Dimensions	H x W x D mm	486 x 1456 x 916	486 x 1456 x 916	486 x 1456 x 916
Heat exchanger	H x W x D mm	486 x 1,456 x 558	487 x 1,456 x 558	488 x 1,456 x 558
Fan	H x W x D mm	377 x 1,150 x 427	377 x 1,150 x 427	377 x 1,150 x 427
Case	H x W x D mm	434 x 1,178 x 360	434 x 1,178 x 360	434 x 1,178 x 360
Net weight	kg	85	86	88
Air volume	Cooling : Heating L/s	1,200 : 1,200	1,200 : 1,200	1,400 : 1,400
External static pressure	Pa	60 (Max.150)	75 (Max.180)	75 (Max.200)
Sound pressure level (H/M/L)	Cooling : Heating dB(A)	46 / 44 / 41 : 46 / 44 / 41	46 / 44 / 41 : 46 / 44 / 41	47 / 45 / 42 : 47 / 45 / 42
Sound power level (H/M/L)	Cooling : Heating dB(A)	78 / 76 / 73 : 78 / 76 / 73	78 / 76 / 73 : 78 / 76 / 73	79 / 77 / 74 : 79 / 77 / 74
Number of fan speeds		3	3	3
Drain pipe size	mm	VP-25	VP-25	VP-25
Outdoor Unit				
Power source	Phase/Hz	3 Phase/ 50Hz	3 Phase/ 50Hz	3 Phase/ 50Hz
	V	415V	415V	415V
Current	Cooling : Heating A	8.25 : 7.80	8.75 : 8.55	9.90 : 9.50
Dimensions	H x W x D mm	1500 x 980 x 370	1500 x 980 x 370	1500 x 980 x 370
Net weight	kg	127	138	138
Air volume	Cooling : Heating L/s	2,733 : 2,733	2,666 : 2,666	2,666 : 2,666
Sound pressure level (Silent mode)	Cooling : Heating dB(A)	59 (57) : 61 (59)	60 (58) : 62 (60)	60 (58) : 62 (60)
Sound power level (Silent mode)	Cooling : Heating dB(A)	77 (75) : 79 (77)	79 (77) : 81 (79)	79 (77) : 81 (79)
Piping connections	Liquid/Gas m	Ø9.52 / Ø19.05	Ø12.7 / Ø19.05	Ø12.7 / Ø19.05
Pipe length	min. - max. m	5 - 50	5 - 50	5 - 50
Elevation difference (OU located lower, OU located higher)	m	30, 30	30, 30	30, 30
Maximum chargeless length	m	30	30	30
Refrigerant at shipping, Additional gas amount	g	R410A, 5,600, 50 (g/m)	R410A, 6,400, 80 (g/m)	R410A, 6,400, 80 (g/m)
Operation ranges	Cooling : Heating °C	-15 to 46 : -20 to 24	-15 to 46 : -20 to 24	-15 to 46 : -20 to 24

Indoor Unit

High Static Pressure

Ducted

High static and large airflow ducted for exceptional installation flexibility.



Self-diagnosing Function



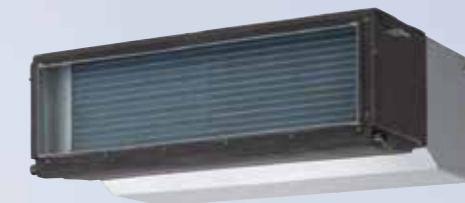
Automatic Fan Operation



Mild dry



Automatic Restart Function



S-60PE1R5B
S-71PE1R5B
S-100PE1R5B



S-125PE1R5B
S-140PE1R5B
S-160PE1R5A

ECONAVI

ECONAVI ready



CZ-CENSC1



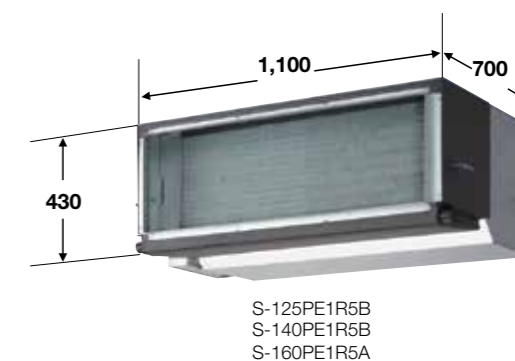
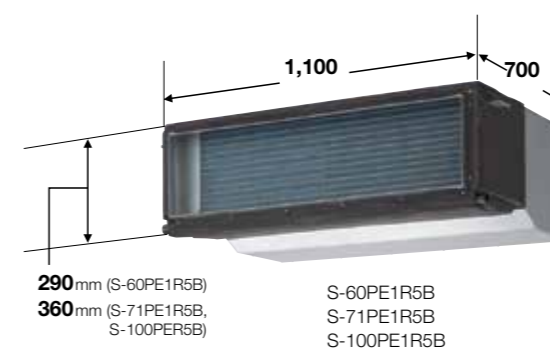
CZ-RTC5B



CZ-RTC4

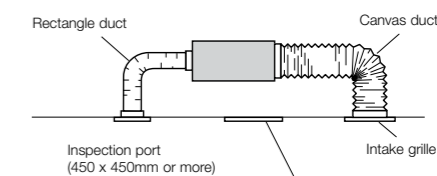
Compact Body Size

Hidden in the ceiling, ideal when interior decor is an important consideration such as in residences with many rooms and light commercial buildings.



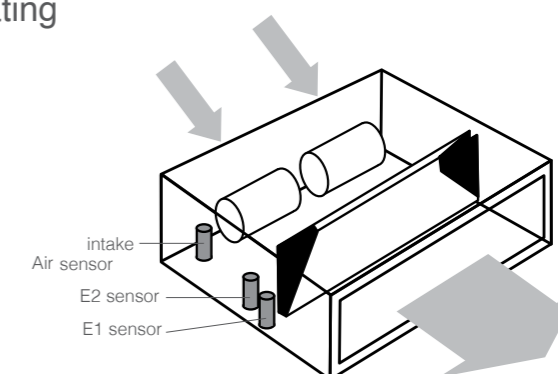
System Example

An inspection port (450mm x 450mm or more) is required at the control-box side of the indoor unit body.



Cold Drafts Reduced During Heating Operation

- Accurate temperature measurement by E1/E2 sensor to reduce cold drafts during heating operation.



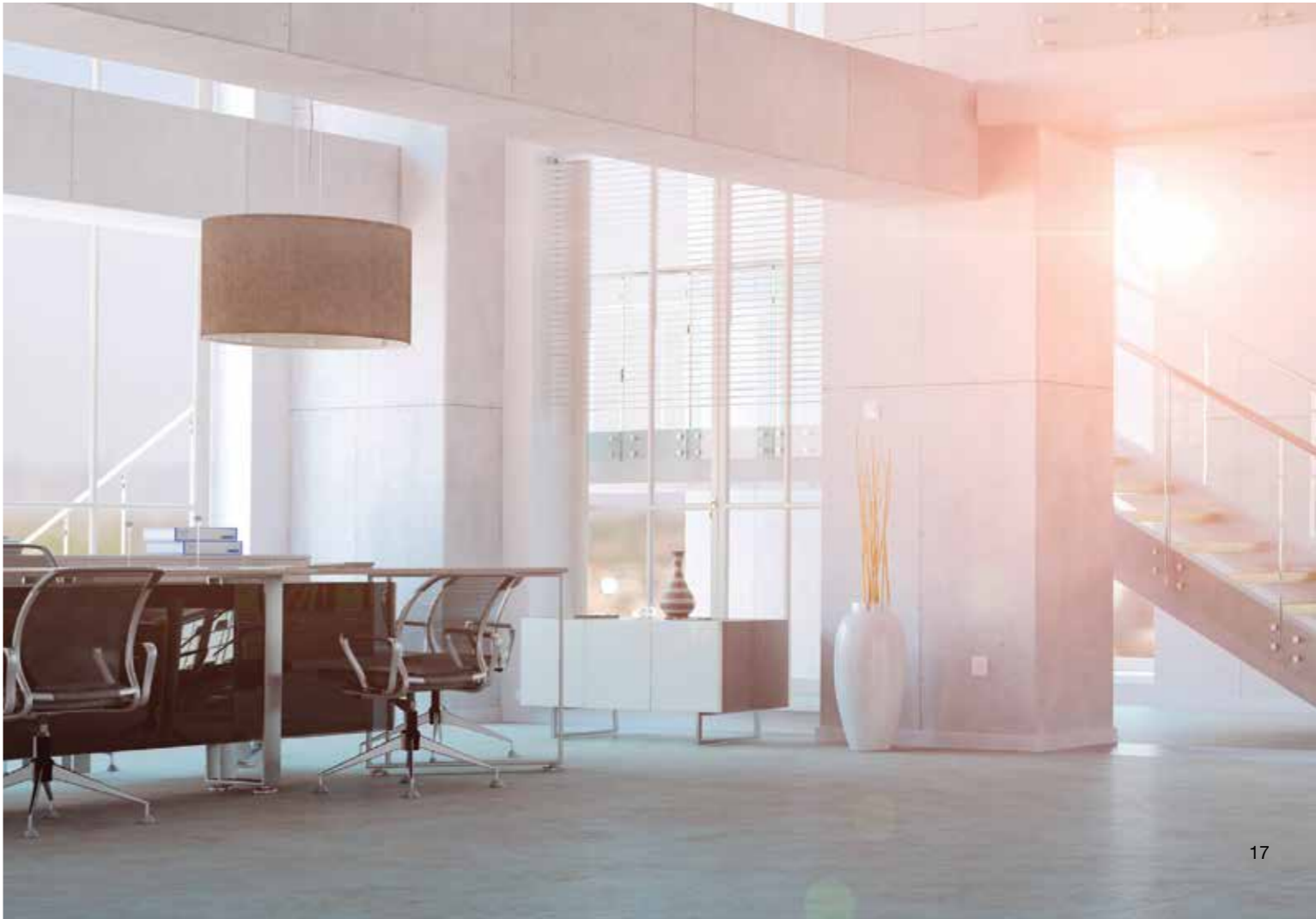
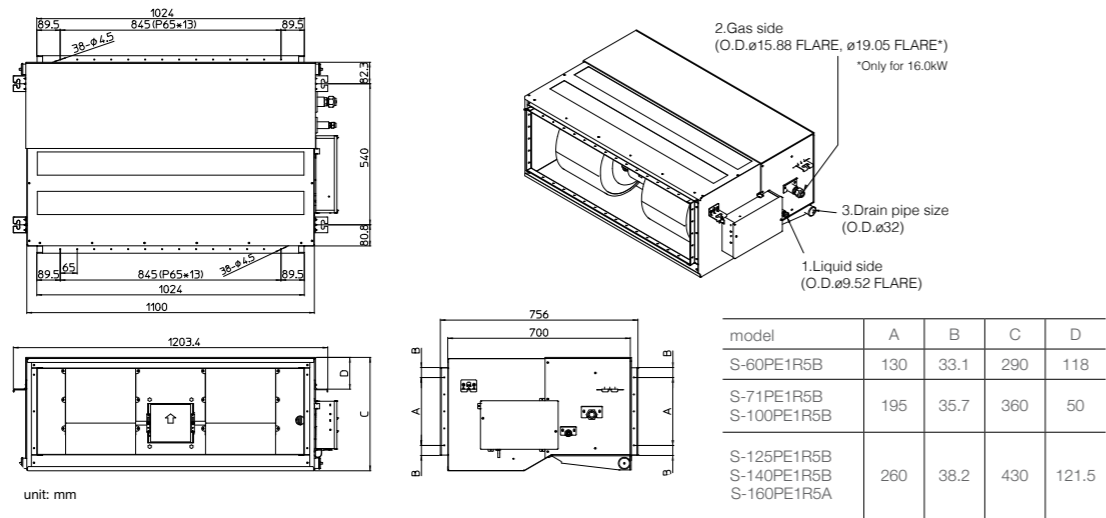
Specifications of R32 Compact Model



Capacity			6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	16.0kW			
Model Name	Indoor Unit		S-60PE1R5B	S-71PE1R5B	S-100PE1R5B	S-100PE1R5B	S-125PE1R5B	S-125PE1R5B	S-140PE1R5B	S-140PE1R5B	S-160PE1R5A
	Outdoor Unit		U-60PZ2R5	U-71PZ2R5	U-100PZ2R5	U-100PZ2R8	U-125PZ2R5	U-125PZ2R8	U-140PZ2R5	U-140PZ2R8	U-160PE2R8A
Cooling capacity : Heating capacity	kW		6.0 (2.0 - 7.1) 6.0 (1.8 - 7.6)	7.1 (2.0 - 8.0) 7.1 (1.8 - 8.6)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)	16.0 (5.4 - 18.0) 18.0 (5.6 - 20.0)
		BTU/h	20,500 (6,800 - 24,200) 20,500 (6,100 - 25,900)	24,200 (6,800 - 27,300) 24,200 (6,100 - 29,300)	34,100 (10,200 - 39,200) 34,100 (10,200 - 47,800)	34,100 (10,200 - 39,200) 34,100 (10,200 - 47,800)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)	54,600 (18,400 - 61,400) 61,400 (19,100 - 68,200)
EER : COP	Cooling : Heating	W/W	3.23 : 3.92	3.18 : 4.06	3.44 : 3.89	3.44 : 3.89	3.30 : 4.00	3.30 : 4.00	3.15 : 3.66	3.15 : 3.66	3.09 : 3.52
Total power input	Cooling : Heating	kW	1.86 : 1.53	2.23 : 1.75	3.00 : 2.57	3.00 : 2.57	3.79 : 3.125	3.79 : 3.125	4.44 : 3.825	4.44 : 3.825	5.18 : 5.11
Indoor Unit											
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V	240V	240V	240V	240V	240V	240V
Current	Cooling : Heating	A	0.86 : 0.86	1.25 : 1.25	1.74 : 1.74	1.74 : 1.74	1.84 : 1.84	1.84 : 1.84	2.70 : 2.70	2.70 : 2.70	2.70 : 2.70
Dimensions	H × W × D	mm	290×1,100 (+100)×700	360×1,100 (+100)×700	360×1,100(+100)×700	360×1,100(+100)×700	430×1,100(+100)×700	430×1,100(+100)×700	430×1,100(+100)×700	430×1,100(+100)×700	430×1,100(+100)×700
Net weight		kg	35	42	44	44	48	48	53	53	53
Air volume	Cooling : Heating	L/s	366 : 366	500 : 500	666 : 666	666 : 666	833 : 833	833 : 833	1,000 : 1,000	1,000 : 1,000	1,000 : 1,000
External static pressure		Pa	70 (Max.100)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	43 / 41 / 40 : 43 / 41 / 40	45 / 44 / 43 : 45 / 44 / 43	48 / 46 / 44 : 48 / 46 / 44	48 / 46 / 44 : 48 / 46 / 44	49 / 47 / 45 : 49 / 47 / 45	49 / 47 / 45 : 49 / 47 / 45	51 / 49 / 47 : 51 / 49 / 47	51 / 49 / 47 : 51 / 49 / 47	51 / 49 / 47 : 51 / 49 / 47
Sound power level (H/M/L)	Cooling : Heating	dB(A)	60 / 58 / 57 : 60 / 58 / 57	62 / 61 / 60 : 62 / 61 / 60	70 / 68 / 66 : 70 / 68 / 66	70 / 68 / 66 : 70 / 68 / 66	71 / 69 / 67 : 71 / 69 / 67	71 / 69 / 67 : 71 / 69 / 67	73 / 71 / 69 : 73 / 71 / 69	73 / 71 / 69 : 73 / 71 / 69	73 / 71 / 69 : 73 / 71 / 69
Number of fan speeds			3	3	3	3	3	3	3	3	3
Drain pipe size		mm	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25
Outdoor Unit											
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	3 Phase/ 50Hz
		V	240V	240V	240V	415V	240V	415V	240V	415V	415V
Current	Cooling : Heating	A	7.70 : 6.15	8.90 : 6.75	11.0 : 9.50	3.75 : 3.24	14.9 : 12.0	4.95 : 4.00	17.2 : 14.1	5.75 : 4.70	7.00 : 6.90
Dimensions	H × W × D	mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	1,500 x 980 x 370
Net weight		kg	44	44	90	90	94	94	94	94	127
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169	1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386	2,733 : 2,733
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)	52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)	56 (57) : 61 (69)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)	68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)	77 (75) : 79 (77)
Piping connections	Liquid/Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø19.05
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	30, 30
Maximum chargeless length		m	30	30	30	30	30	30	30	30	30
Refrigerant at shipping, Additional gas amount		g	R32, 1,450, 35 (g/m)	R32, 1,450, 35 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R410A, 5,600, 50 (g/m)
Operation ranges	Cooling : Heating	℃	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-15 to 46 : -20 to 24

HIGH STATIC PRESSURE DUCTED

Dimensions (6.0kW – 16.0kW)



Indoor Unit

Mid Static Pressure Ducted

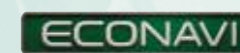
Control all aspects of your environment with exceptional performance and quiet operation. A perfect solution when ceiling heights are restricted.



S-60PF1E5B
S-71PF1E5B



S-100PF1E5B
S-125PF1E5B
S-140PF1E5B



ECONAVI ready



CZ-CENSC1



CZ-RTC5B



CZ-RTC4

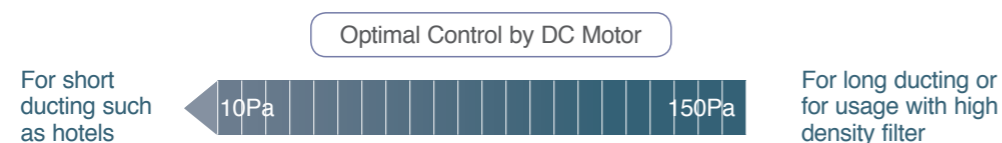


Technical focus

- Space saving 290mm height
- DC fan motor for variable external static pressure control
- Easy to install and maintain

Variable external static pressure control

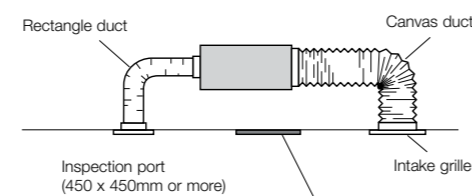
Optimal airflow set-up is possible for different ducting design and conditions.



* Please refer to technical documents for detail.

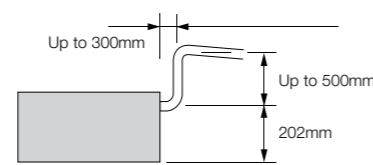
System example

An inspection port (450mm x 450mm or larger) is required at the lower side of the indoor unit body.



More powerful drain pump

Using a high-lift built-in drain pump, drain piping can be elevated up to 702mm from the base of the unit.

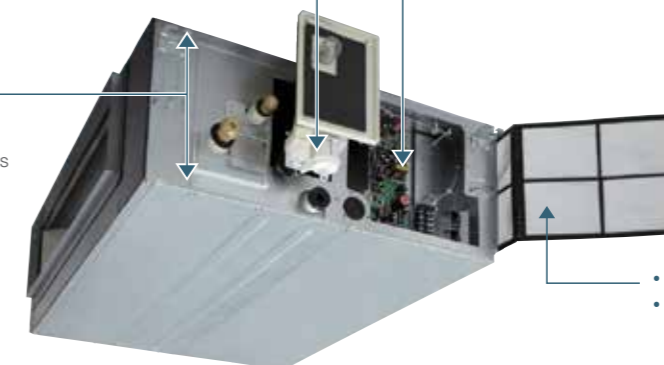


Built-in Drain pump
(DC motor pump)

External electrical equipment box
makes maintenance easy

Space saving height of
290mm for all models

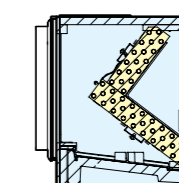
290mm standardised height provides easy and uniform installation for models with different capacities, especially when ceiling heights are restricted.



- Built-in filter
- Side removable filter

V-shaped heat exchanger

To improve heat exchange efficiency, an original V-shaped heat exchanger was developed incorporating a conventional high-efficiency fan and high-efficiency grooved heat transfer tubes. This increases the heat exchange surface area.



Increases surface area



Specifications of R32 Compact Model

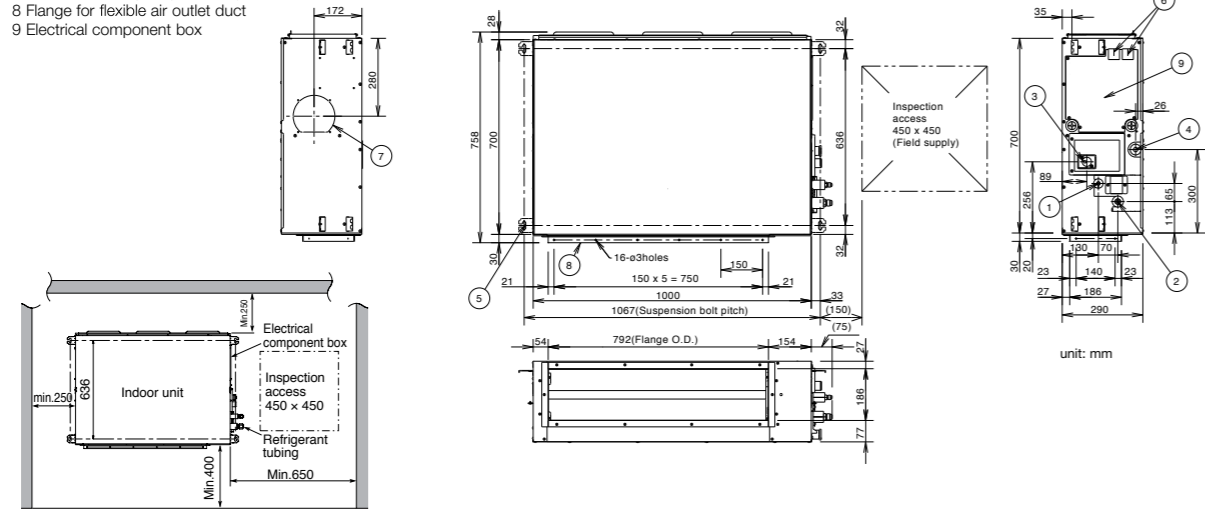


Capacity			6.0KW	7.1KW	10.0KW	12.5KW	14.0KW			
Model Name	Indoor Unit		S-60PF1E5B	S-71PF1E5B	S-100PF1E5B	S-100PF1E5B	S-125PF1E5B	S-125PF1E5B	S-140PF1E5B	S-140PF1E5B
	Outdoor Unit		U-60PZ2R5	U-71PZ2R5	U-100PZ2R5	U-100PZ2R8	U-125PZ2R5	U-125PZ2R8	U-140PZ2R5	U-140PZ2R8
Cooling capacity : Heating capacity	kW		6.0 (2.0 - 7.1) 6.0 (1.8 - 7.6)	7.1 (2.0 - 8.0) 7.1 (1.8 - 8.6)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)
		BTU/h	20,500 (6,800 - 24,200) 20,500 (6,100 - 25,900)	24,200 (6,800 - 27,300) 24,200 (6,100 - 29,300)	34,100 (10,200 - 39,200) 34,100 (10,200 - 47,800)	34,100 (10,200 - 39,200) 34,100 (10,200 - 47,800)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)
EER : COP	Cooling : Heating	W/W	3.80 : 4.51	3.41 : 4.15	3.66 : 4.31	3.66 : 4.31	3.52 : 4.02	3.52 : 4.02	3.18 : 3.79	3.18 : 3.79
Total power input	Cooling : Heating	kW	1.58 : 1.33	2.08 : 1.71	2.73 : 2.32	2.73 : 2.32	3.55 : 3.11	3.55 : 3.11	4.40 : 3.69	4.40 : 3.69
Indoor Unit										
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V	240V	240V	240V	240V	240V
Current	Cooling : Heating	A	0.87 : 0.87	0.87 : 0.87	1.27 : 1.29	1.27 : 1.29	1.39 : 1.38	1.39 : 1.38	1.47 : 1.46	1.47 : 1.46
Dimensions	H × W × D	mm	290×1,000 ×700	290×1,000 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700
Net weight		kg	33	33	45	45	45	45	45	45
Air volume	Cooling : Heating	L/s	350 : 350	350 : 350	533 : 533	533 : 533	566 : 566	566 : 566	600 : 600	600 : 600
External static pressure		Pa	70 (10 - 150)	70 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	35 / 32 / 26 : 35 / 32 / 26	35 / 32 / 26 : 35 / 32 / 26	38 / 34 / 31 : 38 / 34 / 31	38 / 34 / 31 : 38 / 34 / 31	39 / 35 / 32 : 39 / 35 / 32	39 / 35 / 32 : 39 / 35 / 32	40 / 36 / 33 : 40 / 36 / 33	40 / 36 / 33 : 40 / 36 / 33
Sound power level (H/M/L)	Cooling : Heating	dB(A)	58 / 55 / 49 : 58 / 55 / 49	57 / 54 / 48 : 57 / 54 / 48	60 / 56 / 53 : 60 / 56 / 53	60 / 56 / 53 : 60 / 56 / 53	61 / 57 / 54 : 61 / 57 / 54	61 / 57 / 54 : 61 / 57 / 54	62 / 58 / 55 : 62 / 58 / 55	62 / 58 / 55 : 62 / 58 / 55
Number of fan speeds			3	3	3	3	3	3	3	3
Drain piping		mm	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25
Outdoor Unit										
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
		V	240V	240V	240V	415V	415V	415V	415V	415V
Current	Cooling : Heating	A	6.75 : 5.60	8.95 : 7.35	11.1 : 9.30	3.80 : 3.20	14.8 : 12.9	4.95 : 4.30	18.6 : 15.3	6.15 : 5.15
Dimensions	H × W × D	mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	44	44	90	90	94	94	94	94
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169	1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386
Sound pressure level	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)	52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)
Sound power level	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)	68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)
Piping connections	Liquid / Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30
Maximum chargeless length		m	30	30	30	30	30	30	30	30
Refrigerant at shipping, Additional gas amount		g	R32, 1,450, 35 (g/m)	R32, 1,450, 35 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)
Operation ranges	Cooling : Heating	°C	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24

MID STATIC PRESSURE DUCTED

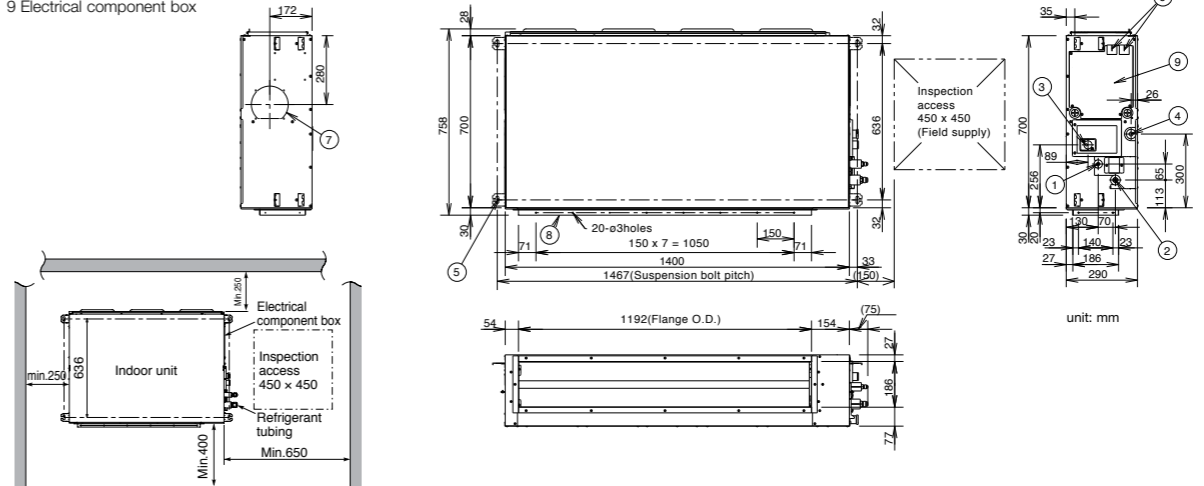
Dimensions (6.0kW – 7.1kW)

- 1 Refrigerant piping joint (liquid tube) Ø9.52 Flare
- 2 Refrigerant piping joint (gas tube) Ø15.88 Flare
- 3 Upper drain port VP25 (O.D. Ø32mm)
- Ø 200 flexible hose supplied
- 4 Bottom drain port VP25 (O.D. Ø32mm)
- 5 Suspension lug (4-12 x 30mm)
- 6 Power supply outlet
- 7 Fresh air intake port (Ø150mm)
- 8 Flange for flexible air outlet duct
- 9 Electrical component box



Dimensions (10.0kW – 14.0kW)

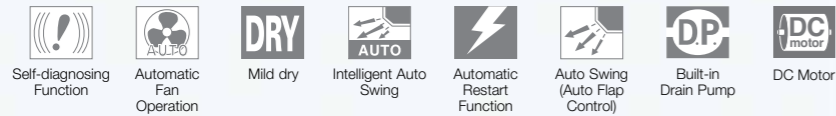
- 1 Refrigerant piping joint (liquid tube) Ø9.52 Flare
- 2 Refrigerant piping joint (gas tube) Ø15.88 Flare
- 3 Upper drain port VP25 (O.D. Ø32mm)
- Ø 200 flexible hose supplied
- 4 Bottom drain port VP25 (O.D. Ø32mm)
- 5 Suspension lug (4-12 x 30mm)
- 6 Power supply outlet
- 7 Fresh air intake port (Ø150mm)
- 8 Flange for flexible air outlet duct
- 9 Electrical component box



Indoor Unit

4-WAY Cassette

Featuring uniform cooling, easy installation, and with a sleek exterior, this unit is the perfect match for your modern home.

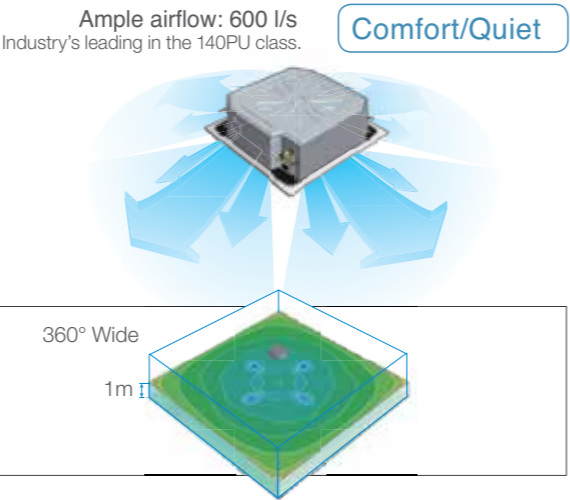


Technical focus

- Compact design
- Low sound levels
- DC fan motor for increased efficiency
- Powerful drain pump gives 850mm lift
- Lightweight design
- Fresh air knockout
- Branch duct connection
- Optional air-intake plenum CZ-FDU3

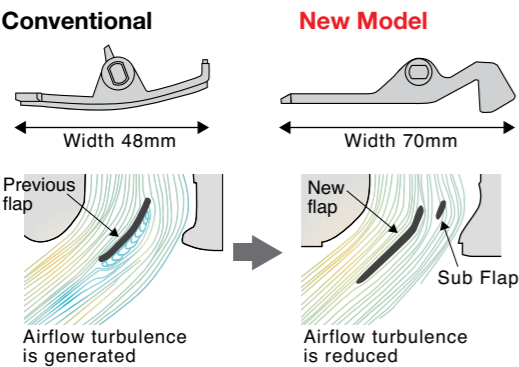
360° Wide & Comfortable Airflow

Our design features wide-angle outlets and flaps that were designed through expert mechanics and prototype tests. Air from the centre is sent farther and the air blown out of the larger, side flaps, spreads throughout the room. The air comes from all for sides of the unit and expands gently in a circle centred on the indoor unit.



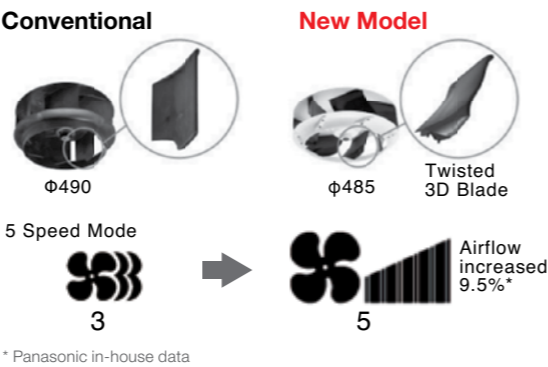
Wide Flap

Adding a sub flap and widening the main flap have reduced turbulence and increased airflow. Also, setting the jetting port at a wider angle allows the airflow to reach the corners of the room more quickly.



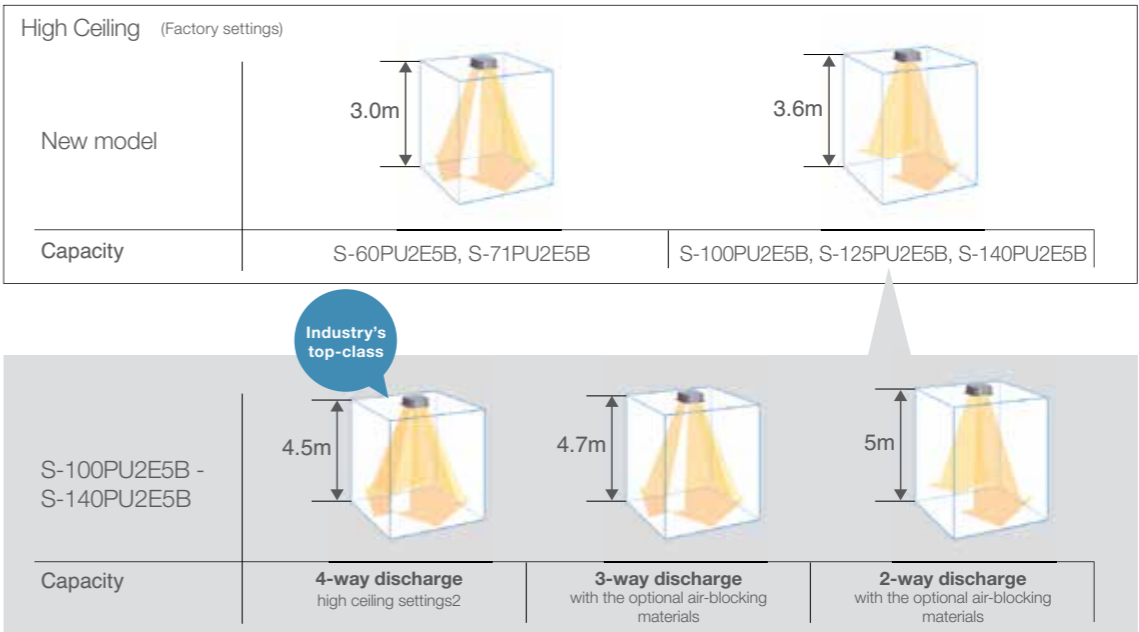
3D Turbo Fan

Using a twisted 3D blade made the unit slimmer and more compact, while also increasing the airflow. A 5-Speed mode allows the airflow to be adjusted in 5 steps to suit the situation.



High-Ceiling Installation (Up to 5m for 10.0kW+ models)

The units can be installed in rooms with high ceilings, where they provide ample floor-level heating in the winter. (See ceiling height guidelines below.)



Ceiling height guidelines

Indoor unit	4-way discharge			3-way discharge (optional air-blocking materials)	2-way discharge (optional air-blocking materials) *2
	Factory settings 1	High ceiling setting 1	High ceiling setting 2		
60PU-71PU	3.0	3.3	3.6	3.8	4.2
100PU, 125PU, 140PU	3.6	3.9	4.5	4.7	5.0

*1 When using the unit in a configuration other than the factory settings, it is necessary to make settings on site to increase airflow.
*2 Use air-blocking materials (CZ-CFU3) to completely block two discharge outlets for 2-way airflow.

Air Purification by nanoe™ Technology



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 odours. It takes reliable air purification performance another step forward.

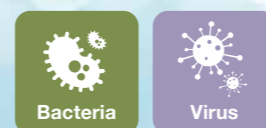


Deodorises unpleasant odours *1 *2 *3



nanoe™ X works on the substances responsible for odours to deodorise them.

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



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

*1 Adhering odour of cigarette [Effectiveness]: Decrease by 1.7 level [Testing Institute: Gunma Research Center [Test Report No]: No. 27055 [Result]: Decrease in odour intensity by 0.7 level after 2 hour of operation. *2 Floating odour of cigarette [Effectiveness]: Decrease by 0.8 level [Test Lab Size]: 136.5m3 [Testing Institute]: Panasonic Corporation Product Analysis Center [Test Report No]: 4AA33-170117-A01 [Result]: Decrease in odour intensity by 0.8 level after 2 hour of operation. *3 Adhering odour 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 odour 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

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

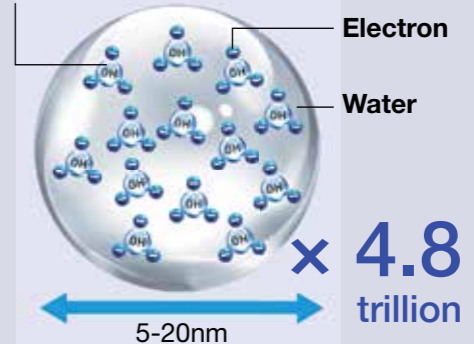
Generation Mechanism

nanoe™ X is generated from moisture in the air



Structure

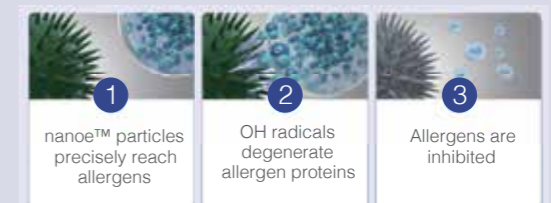
OH radical



How to Deodorise Odour *1 *2 *3



How to Inhibit Bacteria, Virus and Mould *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 odours 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.

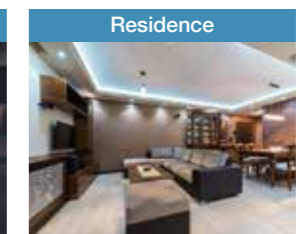
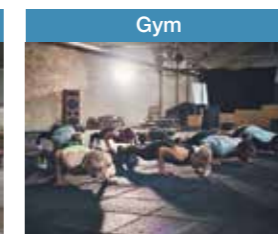
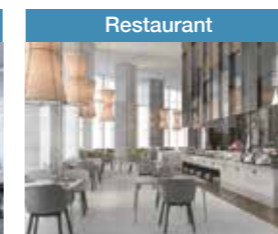
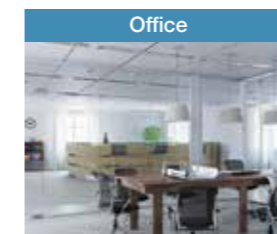
Closed Time



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™



Specifications of R32 Compact Model

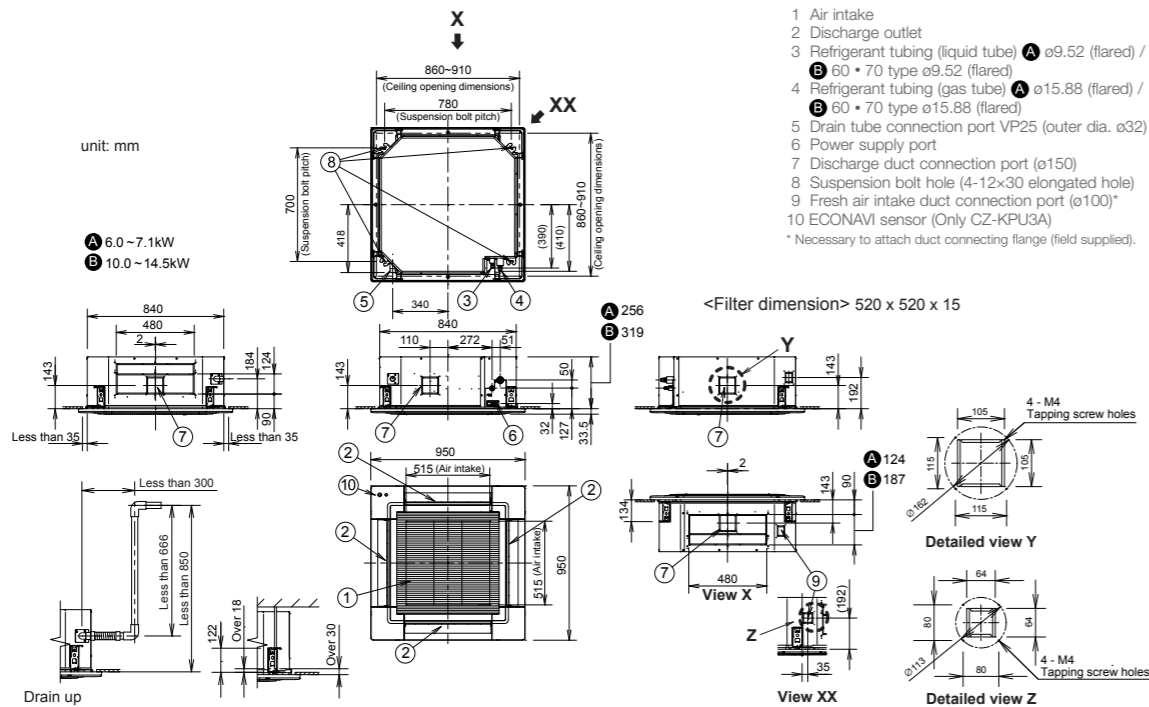


Capacity			6.0kW	7.1kW	10.0kW	12.5kW	14.0kW			
Model Name	Indoor Unit		S-60PU2E5B	S-71PU2E5B	S-100PU2E5B	S-100PU2E5B	S-125PU2E5B	S-125PU2E5B	S-140PU2E5B	S-140PU2E5B
	Outdoor Unit		U-60PZ2R5	U-71PZ2R5	U-100PZ2R5	U-100PZ2R8	U-125PZ2R5	U-125PZ2R8	U-140PZ2R5	U-140PZ2R8
	Panel		Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A
Cooling capacity Heating capacity		kW	6.0 (2.0 - 7.1) 6.0 (1.8 - 7.6)	7.1 (2.0 - 8.0) 7.1 (1.8 - 8.6)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)	10.0 (3.0-11.5) 10.0 (3.0-14.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	12.5 (3.2 - 13.5) 12.5 (3.3 - 15.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)	14.0 (3.3 - 15.0) 14.0 (3.4 - 16.0)
		BTU/h	20,500 (6,800 - 24,200) 20,500 (6,100 - 25,900)	24,200 (6,800 - 27,300) 24,200 (6,100 - 29,300)	34,100 (10,200 - 39,200) 34,100 (10,200 - 47,800)	34,100 (10,200-39,200) 34,100 (10,200 - 47,800)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	42,700 (10,900 - 46,100) 42,700 (11,300 - 51,200)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)	47,800 (11,300 - 51,200) 47,800 (11,600 - 54,600)
EER : COP	Cooling : Heating	W/W	4.05 : 4.80	3.68 : 4.38	3.82 : 4.93	3.82 : 4.93	3.58 : 4.43	3.58 : 4.43	3.23 : 4.18	3.23 : 4.18
Total power input	Cooling : Heating	kW	1.48 : 1.25	1.93 : 1.62	2.62 : 2.03	2.62 : 2.03	3.49 : 2.82	3.49 : 2.82	4.34 : 3.35	4.34 : 3.35
Indoor Unit										
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V	240V	240V	240V	240V	240V
Current	Cooling : Heating	A	0.34 : 0.33	0.38 : 0.37	0.76 : 0.75	0.76 : 0.75	0.85 : 0.84	0.85 : 0.84	0.91 : 0.90	0.91 : 0.90
Dimensions H × W × D	Indoor	mm	256×840 ×840	256×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840
	Panel	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	33.5 x 950 x 950
Net weight	Indoor	kg	20	20	25	25	25	25	25	25
	Panel	kg	5	5	5	5	5	5	5	5
Air volume	Cooling : Heating	L/s	350 : 350	366 : 366	600 : 600	600 : 600	616 : 616	616 : 616	633 : 633	633 : 633
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	36 / 31 / 28 : 36 / 31 / 28	37 / 31 / 28 : 37 / 31 / 28	45 / 38 / 32 : 45 / 38 / 32	45 / 38 / 32 : 45 / 38 / 32	46 / 39 / 33 : 45 / 39 / 33	46 / 39 / 33 : 45 / 39 / 33	47 / 40 / 34 : 47 / 40 / 34	47 / 40 / 34 : 47 / 40 / 34
Sound power level (H/M/L)	Cooling : Heating	dB(A)	51 / 46 / 43 : 51 / 46 / 43	52 / 46 / 43 : 52 / 46 / 43	60 / 53 / 47 : 60 / 53 / 47	60 / 53 / 47 : 60 / 53 / 47	61 / 54 / 48 : 61 / 54 / 48	61 / 54 / 48 : 61 / 54 / 48	62 / 55 / 49 : 62 / 55 / 49	62 / 55 / 49 : 62 / 55 / 49
Number of fan speeds			5*	5*	5*	5*	5*	5*	5*	5*
Drain pipe size		mm	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25	VP-25
Outdoor Unit										
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
		V	240V	240V	240V	415V	240V	415V	240V	415V
Current	Cooling : Heating	A	6.70 : 5.60	8.65 : 7.30	11.1 : 8.50	3.75 : 2.90	15.0 : 12.0	5.00 : 4.00	18.7 : 14.3	6.25 : 4.80
Dimensions H × W × D		mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	44	44	90	90	94	94	94	94
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169	1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)	52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)	68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)
Piping connections	Liquid / Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30	15, 30
Maximum chargeless length		m	30	30	30	30	30	30	30	30
Refrigerant at shipping, Additional gas amount		g	R32, 1,450, 35 (g/m)	R32, 1,450, 35 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,600, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)	R32, 2,980, 45 (g/m)
Operation ranges	Cooling : Heating	℃	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24

* When using CZ-RTC5B, the number of fan speed will be 3 for other controller.

4-WAY CASSETTE

Dimensions (6.0kW – 14.0kW)



* 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.



Indoor Unit Under Ceiling

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



Compact Looking, Stylish, One-Motion Design

With its streamlined, one-motion form, the unit looks thin and compact when installed for a neat appearance in any room.
When not operating, the louver closes to provide an elegant look while also keeping the unit clean.



Energy-Saving Technology Delivering Top-Class Efficiency

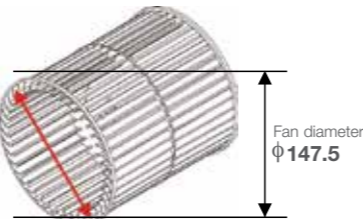
Optimisation of the shape of the casing and fan assures bigger air flow and higher efficiency.
Energy-saving performance is top class in the industry.

Top Class Energy Saving

New DC fan motor



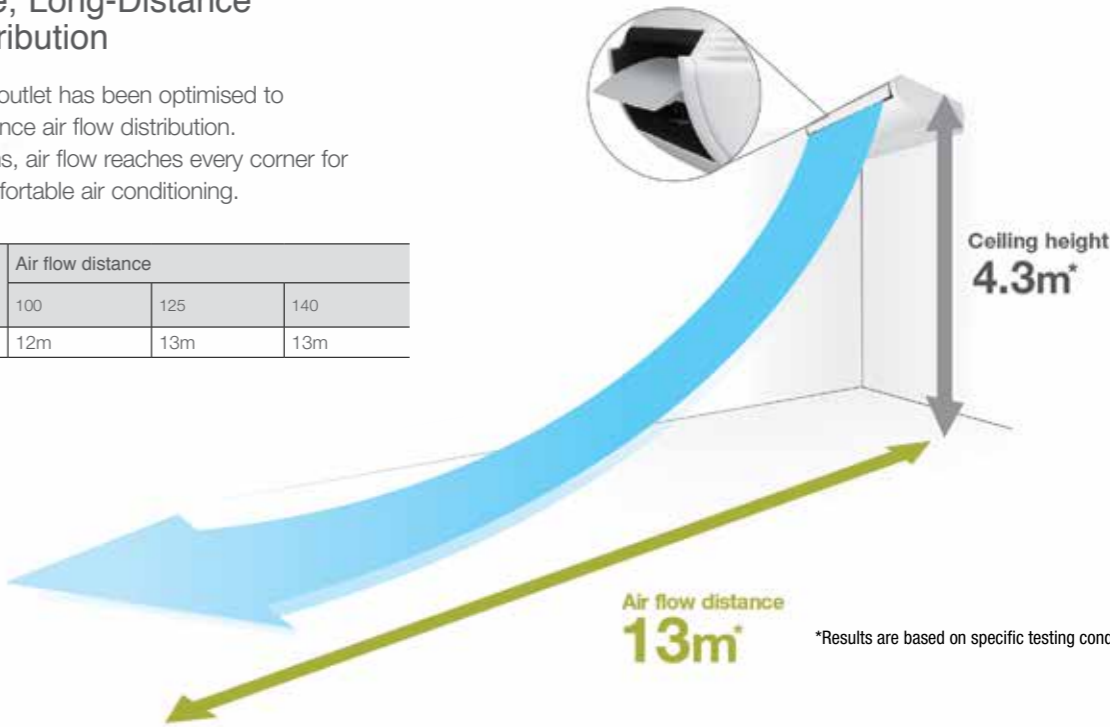
Large Diagonal Air Flow Fan



Comfortable, Long-Distance Airflow Distribution

The shape of the outlet has been optimised to provide long-distance air flow distribution.
Even in long rooms, air flow reaches every corner for exceptionally comfortable air conditioning.

High Ceiling Setting <small>*Setting by remote control</small>	Air flow distance		
	100	125	140
4.3m	12m	13m	13m



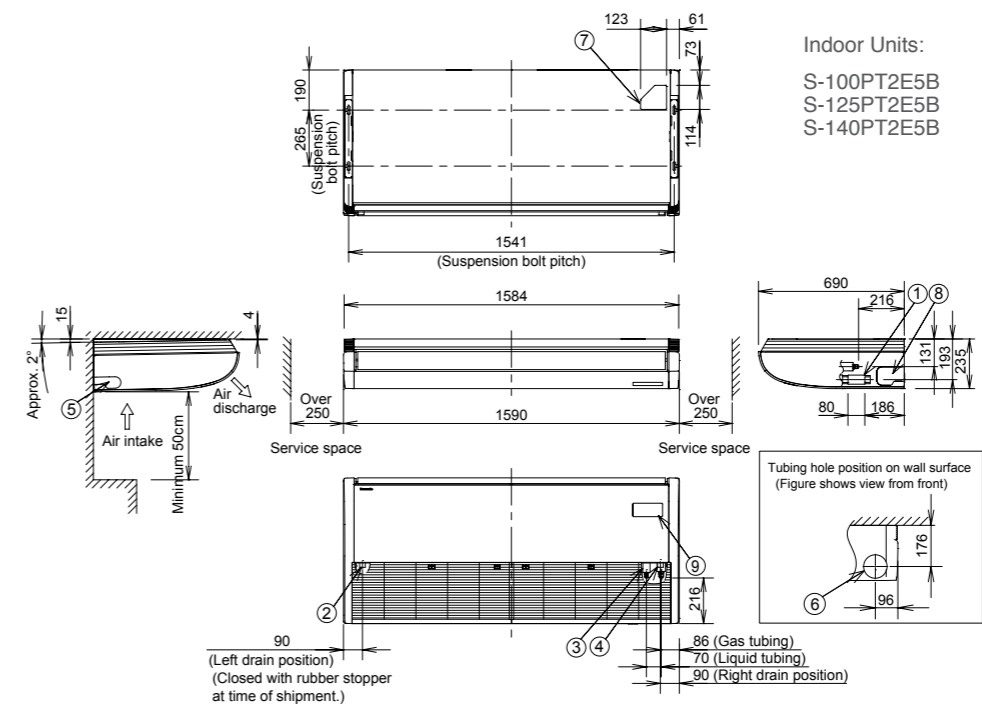
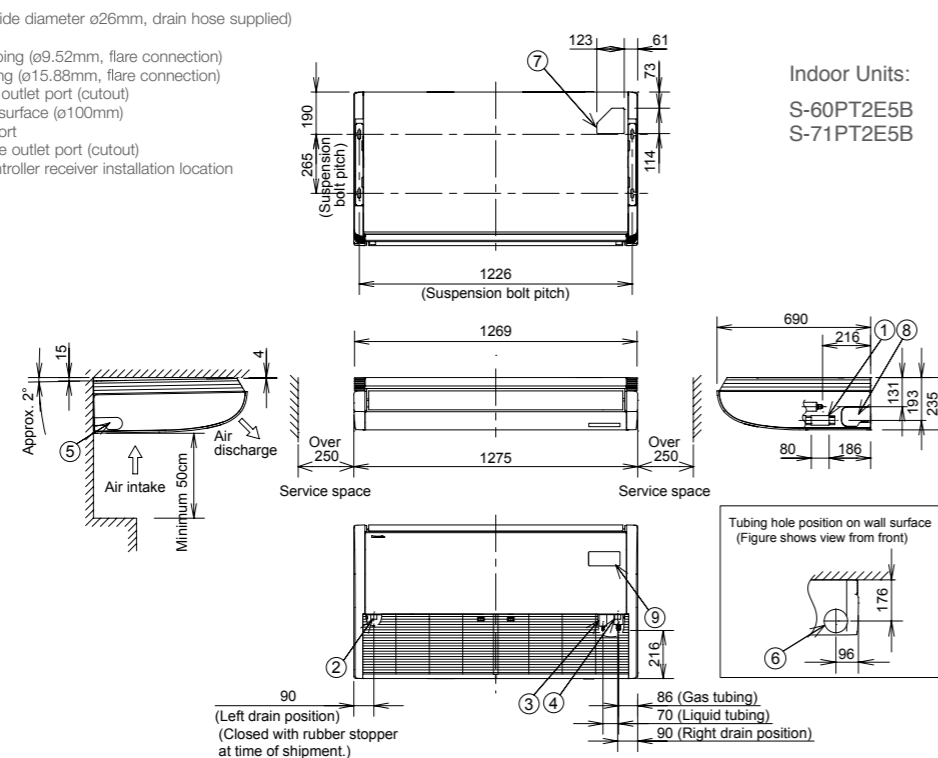
*Results are based on specific testing conditions



R32
REFRIGERANT

CEILING

- 1 Drain port VP20 (inside diameter ø26mm, drain hose supplied)
- 2 Left drain position
- 3 Refrigerant liquid tubing (ø9.52mm, flare connection)
- 4 Refrigerant gas tubing (ø15.88mm, flare connection)
- 5 Left side drain hose outlet port (cutout)
- 6 Tubing hole on wall surface (ø100mm)
- 7 Upper side tubing port
- 8 Right side drain hose outlet port (cutout)
- 9 Wireless remote controller receiver installation location



Wall Mounted

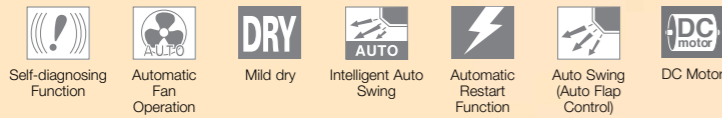
Providing small, lightweight and low noise level design, it is ideal for small offices and other commercial applications. It also has a stylish smooth design with a washable front panel.



S-100PK2E5B



CZ-CENSC1 CZ-RTC5B CZ-RTC4



Technical focus

- Closed discharge port when not in use
 - Lighter and smaller units make installation easy
 - Quiet operation
 - Smooth and durable design
- Piping outlet in six directions
 - Washable front panel
 - Air distribution is automatically altered depending on the operational mode of the unit

Closed discharge port

When the unit is turned off, the flap closes completely to prevent entry of dust into the unit and to keep the equipment clean.

Piping outlet in six directions

Piping outlet is possible in the six directions of right, right rear, right bottom, left, left rear, left bottom, making installation easier.

Air distribution is automatically adjusted depending on the operational mode of the unit

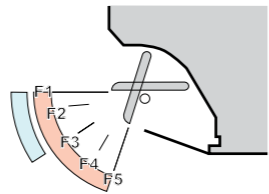
Air outlet angle is automatically adjusted for cooling and heating operation.

Quiet operation

Low operating noise level makes these units ideal for hotels and hospital applications.

Washable front panel

The indoor unit's front panel can be easily cleaned for trouble-free maintenance.



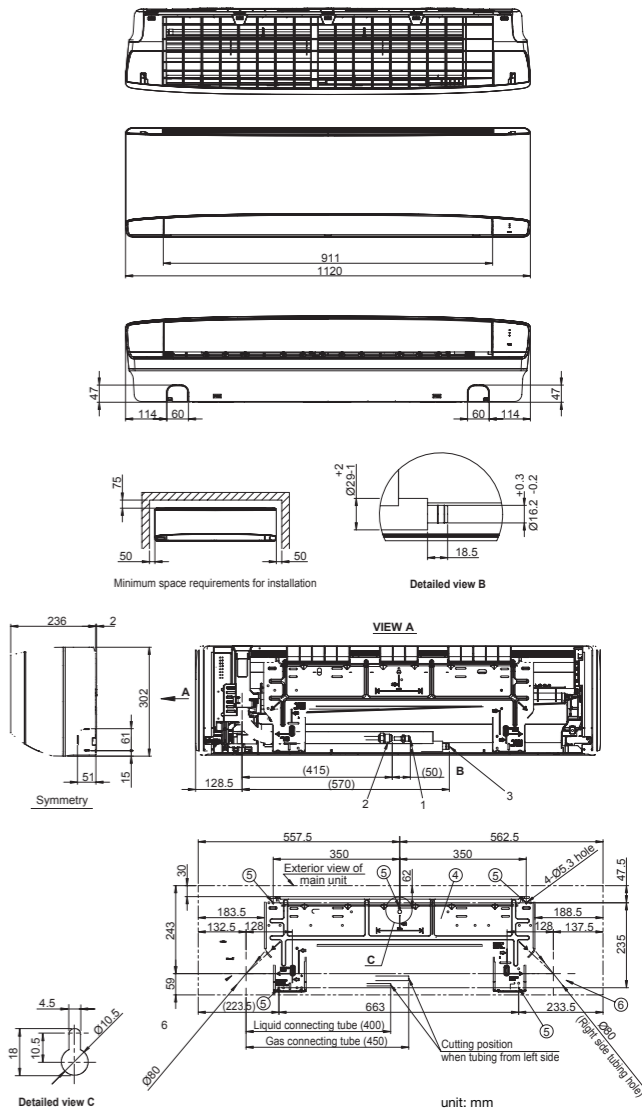
Heating: F1 to F5
Cooling: F1 to F3

Specifications of R32 Compact Model **R32**

Capacity		9.0kW	
Model Name	Indoor Unit	S-100PK2E5B	S-100PK2E5B
	Outdoor Unit	U-100PZ2R5	U-100PZ2R8
Cooling capacity :	kW	9.0 (3.0 - 9.7)	9.0 (3.0 - 9.7)
Heating capacity		9.0 (3.0 - 10.5)	9.0 (3.0 - 10.5)
	BTU/h	30,700 (10,200 - 33,100)	30,700 (10,200 - 33,100)
		30,700 (10,200 - 35,800)	30,700 (10,200 - 35,800)
EER : COP	Cooling : Heating	W/W	3.47 : 3.93
Total power input	Cooling : Heating	kW	2.59 : 2.29
Indoor Unit			
Power source	Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
	V	240V	240V
Current	Cooling : Heating	A	0.66 : 0.66
Dimensions	H x W x D	mm	302 x 1,120 x 236
Net weight		kg	14
Air volume	Cooling : Heating	L/s	367 : 367
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	49 / 45 / 41 : 49 / 45 / 41
Sound power level (H/M/L)	Cooling : Heating	dB(A)	65 / 61 / 57 : 65 / 61 / 57
Number of fan speeds			5
Drain pipe size		mm	VP-16
Outdoor Unit			
Power source	Phase/Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
	V	240V	415V
Current	Cooling : Heating	A	11.0 : 9.7
Dimensions	H x W x D	mm	996 x 980 x 370
Net weight		kg	90
Air volume	Cooling : Heating	L/s	1,285 : 1,169
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	52 (50) : 52 (50)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	68 (66) : 67 (65)
Piping connections	Liquid/Gas	m	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30
Maximum chargeless length		m	30
Refrigerant at shipping, Additional gas amount		g	R32, 2,600, 45 (g/m)
Operation ranges	Cooling : Heating	°C	-10 to 43 : -15 to 24

WALL MOUNTED

Dimensions (10.0kW)



unit: mm

Products for

Small Sized Project

Product line-up suitable for light to medium commercial and residential applications.



Ultra Slim Ducted

CS-E9SD3RW
CS-E12SD3RW
CS-E18SD3RW



CU-E9SD3R/CU-E9QD3R/CU-E9SB4R
CU-E12SD3R/CU-E12QD3R/CU-E12QB4R

Bulkhead Ducted

CS-E9QD3RW
CS-E12QD3RW
CS-E18QD3RW



CU-E18SD3R/CU-E18QD3R/CU-E18QB4R

4-Way Mini Cassette

CS-E9SB4RW
CS-E12QB4RW
CS-E18QB4RW



Panel
CZ-BT20E

CZ-RD52CP

Ultra Slim
Ducted



Technical focus

- Market-leading Energy Efficiency
- Only 200mm High
- Rear or Bottom Return Air
- Built-in Drain Pump (500mm lift*)
- -15°C to +46°C Operating Range

* Refer to Technical Documents for more details

Bulkhead
Ducted



Technical focus

- Market-leading Energy Efficiency
- Only 370mm Deep
- Easy Installation
- Built-in Drain Pump (200mm lift*)
- -15°C to +46°C Operating Range

* Refer to Technical Documents for more details

4-Way
Mini Cassette



Technical focus

- Market-leading Energy Efficiency
- Compact Design (260mm High)
- Easy Installation
- Built-in Drain Pump (600mm lift*)
- -15°C to +46°C Operating Range

* Refer to Technical Documents for more details

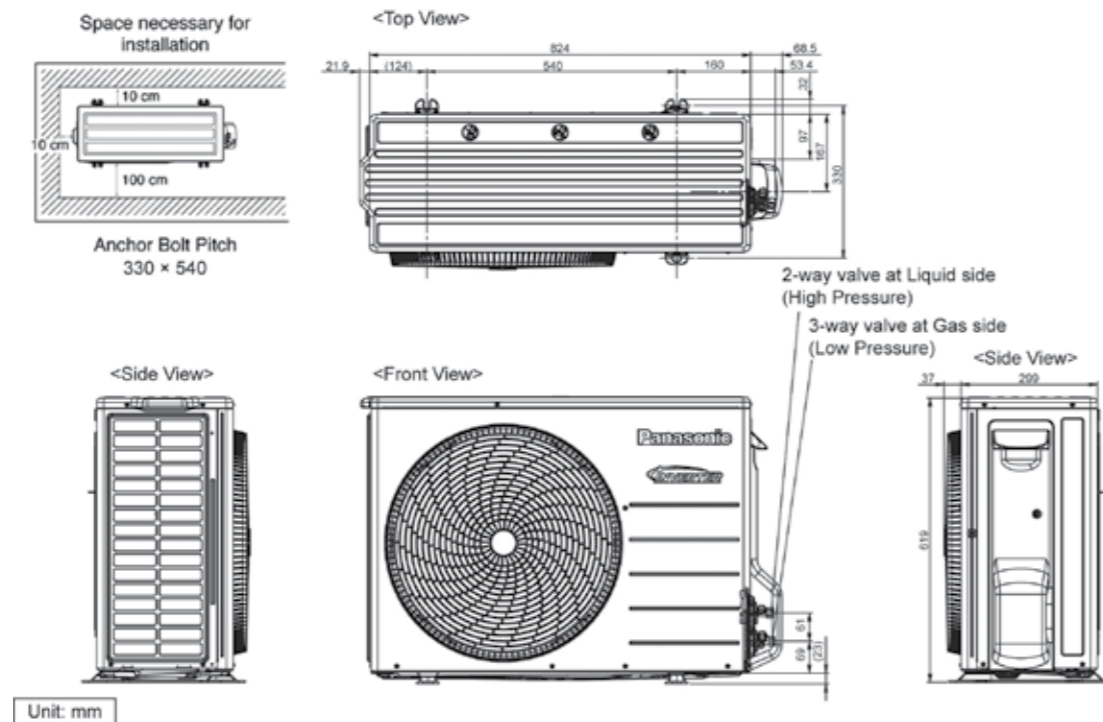
Specifications

			Ultra Slim Ducted			Bulkhead Ducted			Mini Cassette		
Capacity			2.60KW	3.70KW	5.00KW	2.50KW	3.40KW	5.00KW	2.50KW	3.40KW	4.80KW
Model Name	Indoor Unit		CS-E9SD3RW	CS-E12SD3RW	CS-E18SD3RW	CS-E9QD3RW	CS-E12QD3RW	CS-E18QD3RW	CS-E9SB4RW	CS-E12QB4RW	CS-E18QB4RW
	Outdoor Unit		CU-E9SD3R	CU-E12SD3R	CU-E18SD3R	CU-E9QD3R	CU-E12QD3R	CU-E18QD3R	CU-E9SB4R	CU-E12QB4R	CU-E18QB4R
Cooling capacity :	kW		2.6 (0.85 - 3.20)	3.7 (0.85 - 4.00)	5.0 (0.90 - 5.70)	2.5 (0.85 - 3.10)	3.4 (0.85 - 4.00)	5.0 (0.85 - 5.70)	2.5 (0.85 - 3.20)	3.4 (0.85 - 4.00)	4.8 (0.90 - 5.70)
			3.30 (0.85 - 4.50)	4.20 (0.85 - 5.10)	6.1 (0.90 - 7.10)	3.20 (0.85 - 4.40)	4.00 (0.85 - 5.10)	6.1 (0.90 - 7.10)	3.20 (0.85 - 4.70)	4.00 (0.85 - 5.40)	5.00 (0.90 - 7.10)
Heating capacity	BTU/h		8,870 (2,900 - 10,900)	12,600 (2,900 - 13,600)	17,100 (3,070 - 19,400)	8,530 (2,900 - 10,600)	11,600 (2,900 - 13,600)	17,100 (3,070 - 19,400)	8,530 (2,900 - 10,900)	11,600 (2,900 - 13,600)	16,400(3,070 - 19,400)
			11,300 (2,900 -15,300)	14,300 (2,900 -17,400)	20,800 (3,070 -24,200)	10,900 (2,900 - 15,000)	13,600 (2,900 - 17,400)	20,800 (3,070 - 24,200)	10,900 (2,900 - 16,000)	13,600 (2,900 - 18,400)	17,100 (3,070 - 20,400)
EER : COP	Cooling : Heating	W/W	4.19 : 3.93	3.59 : 3.82	3.33 : 3.59	3.85 : 3.64	3.58 : 3.39	3.25 : 3.30	4.55 : 4.10	3.86 : 3.81	3.31 : 3.31
Total power input	Cooling : Heating	kW	0.62 (0.23 - 0.97) : 0.84 (0.22 - 1.36)	1.03 (0.23 - 1.15) : 1.10 (0.22 - 1.50)	1.50 (0.29 - 1.8) : 1.70 (0.33 - 2.05)	0.65 (0.23 - 0.88) : 0.88 (0.22 - 1.36)	0.95 (0.23 - 1.18) : 1.18 (0.22 - 1.6)	1.54 (0.29 - 1.84) : 1.85 (0.33 - 2.20)	0.55 (0.22 - 0.9) : 0.78 (0.21 - 1.36)	0.88 (0.22 - 1.18) : 1.05 (0.21 - 1.68)	1.45 0.29 - 1.93) : 1.51 (0.33 - 2.45)
Indoor Unit											
Power source	Phase/Hz		1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V	240V	240V	240V	240V	240V	240V
Current	Cooling : Heating	A	2.8 : 3.8	4.4 : 4.7	6.5 : 7.4	3.0 : 3.9	4.1 : 5.1	6.6 : 7.9	2.5 : 3.5	3.9 : 4.6	6.2 : 6.5
Dimensions	H x W x D	mm	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640	235 x 750 x 370	235 x 750 x 370	285 x 750 x 370	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575
Net weight		kg	19	19	19	17	17	18	18	18	18
Air volume	Cooling : Heating	L/s	231 : 231	241 : 241	293 : 293	250 : 259	256 : 263	286 : 294	175 : 182	175 : 195	195 : 208
External static pressure		Pa	0 - 78	0 - 84	0 - 114	0 - 124	0 - 140	0 - 147	-	-	-
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	32 / 27 / 24 : 34 / 28 / 25	33 / 27 / 24 : 35 / 28 / 25	41 / 30 / 27 : 41 / 32 / 29	32 / 27 / 24 : 34 / 28 / 25	33 / 27 / 24 : 35 / 28 / 25	42 / 30 / 27 : 42 / 32 / 29	34 / 26 / 23 : 35 / 28 / 25	35 / 26 / 23 : 37 / 28 / 25	38 / 28 / 25 : 39 / 29 / 26
Sound power level (H/M/L)	Cooling : Heating	dB(A)	48 / 43 / 40 : 50 / 44 / 41	49 / 43 / 40 : 51 / 44 / 41	57 / 46 / 43 : 57 / 48 / 45	48 / 43 / 40 : 50 / 44 / 41	49 / 43 / 40 : 51 / 44 / 41	48 / 46 / 43 : 48 / 48 / 45	50 / 42 / 39 : 51 / 44 / 41	51 / 42 / 39 : 53 / 44 / 41	54 / 44 / 41 : 55 / 45 / 42
Outdoor Unit											
Power source	Phase/Hz		1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V	240V	240V	240V	240V	240V	240V
Dimensions	H x W x D	mm	619 x 824 x299	619 x 824 x299	795 x 875 x 320	619 x 824 x299	619 x 824 x299	795 x 875 x 320	619 x 824 x 299	619 x 824 x 299	795 x 875 x 320
Net weight		kg	33	33	52	33	33	52	33	33	52
Piping connections	Liquid / Gas	m	Ø6.35 (1/4) / Ø9.52 (3/8)	Ø6.35 (1/4) / Ø12.70 (1/2)	Ø6.35 (1/4) / Ø12.70 (1/2)	Ø6.35 (1/4) / Ø9.52 (3/8)	Ø6.35 (1/4) / Ø12.70 (1/2)	Ø6.35 (1/4) / Ø12.70 (1/2)	Ø6.35 (1/4) / Ø9.52 (3/8)	Ø6.35 (1/4) / Ø12.70 (1/2)	Ø6.35 (1/4) / Ø12.70 (1/2)
Pipe length	min. - max.	m	3-15	3-15	3-30	3 - 15	3 - 15	3 - 30	3-15	3-15	3-30
Elevation difference (OU located lower, OU located higher)		m	15	15	20	15	15	20	15	15	20
Operation ranges	Cooling : Heating	°C	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24

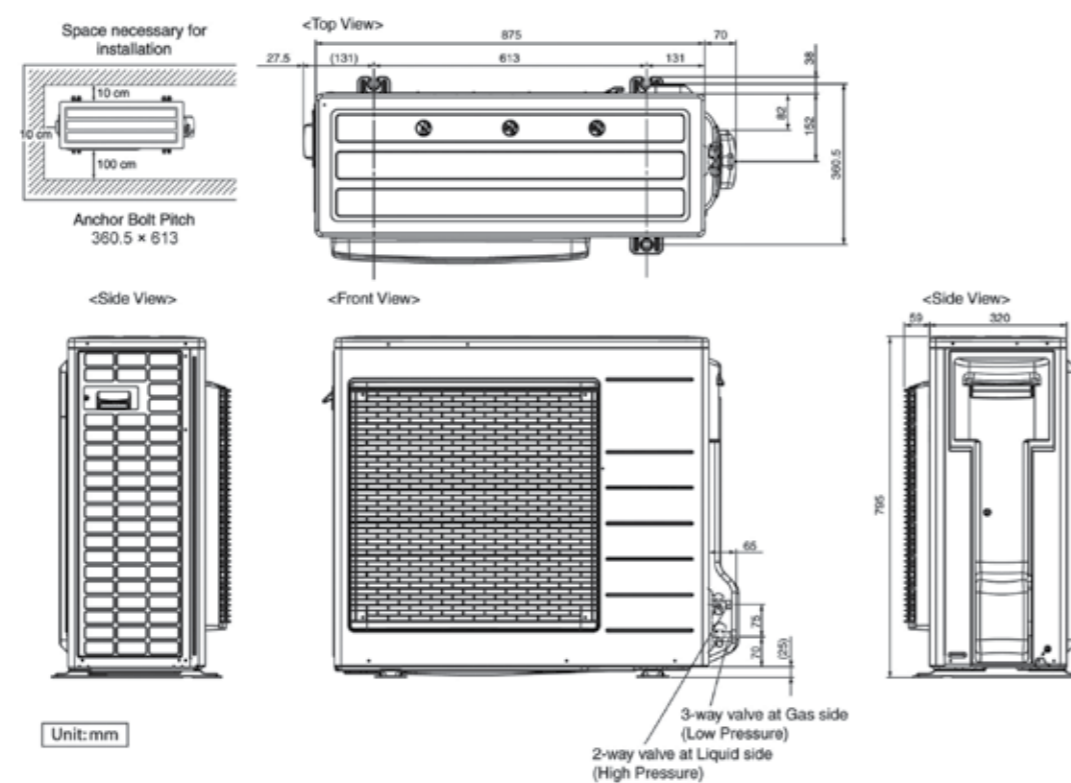
* These products are not supported by PAC/VRF Smart Connectivity and Panasonic AC Smart Cloud.

OUTDOOR UNIT

Dimensions (2.5kW – 3.7kW)

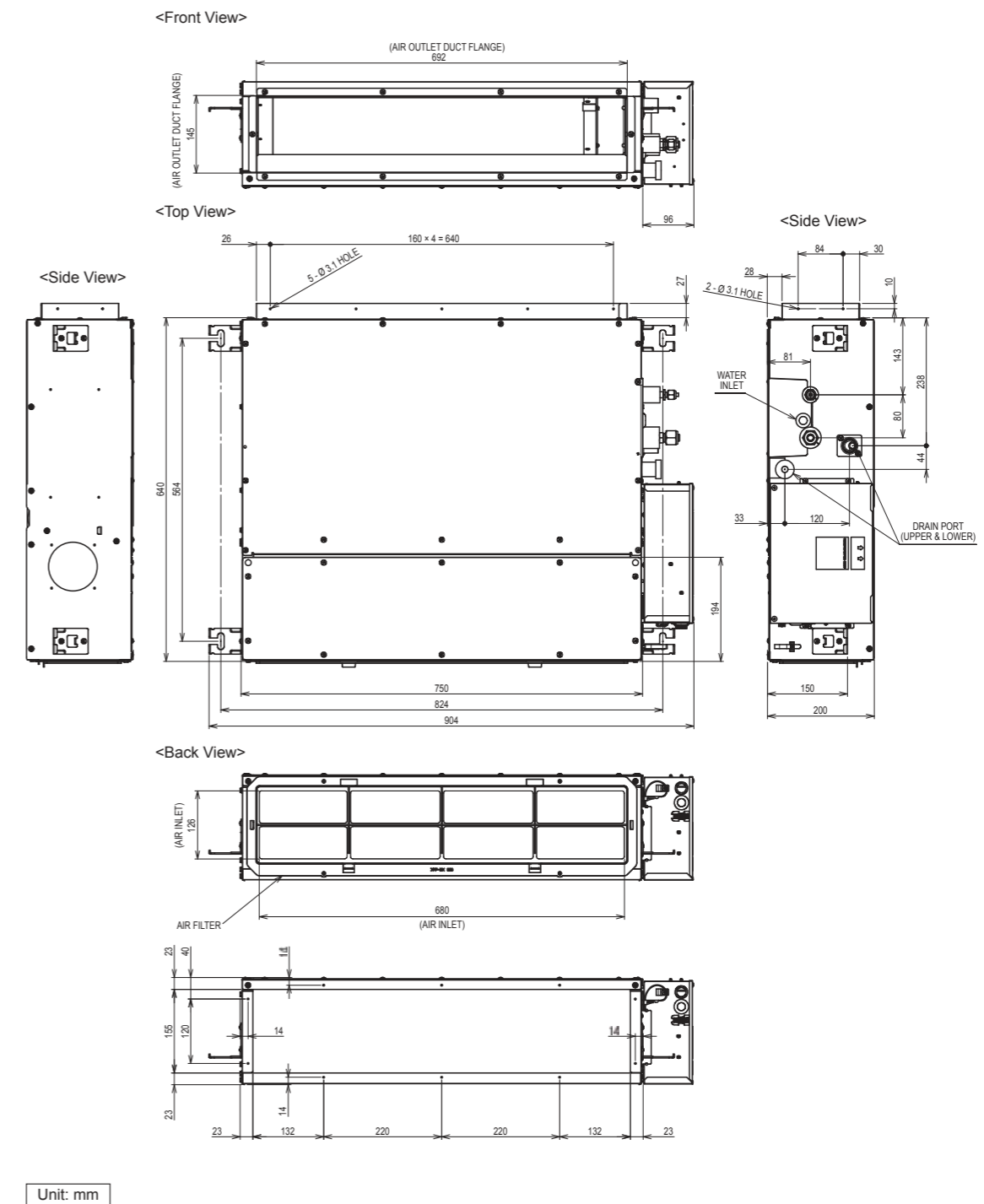


Dimensions (4.8kW – 5.0kW)



ULTRA SLIM DUCTED

Dimensions (2.5kW – 5.0kW)



Smart Control Management Solutions

Panasonic has developed the latest range of smart control management solutions offering streamlined approaches for each unique need. From individual remote control for residential split systems, up to the newest cloud based technology, allowing you to control each of your buildings around the world, all from your portable device.

PAC/VRF Smart Connectivity

Through thorough energy management, Panasonic's PAC/VRF Smart Connectivity is a completely new, state-of-the-art solution providing energy saving and comfort as well as simple installation, operating and running.



Centralised Control System

This integrated control system is ideal for large-scale spaces, and achieves more efficient operation.

Individual Controllers

A remote control solution to optimise the temperature in each room.

Panasonic AC Smart Cloud

With a simple click, all your units from several locations, receive status updates in real-time reducing the chance of breakdowns and optimising costs.



PAC/VRF Smart Connectivity

Through thorough energy management, Panasonic's PAC/VRF Smart Connectivity is a completely new, state-of-the-art solution providing energy saving and comfort as well as simple installation, operation and running.



PAC/VRF Smart Connectivity

PAC/VRF Smart Connectivity offers efficient energy management and a new air conditioning control solution with high IAQ.

Energy Management System for Rooms	Each room is monitored by high-precision sensors, making it possible to make every room's temperature comfortable without wasting energy.
Management System for the Entire Building	A Building Energy Management System (BEMS) can also be connected for Plug & Play centralised control of the building's entire energy consumption.

Advantages

- Dramatic Reduction of OpEx with Outstanding IAQ.**

 - 3 Built-in sensors: Temperature, RH and Light (PIR Optional)
 - ZigBee wireless sensors: CO₂, window/door, human presence.
- Ultimate Customisation.**

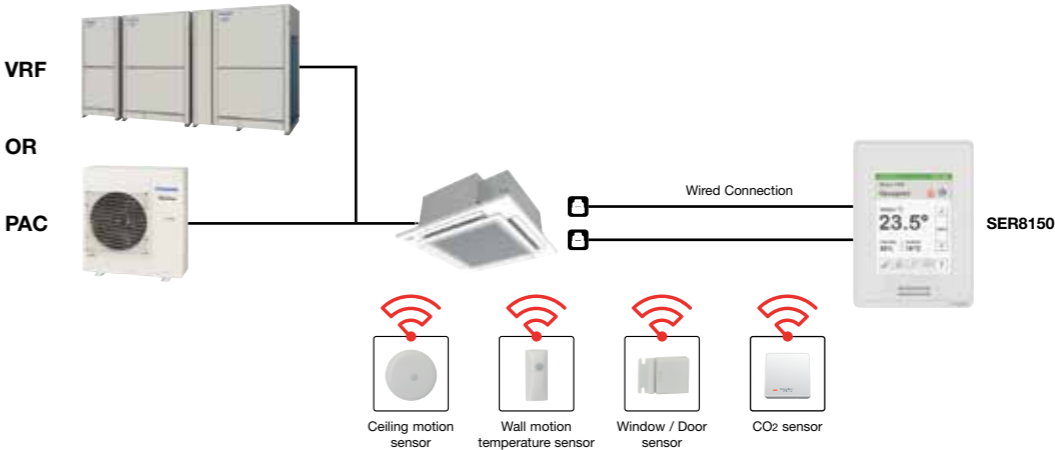
 - Background colour customisable
 - Custom display/icons, messages
 - Programmable logic (also stand alone)
- User-/Owner-friendly.**

 - Colour touch screen
 - Ease and simply of use
 - 20 Languages
 - Easy-to-understand error description
- Easy Design and Plug and Play to Reduce CapEx.**

 - Simple Plug & Play PAC/VRF connection to Building Energy Management System (BEMS)
 - Stand alone or BEMS connected
 - Easy Installation of Zigbee Sensors

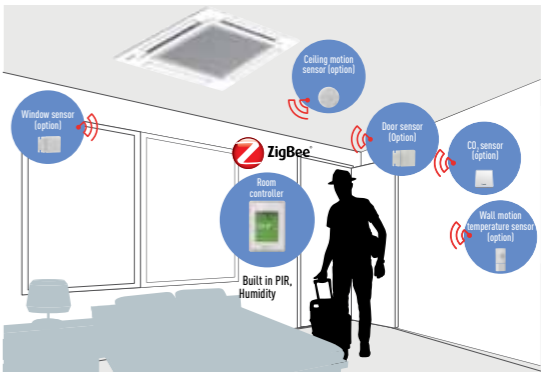
Energy Management System for Rooms

By installing a ceiling motion sensor, wall motion temperature sensor, window/door sensor, and CO₂ sensor in the room, ideal, waste-free air conditioning is achieved.

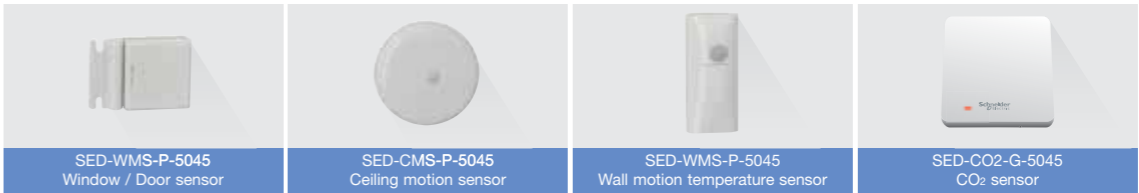


Sensing Technology

Using sensors from Schneider Electric, high-quality occupancy control and automatic IAQ control were realised. The sensors detect the presence or absence of occupants, and the opening and closing of doors and windows to achieve the most efficient energy management for exceptional air-conditioned comfort. Flexible installation is possible to match different applications and building features such as walls, ceilings and proximity to doors and windows. No wiring means extra installation versatility.



Batteries last for up to five years and are easy to install and replace.



* Specifications are subject to change.

Built-in PIR Sensor Control

Built-in occupancy sensors detect the presence or absence of people in each room for optimum control. This creates an environment of high productivity and efficiency.



Humidity Sensor Control

Humidity sensors enable automatic dehumidification for the optimum IAQ regardless of climatic conditions.



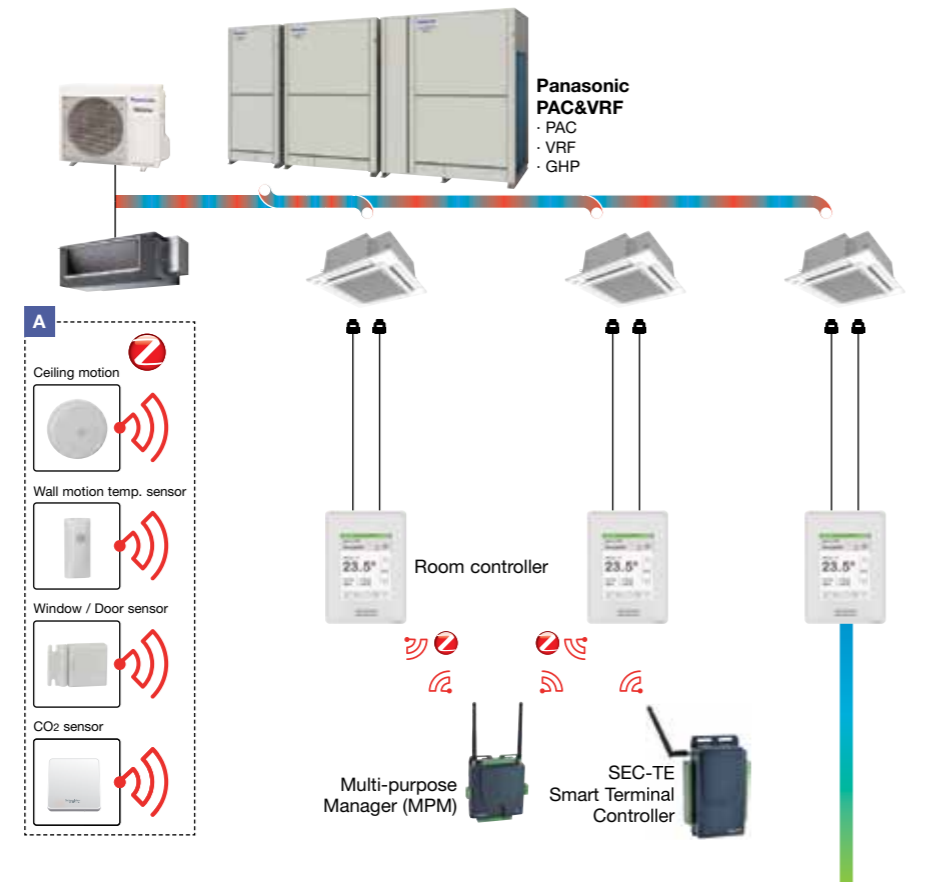
* Except for products for small sized project (Ultra Slim Ducted, Bulkhead Ducted, 4-Way Mini Cassette)

Management System for the Entire Building

The smarter solution to simplify energy management, optimise building efficiency and drive savings.

Plug and Play BEMS connection.

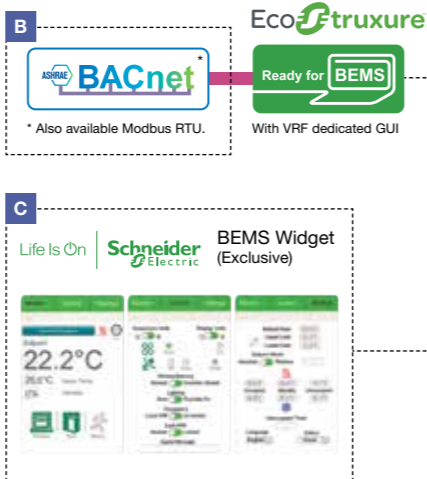
With the SER8150 connection to BEMS is extremely easy. Better still, a remote controller is all that's needed to enable use as a stand-alone system. In addition to dramatically reducing the burden on system integrators, this cuts costs.



A SER8150 smart controller with direct hub to ZigBee® Pro sensors. Great Occupancy and IAQ control. Ex: Hotel room occupancy check by PIR sensor, IAQ by CO2 sensor, Door / Window contacts.

B BACnet MS/TP or Modbus RTU direct connection can be assigned a device address by room scale.

C For Schneider Electric BEMS connection, Panasonic VRF widgets enable easy Plug and Play.



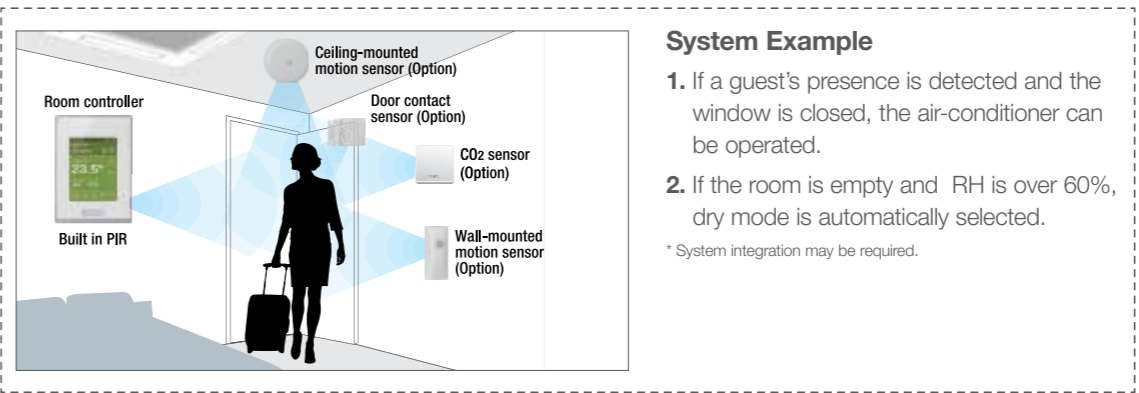
* Graphic shows combination of products from Panasonic, Schneider Electric and others. Currently, some products might not available in Australia, please consult authorised dealer for more details.

Smart Management Solutions

1 Hotels

Room Key Cardless Solution with Programmable Controller

The SER8150 and Zigbee Sensor automatic detection function offer optimal air conditioning regardless of whether there is a hotel room key or not. Sensors detect the presence or absence of occupants and the opening and closing of doors and windows for the optimum air-conditioned environment guests expect. Automatic control ensures the most efficient operation when guests are away or when windows are open. This contributes to an appreciable reduction in operation costs.



A truly comfortable experience for guests

Easy-to-understand, refined on-screen images enable display of hotel logos and original welcoming messages. Colour and design can also be customised for different facilities to create an even more comfortable environment for guests.



2 Small and Medium Offices



CO2 sensors (option) and Humidity sensors

CO2 sensors (option) take measurements in units of ppm, and humidity sensors enable fine air quality control. This creates the most comfortable space for occupants while contributing to improved employee satisfaction.

3 Super Markets



Humidity sensors

Humidity sensors enable automatic dehumidification for the optimum IAQ regardless of climatic conditions. This creates an even more comfortable environment for customers, employees, and products themselves.

* Except for products for small sized project (Ultra Slim Ducted, Bulkhead Ducted, 4-Way Mini Cassette)

Innovative and Unrivalled Advantages

Colour and Design to Match Office Interiors

Colour combinations and design can be set to match different facilities.



Easy-to-Understand Error Description

Error description during an emergency is easy to understand, enabling staff to respond quickly.



Customisation in 20 Languages Possible

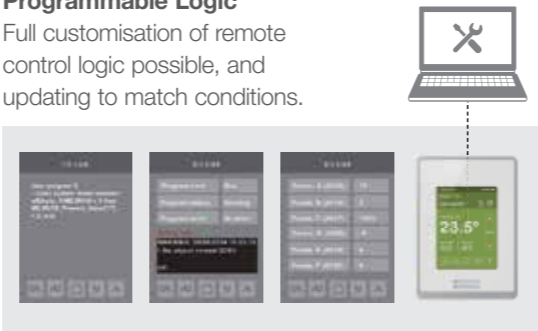
The display can be customised to match the native languages of guests to enable smooth, stress-free communication for hospitality at its finest.



*Currently 6. More languages scheduled for a late 2018 release.

Programmable Logic

Full customisation of remote control logic possible, and updating to match conditions.



Smart Connectivity Devices



Features

- Up to 5-year battery life, batteries included
- Battery level is a point
- Sensor points visible in SBO when SER8150 is integrated via BACnet MS/TP
- Sensor status and battery level visible in SBE when SER8150 is integrated via ZigBee® Pro
- Integration to SBE only recommended when each MPM is connected to Ethernet and set as a ZigBee® Coordinator node

Remote Controller	Description
SER8150R0B1194	Panasonic Net Con, RH, No PIR, R1/R2 (Wired)
SER8150R5B1194	Panasonic Net Con, RH, PIR, R1/R2 (Wired)
Interface	Description
VCM8000V5094P	Panasonic wireless Zigbee Pro Com.card
VCM8000R94BOX *	Panasonic R1/R2 (Wired) to Zigbee adaptor box No Brand
VCM8000V5094G *	Wireless Zigbee Pro / Green Com card

Sensor	Description
SED-WMS-P-5045	SED SEN OCC WALL ZP
SED-WDS-P-5045	SED SW DOR/WIN ZP
SED-CMS-P-5045	SED SEN OCC CEIL ZP
SED-CO2-G-5045 *	Wireless Zigbee Green CO2 sensor
Fascia	Description
FAS-00	Silver
FAS-01	White
FAS-03	Translucent White
FAS-05	Light Tan Wood
FAS-06	Brown Wood
FAS-07	Dark Brown Wood
FAS-10	Brushed Steel

1. VCM8000V5094P : Required in case wired solution connecting with Zigbee Sensors.
2. VCM8000V5094G : Required in case wired solution need to do MPM connection.
3. As for the products marked with*, the time of release will be announced later.
4. Specifications are subject to change.

PAC/VRF Smart Connectivity controller external dimensions

Room Controller SER8150 - Dimensions & Wiring & Specifications

Dimensions
Height: 12cm/4.72in
Width: 8.6cm/3.39in
Depth: 2.7cm/1.06in
Power Requirements
16 Vdc from Panasonic R-R IDU connectors
50/60 Hz, 4VA, Class 2 Supply
Range from Indoor Unit
Recommended 500ft (150 m)
Operating Conditions
0 °C to 50°C (32°F to 122°F)
0% to 95% R.H. non-condensing
Storage Conditions
-30°C to 50°C (-22°F to 122°F)
0% to 95% R.H. non-condensing
Temperature Sensor
Local 10 K NTC type 2 thermistor
Temperature Sensor Resolution
± 0.1°C (± 0.2°F)
Temperature Sensor Accuracy
± 0.5°C (± 0.9°F) @ 21°C (70°F) typical calibrated
Humidity Sensor and Calibration
Single point calibrated bulk polymer type sensor

Humidity Sensor Precision
Reading range from 10 to 90 % R.H. non-condensing
10 to 20% precision: 10%
20% to 80% precision: 5%
80% to 90% precision: 10%
Humidity Sensor Stability
Less than 1.0 % yearly (typical drift)
Wiring
Maximum wire length between last indoor unit to SER8150R0B1194 equals 490ft (150m) with AWG #18 wire (0.82 mm²).
Refer to Panasonic VRF guidelines "Wiring System Diagram for Remote Controller" for this limitation.
Approximate Shipping Weight
0.34 kg (0.75 lb)
Safety Standards All Models
Local 10 K NTC type 2 thermistor
EN 60950-1:2006/A2:2013
UL 873 CSA C22.2 No.24-93
EMC Standards All Models
EMC Directive 2004/108/EC
IEC 61326-1:2005
FCC 15 Subpart B
ICES-003

Radio Standards (Wireless Models)
R&TTE Directive 1999/5/EC
IEC 61326-1:2005
EN 301 489-1 V1.9.2
EN 301 328 V1.8.1
FCC 15 Subpart C, Class A
RSS 210
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

Check with your local government for instruction on disposal of these products.

Ceiling Motion Sensor SED-CMS-P-5045 - Dimensions & Wiring & Specifications

Dimensions
Colour
Weight

75mm diameter x 20mm thick (2.94in diameter x 0.75in thick)
White
50g (1.8oz) with batteries

Communication
Communication Range
Detection Range

ZigBee, HA1.2 Compatible
Up to 40ft (12m), open field 300ft (100m)
Maximum: 90 deg cone, 16.5ft (5m)
Recommended: 45 deg, 12ft (3.6m)

Battery Voltage
Battery Cell
Battery Life
Ambient Temperature

1.5VDC Alkaline
2 x AAA (recommended Panasonic LR03XWA)
Up to 5 years
-10 °C to +50 °C (+14 °F to +122 °F)

Certification
FC CE RoHS Pb
Check with your local government for instruction on disposal of these products.

Wall Motion Sensor SED-WMS-P-5045 - Dimensions & Wiring & Specifications

Dimensions
Color
Weight

65mm H x 29mm W x 25mm D (2.56in H x 1.14in W x 0.99in D)
White
30g (1.06oz) with battery

Communication
Communication Range
Detection Range

ZigBee, HA1.2 Compatible
Up to 40ft (12m) open field 300ft (100m)
Maximum: 90 deg cone, 16.5ft (5m)
Recommended: 47 deg, 16ft (5m)

Battery Voltage
Battery Cell
Battery Life
Ambient Temperature

3.0VDC Lithium
CR2 (recommended Panasonic CR15H270)
Up to 5 years
-10 °C to +50 °C (+14 °F to +122 °F)

Certification
FC CE RoHS Pb
Check with your local government for instruction on disposal of these products.

Door/Window Contact SED-WDS-P-5045 - Dimensions & Wiring & Specifications

Sensor Dimensions
Magnet Dimensions
Color
Weight

32mm wide x 30mm high x 11mm thick (1.26in wide x 1.16in high x 0.43in thick)
15mm wide x 32mm high x 6mm thick (0.59in wide x 1.26in high x 0.24in thick)
White
11g (0.38oz) with battery

Communication
Communication Range

ZigBee, HA1.2 Compatible
Up to 40ft (12m) open field 300ft (100m)

Battery Voltage
Battery Cell
Battery Life
Ambient Temperature

3.0VDC Lithium
CR2032 (recommended Panasonic CR2032)
Up to 5 years
-10 °C to +50 °C (+14 °F to +122 °F)

Certification
FC CE RoHS Pb
Check with your local government for instruction on disposal of these products.

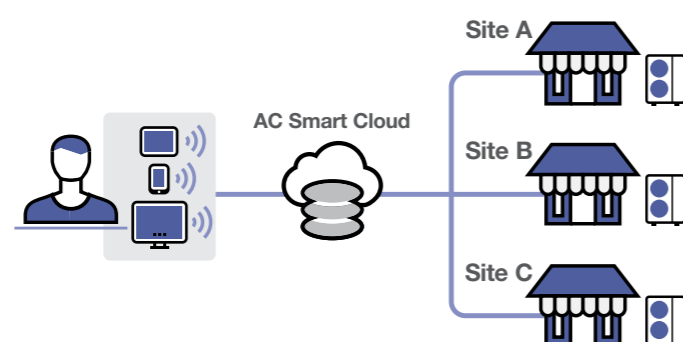
*Except for products for small sized project (Ultra Slim Ducted, Bulkhead Ducted, 4-way Mini Cassette)

Panasonic AC Smart Cloud

The new Panasonic AC Smart Cloud system allows you to have complete control of all your installations. With a simple click, all your units from several locations, receive status updates in real-time reducing the chance of breakdowns and optimising costs.

What is AC Smart Cloud?

Using a cloud computing system, AC Smart Cloud lets you monitor and manage the energy consumption of multiple locations from anywhere, anytime.



AC Smart Cloud is suitable for various facilities



Flexible and Scalable Solution

- Energy monitoring
- Anytime, Anywhere
- Site(s) management

Centralise control of your business premises, from wherever you are, 24/7/365. It doesn't matter how many sites you have, or where they are! The AC Smart Cloud system from Panasonic allows you to have complete control of all your installations, from your tablet or your computer. In a simple click, receive status updates in real-time of all your installations, preventing breakdowns and optimising costs.

Flexible solution for your business.



Scalable solution for your business.



* Customised to meet user demand / Upgraded new functions / Upgraded by new products / IT smart management.

Key Functions and Uniqueness

Multi site monitoring.

- It doesn't matter how many sites you have, easy to manage, operate, compare per sites, locations, rooms.



Powerful statistics for energy savings.

- Power consumption, capacity, efficiency level can be compared according to variable parameters (Yearly / monthly / weekly/ daily bases)



Schedule setting.

- Weekly / holiday timer setting as you want
- One setting can be copied to other sites



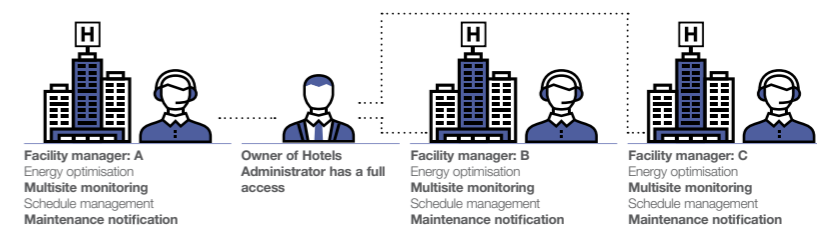
Maintenance notification.

- Error notification by email and with floor layout
- Maintenance notification of PAC / VRF outdoor units



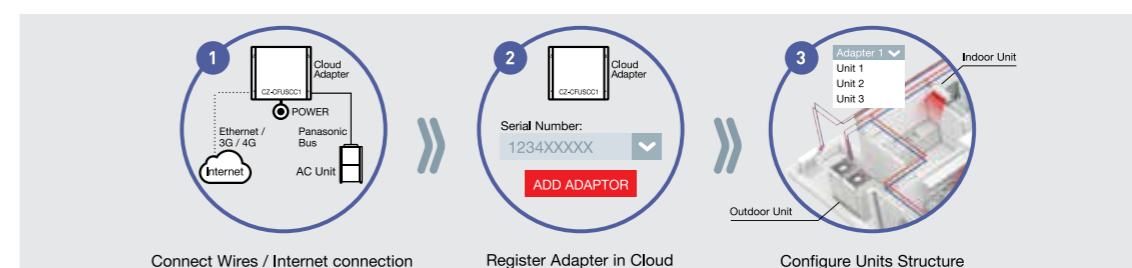
User customisation.

Site administrator can create users as desired and assign customised profiles.



3 Steps to Set Up AC Smart Cloud












Panasonic AC Smart Cloud is very easy to install on existing and new installations. The communication adaptor (CZ-CFUSCC1) is connected to the Panasonic bus and the Ethernet. Then in only 3 steps, the cloud system is running.



* Except for products for small sized project (Ultra Slim Ducted, Bulkhead Ducted, 4-Way Mini Cassette)

Controllers

A wide variety of control options to meet the requirements of different applications.

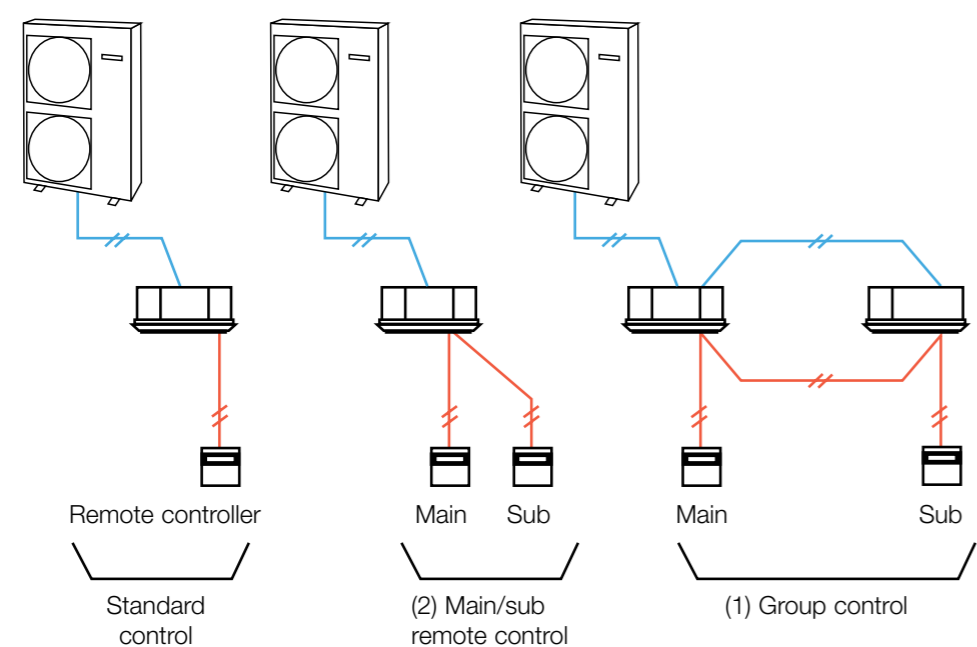
OPERATION SYSTEM	INDIVIDUAL CONTROL SYSTEMS				CENTRALISED CONTROL SYSTEMS				
Requirements	Advanced operation	Normal operation	Operation from anywhere in the room		Normal operation	Operation with various function from centre station	Only ON/OFF operation from centre station	Simplified load distribution ratio (LDR) for each tenant	Connection with 3rd Party Controller
External appearance									 CZ-CAPDC2
Type, model name	Deluxe Wired Remote Controller	Timer Remote Controller (Wired)	Wireless Remote Controller		Wired Remote Controller	System Controller	ON/OFF Controller	Intelligent Controller	Interface adaptor
	CZ-RTC5B	CZ-RTC4	CZ-RWSU3 CZ-RWST3N CZ-RWSK2 + CZ-RWSC3		CZ-RD52CP	CZ-64ESMC3	CZ-ANC3	CZ-256ESMC3 (CZ-CFUNC2)	 CZ-CAPC3
Built-in thermostat	●	●	●		—	—	—	—	
ECONAVI on/off control	●	●	—		—	●	—	●	 CZ-CAPBC2
Number of indoor units which can be controlled	1 group, 8 units	1 group, 8 units	1 group, 8 units		1	64 groups, max. 64 units	16 groups, max. 64 units	64 units x 4 links, max. 256 units	
Use limitations	· Up to 2 controllers can be connected per group (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	· Up to 2 controllers can be connected per group. (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	· Up to 2 controllers can be connected per group.		· Only 1 controller for 1 indoor unit.	· Up to 10 controllers, can be connected to one system. · Main unit/sub unit (1 main unit + 1 sub unit) connection is possible. · Use without remote controller is possible.	· Up to 8 controllers (4 main units + 4 sub units) can be connected to one system. · Use without remote controller is impossible.	· A communication adaptor (CZ-CFUNC2) must be installed for three or more links.	 CZ-CFUNC2
Function ON/OFF	●	●	●		●	●	●	●	
Mode setting	●	●	●		●	●	—	●	
Fan speed setting	●	●	●		●	●	—	●	
Temperature setting	●	●	●		●	●	—	●	
Air flow direction	●	●	●		●	● ¹	—	● ¹	
Permit/Prohibit switching	●	—	—		—	●	●	●	
Weekly program	●	●	—		—	●	—	●	

1. Setting is not possible when a remote control unit is present. (Use the remote controller for setting.)
All specifications subject to change without notice.

Individual Control Systems

Control contents	Part name, model No.	Quantity
Standard Control <ul style="list-style-type: none">Control of the various operations of the indoor unit by wired or wireless remote controller.Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller.Switching between remote controller sensor and body sensor is possible.	Wired remotod controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	1 unit each
(1) Group control <ul style="list-style-type: none">Batch remote control on all indoor units.Operation of all indoor cells in the same mode.Up to 8 units can be connected.The sensor is the body sensor, and thermostat ON/OFF setting in regard to the temperature set by the remote controller is possible for each indoor unit.	Wired remotod controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	As required
(2) Main/sub remote control <ul style="list-style-type: none">Max 2 remote controllers per indoor unit. (Main remote controller can be connected)The button pressed last has priority.Timer setting is possible even with the sub remote controller. When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit.	Main or sub Wired remotod controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	As required

SYSTEM EXAMPLE



Deluxe wired remote controller (CZ-RTC5B)



Dimensions
H 120 x W 120 x
D 16mm

- Basic Operation**
- Individual Louver Control (Lock individual flap for 4-way cassette)
 - ON/ OFF timer
 - Weekly Timer
 - Filter information*
 - Outing function
 - Quiet operation mode*
 - Power consumption monitor*
 - Energy saving*
 - Initial settings
 - Ventilation

- Maintenance Function**
- Outdoor unit error data
 - Service Contact address
 - RC setting mode
 - Test Run
 - Sensor Information*
 - Service check
 - Simple/ Detailed Settings
 - Auto address

* Subject to the connected model

- Energy Saving**
- ECONAVI on/ off*
 - Temperature Auto Return
 - Temperature Setting Range
 - Auto Shutoff
 - Schedule peak cut
 - Repeat off timer

Backup control by using CZ-RTC5B
Group wiring of 2 systems of PAC
can do auto individual control

- Rotation operation
- Backup operation
- Support operation

Timer remote controller (CZ-RTC4)



Dimensions
H 120 x W 120 x D 20mm

- Weekly Programme Function**
- A maximum of 6 settings/day and 42 settings/week can be programmed.
- Outing Function**
- This function can prevent the room temperature from dropping or rising when the occupants are out for a long time.
- Sleeping Function**
- This function controls the room temperature for comfortable sleeping.

Maximum 8 indoor units can be controlled from one remote controller

Remote control by main remote controller and sub controller is possible

Maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

* Depending on the model, some menus cannot be used.

Time Function 24 hours real time clock

- Day of the week indicator.

Wireless remote controller



For 4-Way cassette type CZ-RWSU3



For all Ducted types CZ-RWSC3 +CZ-RWSK2



For under ceiling type CZ-RWST3N

Remote control by main remote controller and sub controller is possible

- Maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

When CZ-RWSC3+CZ-RWSK2 is used, wireless control becomes possible for all indoor units

- When a separate receiver is set up in a different room, control from that room also becomes possible.
- Automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted.

In addition, there are other functions such as temperature setting, operation switching, wind direction/fan speed setting, etc

Ventilation independent operation is possible

When commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote control (interlocked operation with the indoor unit or independent ventilation ON/OFF).

Wired remote controller (CZ-RD52CP)



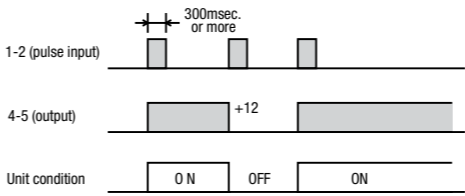
T10 Terminal for External Control (Digital Connection)

Connecting an indoor unit to an external device is easy. The T10 Terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices.



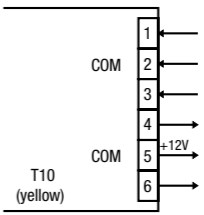
1. T10 Terminal Specification (T10:CN061 at indoor unit PCB)

- Control items : 1. Start/stop input
2. Remote controller prohibit input
3. Start signal output
4. Alarm signal output



NOTE: The wire length from indoor unit to the Relay must be within 2.0m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

Example of wiring



Condition

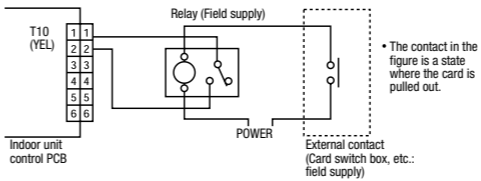
- 1. 1-2 (Pulse input): Unit ON/OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300msec.or more)
- 2. 2-3 (Static input): Open/ Operation with Remote is permitted.(Normal condition) Close/ Remote controller is prohibited.
- 3. 4-5 (Static output): 12V output during the unit ON. / No output at OFF.
- 4. 5-6 (Static output): 12V output when some errors occur / No output at normal.

2. Usage Example

Forced OFF control

- Condition
1-2 (Static input): Close/ Operation with Remote is permitted. (Normal condition) Open/ Unit is forcibly OFF and Remote controller operation is prohibited.

Example of wiring

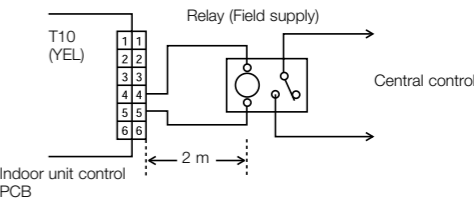


NOTE: The wire length from indoor unit to the Relay must be within 2.0m

Operation ON/OFF signal output

- Condition
4-5 (Static output): 12V output during the unit ON / No output at OFF

Example of wiring



NOTE: The wire length from indoor unit to the Relay must be within 2.0m Pulse signal changeable to static with JP cutting. (Refer to JP001)



Reducing inefficient air conditioning

Providing outstanding energy-saving performance, Panasonic's large capacity air conditioners can be connected to ECONAVI to detect when energy is being wasted.

ECONAVI senses the presence or absence of people and the level of activity in each area of a room. When unnecessary heating or cooling is detected, indoor units are individually controlled to match room conditions for energy-saving operation.



How 2 sensors work for human detection

Detection of the level of activity enables optimum power saving

Presence or absence of people and the level of activity in the room are detected in real time. Set temperature is automatically adjusted to optimise the power consumption.

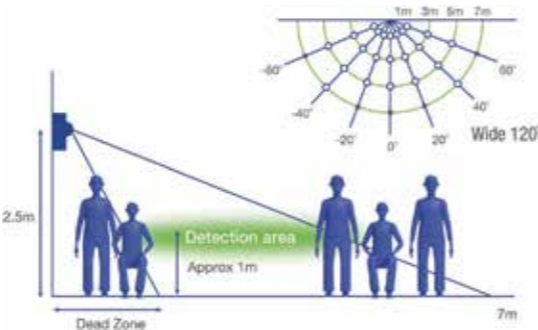
Sensors are remotely located to maximise the energy-saving effect

When sensors are built into the indoor unit, pillars, walls, cabinets and other fittings can obstruct the sensors, reducing the area of detection and lowering the energy-saving effect. Panasonic sensors can be located anywhere in the room which enables the optimum layout for sensors in any location.

Case study at coffee shop



Wide detection area

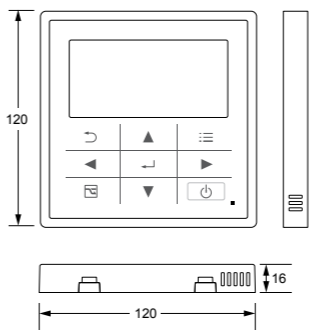


A sensor is remotely set to maximise the detection area.

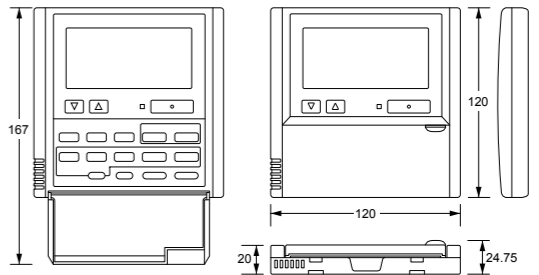
Installation flexibility for indoor unit layout changes.

Remote Controller External Dimensions

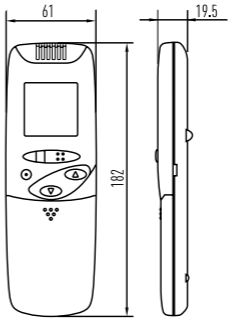
DELUXE WIRED
REMOTE CONTROLLER
(CZ-RTC5B)



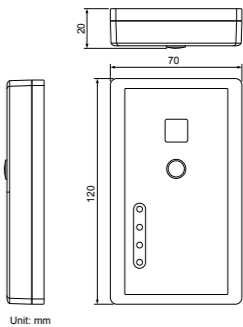
TIMER REMOTE
CONTROLLER
(CZ-RTC4)



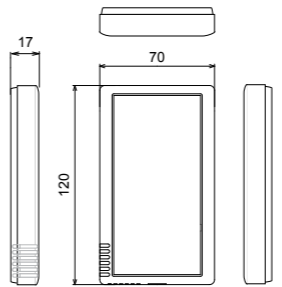
WIRELESS REMOTE
CONTROLLER



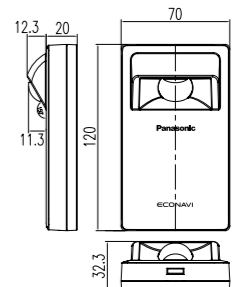
SEPARATE RECEIVER FOR
WIRELESS REMOTE CONTROLLER
(CZ-RWSC3)



REMOTE SENSOR
(CZ-CSRC3)

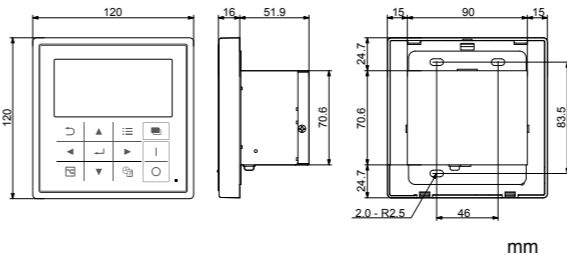


ECONAVI SENSOR
(CZ-CENSC1)

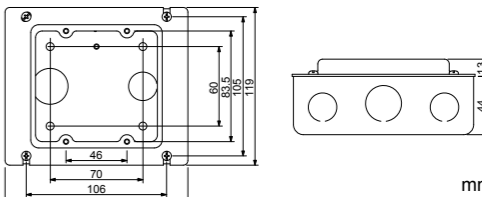


SYSTEM CONTROLLER
(CZ-64ESMC3)

System Controller

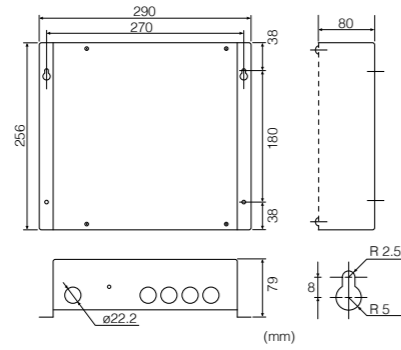


Switch Box

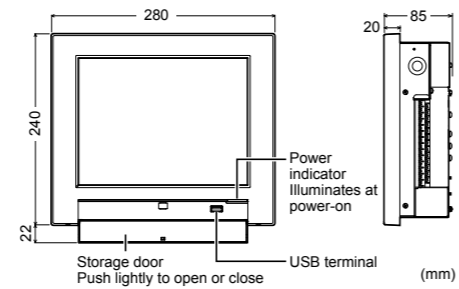


Remote Controller External Dimensions

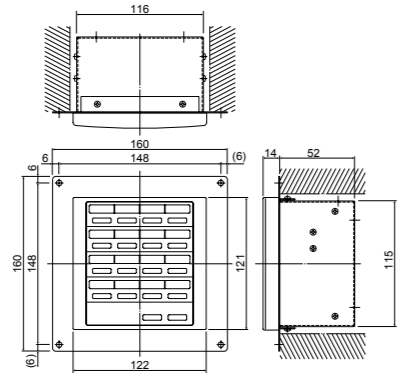
COMMUNICATION ADAPTOR
(CZ-CFUNC2)



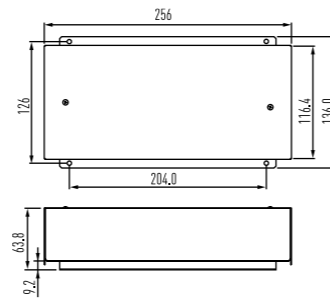
INTELLIGENT CONTROLLER
(CZ-256ESMC3)



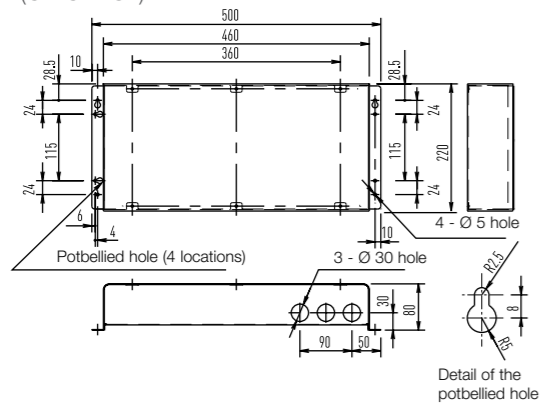
ON/OFF CONTROLLER
(CZ-ANC3)



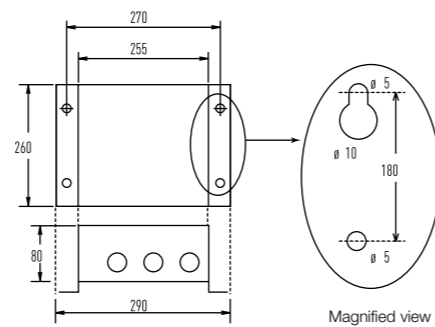
SERI-PARA I/O UNIT FOR EACH INDOOR UNIT
(CZ-CAPBC2)



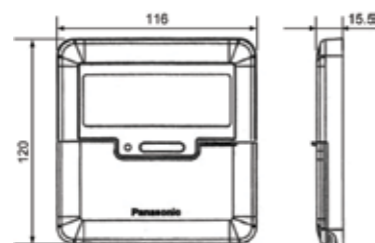
LONWORKS INTERFACE
(CZ-CLNC2)



SERI-PARA I/O UNIT FOR OUTDOOR UNIT
(CZ-CAPDC2)



WIRED REMOTE CONTROLLER
FOR RESIDENTIAL MODEL
(CZ-RD52CP)



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A Better Life. A Better World

- 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 July 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

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