# 100
A CENTURY OF RELIABILITY

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

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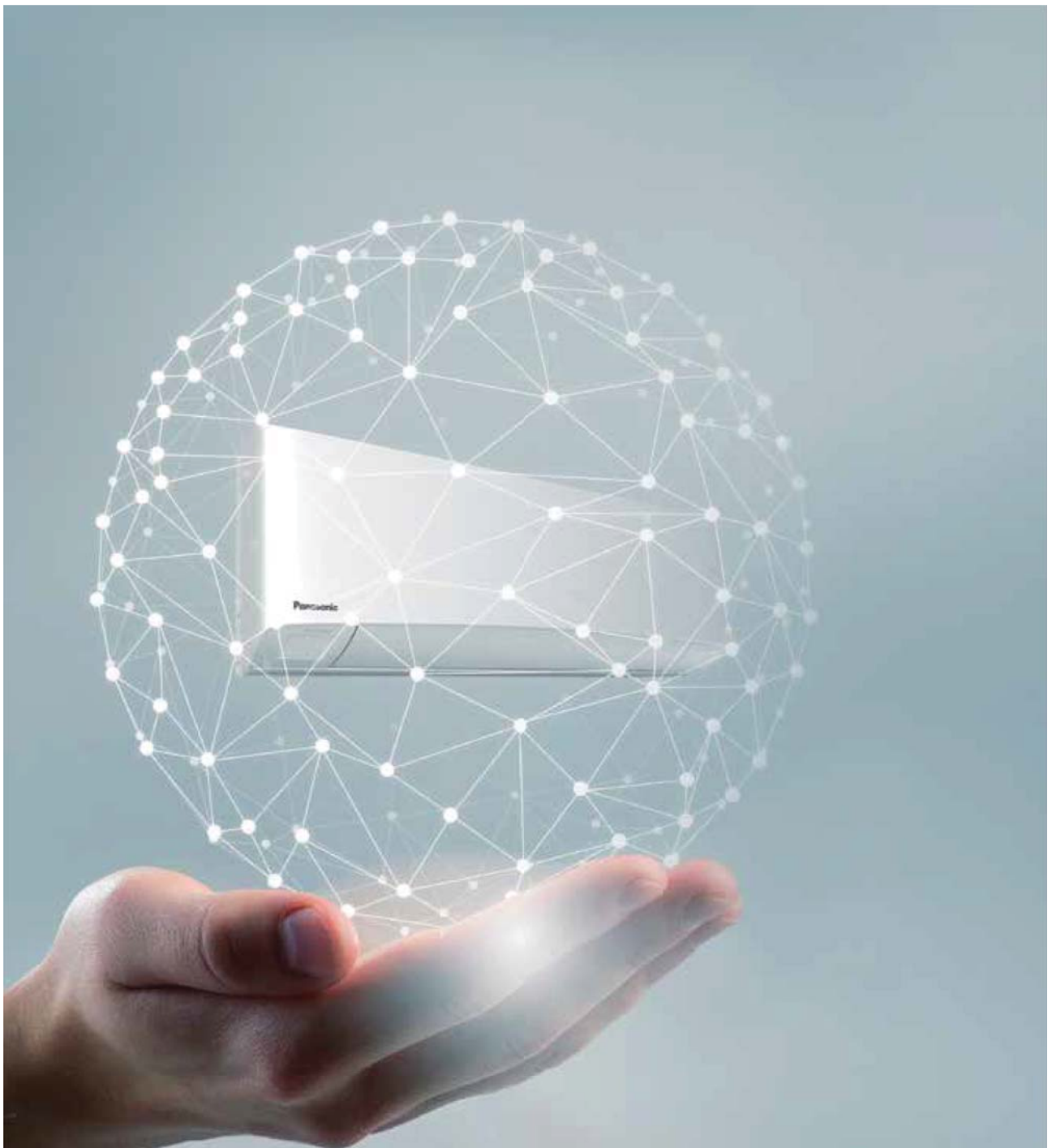
The new model debuts with R32 refrigerant. Its compact body allows installation even in narrow spaces.

Splittable Ducted

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

Smart Control Management Solutions

23.5°

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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For Medium Sized Project

Indoor Unit

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Page 12-13   for 18kW - 22.4kW

Ducted
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4-Way Cassette
* Panel is provided as an option
(CZ-KPU3/CZ-KPU3A)
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nanoeX — ECONAVI — ECONAVI ready

Under Ceiling
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Outdoor Unit

R410A Model
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R410A — DRED ready

R32 Compact Model
Page 6 -9
R32 REFRIGERANT — DRED ready

For Small Sized Project

Indoor Unit

Cooling Capacity	2.5/2.6 kW	3.4/3.7 kW	4.8/5.0 kW
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

6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	16.0kW	18.0kW	20.0kW	22.4kW
S-60PE1R5B	S-71PE1R5B	S-100PE1R5B	S-125PE1R5B	S-140PE1R5B	S-160PE1R5A			
						S-180PE3R5 NEW	S-200PE3R5 NEW	S-224PE3R5 NEW
S-60PF1E5B	S-71PF1E5B	S-100PF1E5B	S-125PF1E5B	S-140PF1E5B				
S-60PU2E5B	S-71PU2E5B	S-100PU2E5B	S-125PU2E5B	S-140PU2E5B				
S-60PT2E5B	S-71PT2E5B	S-100PT2E5B	S-125PT2E5B	S-140PT2E5B				
		S-100PK2E5B						
						U-160PE2R8A*	U-180PE2R8A*	U-200PE2R8A*	U-224PE2R8A*

* 3 phase

U-60PZ2R5	U-71PZ2R5	U-100PZ2R5 U-100PZ2R8*	U-125PZ2R5 U-125PZ2R8*	U-140PZ2R5 U-140PZ2R8*
NEW	NEW	NEW	NEW	NEW

* 3 phase

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.

R32 REFRIGERANT

R410A

INVERTER

DRED ready
DEMAND RESPONSE ENABLING DEVICE

MEPS COMPLIANT
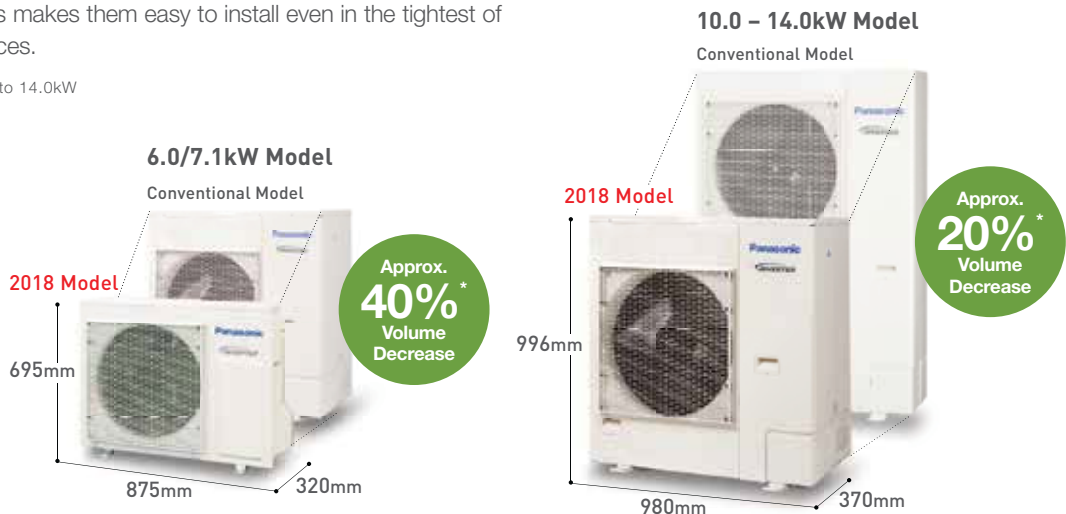
NEW /// R32 Compact Model

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

6.0/7.1kW Model
Conventional Model
2018 Model
695mm
875mm
320mm

Approx. **40%*** Volume Decrease

10.0 – 14.0kW Model
Conventional Model
2018 Model
996mm
980mm
370mm

Approx. **20%*** Volume Decrease

Height	996mm	695mm	301mm Shorter
Weight	68kg	44kg	24kg Lighter

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

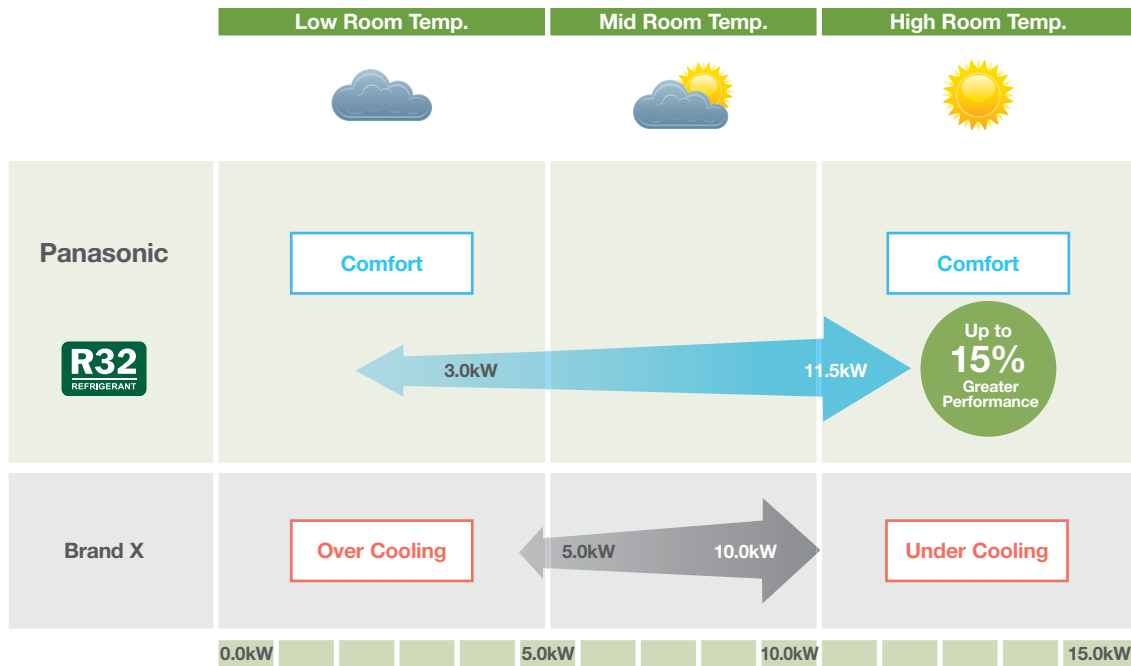| Height	1,416mm	996mm	420mm Shorter
Weight	98kg	90kg	8kg Lighter

* 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.
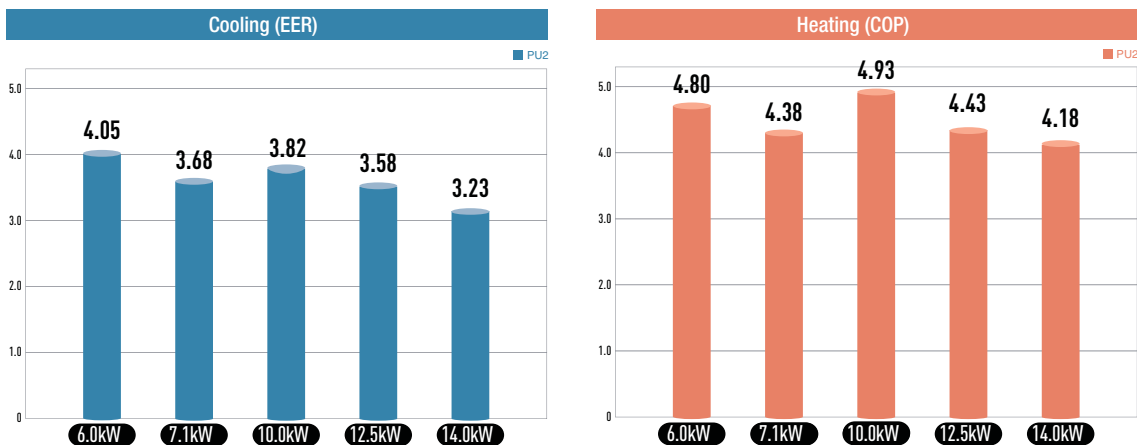
INVERTER

	Low Room Temp.	Mid Room Temp.	High Room Temp.
Panasonic R32 REFRIGERANT	Comfort — 3.0kW	11.5kW	Comfort — Up to 15% Greater Performance
Brand X	Over Cooling — 5.0kW	10.0kW	Under Cooling
	0.0kW	5.0kW	10.0kW	15.0kW

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.

Cooling (EER) ■ PU2

6.0kW	7.1kW	10.0kW	12.5kW	14.0kW
4.05	3.68	3.82	3.58	3.23

Heating (COP) ■ PU2

6.0kW	7.1kW	10.0kW	12.5kW	14.0kW
4.80	4.38	4.93	4.43	4.18

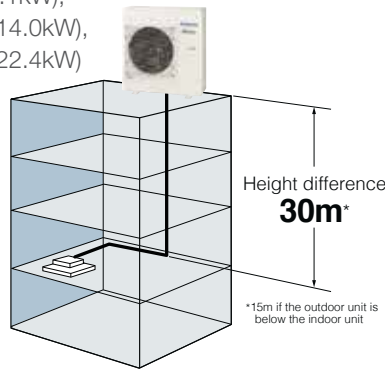* The graph shows 4-way cassette R32 models' values

Other Advanced Technology

Increased Piping Length for Greater Design Flexibility

R32 Compact

R410A

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)

Height difference
30m*

*15m if the outdoor unit is below the indoor unit

Product Quality and Safety

R32 Compact **R410A**

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

R32 Compact **R410A**

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

Demand Response Compliant

R32 Compact **R410A**

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.

DRED ready — DEMAND RESPONSE ENABLING DEVICE
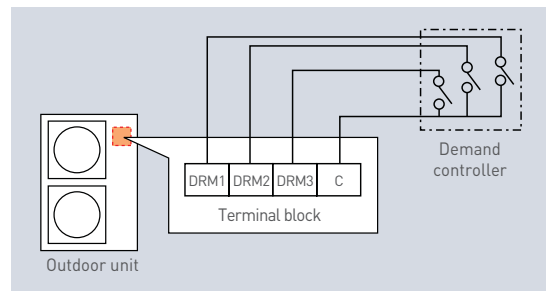
Demand control terminal is available to control 0-50-75-100% of capacities.
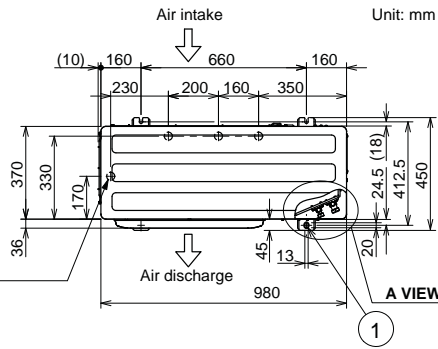
Outdoor Unit Dimensions

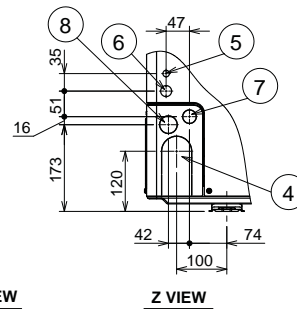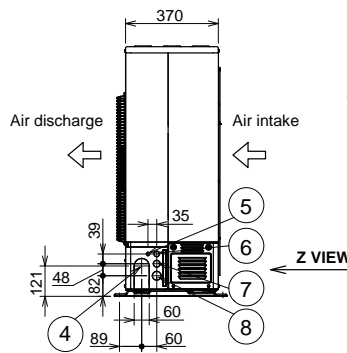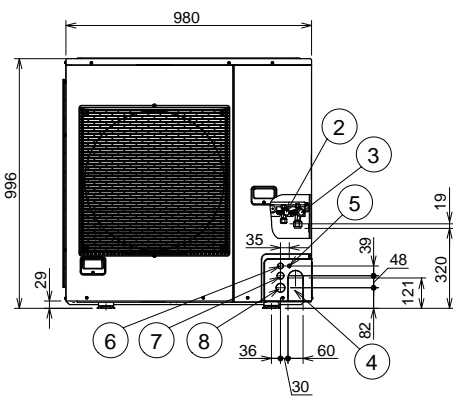#### R32 Compact Model Dimensions (6.0kW – 7.1kW)
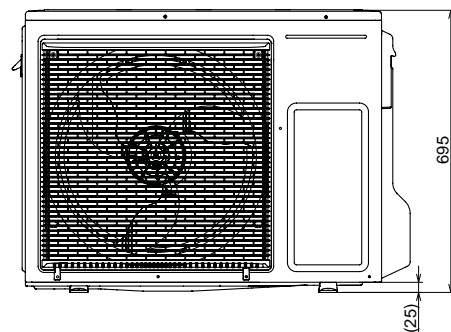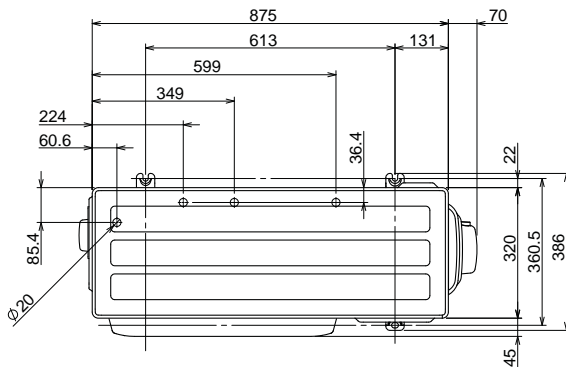
R32 Compact Model Dimensions (10.0kW – 14.0kW)

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)
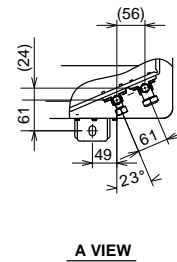
4×Ø32 holes (holes for drain)

When using a drain pipe, install the drain socket
(field supply) on to the drain port. Seal the other
drain port with the rubber cap.

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.
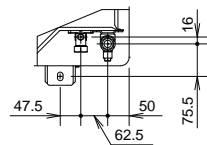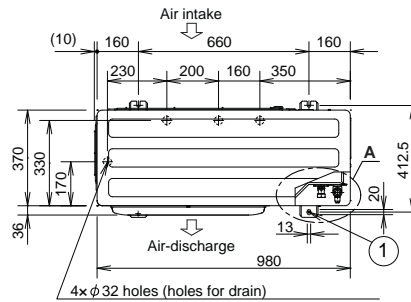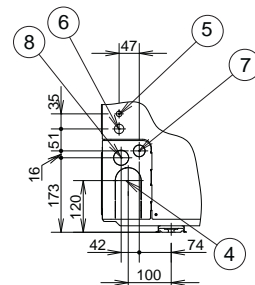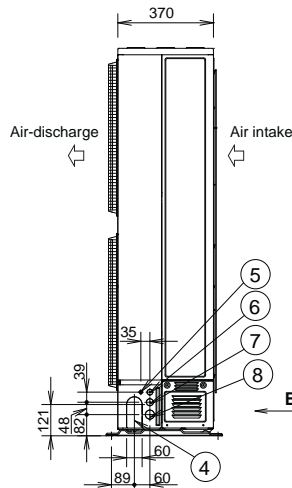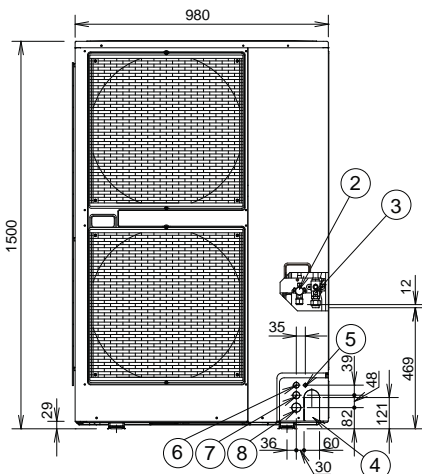
Splittable Ducted

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.

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.

16%* Greater Performance

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.
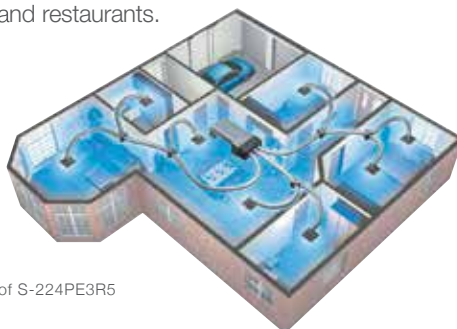
* In case of S-224PE3R5

3-step Static Pressure Set Up

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

75Pa* Factory Setting   130Pa*   200Pa*

* In case of 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.

Heat Exchanger

486mm

558mm

48kg

Fan

377mm

27kg 427mm

434mm

11kg 360mm

Fan Casing

*The weight is for the 18.0kW model only

S-180PE3R5
916mm

486mm

1,456mm
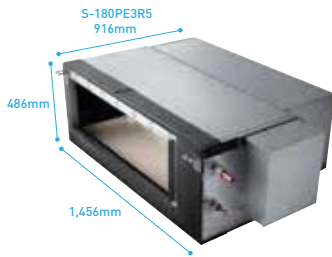
Compared to conventional models, the new Panasonic splittable ducted weighs in at approximately 10%* lighter. This notion is further emphasised by the unit's ability to split into three components, the heaviest of which totals at 48kg.

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

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.
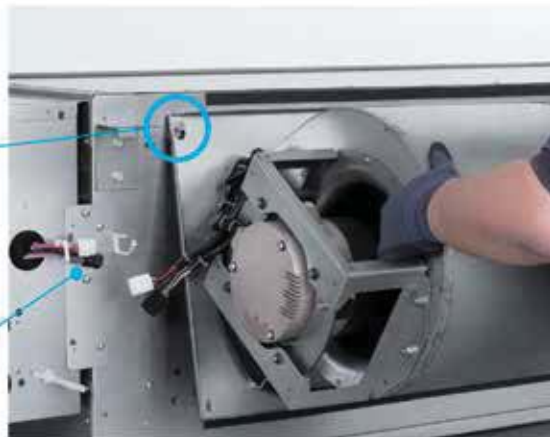
12 Bolts & Screws for Easy Assembly

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.

1 Install the fan to the heat exchanger and tighten the screws and bolts.

2 Assemble the connectors.

3 Install the chassis and tighten the screws and bolts.

Indoor Unit

High Static Pressure

Splittable Ducted

High static and large airflow ducted for exceptional installation flexibility.

Self-diagnosing Function	Automatic Fan Operation	DRY Mild dry	Automatic Restart Function	DC motor 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

unit: mm
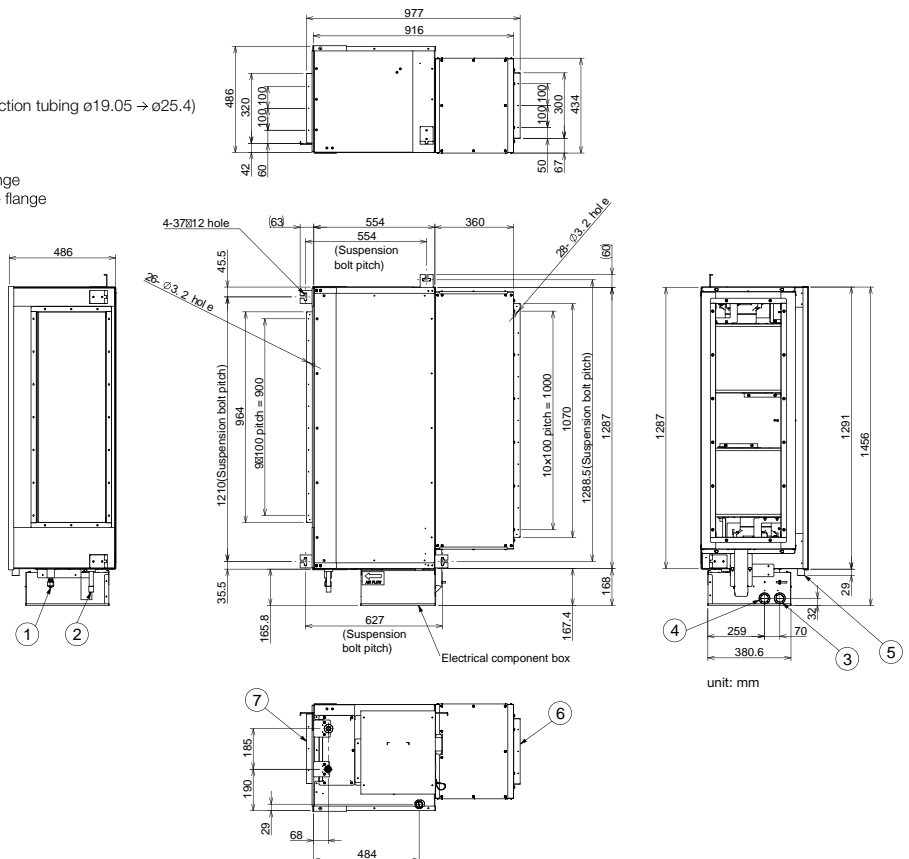
NEW ////

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

CZ-RTC5B   CZ-RTC4

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 : Heating capacity		kW	18.0 (5.4-20.0) 20.0 (5.6-22.4)	20.0 (6.3-22.4) 22.4 (7.1-25.0)	22.4 (6.3-25.0) 25.0 (7.1-28.0)
		BTU/h	61,400 (18,400-68,200) 68,200 (19,100-76,400)	68,200 (21,500-76,400) 76,400 (24,200-85,300)	76,400 (21,500-85,300) 85,300 (24200-95,500)
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 × W × D	mm	486 x 1456 x 916	486 x 1456 x 916	486 x 1456 x 916
Heat exchanger	H × W × D	mm	486 x 1,456 x 558	487 x 1,456 x 558	488 x 1,456 x 558
Fan	H × W × D	mm	377 x 1,150 x 427	377 x 1,150 x 427	377 x 1,150 x 427
Case	H × W × 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 × W × 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	℃	-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.

ECONAVI
ECONAVI ready

CZ-CENSC1   CZ-RTC5B

CZ-RTC4

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

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

Self-diagnosing Function

AUTO
Automatic Fan Operation

DRY
Mild dry

Automatic Restart Function

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.

1,100   700
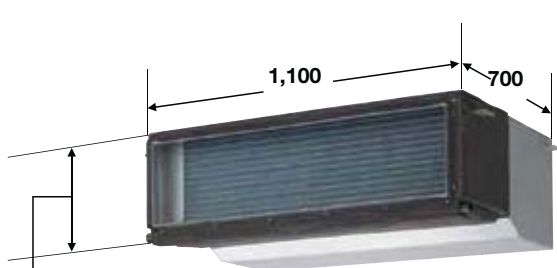
290 mm (S-60PE1R5B)
360 mm (S-71PE1R5B, S-100PER5B)

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

1,100   700

430
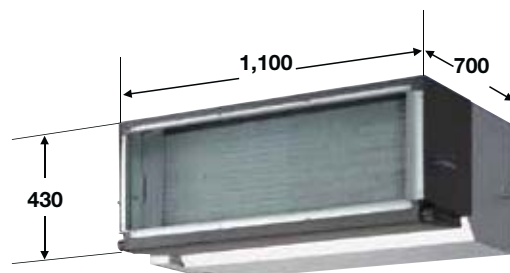
S-125PE1R5B
S-140PE1R5B
S-160PE1R5A

System Example

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

Rectangle duct   Canvas duct

Inspection port
(450 x 450mm or more)

Intake grille
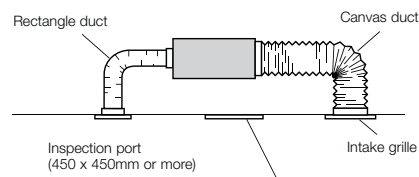
Cold Drafts Reduced During Heating Operation

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

intake
Air sensor

E2 sensor

E1 sensor

Specifications of R32 Compact Model R32 REFRIGERANT

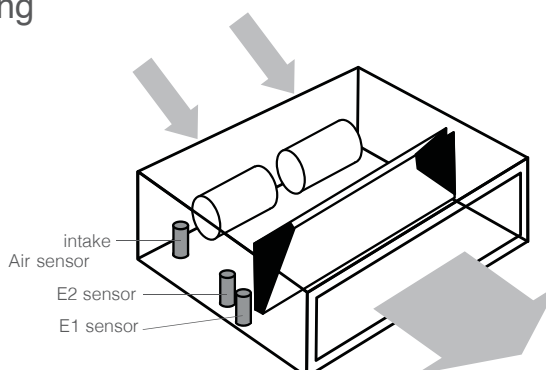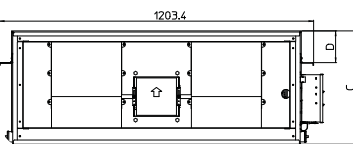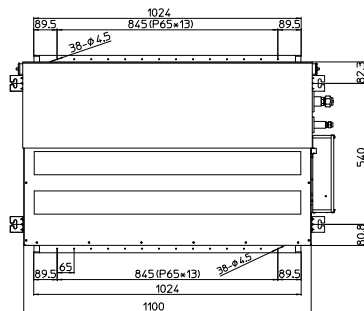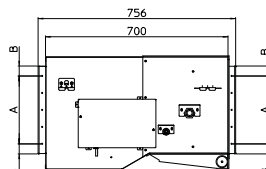| Capacity			6.0kW	7.1kW	10.0kW
Model Name	Indoor Unit		S-60PE1R5B	S-71PE1R5B	S-100PE1R5B
	Outdoor Unit		U-60PZ2R5	U-71PZ2R5	U-100PZ2R5
Cooling capacity : Heating capacity		kW	6.0 (2.0 - 7.1) 6.0 (1.8 - 7.6)	7.1 (2.0 - 8.0) 7.1 (1.8 - 8.6)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)
		BTU/h	20,500 (6,800 - 24,200) 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)
EER : COP	Cooling : Heating	W/W	3.23 : 3.92	3.18 : 4.06	3.44 : 3.89
Total power input	Cooling : Heating	kW	1.86 : 1.53	2.23 : 1.75	3.00 : 2.57
Indoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	0.86 : 0.86	1.25 : 1.25	1.74 : 1.74
Dimensions	H × W × D	mm	290×1,100 (+100)×700	360×1,100 (+100)×700	360×1,100(+100)×700
Net weight		kg	35	42	44
Air volume	Cooling : Heating	L/s	366 : 366	500 : 500	666 : 666
External static pressure		Pa	70 (Max.100)	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
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
Number of fan speeds			3	3	3
Drain pipe size		mm	VP-25	VP-25	VP-25
Outdoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	7.70 : 6.15	8.90 : 6.75	11.0 : 9.50
Dimensions	H × W × D	mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	44	44	90
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)
Piping connections	Liquid/Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30
Maximum chargeless length		m	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)
Operation ranges	Cooling : Heating	°C	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24

HIGH STATIC PRESSURE DUCTED

Dimensions (6.0kW – 16.0kW)

unit: mm

2.Gas side (O.D.ø15.88 FLARE, ø19.05 FLARE*)
*Only for 16.0kW
3.Drain pipe size (O.D.ø32)
1.Liquid side (O.D.ø9.52 FLARE)
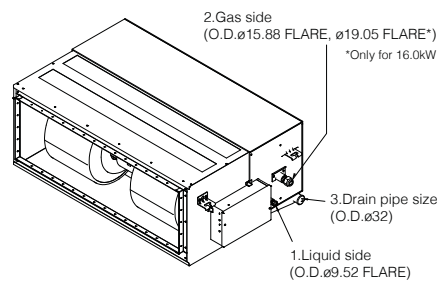
model	A	B	C	D
S-60PE1R5B	130	33.1	290	118
S-71PE1R5B S-100PE1R5B	195	35.7	360	50
S-125PE1R5B S-140PE1R5B S-160PE1R5A	260	38.2	430	121.5

12.5kW			14.0kW		16.0kW
S-100PE1R5B	**S-125PE1R5B**	**S-125PE1R5B**	**S-140PE1R5B**	**S-140PE1R5B**	**S-160PE1R5A**
U-100PZ2R8	**U-125PZ2R5**	**U-125PZ2R8**	**U-140PZ2R5**	**U-140PZ2R8**	**U-160PE2R8A**
10.0 (3.0 - 11.5)	12.5 (3.2 - 13.5)	12.5 (3.2 - 13.5)	14.0 (3.3 - 15.0)	14.0 (3.3 - 15.0)	16.0 (5.4 - 18.0)
10.0 (3.0 - 14.0)	12.5 (3.3 - 15.0)	12.5 (3.3 - 15.0)	14.0 (3.4 - 16.0)	14.0 (3.4 - 16.0)	18.0 (5.6 - 20.0)
34,100 (10,200 - 39,200)	42,700 (10,900 - 46,100)	42,700 (10,900 - 46,100)	47,800 (11,300 - 51,200)	47,800 (11,300 - 51,200)	54,600 (18,400 - 61,400)
34,100 (10,200 - 47,800)	42,700 (11,300 - 51,200)	42,700 (11,300 - 51,200)	47,800 (11,600 - 54,600)	47,800 (11,600 - 54,600)	61,400 (19,100 - 68,200)
3.44 : 3.89	3.30 : 4.00	3.30 : 4.00	3.15 : 3.66	3.15 : 3.66	3.09 : 3.52
3.00 : 2.57	3.79 : 3.125	3.79 : 3.125	4.44 : 3.825	4.44 : 3.825	5.18 : 5.11
1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
240V	240V	240V	240V	240V	240V
1.74 : 1.74	1.84 : 1.84	1.84 : 1.84	2.70 : 2.70	2.70 : 2.70	2.70 : 2.70
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
44	48	48	53	53	53
666 : 666	833 : 833	833 : 833	1,000 : 1,000	1,000 : 1,000	1,000 : 1,000
100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)	100 (Max.150)
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
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
3	3	3	3	3	3
VP-25	VP-25	VP-25	VP-25	VP-25	VP-25
3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	3 Phase/ 50Hz
415V	240V	415V	240V	415V	415V
3.75 : 3.24	14.9 : 12.0	4.95 : 4.00	17.2 : 14.1	5.75 : 4.70	7.00 : 6.90
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
90	94	94	94	94	127
1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386	2,733 : 2,733
52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)	56 (57) : 61 (59)
68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)	77 (75) : 79 (77)
Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø19.05
5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
15, 30	15, 30	15, 30	15, 30	15, 30	30, 30
30	30	30	30	30	30
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)
-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

R410A

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.

ECONAVI

ECONAVI ready

Self-diagnosing Function	Automatic Fan Operation	Mild dry	Automatic Restart Function	Built-in Drain Pump	DC Motor

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.

Optimal Control by DC Motor

For short ducting such as hotels

10Pa 150Pa

For long ducting or for usage with high density filter
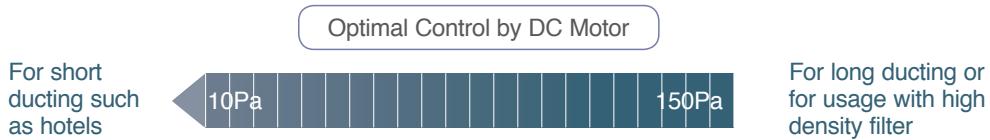
* Please refer to technical documents for detail.

System example

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

Rectangle duct

Canvas duct

Inspection port (450 x 450mm or more)

Intake grille
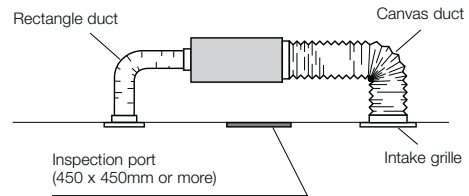
More powerful drain pump

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

Up to 300mm

Up to 500mm

202mm
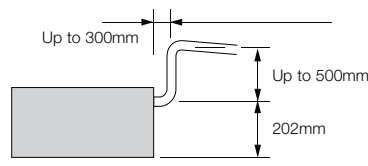
S-60PF1E5B
S-71PF1E5B

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

ECONAVI

ECONAVI ready

CZ-CENSC1   CZ-RTC5B   CZ-RTC4

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.
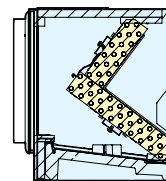
Increases surface area

Specifications of R32 Compact Model R32 REFRIGERANT

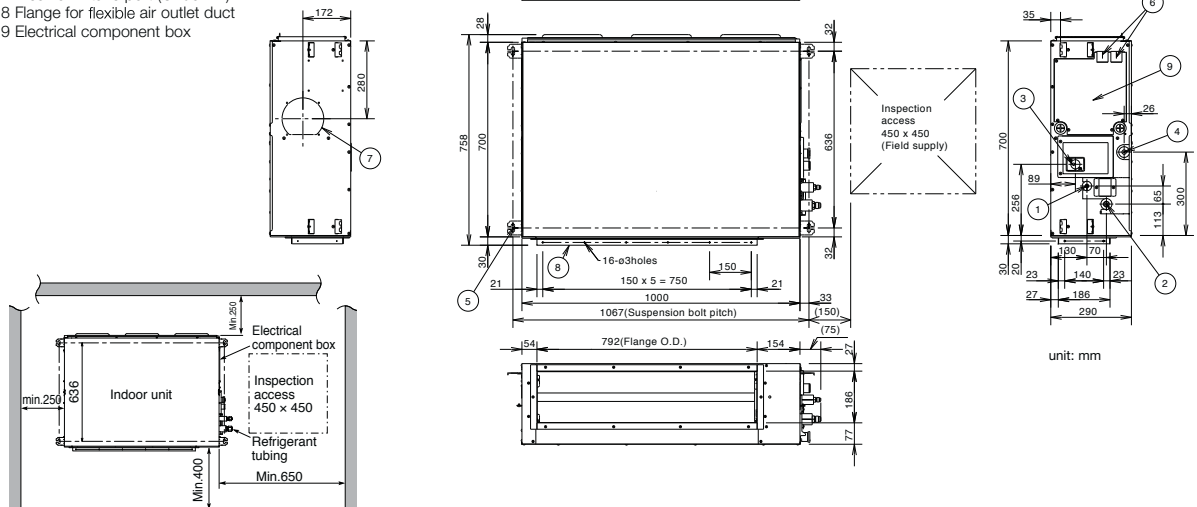| Capacity			6.0KW	7.1KW	10.0KW
Model Name	Indoor Unit		S-60PF1E5B	S-71PF1E5B	S-100PF1E5B
	Outdoor Unit		U-60PZ2R5	U-71PZ2R5	U-100PZ2R5
Cooling capacity : Heating capacity		kW	6.0 (2.0 - 7.1) 6.0 (1.8 - 7.6)	7.1 (2.0 - 8.0) 7.1 (1.8 - 8.6)	10.0 (3.0 - 11.5) 10.0 (3.0 - 14.0)
		BTU/h	20,500 (6,800 - 24,200) 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)
EER : COP	Cooling : Heating	W/W	3.80 : 4.51	3.41 : 4.15	3.66 : 4.31
Total power input	Cooling : Heating	kW	1.58 : 1.33	2.08 : 1.71	2.73 : 2.32
Indoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	0.87 : 0.87	0.87 : 0.87	1.27 : 1.29
Dimensions	H × W × D	mm	290×1,000 ×700	290×1,000 ×700	290×1,400 ×700
Net weight		kg	33	33	45
Air volume	Cooling : Heating	L/s	350 : 350	350 : 350	533 : 533
External static pressure		Pa	70 (10 - 150)	70 (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
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
Number of fan speeds			3	3	3
Drain piping		mm	VP-25	VP-25	VP-25
Outdoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	6.75 : 5.60	8.95 : 7.35	11.1 : 9.30
Dimensions	H × W × D	mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	44	44	90
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169
Sound pressure level	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)
Sound power level	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)
Piping connections	Liquid / Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30
Maximum chargeless length		m	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)
Operation ranges	Cooling : Heating	°C	-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)
 ℓ 200 flexible hose supplied
4 Bottom drain port VP25 (O.D. Ø32mm)
5 Suspension lug (4-12 × 30mm)
6 Power supply outlet
7 Fresh air intake port (Ø150mm)
8 Flange for flexible air outlet duct
9 Electrical component box

unit: mm

|	12.5KW		14.0KW	
S-100PF1E5B	S-125PF1E5B	S-125PF1E5B	S-140PF1E5B	S-140PF1E5B
U-100PZ2R8	U-125PZ2R5	U-125PZ2R8	U-140PZ2R5	U-140PZ2R8
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)
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)
3.66 : 4.31	3.52 : 4.02	3.52 : 4.02	3.18 : 3.79	3.18 : 3.79
2.73 : 2.32	3.55 : 3.11	3.55 : 3.11	4.40 : 3.69	4.40 : 3.69
1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
240V	240V	240V	240V	240V
1.27 : 1.29	1.39 : 1.38	1.39 : 1.38	1.47 : 1.46	1.47 : 1.46
290×1,400 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700	290×1,400 ×700
45	45	45	45	45
533 : 533	566 : 566	566 : 566	600 : 600	600 : 600
100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)
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
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
3	3	3	3	3
VP-25	VP-25	VP-25	VP-25	VP-25
3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
415V	240V	415V	240V	415V
3.80 : 3.20	14.8 : 12.9	4.95 : 4.30	18.6 : 15.3	6.15 : 5.15
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
90	94	94	94	94
1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386
52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)
68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)
Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
15, 30	15, 30	15, 30	15, 30	15, 30
30	30	30	30	30
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)
-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

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)
  ℓ 200 flexible hose supplied
4 Bottom drain port VP25 (O.D. Ø32mm)
5 Suspension lug (4-12 × 30mm)
6 Power supply outlet
7 Fresh air intake port (Ø150mm)
8 Flange for flexible air outlet duct
9 Electrical component box

unit: mm
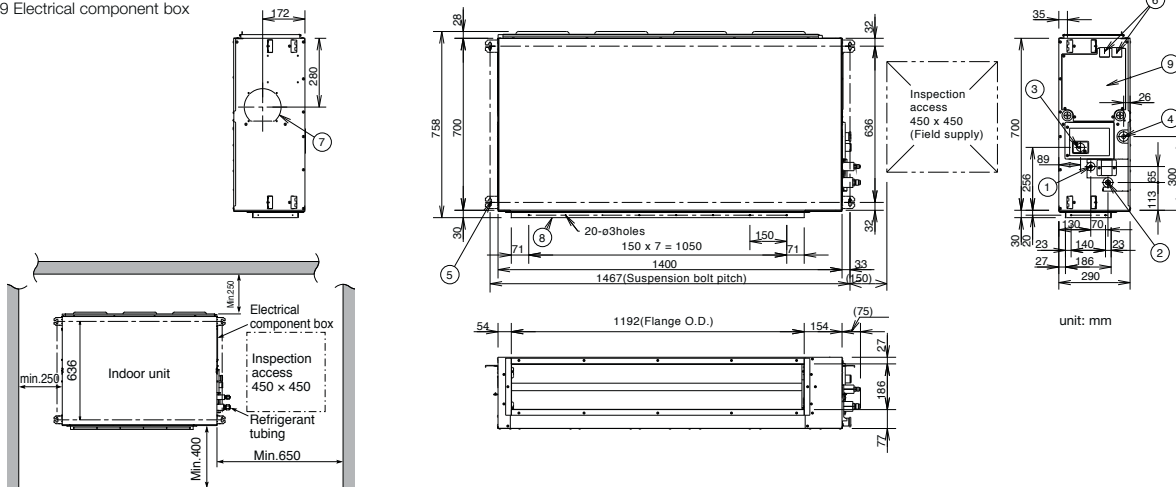
Indoor Unit
4-WAY Cassette

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

nanoe™X
nanoe™X ready

ECONAVI
ECONAVI ready

Self-diagnosing Function	Automatic Fan Operation	Mild dry	Intelligent Auto Swing	Automatic Restart Function	Auto Swing (Auto Flap Control)	Built-in Drain Pump	DC Motor

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

Ample airflow: 600 l/s
Industry's leading in the 140PU class.

Comfort/Quiet

Our design features wide-angle outlets and flaps that were designed through expert mechanics and proto-type tests. Air from the centre is sent farther and the air blown out of the larger, side flaps, spreads through-out the room. The air comes from all for sides of the unit and expands gently in a circle centred on the indoor unit.
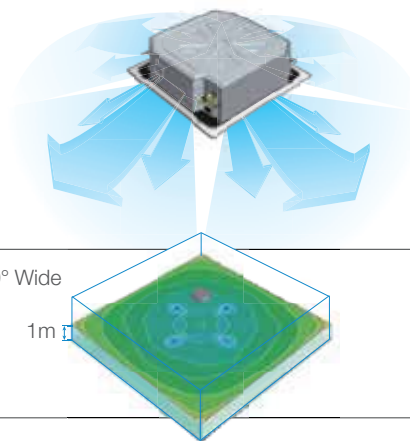
Temperature distribution by thermograph (cooling operation)

Simulation conditions:
P140 4-way ceiling-mounted cassette type in cooling mode / Floor area of 225m ^{2}/ Ceiling height of 3m

360° Wide
1m

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.

Conventional   **New Model**

Width 48mm   Width 70mm

Previous flap   New flap

Sub Flap

Airflow turbulence is generated   Airflow turbulence is reduced
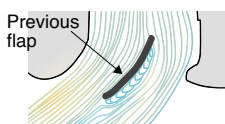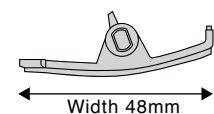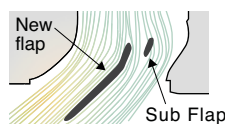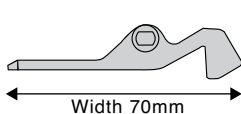
3D Turbo Fan

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.

Conventional   **New Model**

Φ490   Φ485   Twisted 3D Blade

5 Speed Mode

3   5
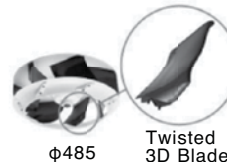
Airflow increased 9.5%*

* Panasonic in-house data

AIR INTAKE CHAMBER

1. Air intake flange (ø100) (field supply).
2. Air intake box CZ-ATU2* for Air intake plenum.
3. Air intake plenum CZ-FDU3
* When using Air intake box (CZ-ATU2), Air intake plenum (CZ-FDU3) required.

PANEL (CZ-KPU3/3A)

Nomal Panel : CZ-KPU3
ECONAVI Panel : CZ-KPU3A

CZ-CENSC1   CZ-RTC5B   CZ-RTC4
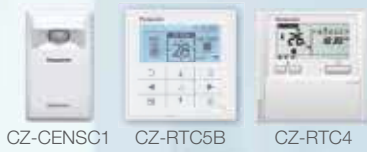
OPTIONAL nanoe™X KIT

CZ-CNEXU1
(CZ-RTC5B is required)
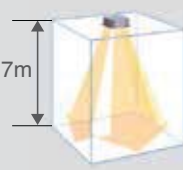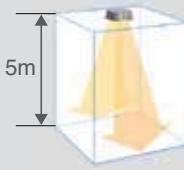
S-60PU2E5B   S-125PU2E5B
S-71PU2E5B   S-140PU2E5B
S-100PU2E5B

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.)

High Ceiling (Factory settings)		
New model	3.0m	3.6m
Capacity	S-60PU2E5B, S-71PU2E5B	S-100PU2E5B, S-125PU2E5B, S-140PU2E5B

Industry's top-class

S-100PU2E5B - S-140PU2E5B	4.5m	4.7m	5m
Capacity	4-way discharge high ceiling settings2	3-way discharge with the optional air-blocking materials	2-way discharge with the optional air-blocking materials

Ceiling height guidelines

Indoor unit	*1 settings	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

Cigarette	Food	Garbage	Sweat

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

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

Bacteria	Virus

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 0.8level [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

Atomisation electrode

Multi-Leader

Structure

OH radical

Electron

Water

× **4.8 trillion**

5-20nm
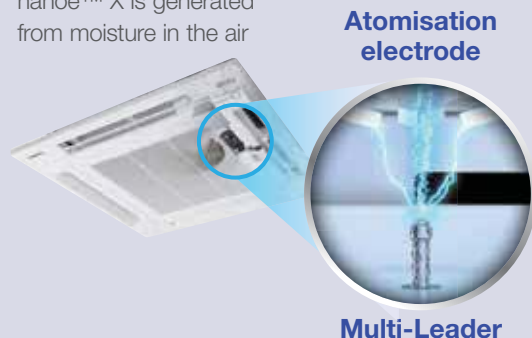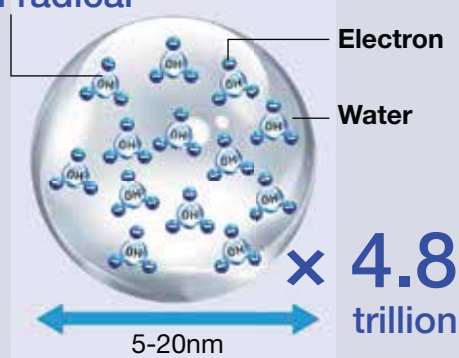
How to Deodorise Odour [1] [2] [3]

1. nanoe™ particles reach odours deep inside fabrics
2. OH radicals decompose odour-causing substances
3. Odours are deodorised

How to Inhibit Bacteria, Virus and Mould [4] [5] [6] [7] [8]

1. nanoe™ particles precisely reach allergens
2. OH radicals degenerate allergen proteins
3. Allergens are inhibited

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

•Simulated image

AC Mode + nanoeX

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

Closed Time

•Simulated image

FAN Mode + nanoeX

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

Case Examples of nanoe™

Office	Restaurant	Gym	Residence

Specifications of R32 Compact Model **R32** REFRIGERANT

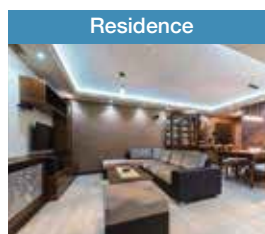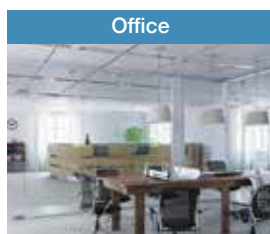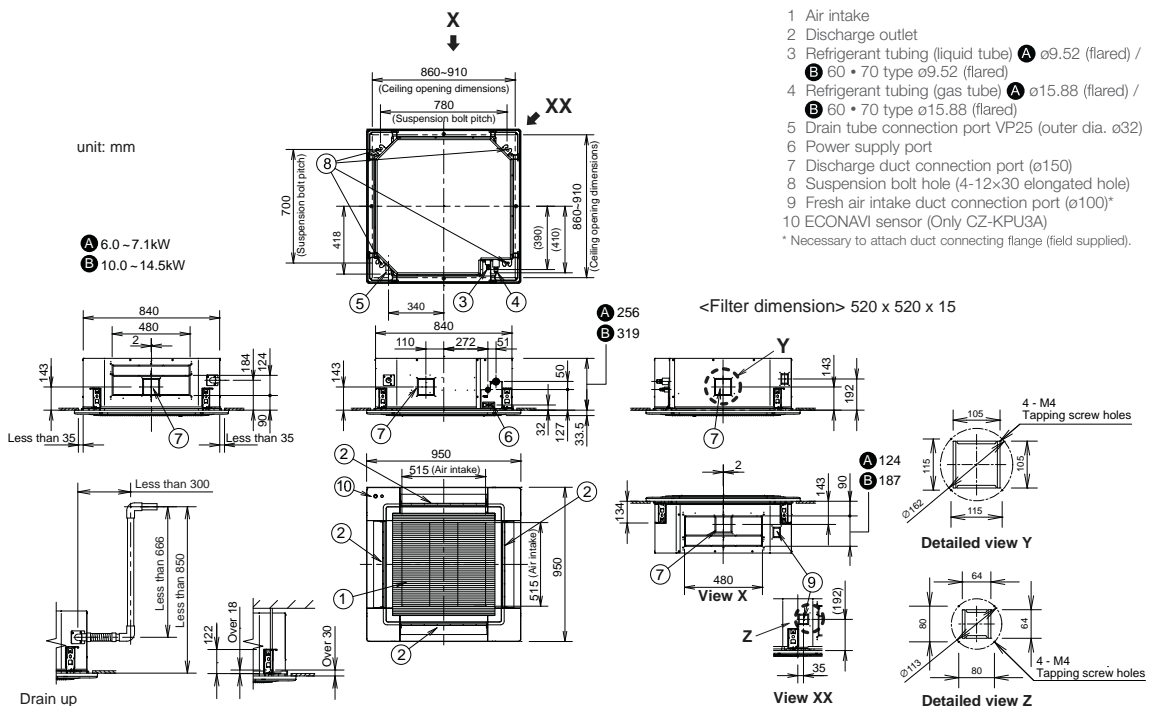| Capacity			6.0kW	7.1kW	10.0kW
Model Name	Indoor Unit		**S-60PU2E5B**	**S-71PU2E5B**	**S-100PU2E5B**
	Outdoor Unit		**U-60PZ2R5**	**U-71PZ2R5**	**U-100PZ2R5**
	Panel		Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A	Standard type:CZ-KPU3:ECONAVI type:CZ-KPU3A
Cooling 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)
		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)
EER : COP	Cooling : Heating	W/W	4.05 : 4.80	3.68 : 4.38	3.82 : 4.93
Total power input	Cooling : Heating	kW	1.48 : 1.25	1.93 : 1.62	2.62 : 2.03
Indoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	0.34 : 0.33	0.38 : 0.37	0.76 : 0.75
Dimensions H × W × D	Indoor	mm	256×840 ×840	256×840 ×840	319×840 ×840
	Panel	mm	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950
Net weight	Indoor	kg	20	20	25
	Panel	kg	5	5	5
Air volume	Cooling : Heating	L/s	350 : 350	366 : 366	600 : 600
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
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
Number of fan speeds			5*	5*	5*
Drain pipe size		mm	VP-25	VP-25	VP-25
Outdoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	6.70 : 5.60	8.65 : 7.30	11.1 : 8.50
Dimensions H × W × D		mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	44	44	90
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)
Piping connections	Liquid / Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30
Maximum chargeless length		m	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)
Operation ranges	Cooling : Heating	°C	-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)

1 Air intake
2 Discharge outlet
3 Refrigerant tubing (liquid tube) **A** ø9.52 (flared) / **B** 60 • 70 type ø9.52 (flared)
4 Refrigerant tubing (gas tube) **A** ø15.88 (flared) / **B** 60 • 70 type ø15.88 (flared)
5 Drain tube connection port VP25 (outer dia. ø32)
6 Power supply port
7 Discharge duct connection port (ø150)
8 Suspension bolt hole (4-12×30 elongated hole)
9 Fresh air intake duct connection port (ø100)*
10 ECONAVI sensor (Only CZ-KPU3A)
* Necessary to attach duct connecting flange (field supplied).

<Filter dimension> 520 x 520 x 15

* 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.

	12.5kW		14.0kW	
S-100PU2E5B	**S-125PU2E5B**	**S-125PU2E5B**	**S-140PU2E5B**	**S-140PU2E5B**
U-100PZ2R8	**U-125PZ2R5**	**U-125PZ2R8**	**U-140PZ2R5**	**U-140PZ2R8**
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
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)
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)
3.82 : 4.93	3.58 : 4.43	3.58 : 4.43	3.23 : 4.18	3.23 : 4.18
2.62 : 2.03	3.49 : 2.82	3.49 : 2.82	4.34 : 3.35	4.34 : 3.35
1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
240V	240V	240V	240V	240V
0.76 : 0.75	0.85 : 0.84	0.85 : 0.84	0.91 : 0.90	0.91 : 0.90
319×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840	319×840 ×840
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
25	25	25	25	25
5	5	5	5	5
600 : 600	616 : 616	616 : 616	633 : 633	633 : 633
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
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
5*	5*	5*	5*	5*
VP-25	VP-25	VP-25	VP-25	VP-25
3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
415V	240V	415V	240V	415V
3.75 : 2.90	15.0 : 12.0	5.00 : 4.00	18.7 : 14.3	6.25 : 4.80
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
90	94	94	94	94
1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386
52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)
68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)
Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
15, 30	15, 30	15, 30	15, 30	15, 30
30	30	30	30	30
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)
-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

Indoor Unit
Under Ceiling

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

ECONAVI

ECONAVI ready

Self-diagnosing Function

Automatic Fan Operation

Automatic Restart Function

DC Motor

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

Top Class Energy Saving

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.

New DC fan motor

DC motor

Large Diagonal Air Flow Fan

Fan diameter
ϕ147.5
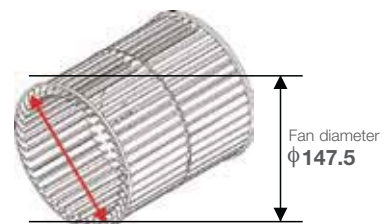
S-60PT2E5B
S-71PT2E5B

S-100PT2E5B
S-125PT2E5B
S-140PT2E5B

ECONAVI
ECONAVI ready

CZ-CENSC1   CZ-RTC5B   CZ-RTC4

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 *Setting by remote control	Air flow distance		
	100	125	140
4.3m	12m	13m	13m

Ceiling height
4.3m*

Air flow distance
13m*
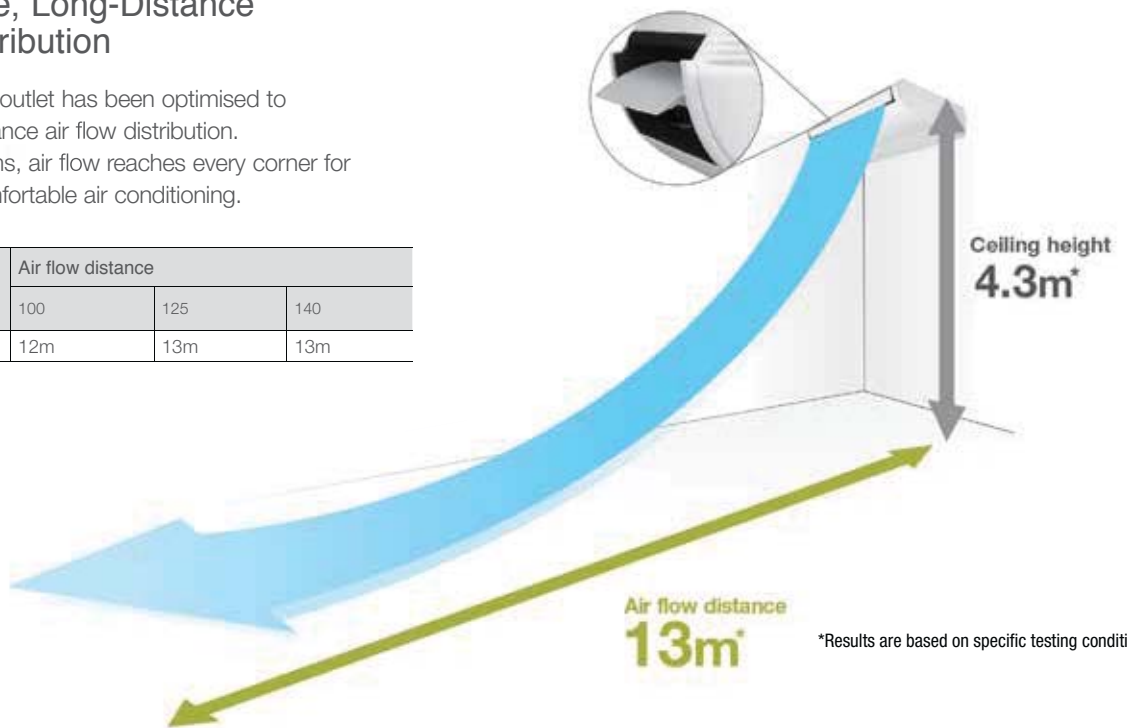
*Results are based on specific testing conditions

Specifications of R32 Compact Model

R32 REFRIGERANT

Capacity			6.0kW	7.1kW	10.0kW
Model Name	Indoor Unit		**S-60PT2E5B**	**S-71PT2E5B**	**S-100PT2E5B**
	Outdoor Unit		**U-60PZ2R5**	**U-71PZ2R5**	**U-100PZ2R5**
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)
		BTU/h	20,500 (6,800 - 24,200) 20,500 (6,100 - 25,900)	24,200 (6,800 - 27,300) 24,200 (6,800 - 29,300)	34,100 (10,200 - 39,200)) 34,100 (10,200 - 47,800)
EER : COP	Cooling : Heating	W/W	4.05 : 4.80	3.68 : 4.38	3.64 : 4.24
Total power input	Cooling : Heating	kW	1.48 : 1.25	1.93 : 1.62	2.75 : 2.36
Indoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	0.40 : 0.40	0.43 : 0.43	0.65 : 0.65
Dimensions	H × W × D	mm	235×1,275 ×690	235 x 1,275 x 690	235 × 1,590 × 690
Net weight		kg	33	33	40
Air volume	Cooling : Heating	L/s	333 : 333	350 : 350	500 : 500
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	38 / 34 / 30 : 38 / 34 / 30	39 / 35 / 31 : 39 / 35 / 31	42 / 37 / 35 : 42 / 37 / 35
Sound power level (H/M/L)	Cooling : Heating	dB(A)	56 / 52 / 48 : 56 / 52 / 48	57 / 53 / 49 : 57 / 53 / 49	60 / 55 / 53 : 60 / 55 / 53
Number of fan speeds			3	3	3
Drain pipe size		mm	VP-20	VP-20	VP-20
Outdoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	6.60 : 5.55	8.60 : 7.25	11.7 : 10.0
Dimensions	H × W × D	mm	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	44	44	90
Air volume	Cooling : Heating	L/s	750 : 750	867 : 750	1,285 : 1,169
Sound pressure level	Cooling : Heating	dB(A)	46 (44) : 48 (46)	49 (47) : 49 (47)	52 (50) : 52 (50)
Sound power level	Cooling : Heating	dB(A)	65 (63) : 66 (64)	67 (65) : 67 (65)	68 (66) : 67 (65)
Piping connections	Liquid/Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	3 - 40	3 - 40	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30	15, 30
Maximum chargeless length		m	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)
Operation ranges	Cooling : Heating	℃	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24

CEILING

Dimensions (6.0kW – 14.0kW)

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

Indoor Units:

S-60PT2E5B
S-71PT2E5B

	12.5kW		14.0kW	
S-100PT2E5B	**S-125PT2E5B**	**S-125PT2E5B**	**S-140PT2E5B**	**S-140PT2E5B**
U-100PZ2R8	**U-125PZ2R5**	**U-125PZ2R8**	**U-140PZ2R5**	**U-140PZ2R8**
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)	13.6 (3.3-15.0) 14.0 (3.4-16.0)	13.6 (3.3-15.0) 14.0 (3.4-16.0)
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)	46,400 (11,300 - 51,200) 47,800 (11,600 - 54,600)	46,400 (11,300 - 51,200) 47,800 (11,600 - 54,600)
3.64 : 4.24	3.32 : 3.89	3.32 : 3.89	3.15 : 3.70	3.15 : 3.70
2.75 : 2.36	3.76 : 3.21	3.76 : 3.21	4.32 : 3.78	4.32 : 3.78
1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
240V	240V	240V	240V	240V
0.65 : 0.65	0.83 : 0.83	0.83 : 0.83	0.88 : 0.88	0.88 : 0.88
235 × 1,590 × 690	235 × 1,590 × 690	235 × 1,590 × 690	235 × 1,590 × 690	235 × 1,590 × 690
40	40	40	40	40
500 : 500	566 : 566	566 : 566	583 : 583	583 : 583
42 / 37 / 35 : 42 / 37 / 35	46 / 40 / 36 : 46 / 40 / 36	46 / 40 / 36 : 46 / 40 / 36	47 / 41 / 37 : 47 / 41 / 37	47 / 41 / 37 : 47 / 41 / 37
60 / 55 / 53 : 60 / 55 / 53	64 / 58 / 54 : 64 / 58 / 54	64 / 58 / 54 : 64 / 58 / 54	65 / 59 / 55 : 65 / 59 / 55	65 / 59 / 55 : 65 / 59 / 55
3	3	3	3	3
VP-20	VP-20	VP-20	VP-20	VP-20
3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz	1 Phase/ 50Hz	3 Phase/ 50Hz
415V	240V	415V	240V	415V
4.00 : 3.40	16.2 : 13.7	5.40 : 4.60	18.6 : 16.2	6.20 : 5.40
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
90	94	94	94	94
1,285 : 1,169	1,436 : 1,302	1,436 : 1,302	1,486 : 1,386	1,486 : 1,386
52 (50) : 52 (50)	55 (53) : 55 (53)	55 (53) : 55 (53)	56 (54) : 56 (54)	56 (54) : 56 (54)
68 (66) : 67 (65)	70 (68) : 70 (68)	70 (68) : 70 (68)	71 (69) : 71 (69)	71 (69) : 71 (69)
Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
15, 30	15, 30	15, 30	15, 30	15, 30
30	30	30	30	30
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)
-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

Indoor Units:

S-100PT2E5B
S-125PT2E5B
S-140PT2E5B

123 / 61 / 73 / 190 / 265 (Suspension bolt pitch) / 114 / 1541 (Suspension bolt pitch)

1584 / 1590 / Over 250 / Service space / Over 250 / Service space

690 / 216 / 131 / 193 / 235 / 80 / 186

Approx. 2° / 15 / 4 / Air discharge / Air intake / Minimum 50cm

90 (Left drain position) (Closed with rubber stopper at time of shipment.)

216 / 86 (Gas tubing) / 70 (Liquid tubing) / 90 (Right drain position)

Tubing hole position on wall surface (Figure shows view from front) / 176 / 96

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.

ECONAVI

ECONAVI ready

| Self-diagnosing Function | Automatic Fan Operation | Mild dry | Intelligent Auto Swing | Automatic Restart Function | Auto Swing (Auto Flap Control) | DC Motor |

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.

Quiet operation

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

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.
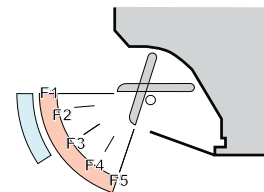
Washable front panel

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

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

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

F1
F2
F3
F4
F5

Heating: F1 to F5
Cooling: F1 to F3

ECONAVI
ECONAVI ready

S-100PK2E5B

CZ-CENSC1   CZ-RTC5B   CZ-RTC4

Specifications of R32 Compact Model R32 REFRIGERANT

Capacity			9.0kW	
Model Name	Indoor Unit		S-100PK2E5B	S-100PK2E5B
	Outdoor Unit		U-100PZ2R5	U-100PZ2R8
Cooling capacity : Heating capacity		kW	9.0 (3.0 - 9.7) 9.0 (3.0 - 10.5)	9.0 (3.0 - 9.7) 9.0 (3.0 - 10.5)
		BTU/h	30,700 (10,200 - 33,100) 30,700 (10,200 - 35,800)	30,700 (10,200 - 33,100) 30,700 (10,200 - 35,800)
EER : COP	Cooling : Heating	W/W	3.47 : 3.93	3.47 : 3.93
Total power input	Cooling : Heating	kW	2.59 : 2.29	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	0.66 : 0.66
Dimensions	H × W × D	mm	302 x 1,120 x 236	302 x 1,120 x 236
Net weight		kg	14	14
Air volume	Cooling : Heating	L/s	367 : 367	367 : 367
Sound pressure level (H/M/L)	Cooling : Heating	dB(A)	49 / 45 / 41 : 49 / 45 / 41	49 / 45 / 41 : 49 / 45 / 41
Sound power level (H/M/L)	Cooling : Heating	dB(A)	65 / 61 / 57 : 65 / 61 / 57	65 / 61 / 57 : 65 / 61 / 57
Number of fan speeds			5	5
Drain pipe size		mm	VP-16	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	3.75 : 3.30
Dimensions	H × W × D	mm	996 x 980 x 370	996 x 980 x 370
Net weight		kg	90	90
Air volume	Cooling : Heating	L/s	1,285 : 1,169	1,285 : 1,169
Sound pressure level (Silent mode)	Cooling : Heating	dB(A)	52 (50) : 52 (50)	52 (50) : 52 (50)
Sound power level (Silent mode)	Cooling : Heating	dB(A)	68 (66) : 67 (65)	68 (66) : 67 (65)
Piping connections	Liquid/Gas	m	Ø9.52 / Ø15.88	Ø9.52 / Ø15.88
Pipe length	min. - max.	m	5 - 50	5 - 50
Elevation difference (OU located lower, OU located higher)		m	15, 30	15, 30
Maximum chargeless length		m	30	30
Refrigerant at shipping, Additional gas amount		g	R32, 2,600, 45 (g/m)	R32, 2,600, 45 (g/m)
Operation ranges	Cooling : Heating	℃	-10 to 43 : -15 to 24	-10 to 43 : -15 to 24

WALL MOUNTED

Dimensions (10.0kW)

911
1120

47   114   60   60   114   47

7.5   50   50
Minimum space requirements for installation

Ø29±1
Ø16.2 +0.3 -0.2
18.5
Detailed view B

VIEW A

236   2
302
A
61
51
15
128.5   (415)   (50)   B
(570)   3
2   1
Symmetry

557.5   562.5
350   350
30   Exterior view of main unit   4 Ø5.3 hole   47.5
183.5   188.5
132.5   128   128   137.5   235
243   C
59
223.5   663   233.5
6   Liquid connecting tube (400)   Ø80 (Right side tubing hole)
Gas connecting tube (450)   Cutting position when tubing from left side

4.5   Ø10.5
18   10.5
Ø80
Detailed view C   unit: mm

Products for
Small Sized Project

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

R410A INVERTER DRED ready DEMAND RESPONSE ENABLING DEVICE MEPS COMPLIANT

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

Specifications

			Ultra Slim Ducted		
Capacity			**2.60KW**	**3.70KW**	**5.00KW**
Model Name	Indoor Unit		**CS-E9SD3RW**	**CS-E12SD3RW**	**CS-E18SD3RW**
	Outdoor Unit		**CU-E9SD3R**	**CU-E12SD3R**	**CU-E18SD3R**
Cooling capacity : Heating capacity		kW	2.6 (0.85 - 3.20) 3.30 (0.85 - 4.50)	3.70 (0.85 - 4.00) 4.20 (0.85 - 5.10)	5.00 (0.90 - 5.70) 6.10 (0.90 - 7.10)
		BTU/h	8,870 (2,900 - 10,900) 11,300 (2,900 -15,300)	12,600 (2,900 - 13,600) 14,300 (2,900 -17,400)	17,100 (3,070 - 19,400) 20,800 (3,070 -24,200)
EER : COP	Cooling : Heating	W/W	4.19 : 3.93	3.59 : 3.82	3.33 : 3.59
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)
Indoor Unit					
Power source		Phase/Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
		V	240V	240V	240V
Current	Cooling : Heating	A	2.8 : 3.8	4.4 : 4.7	6.5 : 7.4
Dimensions	H × W × D	mm	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640
Net weight		kg	19	19	19
Air volume	Cooling : Heating	L/s	231 : 231	241 : 241	293 : 293
External static pressure		Pa	0 - 78	0 - 84	0 - 114
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
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
Outdoor Unit					
Power source		Phase/Hz	1 Phase / 50Hz	1 Phase / 50Hz	1 Phase / 50Hz
		V	240V	240V	240V
Dimensions	H × W × D	mm	619 x 824 x299	619 x 824 x299	795 x 875 x 320
Net weight		kg	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)
Pipe length	min. - max.	m	3-15	3-15	3-30
Elevation difference (OU located lower, OU located higher)		m	15	15	20
Operation ranges	Cooling : Heating	°C	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.

Ultra Slim Ducted

CS-E9SD3RW
CS-E12SD3RW
CS-E18SD3RW

Bulkhead Ducted

CS-E9QD3RW
CS-E12QD3RW
CS-E18QD3RW

4-Way Mini Cassette

CS-E9SB4RW
CS-E12QB4RW
CS-E18QB4RW

Panel
CZ-BT20E

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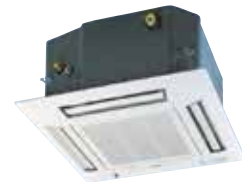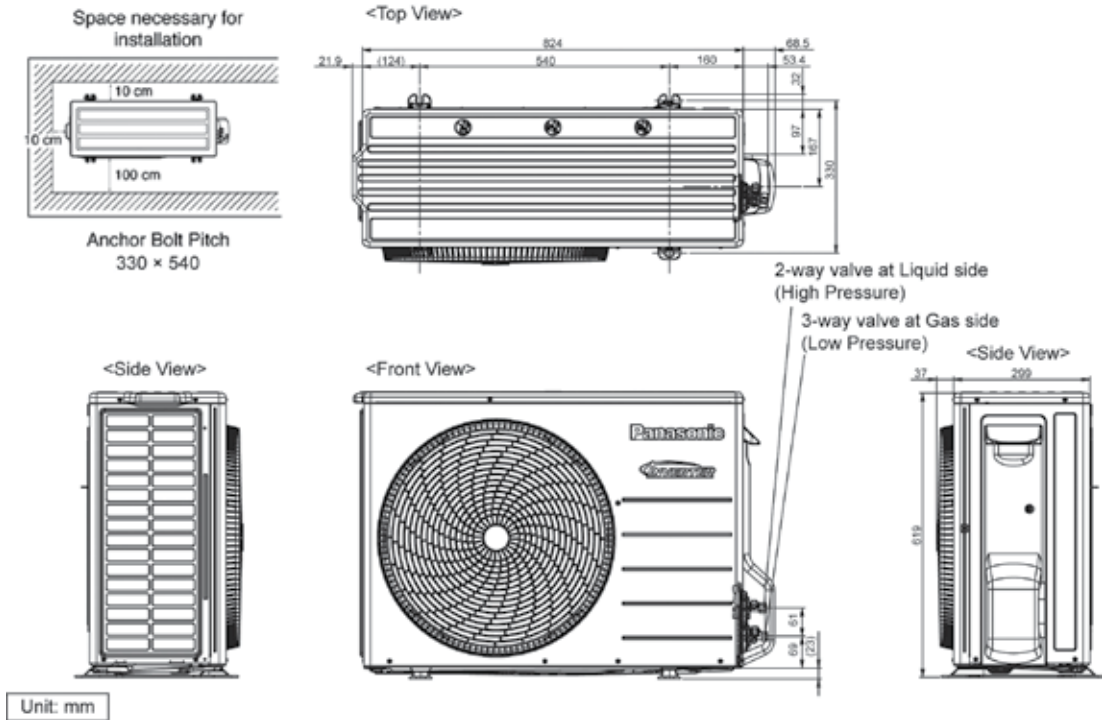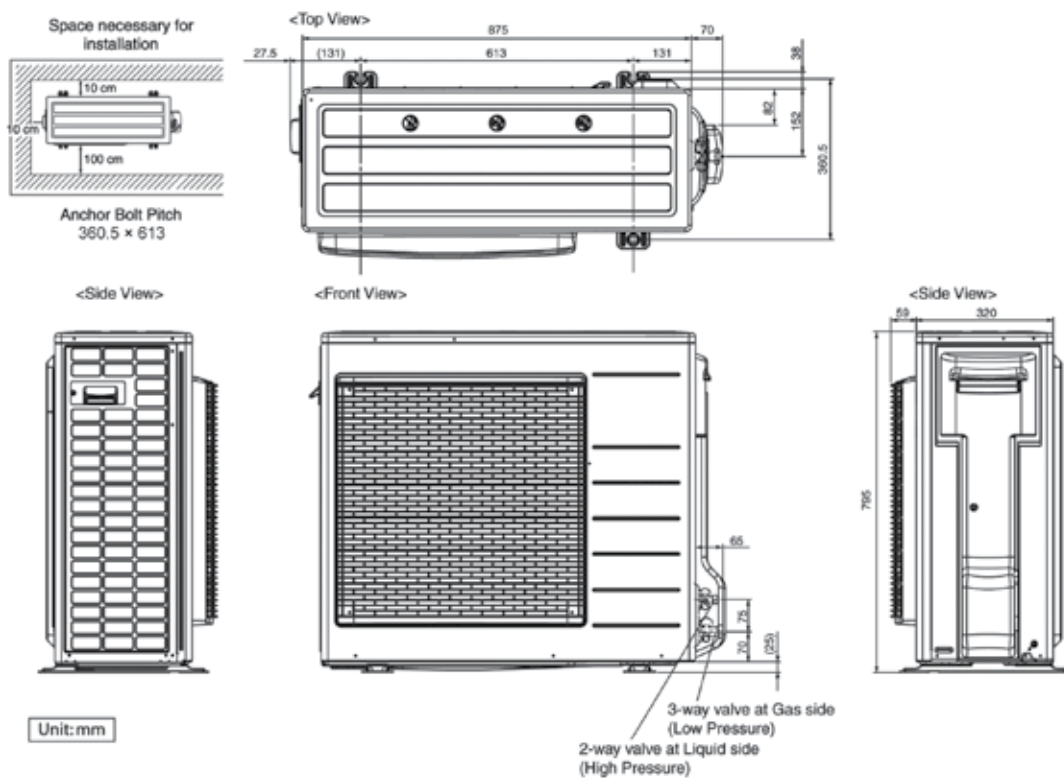CU-E12SD3R/CU-E12QD3R/CU-E12QB4R

CU-E18SD3R/CU-E18QD3R/CU-E18QB4R

CZ-RD52CP

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

Bulkhead Ducted			Mini Cassette		
2.50KW	**3.40KW**	**5.00KW**	**2.50KW**	**3.40KW**	**4.80KW**
CS-E9QD3RW	CS-E12QD3RW	CS-E18QD3RW	CS-E9SB4RW	CS-E12QB4RW	CS-E18QB4RW
CU-E9QD3R	CU-E12QD3R	CU-E18QD3R	CU-E9SB4R	CU-E12QB4R	CU-E18QB4R
2.50 (0.85 - 3.10) 3.20 (0.85 - 4.40)	3.40 (0.85 - 4.00) 4.00 (0.85 - 5.10)	5.00 (0.90 - 5.70) 6.10 (0.90 - 7.10)	2.50 (0.85 - 3.20) 3.20 (0.85 - 4.70)	3.40 (0.85 - 4.00) 4.00 (0.85 - 5.40)	4.80 (0.90 - 5.70) 5.00 (0.90 - 7.10)
8,530 (2,900 - 10,600) 10,900 (2,900 - 15,000)	11,600 (2,900 - 13,600) 13,600 (2,900 - 17,400)	17,100 (3,070 - 19,400) 20,800 (3,070 - 24,200)	8,530 (2,900 - 10,900) 10,900 (2,900 - 16,000)	11,600 (2,900 - 13,600) 13,600 (2,900 - 18,400)	16,400(3,070 - 19,400) 17,100 (3,070 - 20,400)
3.85 : 3.64	3.58 : 3.39	3.25 : 3.30	4.55 : 4.10	3.86 : 3.81	3.31 : 3.31
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)
1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz	1 Phase/ 50Hz
240V	240V	240V	240V	240V	240V
3.0 : 3.9	4.1 : 5.1	6.6 : 7.9	2.5 : 3.5	3.9 : 4.6	6.2 : 6.5
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
17	17	18	18	18	18
250 : 259	256 : 263	286 : 294	175 : 182	175 : 195	195 : 208
0 - 124	0 - 140	0 - 147	–	–	–
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
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
1 Phase / 50Hz	1 Phase / 50Hz	1 Phase / 50Hz	1 Phase / 50Hz	1 Phase / 50Hz	1 Phase / 50Hz
240V	240V	240V	240V	240V	240V
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
33	33	52	33	33	52
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)
3 - 15	3 - 15	3 - 30	3-15	3-15	3-30
15	15	20	15	15	20
5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24	5 - 46 : -15 - 24

OUTDOOR UNIT

Dimensions (2.5kW – 3.7kW)

Space necessary for installation

10 cm
10 cm
100 cm

Anchor Bolt Pitch
330 × 540

<Top View>

2-way valve at Liquid side
(High Pressure)

3-way valve at Gas side
(Low Pressure)

<Side View>

<Side View>

<Front View>

Panasonic

Unit: mm

Dimensions (4.8kW – 5.0kW)

Space necessary for installation

10 cm
10 cm
100 cm

Anchor Bolt Pitch
360.5 × 613

<Top View>

<Side View>

<Front View>

<Side View>

3-way valve at Gas side
(Low Pressure)

2-way valve at Liquid side
(High Pressure)

Unit: mm

ULTRA SLIM DUCTED

Dimensions (2.5kW – 5.0kW)

<Front View>

(AIR OUTLET DUCT FLANGE)
692

(AIR OUTLET DUCT FLANGE)
145

<Top View>

<Side View>

26

160 x 4 = 640

5 · Ø 3.1 HOLE

27

2 · Ø 3.1 HOLE

96

<Side View>

84   30

28

10

81

143

238

WATER
INLET

640   564

80

44

194

33   120

DRAIN PORT
(UPPER & LOWER)

750

824

904

150

200

<Back View>

(AIR INLET)
126

680
(AIR INLET)

AIR FILTER

23   40

14

155   120

14

14

23

23   132   220   220   132   23

14
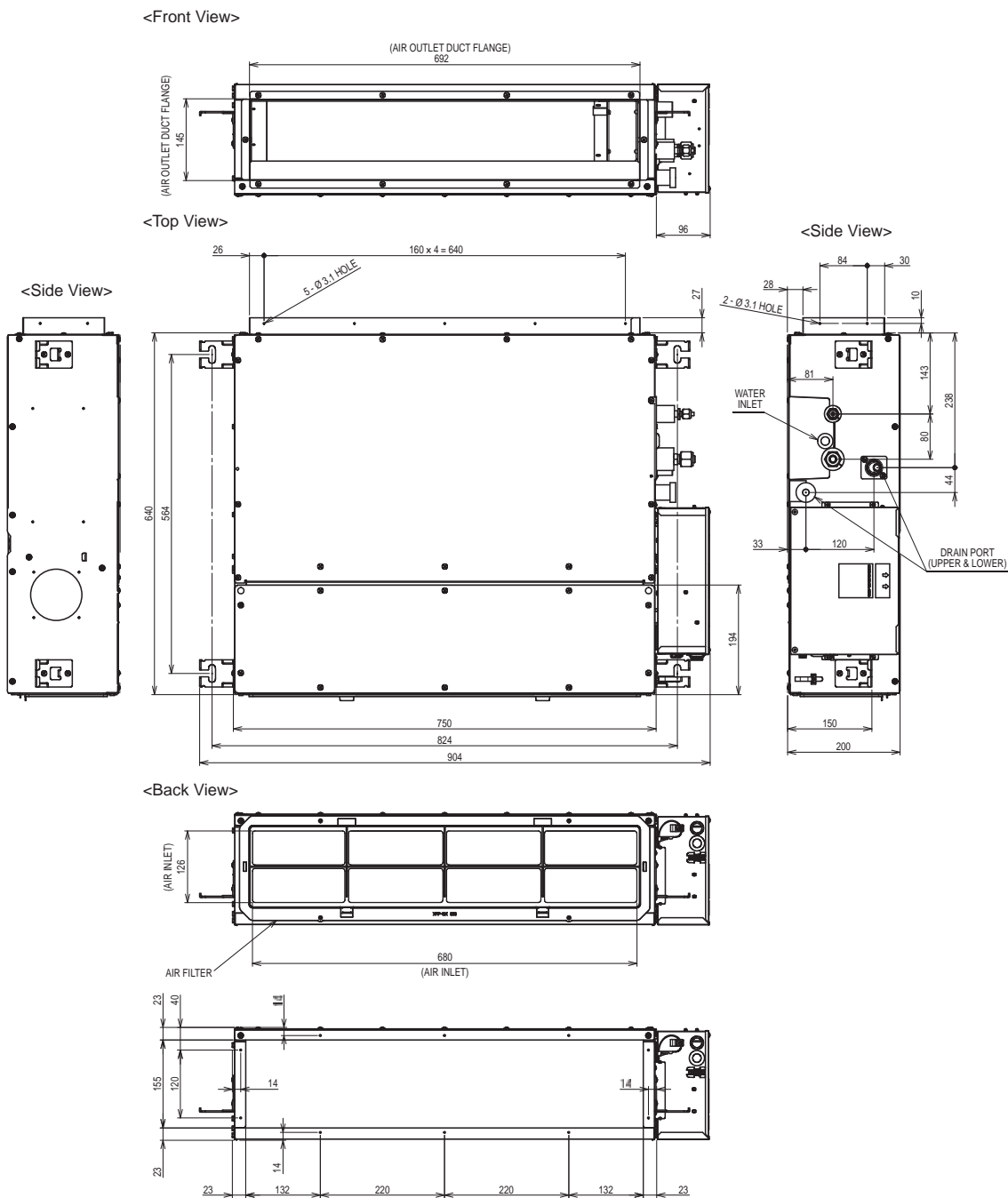
Unit: mm

BULKHEAD DUCTED

Dimensions (2.5kW – 3.4kW)
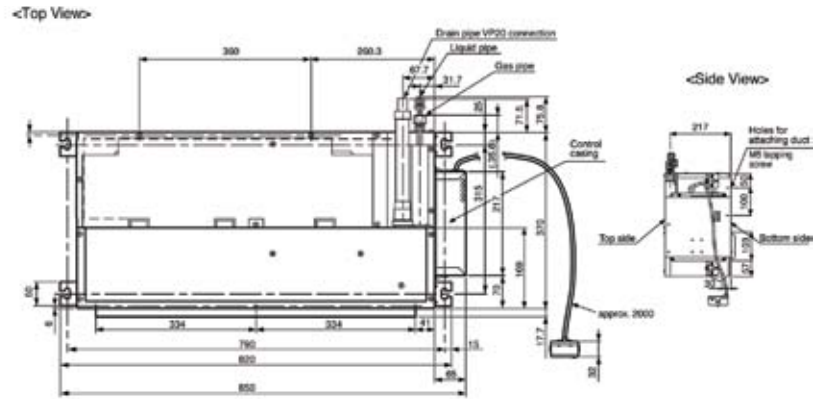
Dimensions (5.0kW)
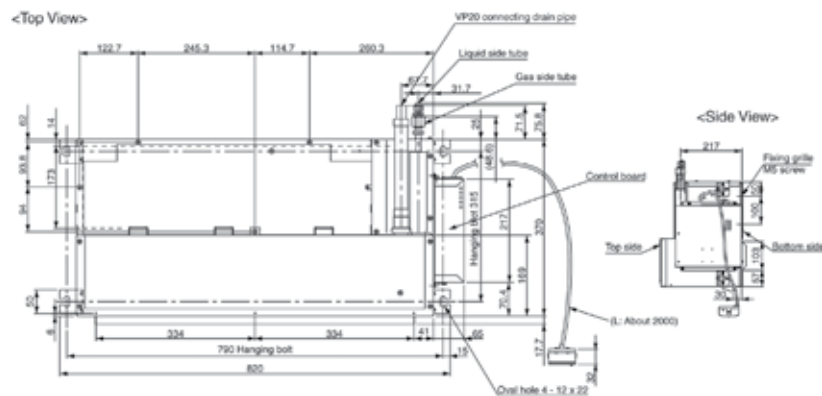
4-WAY MINI CASSETTE

Dimensions (2.5kW – 5.0kW)

<Back View>

Holes for attaching duct
M4 tapping screw

736

7

30

20

32 mm diameter
Opening

262.5   262.5

92.5   400 (100 x 4)   92.5   136.8

550   17.5

<Front View>

750

635   69.5

14.7

Holes for attaching duct
M4 tapping screw

681

670

35

40

67.5   300   300   67.5   7.5

Remote control
receiver

Unit : mm

<Back View>

736   7

Duct installation hole M4 tapping screw

33   20

32 semi cut
hole

400 (100 x 4)

92.5   92.5   136.8

550   17.5

<Front View>

750

635   69.5

300   300   67.5

14.7

Duct installation hole M4 tapping
screw

58.5

681

670

35

40

67.5   300   300   67.5   7.5

Receiver

Unit : mm

Gas piping   73   44   Liquid piping   Drain pipe   142

260

100   25

151

700

700

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.

Life Is On | **Schneider** Electric

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.

Life Is On | Schneider Electric

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: CO_2, window/door, human presence.

User-/Owner-friendly.
· Colour touch screen
· Ease and simply of use
· 20 Languages
· Easy-to-understand error description

Ultimate Customisation.
· Background colour customisable
· Custom display/icons, messages
· Programmable logic (also stand alone)

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 CO_2 sensor in the room, ideal, waste-free air conditioning is achieved.

VRF

OR

PAC

Wired Connection

SER8150

Ceiling motion sensor

Wall motion temperature sensor

Window / Door sensor

CO_2 sensor
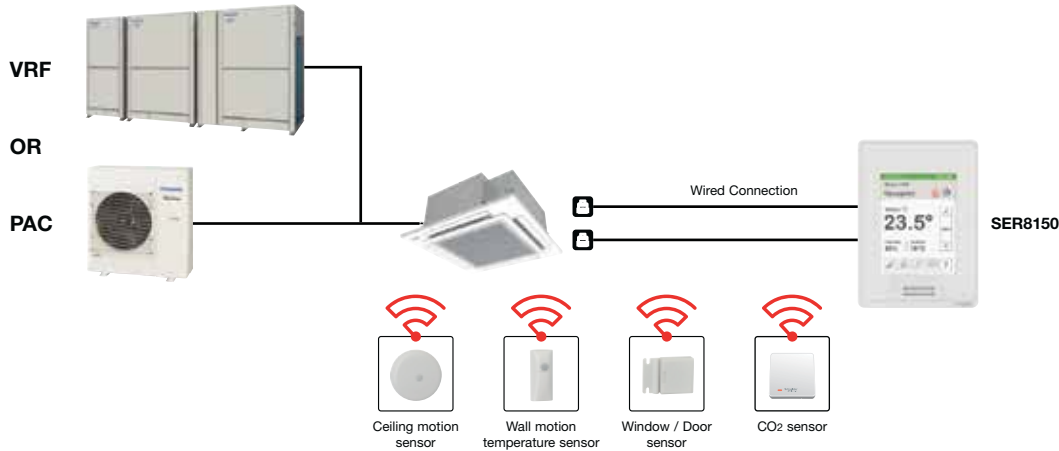
Sensing Technology

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.

Ceiling motion sensor (option)

Window sensor (option)

ZigBee

Room controller

Built in PIR, Humidity

Door sensor (Option)

CO_2 sensor (option)

Wall motion temperature sensor (option)

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

| SED-WMS-P-5045 Window / Door sensor | SED-CMS-P-5045 Ceiling motion sensor | SED-WMS-P-5045 Wall motion temperature sensor | SED-CO2-G-5045 CO_2 sensor |

* 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.

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.

Panasonic PAC&VRF
· PAC
· VRF
· GHP

A
Ceiling motion

Wall motion temp. sensor

Window / Door sensor

CO_2 sensor

Room controller

Multi-purpose Manager (MPM)

SEC-TE Smart Terminal Controller

B BACnet
ASHRAE
* Also available Modbus RTU.

Eco truxure
Ready for BEMS
With VRF dedicated GUI

C
Life Is On | Schneider Electric
BEMS Widget (Exclusive)
22.2°C
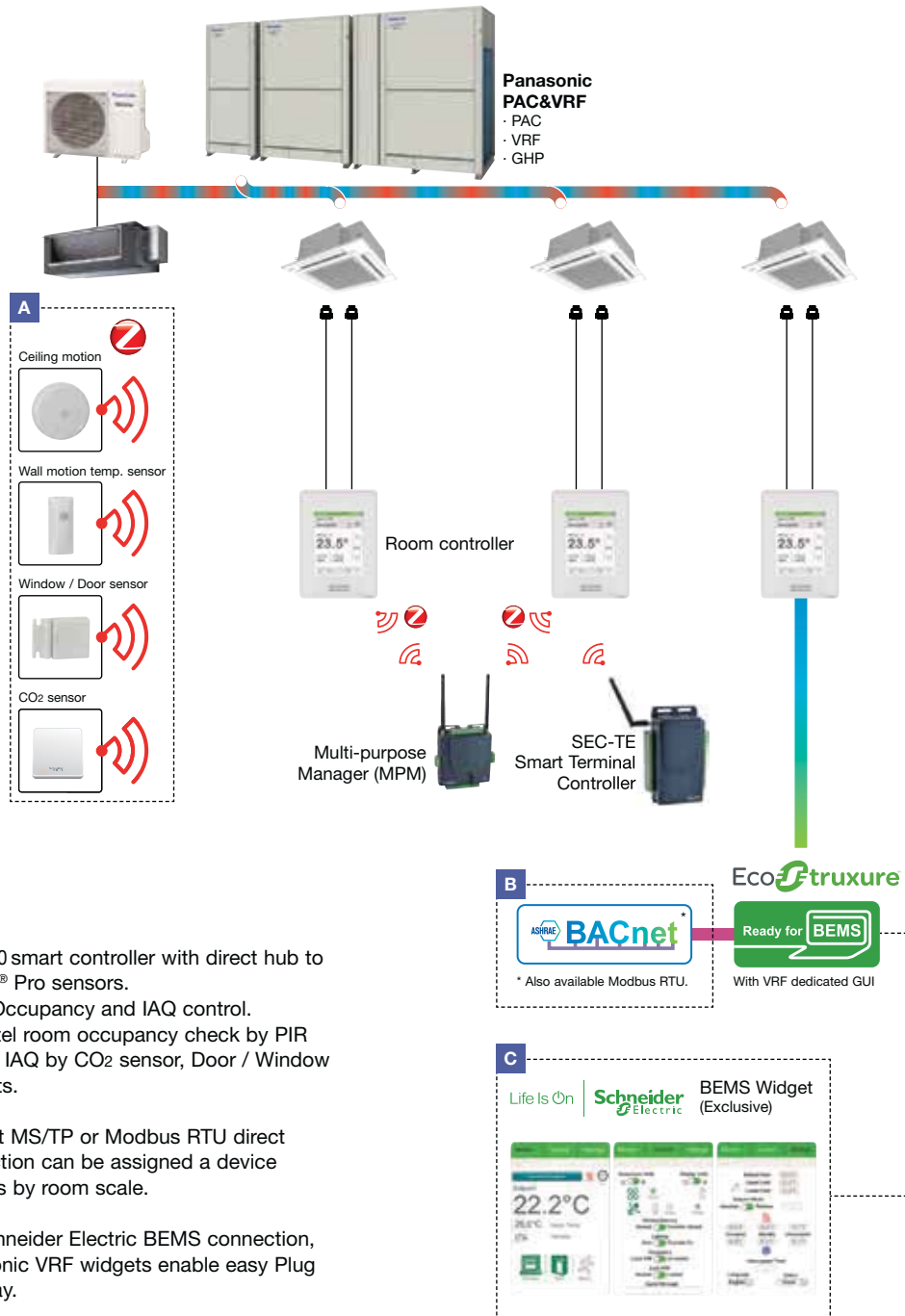
A SER8150 smart controller with direct hub to ZigBee® Pro sensors.
Great Occupancy and IAQ control.
Ex: Hotel room occupancy check by PIR sensor, IAQ by CO_2 sensor, Door / Window contacts.

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.

Ceiling-mounted motion sensor (Option)

Room controller

Door contact sensor (Option)

CO_2 sensor (Option)

Built in PIR

Wall-mounted motion sensor (Option)
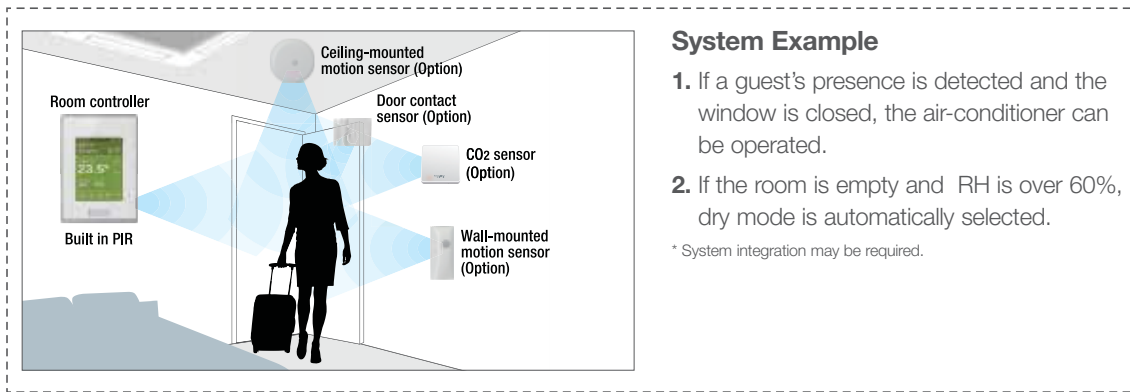
System Example

1. If a guest's presence is detected and the window is closed, the air-conditioner can be operated.

2. If the room is empty and RH is over 60%, dry mode is automatically selected.

* System integration may be required.

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

CO_2 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.

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.

Easy-to-Understand Error Description

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

Programmable Logic

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

Smart Connectivity Devices

Schneider Electric brand - SER8150

| SED-WDS-P-5045 Window / Door sensor | SED-CMS-P-5045 Ceiling motion sensor |

| SED-WMS-P-5045 Wall motion temperature sensor | SED-CO2-G-5045 CO_2 sensor |

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

BACnet MS/TP or Modbus
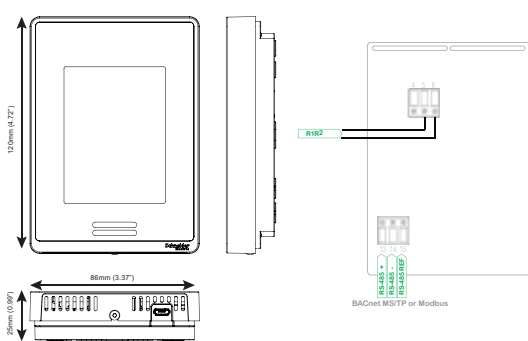
Dimensions
Height: 12cm/4.72in
Width: 8.6cm/3.39in
Depth: 2.7cm/1.06in
Power Requirements
16 Vdc from Panasonic R-R IDU connectors
50/60 Hz, 4VA, Class 2 Supply
Range from Indoor Unit
Recommended 500ft (150 m)
Operating Conditions
0 °C to 50°C (32°F to122°F)
0% to 95% R.H. non-condensing
Storage Conditions
-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 SER8150RxB1194 equals 490ft (150m) with AWG #18 wire (0.82 mm^2). 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
LVD Directive 2006/95/EC
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 UNDESIRED OPERATION.

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

Ceiling Motion Sensor SED-CMS-P-5045 - Dimensions & Wiring & Specifications
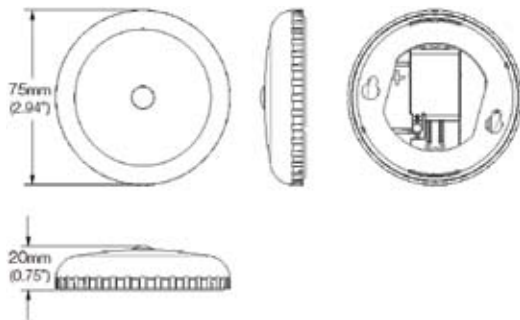
Dimensions	75mm diameter x 20mm thick (2.94in diameter x 0.75in thick)
Colour	White
Weight	50g (1.8oz) with batteries
Communication	ZigBee, HA1.2 Compatible
Communication Range	Up to 40ft (12m), open field 300ft (100m)
Detection Range	Maximum: 90 deg cone, 16.5ft (5m)
	Recommended: 45 deg, 12ft (3.6m)
Battery Voltage	1.5VDC Alkaline
Battery Cell	2 x AAA (recommended Panasonic LR03XWA)
Battery Life	Up to 5 years
Ambient Temperature	-10 °C to +50 °C (+14 °F to +122 °F)

Certification

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

Wall Motion Sensor SED-WMS-P-5045 - Dimensions & Wiring & Specifications
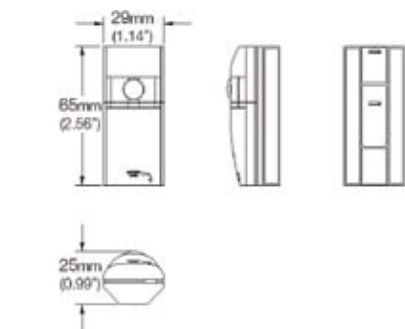
Dimensions	65mm H x 29mm W x 25mm D (2.56in H x 1.14in W x 0.99in D)
Color	White
Weight	30g (1.06oz) with battery
Communication	ZigBee, HA1.2 Compatible
Communication Range	Up to 40ft (12m) open field 300ft (100m)
Detection Range	Maximum: 90 deg cone, 16.5ft (5m)
	Recommended: 47 deg, 16ft (5m)
Battery Voltage	3.0VDC Lithium
Battery Cell	CR2 (recommended Panasonic CR15H270)
Battery Life	Up to 5 years
Ambient Temperature	-10 °C to +50 °C (+14 °F to +122 °F)

Certification

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

Door/Window Contact SED-WDS-P-5045 - Dimensions & Wiring & Specifications
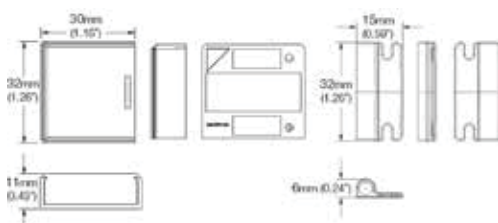
Sensor Dimensions	32mm wide x 30mm high x 11mm thick (1.26in wide x 1.16in high x 0.43in thick)
Magnet Dimensions	15mm wide x 32mm high x 6mm thick (0.59" wide x 1.26" high x 0.24" thick)
Color	White
Weight	11g (0.38oz) with battery
Communication	ZigBee, HA1.2 Compatible
Communication Range	Up to 40ft (12m) open field 300ft (100m)
Battery Voltage	3.0VDC Lithium
Battery Cell	CR2032 (recommended Panasonic CR2032)
Battery Life	Up to 5 years
Ambient Temperature	-10 °C to +50 °C (+14 °F to +122 °F)

Certification

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

Site A

Site B

Site C
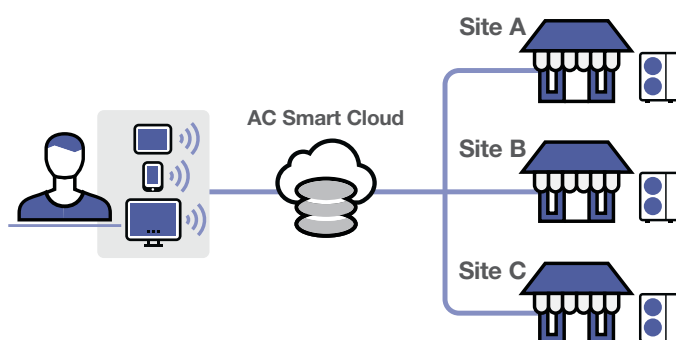
AC Smart Cloud is suitable for various facilities

Retail   School   Hotel   Hospital

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.

Anytime | Anywhere | Multi-platform | Internet browser

Scalable solution for your business.

Small to large | 1 to multi sites | Upgrade features* | Multi PAC/VRF
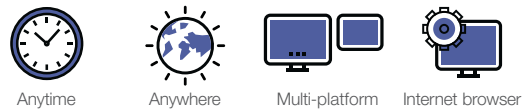
* Customised to meet user demand / Upgraded new functions / Upgraded by new products / IT smart management.

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.

Facility manager: A
Energy optimisation
Multisite monitoring
Schedule management
Maintenance notification

Owner of Hotels
Administrator has a full access

Facility manager: B
Energy optimisation
Multisite monitoring
Schedule management
Maintenance notification

Facility manager: C
Energy optimisation
Multisite monitoring
Schedule management
Maintenance notification

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.
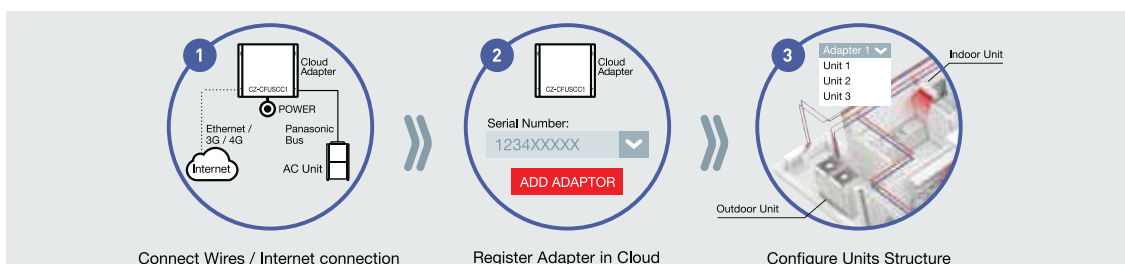
1 Cloud Adapter — CZ-CFUSCC1 — POWER — Ethernet / 3G / 4G — Panasonic Bus — Internet — AC Unit

2 Cloud Adapter — CZ-CFUSCC1 — Serial Number: 1234XXXXX — ADD ADAPTOR

3 Adapter 1 — Unit 1 — Unit 2 — Unit 3 — Indoor Unit — Outdoor Unit

Connect Wires / Internet connection | Register Adapter in Cloud | Configure Units Structure

* 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			
Requirements	Advanced operation	Normal operation	Operation from anywhere in the room	
External appearance				
Type, model name	Deluxe Wired Remote Controller / CZ-RTC5B	Timer Remote Controller (Wired) / CZ-RTC4	Wireless Remote Controller / CZ-RWSU3 CZ-RWST3N CZ-RWSK2 + CZ-RWSC3	
Built-in thermostat	●	●	●	
ECONAVI on/off control	●	●	—	
Number of indoor units which can be controlled	1 group, 8 units	1 group, 8 units	1 group, 8 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.	
Function ON/OFF	●	●	●	
Mode setting	●	●	●	
Fan speed setting	●	●	●	
Temperature setting	●	●	●	
Air flow direction	●	●	●	
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.

	CENTRALISED CONTROL SYSTEMS				Connection with 3rd Party Controller
	Normal operation	Operation with various function from centre station	Only ON/OFF operation from centre station	Simplified load distribution ratio (LDR) for each tenant	
				Touch screen panel	**Seri-Para I/O unit for outdoor unit**
			NEW		CZ-CAPDC2
	Wired Remote Controller	System Controller	ON/OFF Controller	Intelligent Controller	**Interface adaptor**
	CZ-RD52CP	CZ-64ESMC3	CZ-ANC3	CZ-256ESMC3 (CZ-CFUNC2)	**NEW** CZ-CAPC3
	—	—	—	—	**Seri-Para I/O unit for each indoor unit**
	—	●	—	●	CZ-CAPBC2
	1	64 groups, max. 64 units	16 groups, max. 64 units	64 units x 4 links, max. 256 units	
	· 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.	**Communication Adaptor** CZ-CFUNC2
	●	●	●	●	**LonWorks Interface**
	●	●	—	●	CZ-CLNC2
	●	●	—	●	
	●	●	—	●	
	●	●[1]	—	●[1]	
	—	●	●	●	
	—	●	—	●	

51

Individual Control Systems

Control contents	Part name, model No.	Quantity
Standard Control • 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 remoted controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	1 unit each
(1) Group control • 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 remoted controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	As required
(2) Main/sub remote control • 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 remoted controller CZ-RTC4 / CZ-RTC5B Wireless remote controller CZ-RWSU3 / CZ-RWST3N / CZ-RWSK2 + CZ-RWSC3	As required

SYSTEM EXAMPLE

Remote controller   Main   Sub   Main   Sub

Standard control   (2) Main/sub remote control   (1) Group control
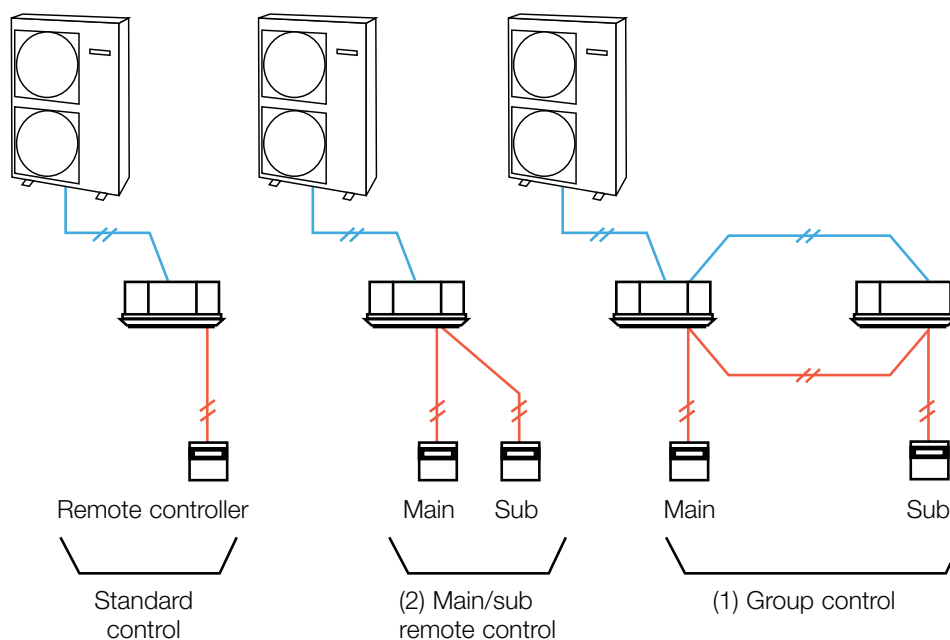
Deluxe wired remote controller (CZ-RTC5B)

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

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

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

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.

Basic remote controller ON/OFF
• Operation mode changeover
  (Cooling, Heating, Dry, Auto, Fan).
• Temperature setting
  (Cooling/Dry: 18-30°   Heating: 16-30°).
• Fan speed setting H/ M/ L and Auto.
• Air flow direction adjustment.
• ECONAVI on/ off*

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
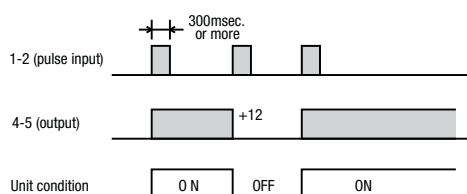
1-2 (pulse input)   300msec. or more

4-5 (output)   +12

Unit condition   O N   OFF   ON

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

COM
COM
T10
(yellow)
1
2
3
4
5 +12V
6
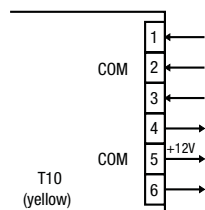
Condition

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

T10
(YEL)
Relay (Field supply)
Indoor unit control PCB
POWER
External contact (Card switch box, etc.: field supply)

• The contact in the figure is a state where the card is pulled out.
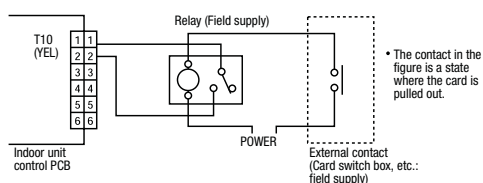
NOTE: The wire length from indoor unit to the Relay must be within 2.0m

Operation ON/OFF signal output

• Condition

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

• Example of wiring
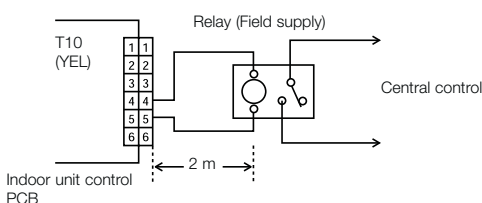
T10
(YEL)
Relay (Field supply)
Central control
Indoor unit control PCB
2 m

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)

ECONAVI

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.

ECONAVI Sensor
CZ-CENSC1

Applicable to all 5-types of indoor units*
* Except 18.0 - 22.4kW models

4-way Cassette

Under Ceiling

Mid Static Duct

High Static Duct

Wall Mounted

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.

Case study at coffee shop

In the morning
Reduced cooling when there are fewer people.

In the afternoon
Thorough cooling when there is a high level of activity.

At night
Automatic Thermo Off depending on conditions at the end of the day.

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 any where in the room which enables the optimum layout for sensors in any location.

Wide detection area

1m 3m 5m 7m
Wide 120°

2.5m
Detection area
Approx 1m

Dead Zone
7m
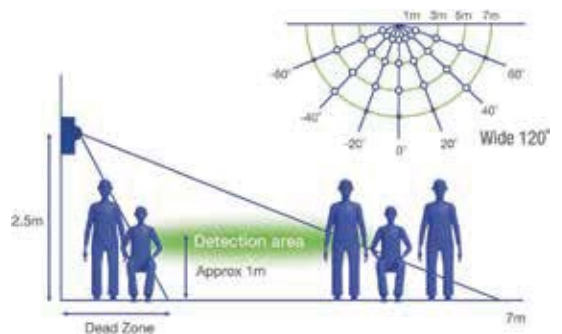
A sensor is remotely set to maximise the detection area.

Installation flexibility for indoor unit layout changes.

Remote Controller External Dimensions
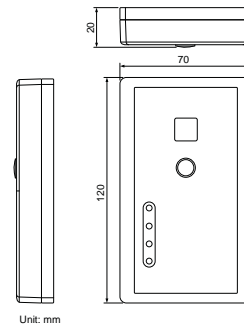
DELUXE WIRED
REMOTE CONTROLLER
(CZ-RTC5B)

120

16

120

TIMER REMOTE
CONTROLLER
(CZ-RTC4)

167

120

120

20

24.75

WIRELESS REMOTE
CONTROLLER

61

19.5

182
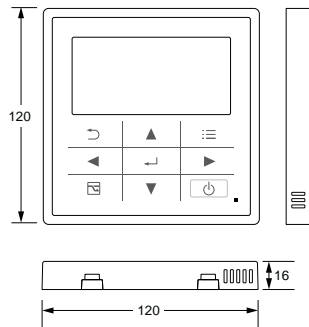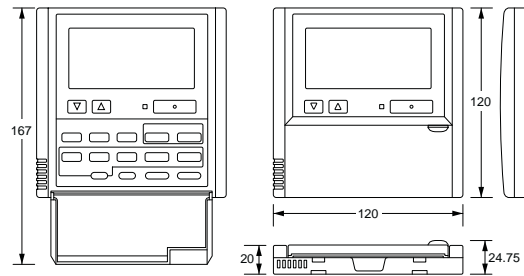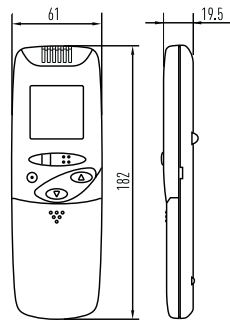
SEPARATE RECEIVER FOR
WIRELESS REMOTE CONTROLLER
(CZ-RWSC3)

20

70

120

Unit: mm

REMOTE SENSOR
(CZ-CSRC3)

17

70

120

ECONAVI SENSOR
(CZ-CENSC1)

70

12.3   20

11.3

120

Panasonic

ECONAVI

32.3
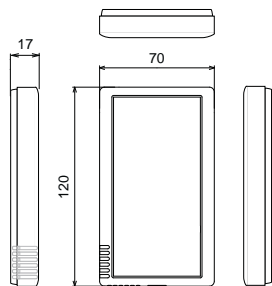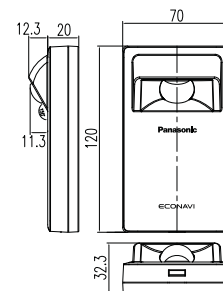
SYSTEM CONTROLLER
(CZ-64ESMC3)

System Controller

120

16   51.9

15   90   15

24.7

70.6

70.6

24.7

83.5

2.0 - R2.5   46

120

mm

Switch Box

60
83.5
105
119

46

70

106

138

13

44

mm

57
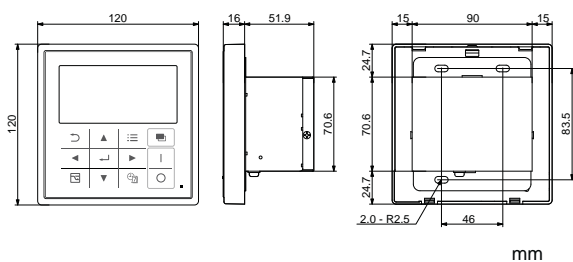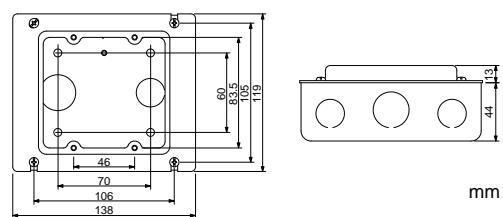
Remote Controller External Dimensions

COMMUNICATION ADAPTOR
(CZ-CFUNC2)

(mm)
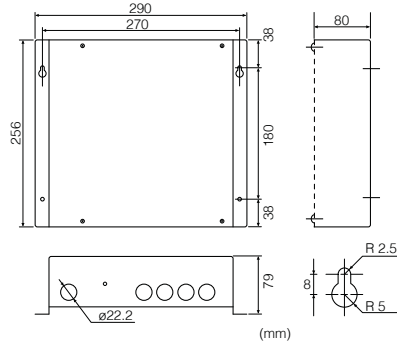
INTELLIGENT CONTROLLER
(CZ-256ESMC3)

Power indicator
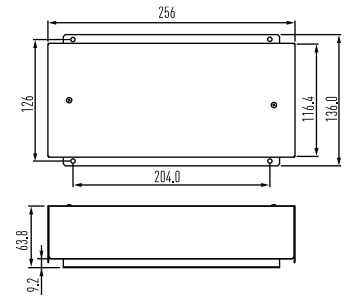Illuminates at power-on

Storage door
Push lightly to open or close
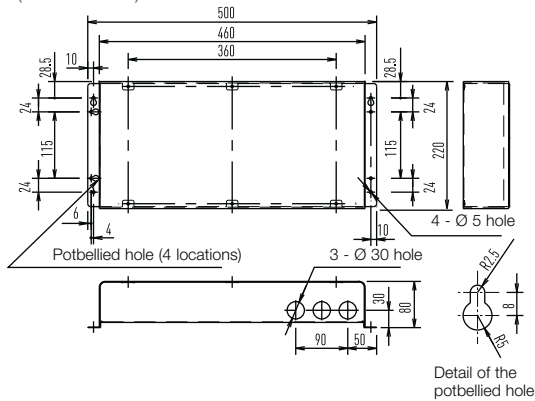
USB terminal

(mm)
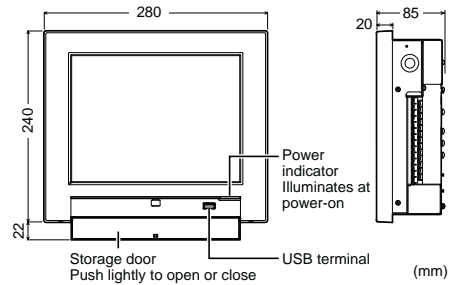
ON/OFF CONTROLLER
(CZ-ANC3)
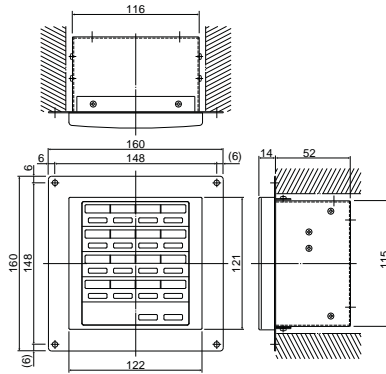
SERI-PARA I/O UNIT FOR EACH INDOOR UNIT
(CZ-CAPBC2)

LONWORKS INTERFACE
(CZ-CLNC2)

Potbellied hole (4 locations)

3 - Ø 30 hole

4 - Ø 5 hole

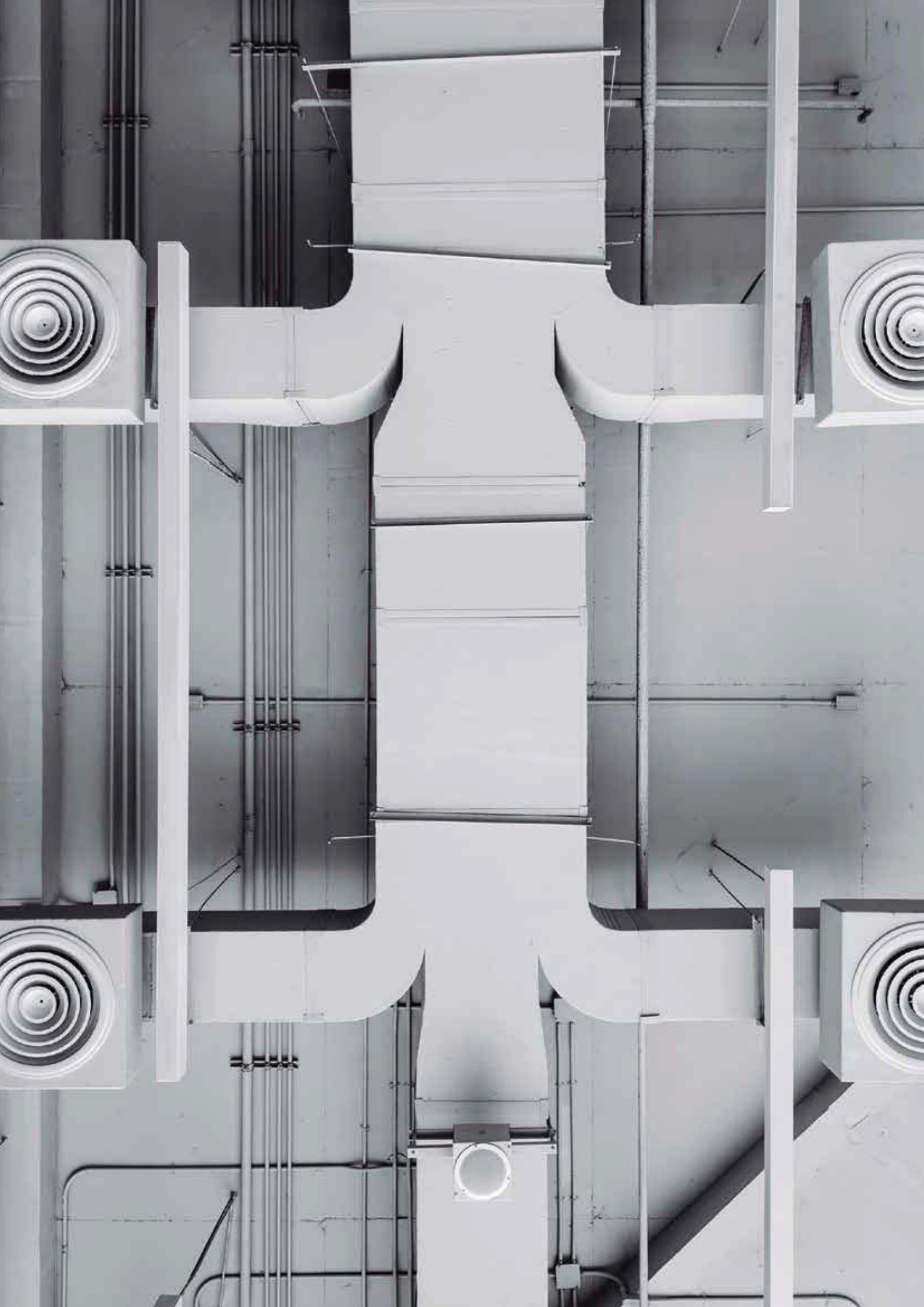Detail of the potbellied hole

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

Magnified view
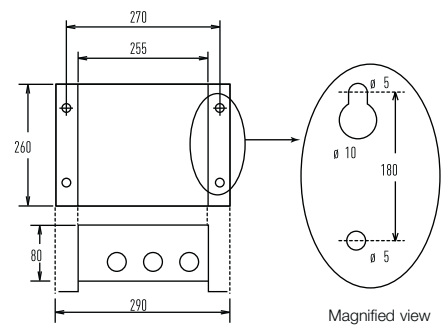
WIRED REMOTE CONTROLLER
FOR RESIDENTIAL MODEL
(CZ-RD52CP)
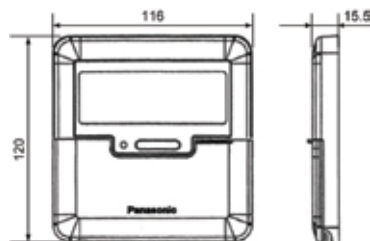
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- Please read the Installation Instructions carefully before installing the unit, and the Operating Instructions before using it.
- Specifications are subject to change without prior notice.
- The contents of this catalogue are accurate as of July 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.

Authorised Dealer

⚠ 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.

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Air Conditioning