Panasonic has developed a range of products designed for you, better than ever before. With its innovative design, high efficiency and incomparable purification system, the Etherea range has been designed with your clients in mind. Above all, it is also a range for air conditioning professionals, such as yourself, thanks to its broad range of products which are capable of conditioning rooms of all sizes – always with optimal efficiency and incomparable ease of installation. The Etherea range guarantees that you are offering your clients the very best.

Go green. Go clean. Go your way
Panasonic Air Conditioners are designed to provide more than just comfort cooling to homes. They save energy. They purify your surroundings. They adjust cooling power to suit your living spaces and styles. Living an eco-lifestyle your way is now easier than ever.
Highlighted Features

Panasonic air conditioners provide more savings and more comfort

We believe that going green shouldn’t compromise on comfort. That’s why Panasonic is introducing the new Econavi system; combining human sensor and control program technology to detect and reduce energy waste by 38%.

Our super silent air conditioners guarantee the purest air to take care of you and your family. And, for a cleaner living environment, the new Nanoe helps purify the air as well as your surroundings.

Together, these breakthrough technologies define what Panasonic’s Eco Clean Life Innovation is all about – innovations that improve our environment while making life as comfortable as possible.
ENERGY SAVING

- 38% ECONAVI
- A+++ 10,50 SEER
- A+++ 6,20 SCOP
- R2 ROTARY COMPRESSOR
- R32 NEW REFRIGERANT GAS

Intelligent Human Activity Sensor and new Sunlight Sensor technologies that can detect and reduce waste by optimising air conditioner according to room conditions. With just one touch of a button, you can save energy.

HIGH PERFORMANCE AND HEALTHY AIR

99%

New Nanoe utilises nano-technology fine particles to purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould. Seal of Approval of the British Allergy Foundation.

PM2.5 FILTER

Particulate matter (PM2.5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. Sized at 2.5µm, these particles are said to pose health problems as they can easily enter our lungs.

19dB(A)

With Super Quiet technology our devices are much more quiet than a library (30dB(A)).

SUPER QUIET

The Perfect Humidity Air controls the humidity level in the air to prevent over-dryness.

HUMIDITY CONTROL

More comfort with Aerowings. Direct airflow to ceiling to create shower cooling effect by twin flap built in indoor.

AEROWINGS

Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.

Down to -10°C in cooling only mode. The air conditioner works in cooling only mode with an outdoor temperature of -10°C.

COOLING MODE

Now Nanoe has been comprehensively tested in real-life chamber and demonstrated it is also effective against Allergy airborne particles. Due to this, Nanoe get the Seal of Approval of the British Allergy Foundation.

HIGH CONNECTIVITY

- 5 Years Warranty.
- We guarantee the outdoor unit compressors in the entire range for five years.

NEW / DOMESTIC

- Panasonic R22 R32 systems.
- The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R32 systems.

5 Years Warranty. Panasonic Air Conditioning System Wins Prestigious Design Award. Panasonic is pleased to announce that its Etherea air conditioning system has won an iF 2013 Product Design Award.

Our heat pumps containing the new refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a components refrigerant, making it easy to recycle.

NEW / DOMESTIC

- 5 Years Warranty.
- We guarantee the outdoor unit compressors in the entire range for five years.

85
New R32 Refrigerant Gas

A ‘small’ change that changes everything

Not everyone is ready for change. Indeed, there are some who resist the future. But at Panasonic we will keep believing in technologies that improve people’s lives. Which is why we are now presenting a new generation of air conditioners with R32, an innovative refrigerant in all ways imaginable: it is easy to install, environmentally friendly and saves energy. The result? Greater wellbeing for people and for the planet. Because there will always be people who resist change. But we say: Goodbye yesterday. Hello R32.

Today Panasonic. Tomorrow everyone.

European regulation CE 517/2014 makes the replacement of fluorinated gases (F-gases) compulsory, such as R410A, for environmental reasons, although it also grants a transition period from 2017 to 2030.

Must we wait? No. Our commitment to innovation is not hampered by dates. Which is why we are jumping the gun and are now presenting our new generation of air conditioners that employ the R32 refrigerant.
The new generation of air conditioners with R32 represents innovation in every way. Shall we list them?

1. **Installation innovation**
   - Extremely easy to install, practically the same as for the R410A. (Just remember to verify that the pressure gauge and vacuum pump are compatible with the R32)
   - This refrigerant is 100% pure, which makes it easier to recycle and reuse

2. **Environmental innovation**
   - Zero impact on the ozone layer
   - 75% less impact on global warming

And what does all this mean in practice?

### Greater wellbeing for people and friendlier to the planet

**Innovation is not just technology. It’s an attitude**

Leadership isn’t something you can just get. You have to show it. Which is why at Panasonic we strive each and every day to make our air conditioners highly reliable and surprisingly efficient, with minimum noise impact and the lowest environmental footprint possible.

To all that we then add sophisticated and elegant designs. Our air conditioners are like that: innovative inside and beautiful outside.

The best proof of our commitment is that we are moving ahead of the sector by including the R32 refrigerant in our entire range of domestic air conditioners, representing an enormous technological lead that manages to combine excellent comfort in the home and perfect harmony with the environment.

**And what about tomorrow?**

Our great challenge today: fighting to help the environment. How to make this possible? With greater energy efficiency and minimal energy consumption, so that we reduce the use of the planet’s fossil fuels. But also by using advanced refrigerants such as R32, employed in our entire home range.

Because this has always been technology’s purpose: To make the impossible, possible.

At Panasonic we have a firm commitment to healthier lifestyles and to reducing global warming on the planet.

For this reason, we will keep on presenting advanced, efficient and reliable solutions.

Because our commitment to innovation did not just come about today. It started when Panasonic was founded, in 1918. So we’ve been innovative for a long time now. And we want to take it even further.

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#### 100 Year Global Warming Potential of Different Refrigerants

- **R32**
  - GWP: 675
  - ODP: 0
  - 30% less energy consumption compared to R410A

- **R410A**
  - GWP: 2,087.5
  - ODP: 0

#### 3. Economic and energy consumption innovation.

- Lower cost and greater savings:
  - 30% less refrigerant
- Higher energy efficiency A+++ than R410A
- R32 consumes less energy when there are extreme temperatures outside
New Etherea 2016. Perfect outside, perfect inside

New Etherea with Econavi intelligent sensor and new Nanoe air-purifying system: outstanding efficiency A+++; comfort (Super Quiet technology only 19 dB(A)) and healthy air combined with a breakthrough design.

The new Etherea has an astonishingly slim design
A breakthrough design that combines perfectly with the most modern environments. We have selected the best materials and processes for a refined design. And now they’re available in an elegant metallic or matt silver and matt or gloss white.

Discover how to achieve energy savings with the new Etherea A+++
Econavi Sensor technology reduce waste by adjusting the operation of the air conditioner to suit the requirements of the room. With just one touch of a button, you can save energy efficiently with uninterrupted cooling, comfort and convenience.

Get the best for your health with Etherea and nanoe™
Using nanoe™ with nano-technology, fine particles purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment.
Seasonal Efficiency: New Energy Efficiency Label

From January 2013, the energy performance calculation for air conditioning systems changed from an overall EU based standard of EER and COP to a new standard based on seasonal efficiencies of SEER and SCOP. These changes to the Energy Related Products Directive or ErP are designed to give consumers a better understanding of the real efficiency of air conditioning and heat pump systems whose nominal power rating does not exceed 12kW.

Undergoing gradual implementation from 1 January 2013 until 1 January 2019, the schedule for each product category is as follows:

- 01 January 2013: A+++, A++, A+, A, B, C, D, E, F and G.

Seasonal Energy Efficiency Ratio (SEER) – This is the overall energy efficiency ratio of the unit, representative of the entire cooling season. It is calculated as the annual cooling demand divided by the annual consumption of electricity for cooling.

Seasonal Coefficient of Performance (SCOP) - This is the overall coefficient of performance of the unit, representative of the entire heating season designated (the value of SCOP corresponds to a determined heating season). It is calculated by dividing the reference annual heating demand by the annual consumption of electricity for heating.

---

New Etherea and Heatcharge performance: the very best SEER and SCOP available

Etherea and Heatcharge. Economical, environment-friendly operation high SCOP (Seasonal Coefficient of Performance).

Original Panasonic Inverter technology and a high performance compressor provide top-class operating efficiency. This lets you enjoy lower electricity bills while contributing to environmental protection.

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*SCOP on heating mode for Etherea KIT-XZ9-SKE and KIT-Z9-SKE and Heatcharge KIT-VZ9-SKE compared with electrical heaters at +7°C*
nanoe™ is nanosized electrostatic atomized water particles with plentiful OH radicals. Its effectiveness of bacteria inhibition depends on the number of OH radical, which is generated at the rate of 480 billion per second.

Adhesive
Inhibit 99.9% bacteria, viruses, pollen and mould in fabric elements. Also, deodorize odour inside.

Airborne
Inhibit 99.9% bacteria and viruses in the air.

nanoe™ attack micro-organisms.

nanoe™ is nanosized electrostatic atomized water particles, nanoe™, that improve air quality

Proven benefits of electrostatic atomized water particles, nanoe™, through experiments

The benefits range widely from inhibiting viruses and bacteria, inhibiting mould and allergens, moisturizing skin.

Experiments by universities and research institutions have proven the effects of nanoe™. The world is focusing its attention on this breakthrough technology that could be the key to the air purification.

Characteristics of nanoe™ Technology

1. Long Life
6 times longer lifespan than general negative ion. nanoe™ contains moisture around 1,000 times more than general negative ion. Being contained in water particles, it has a longer lifespan and is able to spread for a long distance.

Comparison of distribution in the room

nanoe™ spreads to every corner.

General negative ion ions decay before spreading throughout the room.

2. Water-originated
nanoe™ comes from condensed moisture in the air so that water replenishment for nanoe™ generation is not required.

nanoe™ is tiny enough to penetrate into clothes for inhibiting mould and deodorizing.

Allergens (such as pollen, mite droppings and corpses) are enclosed and inhibited.

Steam particle and large particles cannot penetrate deeply inside the fabrics.

nanoe™ can penetrate deeply inside the fabrics.

3. Microscopic Scale
Only one-billionth the size of a steam particle nanoe™ is much smaller than steam that can deeply penetrate into cloth fabrics to deodorize.

* 1nm (nanometer) = one billionth of meter

nanoe™: around 5-20nm
Steam: around 6,000nm

OH
—
—
—
—
Water
OH Radical
Electron
How does nanoe™ technology help you?

1. Virus / Bacteria / Pollen inhibition

Inhibits Virus. nanoe™ approach and capture those objects.

• OH+H2O

Virus / Bacteria / Pollen

nanoe™-metamorphosis structure of Virus / Bacteria / Pollens (Remove hydrogen)

Virus / Bacteria / Pollen is suspended in indoor air.

Completion inhibition.

INFLUENZA VIRUS

99.9%

INHIBITED

*The effectiveness of nanoe™

<table>
<thead>
<tr>
<th>Tested contents</th>
<th>Result (deactivates)</th>
<th>Testing condition</th>
<th>Tested laboratory / company</th>
<th>Report doc No.</th>
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</thead>
<tbody>
<tr>
<td>Airborne</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virus (Coliphage)</td>
<td>99.7%</td>
<td>10m²</td>
<td>6h</td>
<td>Kitasato research center for Environmental science</td>
</tr>
<tr>
<td>Bacteria (Staphylococcus aureus)</td>
<td>99.7%</td>
<td>10m²</td>
<td>4h</td>
<td>Kitasato research center for Environmental science</td>
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<tr>
<td>Adhesive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virus (Coliphage)</td>
<td>99.8%</td>
<td>10m²</td>
<td>8h</td>
<td>Japan food research laboratories</td>
</tr>
<tr>
<td>Virus (Influenza)</td>
<td>99.5%</td>
<td>1m²</td>
<td>2h</td>
<td>Kitasato research center for Environmental science</td>
</tr>
<tr>
<td>Bacteria (Staphylococcus aureus)</td>
<td>99.5%</td>
<td>10m²</td>
<td>8h</td>
<td>Japan food research laboratories</td>
</tr>
<tr>
<td>Tobacco odour</td>
<td>Deodorized in 2h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cedar pollen</td>
<td>99%</td>
<td>45L</td>
<td>2h</td>
<td>Panasonic analysis center</td>
</tr>
</tbody>
</table>

2. Deodorization

The smell adhered at curtain and sofa are deodorized.

Deodorization Effect for Adhering Odour (Tobacco)

<table>
<thead>
<tr>
<th>Odour intensity drop by 1 level means</th>
<th>90% is reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour intensity 1.2 level down.</td>
<td></td>
</tr>
</tbody>
</table>

The deodorization effect will vary subject to the surrounding environment (temperature / humidity), operation time, types of smell and clothes.

· Test Laboratory: Panasonic Corporation Analysis Center. · Test Methodology: Verifying with 4-level odour intensity indication in 10m² test rooms. · Deodorization Method: nanoe™ emit. · Test Subject: Adhering Tobacco Smell. · Test Result: 1.2 level of odour intensity is decreased after 120 minutes. · Report No.: BAA33-130126-001.

3. Moisturizing Skin

Helps retain the moisture of the skin.

With nanoe™ nanoe™ hydrate the sebum on the skin to prevent the loss of moisture.

· Test Laboratory: FCS Research Institute Inc. Report no. 1914

After 28 days Skin is hydrated that nanoe™ keeps the texture of the skin.

New PM2,5 Filter

Panasonic new PM2.5 purifying filter catch virus & allergen, even micro size ones, to remove from the air and create clean & comfort indoor quality.

What’s PM2.5 and how harmful

PM2.5 is an air pollutant that can drastically affect people’s health. The size of the suspended particulate is thirty times smaller than the width of human hair, essentially making it difficult to see with the naked eye. It causes dangerous breathing problems such as acute bronchitis and lung cancer in older people and young children.

Panasonic new PM2.5 purifying filter catch virus & allergen, even micro size ones, to remove from the air and create clean & comfort indoor quality.
Econavi Intelligent Sensors

Discover how to achieve energy savings

When you are relaxing while watching television, the air conditioner’s operation usually runs at a constant temperature setting.

Econavi detects and reduces this waste in all the right ways

Using high-tech sensors and precise control programs, it analyses room conditions and adjusts cooling power accordingly. Econavi is smart enough to locate and operate in all the right places to give you better energy savings.

So much saved with so little effort

Up to 38%* energy savings for Inverter cooling model with temperature wave

Econavi ON, Outside temperature: 35°C/24°C
Remote setting temperature: 23°C with Fan Speed (High)
Vertical Airflow direction: Auto, Horizontal Airflow direction: Econavi Mode
Setting temperature goes up 2°C in total, 1°C controlled by Econavi activity level detection and another 1°C controlled by Econavi light intensity detection.
Temperature Wave is ON, electric heater (300W; simulating the heat of human and TV etc)

Econavi OFF, Outside temperature: 35°C/24°C
Remote setting temperature: 23°C with Fan Speed (High)
Vertical Airflow direction: Auto, Horizontal Airflow direction: Front

Total power consumption amount are measured for 2 hours in stable condition. At Panasonic Amenity Room (size:16,6m²). This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

* Comparison of 1.5HP Inverter model between Econavi with (Dual Human Activity Sensor, Sunlight Sensor, and Temperature Wave) ON and Econavi OFF (Cooling)
5 Features saving energy all at once: Econavi with intelligent eco sensors

Intelligent Sensors detect potential waste of energy using the Human Activity Sensor and Sunlight Sensor. It is able to monitor human location, movements, absence and sunlight intensity. It then automatically adjusts cooling power to save energy efficiently with uninterrupted heating and cooling comfort and convenience.

Econavi sunlight sensor

Sunlight Detection (on Cooling Mode)
Econavi detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces waste energy by reducing cooling under less sunny conditions. When weather changes from sunny to cloudy/night, Econavi detects less sunlight intensity and determines less cooling power is required. If cooling power remains the same, energy will be wasted. Econavi detects this waste and reduces cooling power by an amount equivalent to increasing the set temperature by 1°C.

Sunlight Detection (on Heating Mode)
Econavi detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces heating operation (wasted energy) under more sunnier conditions. When weather changes from cloudy/night to sunny, Econavi detects more sunlight intensity and determines less heating power is required. If heating power remains the same, energy will be wasted. Econavi detects this waste and reduces heating power by an amount equivalent to decreasing the set temperature by 1°C.

Temperature wave

Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.
Econavi with Temperature Wave was developed based on an understanding of Thermal Physiology; the human body adapts physiologically to changes in temperature. Taking advantage of this understanding, Panasonic’s R&D Centre has developed the Rhythmic Temperature Control pattern, which offsets the air conditioner’s performance against thermal physiological responses. Hence, when Econavi detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy savings without sacrificing comfort.

How does temperature wave works?
When Econavi detects low activity

The result of the experiment showed that thermal sensation was maintained within the comfortable range even though average set temperature was moderately increased. Hence, when Econavi detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy savings without sacrificing comfort.

* The thermal condition of which PMV (Predicted Mean Value) is within -0.5 to +0.5 is recommended as comfortable conditions (in the condition B) by International Standard EN ISO 7730.
Econavi Intelligent Sensors

Econavi Intelligent Sensors are able to monitor sunlight intensity, human movements, activity levels and human absence to detect unconscious waste of energy and automatically adjust cooling power to save energy efficiently whilst still providing uninterrupted cooling comfort and convenience.

**High-precision sensing**

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

**Detecting Human Presence**

- **Difference in temperatures**
- **Movement**

When there is no movement for over 20 min.
- **Concludes nobody is present**
- **Concludes nobody is present**
- **Concludes somebody is present**

**Determining the Level of Human Activity**

- **Scale**
- **Frequency**
- **Speed of Movement**

A highly precise conclusion is reached through a complex algorithm

- **HIGH**
- **NORMAL**

**Sensor detection principle**

Human Activity Sensor detects human activity level and directs airflow to occupied or high activity zone.

**Differentiating objects**

Econavi’s sensor technology uses factors such as speed, frequency and temperature of every object to determine if it is human.

- **Electrical products**
  - Difference in temperatures
  - Movement
  - Concludes it is not human

- **A rolling ball**
  - Difference in temperatures
  - Concludes it is not human

- **Small insects**
  - Difference in temperatures
  - Movement
  - Concludes it is not human

- **Pets**
  - Difference in temperatures
  - Movement
  - Concludes Level of Activity High or Normal

Both changes may be detected, but they are too small to have any effect on the sensor.

From the difference in temperatures and the nature of the object’s movement, Econavi can determine if it’s human.*

* The sensor may deem pets as humans, unless it moves within the detection zone at speeds that are not humanly possible.

**Coverage capabilities**

Human Activity Sensor covers a wider area due to its improved area detection function. The entire room is divided into 7 detection areas.

**Aerowings**

Direct airflow to ceiling to create shower cooling effect by twin flap built in indoor

**Indirect airflow after reaching set temperature**

- **Ideal air flow discharge on cooling mode**
- **Airflow in Cooling Mode**
  - 2 air guides to improve the air flow direction
Inverter technology

The secret is flexibility
Panasonic Inverter air conditioners have the flexibility to vary the rotation speed of the compressor. This allows it to use less energy to maintain the set temperature while also being able to cool the room quicker at start up. So you can enjoy better savings on your electricity bills while maintaining cooling comfort.

The advantages of inverter heat pumps. Comparing Inverter and non-Inverter heat pumps.

Exceptional energy-saving performance. Reduces electricity consumption
Panasonic Inverter air conditioners are designed to give you exceptional energy savings and performance. At the start up of an air conditioner’s operation, a boost in power is required to reach the set temperature. After the set temperature is reached, less power is required to maintain it. The Panasonic Inverter air conditioner varies the rotation speed of the compressor. This provides a highly precise method of maintaining the set temperature.

Silent ambient and relaxing atmosphere 18 dB(A)
We have succeeded in making one of the most silent air conditioners on the market. Panasonic Inverter air conditioner’s indoor operating noise has been reduced as the Inverter constantly varies its output power to enable more precise temperature control.

Constant Comfort
Precise temperature control with a wide power output range enables an inverter air conditioner to meet different room occupancy levels – thus ensuring constant comfort.

Quick Comfort
Panasonic Inverter air conditioners can operate with higher power during the start up period to cool the room 1,5 times faster and heat the room 4 times faster than non-Inverter models.

Mild Dry Cooling
Mild dry cooling maintains a higher level of relative humidity of up to 10% compared to regular cooling operation. This helps to reduce skin dryness - and a dry throat.

Exceptional energy-saving performance
Panasonic Inverter air conditioners are designed to give you exceptional energy savings and performance. At the start up of an air conditioner’s operation, a boost in power is required to reach the set temperature. After the set temperature is reached, less power is required to maintain it. The Panasonic Inverter air conditioner varies the rotation speed of the compressor. This provides a highly precise method of maintaining the set temperature.

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We have succeeded in making one of the most silent air conditioners on the market. Panasonic Inverter air conditioner’s indoor operating noise has been reduced as the Inverter constantly varies its output power to enable more precise temperature control.

Quick Mode reduces operation noise to a quiet 18 dB(A)* for a comfortable night’s sleep
Noise is 5 dB(A) quieter than during regular operation

Mild Dry Cooling
Mild dry cooling maintains a higher level of relative humidity of up to 10% compared to regular cooling operation. This helps to reduce skin dryness - and a dry throat.
Heatcharge. Energy Charge System

Heating power and efficiency
- Energy Charge System. Heat storage unit which features Non-Stop heating and fast heating function
- Maximum efficiency and comfort with Econavi sunlight detection and human activity detection
- Nanoe air purifying system
- More powerful airflow to quickly reach the desired temperature

Panasonic’s new full line-up of A+++ heat pumps
In response to the Kyoto Protocol, the European Union set some challenging targets for the reduction in greenhouse-gas emissions. By the year 2020, across the member states, the EU wants to have achieved the following objectives:
- A 20% cut in greenhouse gas emissions (from 1990 base levels)
- The share of renewables in the energy mix to increase by 20%
- An overall reduction of 20% in energy consumption
Powerful, reliable heating even at low ambient winter temperatures

When the air conditioner is operating, the compressor, which is the power source of the unit, generates heat. Until now, this heat was released into the atmosphere. Panasonic focused on this waste heat!

Heatcharge is a unique, innovative Panasonic technology that stores this waste heat in the compressor and effectively uses it as heating energy. This lets you enjoy a new level of air conditioner heating power and efficiency.

Constant heating

Using stored heat provides stable heating with less drop in temperature.

Even when heating operation stops during defrost operation, stored heat continues to constantly warm the room. This eliminates the previous discomfort due to the temperature dropping when heating temporarily stops to ensure stable air conditioner heating.

You can check the charge level with the remote control. Press the Information button and the level is displayed in five stages (from 0 to 4).

Conventional: The room gradually becomes cold

Defrost operation: About 11 to 15 min.
Fall in room temperature: About 5 to 6 °C

Heatcharge: The room is thoroughly warmed

Defrost operation: About 5 to 6 min.
Fall in room temperature: About 1 to 2 °C

You can check the charge level with the remote control. Press the Information button and the level is displayed in five stages (from 0 to 4).

* Defrost operation time and how low room temperature falls differ depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.

* Output air temperature falls during defrost operation. How low room temperature falls differs depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.

* In environments where a lot of frost accumulates, heating may stop during defrost operation.

Conventional

During operation, heat is generated inside the compressor.

Heat was released into the atmosphere

Heat charge

Heat generated by the compressor is stored inside and used to warm the refrigerant to efficiently increase heating power.

Waste heat is "charged" and used effectively

Heat charge unit

The compressor is wrapped and exhaust heat is used for charging.

Heat charge tank

Waste heat from the compressor is stored.

Finless heat exchanger

Stored heat is converted to energy.
Panasonic R2 Rotary Compressor

Making the world a cooler place since 1978.
Panasonic Rotary Compressors for Room Air Conditioners have been installed in the most demanding environments around the world. Designed to withstand extreme conditions, Panasonic Rotary delivers high performance, efficiency and reliable service, no matter where you are. Panasonic, the world’s largest manufacturer of rotary compressors.

Why is the Panasonic R2 Rotary Compressor so efficient?
1. High Efficiency Motor The premium silicon steel motor meets industry efficiency requirements.
2. Improved Lubrication of High Volume Oil Pump The extended, high volume oil pump in conjunction with a larger capacity oil reservoir provides superior lubrication.
3. Accumulator has Larger Refrigerant Capacity The larger accumulator accommodates generous refrigerant amounts needed in longer line length installations.
R2 rotary compressors utilize rolling piston technology.
The R2 compressor has been tested in extreme conditions.

R2 Compressor Value
About R2 Compressor
Built upon 36 years of compressor design and production experience, R2 is the next generation of Rotary Compressors for residential central air conditioning. New technology improvements, enhanced materials and simple design ensure R2 compressors are reliable, efficient and quiet. The R2 Compressor delivers quality, comfort and peace of mind in homes around the world. Panasonic’s Rotary Compressors have been life tested in some of the world’s most demanding environments. Proven for years many of the most demanding areas of the world, the R2 design is the compressor of choice by contractors and homeowners in these challenging climates. For the high performance that homeowners demand, R2 Rotary Compressors are the best air conditioning engines for today’s residential cooling solutions.

Leading Technology
Used in over 80% of cooling solutions globally, rotary is the world’s dominant residential air conditioning compression technology. Panasonic is the leading rotary and residential AC compressor manufacturer in the world, with over 200 million compressors produced.

Benefits
Central air conditioning delivered with a Panasonic R2 Rotary Compressor ensures a superior level of comfort at an economical cost.

FAQ

How does a Panasonic Rotary compressor work?
R2 compressors are rolling piston rotary compressors. The heart of the rotary compressor is the cylinder which houses the piston and the vane. The vane maintains constant contact with the piston as the piston rolls along the inside wall of the cylinder. As the piston rotates, gas is compressed into an increasingly smaller area until the discharge pressure is reached, releasing gas into the shell chamber. At the same time, more gas comes in through the suction port, enabling a continuous process of suction and discharge. The simple design and symmetry of the cylinder components, combined with a special coating and premium materials, provide a highly durable and reliable product, rotation after rotation.

What SEER range does the Panasonic Rotary compressor support?
R2 compressors are found in air conditioning products featuring the very latest technology and offering the highest efficiency on the market today. Our R2 compressors are engineered specifically for this SEER efficiency requirement. Combined with the inherently simple design of the rotary, this results in a high desirable and impressively economical solution.

What makes Panasonic Rotary compressor so reliable?
Changes to the construction and material of internal components enable the R2 compressor to reliably operate with an above average maximum discharge pressure. A Physical Vapor Deposition (PVD) coating on the vane, along with enhanced steel materials, significantly reduces wear and increases durability.

What makes a Panasonic Rotary compressor so quiet?
The structure of the R2 compressor mechanism has been redesigned to increase stability and reduce vibration. Specifically, the compressor has an upper cylinder discharge, an enhanced fixed upper bearing, and reduced friction in the cylinder parts. The lower discharge and muffler in the dual piston compressors also enables lower noise levels. As a result, this new design optimises efficiency and minimises noise.

How do R2 rotary compressors compare to scroll and reciprocating compressors?
R2 rotary compressors are very similar to some scroll compressors in overall performance, including efficiency and reliability. The simple and symmetrical key components contribute to the R2 compressor’s reliability, light weight, compact size, and economical applied cost, without sacrificing the key performance requirements of high efficiency and low noise levels.

Which refrigerants can be used with Panasonic Rotary compressor?
Panasonic has R2 Rotary Compressors available for R32 and R410A applications.
Change your old air conditioning system to a more efficient system!

R22 Renewal

An important drive to further reduce the potential damage to our ozone

It is often said that legislation is ruling our lives but sometimes it is there to help save lives. R22 phase out can be described as one of these and from Jan 1st 2010 the use of Virgin [new] R22 refrigerant was banned within the European Community.

- All Panasonic standard NKE, PKE, QKE, RKE and SKE units can be install on existing R22 pipings
- No need of additional accessories (only pipe reduces)
- Approximately 30% energy saving compare to R22 units
Panasonic are doing our part

We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to be introduced with as minimum an effect on businesses and cash reserves as possible. The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems. By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don’t even limit the manufacturer’s equipment we are replacing.

By installing a new high efficiency Panasonic R410A system you can benefit from around 30% running cost saving compared to the R22 system.

Yes...
1. Check the capacity of the system you wish to replace
2. Select from the Panasonic range the best system to replace it with
3. Follow the procedure detailed in the brochure and technical data

Simple...

R22 - The reduction of Chlorine critical for a cleaner future.

Guidance on re-using of existing R22 piping for a new R410A installation

1. Precaution
The existing R22 piping can be re-used for a R410A system installation if the following conditions are met and the piping are finally verified to be:
• Dry (no moisture remained in the piping)
• Clean (no dust remained in the piping)
• Tight (no refrigerant leak at the joining and piping)

2. Conditions
• Recover the refrigerant and oil.
  Operate “force cooling” according to the recommended operation time, regardless of the piping length.
  Single split: 10min.
  Multi split: 30min.
  After that, carry out “pump down” to recover the refrigerant and oil from the existing R22 system

* Note: If pump down operation is not possible due to the malfunction of the system, flush and wash the existing piping to collect back the oil and dirt inside the system.

- Check the oil condition. If the oil contains dirt, wash the existing pipes
- Check the oil color. After pump down, use a cotton bud to wipe the oil from the existing pipe.
  If the oil color is higher than ASTM3, use a new pipe as re-use of old piping is not allowed

Deterioration Criteria for Refrigerant Oil

- Check pipe thickness.
  Make sure that the pipe thickness is more than 0,8mm.
  If the thickness is less than 0,8mm, use a new pipe
- Rework the flare for R410A connection.
  Do not reuse the old flare nuts.
Make sure to use the new flare nuts attached to the R410a system

* Note: If the existing piping size is 1/4” (6,35mm) and 1/2” (12,7mm), and the new R410a system is 1/4” (6,35mm) and 3/8” (9,52mm), use a pipe reducer connected at indoor and outdoor unit.

3. Applicable Model
Panasonic single split room air conditioner from CS/CU-RE/UE/YE/XE/CE/NE/E*NKE and PKE series onwards.
Panasonic multi split room air conditioner from CU-2E/3E/4E/5PBE series onwards.
Control & Connectivity

Aware of the importance of both control and connectivity in offering the best comfort at the lowest price, Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver maximum performance. You can properly manage the air conditioning and perform comprehensive monitoring and control, with all of the features the remote control provides at home, from anywhere in the world thanks to the internet applications Panasonic has created for you.

New Domestic integration to P-Line - CZ-CAPRA1

Can connect all ranges to P-Line. Full control is now possible.

Integrates any unit in big system control
- PKEA Server room integration
- Small offices with Domestic indoors
- Tender for refurbishment (old system Domestic and VRF in one installation)

Current system for PACi / VRF. Central controller can connect to S-link line to control units directly.

Request: We want to control RAC unit (which does not have S-link protocol) by Central controllers.

It’s necessary to have interface between S-link and RAC protocol to cover basic operating items.

Basic operation items
- External input
- ON/OFF
- Mode select
- Abnormal stop signal
- Fan speed
- Prohibit, Mode change
- Stop setting
- External output for Relay
- Remote control prohibit
- Operation status (ON/OFF)
- Demand control
- Alarm status output
- External heater control output

1) Because current CN-CNT connector cannot provide the power for external output relay, additional power input for external relay is necessary.
**Internet Control**

Control your air conditioning from wherever you are. Control your comfort and efficiency with the lowest energy consumption.

Reference: PAW-IR-WIFI-1
IntesisHome IS-IR-WIFI-1 device is an easy to install and small device which allows connectivity with the IntesisHome application and connects with your climate system using Infrared (IR). The device enables the control of the Panasonic RAC units without CN-CNT connector (RE, UE, GFE and Free Multi lines).

Specific features:
- ON/OFF, mode, set point, fan speed, vanes and room temperature
- Easy installation (no special electrical work needed)
- Feedback to the IntesisHome system when changes are made from the infrared remote controller.

General IntesisHome features:
- Calendar scheduler
- Scenes
- Control from anywhere
- Several languages

**Connectivity. Control by BMS**

Great flexibility for integration into your IntesisHome, KNX, EnOcean, Modbus and BacNet projects allows fully bi-directional monitoring and control of all the functioning parameters.

Reference: PAW-AC-KNX-1i
- Quick installation and possibility of hidden installation
- External power not required
- Direct connection to the AC indoor unit (split unit or Multi split unit)
- Fully KNX compatible. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication
- Use the air conditioner ambient temperature or the one measured by a KNX temperature sensor or Thermostat
- AC unit can be controlled simultaneously by the remote control of the AC unit and by KNX devices
- Advanced control functions: use it as a room controller
- 4 binary inputs. They work as standard KNX binary inputs as well as being used to control the AC directly

Reference: PAW-AC-MBS-1
- Quick installation and possibility of hidden installation
- External power not required
- Direct connection to the AC indoor unit (split unit or Multi split unit)
- Fully Modbus compatible. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication
- Use the air conditioner ambient temperature or the one measured by a Modbus temperature sensor or Thermostat
- AC unit can be controlled simultaneously by the remote control of the AC unit and by Modbus devices
- Advanced control functions: use it as a room controller
- 4 binary inputs. They work as standard Modbus binary inputs as well as being used to control the AC directly

Reference: PAW-AC-DIO
- Quick installation and possibility of hidden installation
- External power not required
- Direct connection to the AC indoor unit (split unit or Multi split unit)
- Fully EnOcean compatible. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication
- Use the air conditioner ambient temperature or the one measured by an EnOcean temperature sensor or Thermostat
- AC unit can be controlled simultaneously by the remote control of the AC unit and by EnOcean devices
- Advanced control functions: use it as a room controller
- 4 binary inputs. They work as standard EnOcean binary inputs as well as being used to control the AC directly

Reference: PAW-AC-BAC-1
- Quick installation and possibility of hidden installation
- External power not required
- Direct connection to the AC indoor unit
- Total Control and Supervision. Real states of the AC unit’s internal variables
- Allows using simultaneously the IR and wired remote controls and BACnet.

Reference: PAW-AC-DIO
Dry contact ON/OFF Interface. Panasonic has developed for hotels applications a dry contact PCB which works with Etherea, RE, UE and YE indoor units in order to control simply the unit centrally.
- ON/OFF signal by 3rd party BMS
- External power not required
- Quick installation and possibility of hidden installation
- Direct connection to the AC indoor unit

**Easy connectivity**

CN-CNT easy to access. Previous Etherea indoor unit had to be dismantle to reach connector.

**Can easier connect:**
- Wi-Fi accessory / KNX / Modbus / New CZ-CAPRA1 to integrate to PACi control.

<table>
<thead>
<tr>
<th>Model name</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZ-CAPRA1</td>
<td>NEW Domestic with CZ-CNT port integration to PACi and ECOi (available in June 2016)</td>
</tr>
<tr>
<td>PAW-IR-WIFI-1</td>
<td>Interface for IntesisHome by Infrared sensor, only ON/OFF and temperature setting</td>
</tr>
<tr>
<td>PAW-AC-KNX-1i</td>
<td>Interface for KNX (Etherea, 4-Way 60/60 cassette and Low static pressure hide away)</td>
</tr>
<tr>
<td>PAW-AC-MBS-1</td>
<td>Interface for Modbus (Etherea, 4-Way 60/60 cassette and Low static pressure hide away)</td>
</tr>
<tr>
<td>PAW-AC-BAC-1</td>
<td>Interface for BacNet (Etherea, 4-Way 60/60 cassette and Low static pressure hide away)</td>
</tr>
<tr>
<td>PAW-AC-DIO</td>
<td>Interface by Infra red sensor, only ON/OFF and temperature setting</td>
</tr>
<tr>
<td>PAW-SMSCONTROL</td>
<td>Control of the Etherea, Flagship and Heatcharge by SMS (need additional SIM card)</td>
</tr>
</tbody>
</table>
## Domestic Air Conditioner Range

<table>
<thead>
<tr>
<th>1x1 and Multi Split Kits</th>
<th>2.2 kW</th>
<th>2.8 kW</th>
<th>3.2 kW</th>
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<tbody>
<tr>
<td>Wall Mounted Etherea Inverter+ Silver Plated</td>
<td><img src="R32" alt="Image" /> NEW KIT-XZ7-SKE</td>
<td>KIT-XZ9-SKE</td>
<td>KIT-XZ12-SKE</td>
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<tr>
<td>Wall Mounted Etherea Inverter+ Silver</td>
<td>KIT-XE7-QKE</td>
<td>KIT-XE9-QKE</td>
<td>KIT-XE12-QKE</td>
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<tr>
<td>Wall Mounted Etherea Inverter+ White</td>
<td>KIT-E7-QKE</td>
<td>KIT-E9-QKE</td>
<td>KIT-E12-QKE</td>
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<tr>
<td>Wall Mounted VZ Inverter+</td>
<td><img src="R32" alt="Image" /> NEW KIT-VZ9-SKE</td>
<td>KIT-VZ12-SKE</td>
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<tr>
<td>Wall Mounted TZ Type Standard Inverter</td>
<td><img src="R32" alt="Image" /> NEW KIT-TZ9-SKE</td>
<td>KIT-TZ12-SKE</td>
<td></td>
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<tr>
<td>Wall Mounted RE Type Standard Inverter</td>
<td>KIT-RE9-RKE</td>
<td>KIT-RE12-RKE</td>
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<tr>
<td>Wall Mounted UZ Type Standard Inverter</td>
<td><img src="R32" alt="Image" /> NEW KIT-UZ9-SKE</td>
<td>KIT-UZ12-SKE</td>
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<tr>
<td>Wall Mounted UE Type Standard Inverter</td>
<td>KIT-UE9-RKE</td>
<td>KIT-UE12-RKE</td>
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<tr>
<td>Wall Mounted PZ Type Standard Inverter</td>
<td><img src="R32" alt="Image" /> NEW KIT-PZ9-SKE</td>
<td>KIT-PZ12-SKE</td>
<td></td>
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<tr>
<td>Wall Mounted PE Type Standard Inverter</td>
<td>KIT-PE9-RKE</td>
<td>KIT-PE12-RKE</td>
<td></td>
</tr>
<tr>
<td>Wall Mounted Professional Inverter -15°C</td>
<td><img src="R32" alt="Image" /> NEW KIT-E9-PKEA</td>
<td>KIT-E12-PKEA</td>
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<tr>
<td>Floor Console Type Inverter+</td>
<td><img src="R32" alt="Image" /> KIT-E9-PTE</td>
<td>KIT-E12-PTE</td>
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<tr>
<td>4-Way 60x60 Cassette Standard Inverter</td>
<td><img src="R32" alt="Image" /> KIT-E9-PB4EA</td>
<td>KIT-E12-PB4EA</td>
<td></td>
</tr>
<tr>
<td>Low Static Pressure Hide Away Standard Inverter</td>
<td><img src="R32" alt="Image" /> KIT-E9-PD3EA</td>
<td>KIT-E12-PD3EA</td>
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<td></td>
<td>4,5 kW</td>
<td>5,0 kW</td>
<td>6,0 kW</td>
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<td>KIT-X1-SKE</td>
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<td>KIT-X1-SKE</td>
<td>KIT-X1-SKE</td>
<td>KIT-X1-SKE</td>
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</tbody>
</table>

**Wall Mounted Etherea Inverter+ Silver Plated**

- R32 GAS

- KIT-XZ7-SKE
- KIT-XZ9-SKE
- KIT-XZ12-SKE
- KIT-XZ18-SKE

**Wall Mounted Etherea Inverter+ White**

- R32 GAS

- KIT-Z7-SKEG / KIT-Z7-SKEM
- KIT-Z9-SKEG / KIT-Z9-SKEM
- KIT-Z12-SKEG / KIT-Z12-SKEM
- KIT-Z15-SKEG / KIT-Z15-SKEM
- KIT-Z18-SKEG / KIT-Z18-SKEM

**Wall Mounted Etherea Inverter+ Silver**

- KIT-XE7-QKE
- KIT-XE9-QKE
- KIT-XE12-QKE
- KIT-XE18-QKE

**Wall Mounted Etherea Inverter+ White**

- KIT-E7-QKE
- KIT-E9-QKE
- KIT-E12-QKE
- KIT-E15-QKE
- KIT-E18-QKE
- KIT-E21-QKE
- KIT-E24-QKE
- KIT-E28-QKE

**Wall Mounted VZ Inverter**

- R32 GAS

- KIT-VZ9-SKE
- KIT-VZ12-SKE

**Wall Mounted TZ Type Standard Inverter**

- R32 GAS

- KIT-TZ9-SKE
- KIT-TZ12-SKE
- KIT-TZ15-SKE
- KIT-TZ18-SKE
- KIT-TZ24-SKE

**Wall Mounted RE Type Standard Inverter**

- R32 GAS

- KIT-RE9-RKE
- KIT-RE12-RKE
- KIT-RE15-RKE
- KIT-RE18-RKE
- KIT-RE24-RKE

**Wall Mounted UZ Type Standard Inverter**

- R32 GAS

- KIT-UZ9-SKE
- KIT-UZ12-SKE
- KIT-UZ18-SKE

**Wall Mounted UE Type Standard Inverter**

- R32 GAS

- KIT-UE9-RKE
- KIT-UE12-RKE
- KIT-UE18-RKE
- KIT-UE24-RKE

**Wall Mounted PZ Type Standard Inverter**

- R32 GAS

- KIT-PZ9-SKE
- KIT-PZ12-SKE
- KIT-PZ18-SKE

**Wall Mounted PE Type Standard Inverter**

- R32 GAS

- KIT-PE9-RKE
- KIT-PE12-RKE

**Wall Mounted Professional Inverter -15°C**

- KIT-E9-PKEA
- KIT-E12-PKEA
- KIT-E15-PKEA
- KIT-E18-PKEA

**Floor Console Type Inverter+**

- KIT-E9-PFE
- KIT-E12-PFE
- KIT-E18-PFE

**4-Way 60x60 Cassette Standard Inverter**

- KIT-E9-PB4EA
- KIT-E12-PB4EA
- KIT-E18-PB4EA
- KIT-E21-PB4EA

**Low Static Pressure Hide Away Standard Inverter**

- KIT-E9-PD3EA
- KIT-E12-PD3EA
- KIT-E18-PD3EA
- KIT-E21-PD3EA

**NEW / DOMESTIC**

**NEW / DOMESTIC**
**ENERGY SAVING**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econavi</td>
<td>The sensor determines the human activity level and the position in the room to adjust the air flow orientation for maximum comfort and maximum savings, and detects changes in sunlight intensity and judges whether it is sunny or cloudy/night. It reduces unnecessary heating under more sunny conditions.</td>
</tr>
<tr>
<td>Econavi Sunlight Detection</td>
<td>Detects changes in sunlight intensity and judges whether it is sunny or cloudy/night. It reduces the heating and therefore wasted energy under more sunlight conditions.</td>
</tr>
<tr>
<td>Inverter Plus System</td>
<td>Inverter plus products improve on the characteristics of standard Inverter air conditioners by over 20%. This means 20% less consumption and 20% off your electric bill. Inverter plus is also A class on cooking and heating mode.</td>
</tr>
<tr>
<td>Inverter system</td>
<td>The Inverter range provides greater efficiency, more comfort. Provides more precise temperature control, without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.</td>
</tr>
<tr>
<td>R2 Rotary Compressor</td>
<td>Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.</td>
</tr>
<tr>
<td>Refrigerant R32</td>
<td>Our heat pumps containing the new refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a component of refrigerant, making it easy to recycle.</td>
</tr>
</tbody>
</table>

**HIGH PERFORMANCE AND HEALTHY AIR**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nano</td>
<td>Panasonic utilises nano-technology fine particles to purify the air in the room. It works effectively on airborne and adhesives micro-organisms such as bacteria, viruses and moulds, ensuring a cleaner living environment. Seal of Approval of the British Allergy Foundation.</td>
</tr>
<tr>
<td>PM2.5 Filter</td>
<td>Particulate matter (PM2.5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. Sized at 2.5µm, these particles are said to pose health problems as they can easily enter our lungs.</td>
</tr>
<tr>
<td>Antiallergy Properties</td>
<td>System is equipped with antiallergy properties filter.</td>
</tr>
<tr>
<td>Super Quiet</td>
<td>Thanks to its latest generation compressor and its twin blade fan, our outdoor unit is one of the most silent on the market. The indoor unit emits an almost imperceptible 18 dB(A).</td>
</tr>
<tr>
<td>Mild Dry Cooling</td>
<td>Fine control helps prevent a rapid decrease in room humidity while maintaining the set temperature. Maintains an RH* up to 10% higher than cooling operation (*RH: Relative Humidity), ideal when sleeping with the air conditioner on.</td>
</tr>
<tr>
<td>Aerowings</td>
<td>More comfort with Aerowings. Direct airflow to ceiling to create shower cooling effect by twin flap built in indoor.</td>
</tr>
<tr>
<td>Down to -10°C in cooling only mode</td>
<td>The air conditioner works in cooling only mode with an outdoor temperature of -10°C.</td>
</tr>
<tr>
<td>Down to -15°C in heating mode</td>
<td>The air conditioner works in heat pump mode with an outdoor temperature as low as -15°C.</td>
</tr>
<tr>
<td>Heatcharge</td>
<td>This innovative, newly developed technology charges heat and uses it for heating. Thanks to this system, you can enjoy incredibly powerful, comfortable air conditioner heating.</td>
</tr>
<tr>
<td>Summer House</td>
<td>This innovative function keeps the house at 78°F to avoid freezing pipes during the winter. This function is highly appreciated in summer house or week end houses.</td>
</tr>
<tr>
<td>R22 Renewal</td>
<td>The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems.</td>
</tr>
<tr>
<td>R410A/R22 Renewal</td>
<td>The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.</td>
</tr>
<tr>
<td>Odour-removing function</td>
<td>Allows the exchanger to be cleaned, preventing possible odours. While this function is connected, the fan also remains off momentarily to avoid unpleasant odours while the exchanger is being cleaned.</td>
</tr>
<tr>
<td>Removable, washable panel</td>
<td>The front panel is easy to keep clean. It can be removed quickly in one single step and can be washed in water. A clean front panel ensures smoother, more efficient operation, which can save energy.</td>
</tr>
<tr>
<td>Powerful Mode</td>
<td>The rapid and effective powerful mode is ideal for when you come home on the hottest or coldest days. It works at maximum power to reach the desired temperature in just 15 minutes.</td>
</tr>
<tr>
<td>Soft Dry Operation Mode</td>
<td>The soft dry mode eliminates excessive moisture with a soft breeze and provides a sense of wellbeing without much change in temperature.</td>
</tr>
<tr>
<td>Personal Airflow Creation</td>
<td>Permits the air direction to be adjusted vertically and horizontally. This feature can be conveniently selected by remote control.</td>
</tr>
<tr>
<td>Automatic Vertical Airflow Control</td>
<td>The flap swings up and down automatically. The flow can also be set at a fixed angle with the remote control.</td>
</tr>
<tr>
<td>Manual Horizontal Airflow Control</td>
<td></td>
</tr>
</tbody>
</table>

**HIGH CONNECTIVITY**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Control</td>
<td>Internet Control is a next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet.</td>
</tr>
<tr>
<td>Easy control by BMS</td>
<td>The communication port is integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.</td>
</tr>
<tr>
<td>Wide Access Ports</td>
<td>Indicating the maximum length of pipe between the outdoor unit and the indoor unit(s). The distances permitted, demonstrate the installations possible.</td>
</tr>
<tr>
<td>Top-Panel Maintenance Access</td>
<td>Maintenance of an outdoor unit used to be quite a tedious task. Now, with the possibility of removing the top cover, maintenance is quick and easy.</td>
</tr>
<tr>
<td>Self-Diagnosis Function</td>
<td>With this function the unit carries out a process self-diagnosis when a particular function does not work correctly. This allows faster servicing.</td>
</tr>
</tbody>
</table>

**WARRANTY**

- **5 Years Warranty.** Panasonic guarantees the compressors in the entire range for five years.
### NEW / DOMESTIC

#### MODELS

<table>
<thead>
<tr>
<th>Models</th>
<th>Wall Mounted</th>
<th>Ceiling Inverter + R32 Gas</th>
<th>Ceiling Inverter + R32 Gas</th>
<th>Wall Mounted</th>
<th>Ceiling Inverter + R32 Gas</th>
<th>Ceiling Inverter + R32 Gas</th>
<th>Wall Mounted</th>
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<th>Wall Mounted</th>
<th>Ceiling Inverter + R32 Gas</th>
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<td>EZ CAP61, EZ CAP71 port integration to PK20 and E26</td>
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<td>Easy control by BMS</td>
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</table>

* At the lowest fan speed.
## Etherea

Etherea with enhanced Econavi sensor and new Nanoe air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort.

Econavi not only optimizes air flow orientation and volume according to human presence, it also allows you to adjust output thereby giving you the best comfort at anytime whilst saving energy.

Etherea with enhanced Econavi sensor and new Nanoe air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

### Technical focus

- **NEW** R32 gas environmental friendly
- **NEW** design
- Maximum efficiency and comfort with Econavi, now with sunlight detection
- Nanoe air purifying system, 99% effective on both airborne and adhesive mould, viruses, bacteria and pollen allergen
- Optional smartphone control
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- Super Quiet! Only 19 dB(A), equivalent to night-time in the countryside (XZ7, XZ9, XZ12, Z7, 29 and Z12)
- More powerful airflow to quickly reach the desired temperature

### Kit Information

<table>
<thead>
<tr>
<th>Kit Silver*</th>
<th>KIT-Z7SKE</th>
<th>KIT-Z9SKE</th>
<th>KIT-Z12SKE</th>
<th>KIT-Z15SKE</th>
<th>KIT-Z18SKE</th>
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</thead>
<tbody>
<tr>
<td>Kit White Glass (SKEG)** / Matt (SKEW)**</td>
<td>KIT-Z7SKEW</td>
<td>KIT-Z9SKEW</td>
<td>KIT-Z12SKEW</td>
<td>KIT-Z15SKEW</td>
<td>KIT-Z18SKEW</td>
</tr>
</tbody>
</table>

### Power Input

- EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC.
- The annual energy consumption is calculated in accordance with the ErP directive.
- The Sound pressure level of the units shows the value measured at a position 1 metre in front of the unit.
- More powerful airflow to quickly reach the desired temperature.
Etherea with enhanced Econavi sensor and new Nanoe air-purifying system:
outstanding efficiency, comfort and healthy air combined with state-of-the-art
design

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort.

Furthermore, the Nanoe revolutionary air-purifying system utilizes nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.

Technical focus
- This units can be installed on R22 pipings
- Maximum efficiency and comfort, with Econavi, now with sunlight detection
- Nanoe air purifying system, 99% effective on both airborne and adhesive mould, viruses, bacteria and pollen allergen
- Optional smartphone control
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- Super Quiet! Only 20 dB(A), equivalent to night-time in the countryside (XE7, XE9, XE12, E7, E9 and E12)
- More powerful airflow to quickly reach the desired temperature
**Etherea**

Etherea with enhanced Econavi sensor and new Nanoe air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at any time whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort.

Furthermore, the Nanoe revolutionary air-purifying system utilizes nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.

**Technical focus**
- This units can be installed on R22 pipings
  - Maximum efficiency and comfort with Econavi, now with sunlight detection
  - Nanoe air purifying system, 99% effective on both airborne and adhesive mold, viruses, bacteria and pollen allergen
  - Optional smartphone control
  - Mild Dry Cooling: prevent a rapid decrease in room humidity
  - More powerful airflow to quickly reach the desired temperature

---

**Kit Silver Plated**

<table>
<thead>
<tr>
<th>KIT-EX18-QKE</th>
<th>KIT-EX18-QKE</th>
<th>KIT-EX21-QKE</th>
<th>KIT-EX21-QKE</th>
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<tbody>
<tr>
<td>EER 1)</td>
<td>3.47 (3.50-3.02)</td>
<td>3.89 (3.89-3.31)</td>
<td>3.27 (3.27-2.60)</td>
</tr>
<tr>
<td>SEER</td>
<td>6.95</td>
<td>6.50</td>
<td>6.10</td>
</tr>
<tr>
<td>Piping (cooling)</td>
<td>kW</td>
<td>5.6</td>
<td>6.3</td>
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<tr>
<td>Piping (heating)</td>
<td>kW</td>
<td>4.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Power input cooling</td>
<td>Nominal (Min - Max) kW</td>
<td>1.440 (0.280 - 1.990)</td>
<td>1.680 (0.300 - 2.600)</td>
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<tr>
<td>Annual energy consumption (cooling) 2)</td>
<td>kWh/a</td>
<td>254</td>
<td>339</td>
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<tr>
<td>Heating capacity Nominal (Min - Max) kW</td>
<td>5.80 (0.180 - 8.00)</td>
<td>7.20 (0.180 - 9.30)</td>
<td>8.60 (0.180 - 11.30)</td>
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<td>COP 3)</td>
<td>3.12 (2.88-3.11) A</td>
<td>3.44 (2.88-3.11) B</td>
<td>3.23 (2.18-3.19) C</td>
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<tr>
<td>SCOP</td>
<td>4.25</td>
<td>4.00</td>
<td>3.99</td>
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<tr>
<td>Power source V</td>
<td>230</td>
<td>230</td>
<td>230</td>
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<tr>
<td>Power input heating</td>
<td>Nominal (Min - Max) kW</td>
<td>1.520 (0.348 - 2.570)</td>
<td>1.890 (0.348 - 2.730)</td>
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<tr>
<td>Weight</td>
<td>kg</td>
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<td>47</td>
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<td>Dimensions</td>
<td>mm²</td>
<td>295 x 1,070 x 255</td>
<td>295 x 1,070 x 255</td>
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<td>Air volume Cooling / Heating m³/h</td>
<td>1.074 / 1.158</td>
<td>1.134 / 1.200</td>
<td>1.188 / 1.272</td>
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<td>Power input Cooling</td>
<td>Nominal (Min - Max) kW</td>
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<td>1.470</td>
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<td>Power input Heating</td>
<td>Nominal (Min - Max) kW</td>
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<td>3.410</td>
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<td>Air pressure level Cooling / Heating (Hi / Lo / Q-Lo) dB(A)</td>
<td>44 / 37 / 34</td>
<td>47 / 50 / 34</td>
<td>45 / 38 / 34</td>
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<td>Installation</td>
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<td>Indoor Unit Silver Plated</td>
<td>CS-XE18KEV</td>
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<tr>
<td>Indoor Unit White</td>
<td>CS-E18KEW</td>
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<tr>
<td>Power source V</td>
<td>230</td>
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</table>

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**CE-CAPRA1**

- Wired remote control for wall type

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**Technical specifications**

- Full bidirectional WiFi interface for Internet control
- H Generation interface to ECOi control integration (available in June 2016)
- Control CZ-RD514C
- Optional wired remote
- INTEGRATION P-LINE
- Optional wired remote control CZ-BS14AC
- BMS
- COMPRESSOR R22 R410A
- HUMIDITY CONTROL MILD DRY
- H Generation interface to ECOi control integration (available in June 2016)
- FULL BIDIRECTIONAL WIFI INTERFACE FOR INTERNET CONTROL
- H GENERATION INTERFACE TO ECOI CONTROL INTEGRATION (AVAILABLE IN JUNE 2016)
The new Heatcharge from Panasonic has the capacity to store heat on the outdoor unit which allows heating to start quickly just after turning on the heat pump. It also ensures maximum comfort and heat in the house even during defrost operation as Heat charge also stores heat to prevent cool air during defrost.

Econavi builds-in a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy.

Furthermore, the Nano revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.

Technical focus
- **NEW!** R32 gas environmental friendly
- **NEW!** design
- **Work up to** -35°C
- **Energy Charge System. Heat storage unit which realizes NON-STOP heating and fast heating function**
- **Maximum efficiency and comfort with Econavi sunlight detection**
- **Nano air purifying system, 99% effective on both airborne and adhesive mould, viruses and bacteria**
- **Super Quiet! Only 18 dB(A), equivalent to night-time in the country**
- **More powerful airflow to quickly reach the desired temperature**

**Kits**

<table>
<thead>
<tr>
<th>Kit</th>
<th>KIT-VZ7-5KE</th>
<th>KIT-VZ7-5KE</th>
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<tbody>
<tr>
<td>Cooling capacity (Nominal) kW</td>
<td>2.50 (0.66 - 3.00)</td>
<td>3.50 (0.66 - 4.00)</td>
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<tr>
<td>SEER Nominal</td>
<td>10.50</td>
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<tr>
<td>Pďźąsýn (kw)</td>
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<tr>
<td>Power input Nominal kW</td>
<td>0.430 (0.140 - 0.810)</td>
<td>0.800 (0.140 - 1.010)</td>
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<tr>
<td>Annual electricity consumption (cooling) kWh/a</td>
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**Outdoor Unit**

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<thead>
<tr>
<th>CU-VZ9SKE</th>
<th>CU-VZ12SKE</th>
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<tr>
<td>Power source V</td>
<td>230</td>
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<tr>
<td>Recommended fuse A</td>
<td>16</td>
</tr>
<tr>
<td>Air volume Cooling / Heating m³/h</td>
<td>1.020</td>
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<tr>
<td>Sound pressure level (dB(A))</td>
<td>44 / 27 / 18</td>
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<tr>
<td>Dimensions / Net weight mm / kg</td>
<td>295 x 890 x 375 / 14.5</td>
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<tr>
<td>R32 Refrigerant amount kg</td>
<td>1.05</td>
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<tr>
<td>Operating range Cooling / Heating Min ~ Max °C</td>
<td>-10 ~ +43 / -35 ~ +24</td>
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**Accessories**

- PA-AC-WIFI-1 Interface for IntesisHome
- PAW-IR-WIFI-1 IR Wifi interface for Internet control
- PAW-SMSCONTROL Control by SMS (need additional SIM card)

*Available in January 2016.*
**New TZ Inverter models are powerful and efficient, with an outstanding energy ranking of A+++/A+, unique in the market! The TZ works up to an outdoor temperature of -15°C in heating mode and -10°C up a outdoor temperature of -15°C in heating and -10 in cooling and still with a high efficiency and capacity! Furthermore, the annual energy consumption has never been so low.**

### Technical focus

- **NEW!** R32 gas environmental friendly
- **NEW!** New design
- Wired Controller (optional)
- Complete line-up of standard Inverter models
- Super Quiet! Only 20 dB(A)
- High energy savings
- Long connection distance (from 15 m up to 30 m)

#### Kit

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Cooling capacity</td>
<td>Nominal (Min - Max) kW</td>
<td>2,50 (0,85 - 3,60)</td>
<td>2,50 (0,85 - 3,90)</td>
<td>2,45 (0,90 - 4,60)</td>
<td>2,60 (1,00 - 5,40)</td>
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<tr>
<td>SEER</td>
<td>Nominal (Min - Max) W/W</td>
<td>6,20</td>
<td>6,20</td>
<td>5,60</td>
<td>6,70</td>
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<tr>
<td>Power input cooling</td>
<td>Nominal (Min - Max) kW</td>
<td>0,670 (0,250 - 0,890)</td>
<td>0,600 (0,250 - 1,190)</td>
<td>0,50 (0,80 - 1,660)</td>
<td>0,80 (0,98 - 2,160)</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>Nominal (Min - Max) kW</td>
<td>3,30 (0,80 - 4,10)</td>
<td>4,00 (0,80 - 5,10)</td>
<td>5,00 (0,80 - 6,60)</td>
<td>5,80 (0,98 - 7,50)</td>
</tr>
<tr>
<td>Heating capacity at -7°C</td>
<td>Nominal (Max) kW</td>
<td>1,30</td>
<td>1,30</td>
<td>1,30</td>
<td>1,30</td>
</tr>
<tr>
<td>COP</td>
<td>Nominal (Min - Max) W/W</td>
<td>4,10</td>
<td>4,10</td>
<td>3,76</td>
<td>3,90</td>
</tr>
<tr>
<td>SCOP</td>
<td>Nominal (Min - Max) W/W</td>
<td>4,20</td>
<td>4,20</td>
<td>3,90</td>
<td>4,10</td>
</tr>
<tr>
<td>Power input heating</td>
<td>Nominal (Min - Max) kW</td>
<td>0,800 (0,195 - 1,130)</td>
<td>0,350 (0,130 - 2,300)</td>
<td>0,920 (0,360 - 2,420)</td>
<td>1,760 (0,340 - 2,420)</td>
</tr>
</tbody>
</table>

#### Indoor Unit

<table>
<thead>
<tr>
<th>Indoor Unit</th>
<th>CS-TZ9SKEW</th>
<th>CS-TZ12SKEW</th>
<th>CS-TZ15SKEW</th>
<th>CS-TZ18SKEW</th>
<th>CS-TZ24SKREW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air volume</td>
<td>Cooling / Heating m³/h</td>
<td>890 / 732</td>
<td>714 / 738</td>
<td>738 / 786</td>
<td>696 / 744</td>
</tr>
<tr>
<td>Moisture removal volume</td>
<td>l/h</td>
<td>1,5</td>
<td>2,4</td>
<td>2,9</td>
<td>3,9</td>
</tr>
<tr>
<td>Sound pressure level</td>
<td>Cooling — Heating (Hi / Lo / Q-Lo) dB(A)</td>
<td>47 / 26 / 20</td>
<td>47 / 26 / 20</td>
<td>47 / 26 / 20</td>
<td>47 / 26 / 20</td>
</tr>
<tr>
<td>Dimensions / Net weight</td>
<td>H x W x D mm / kg</td>
<td>369 x 870 x 284 / 8</td>
<td>390 x 870 x 285 / 9</td>
<td>290 x 870 x 286 / 10</td>
<td>290 x 870 x 286 / 10</td>
</tr>
</tbody>
</table>

#### Outdoor Unit

<table>
<thead>
<tr>
<th>Outdoor Unit</th>
<th>CU-TZ9SKE</th>
<th>CU-TZ12SKE</th>
<th>CU-TZ15SKE</th>
<th>CU-TZ18SKE</th>
<th>CU-TZ24SKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power source</td>
<td>V</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Recommended fuse</td>
<td>A</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Connection (indoor/outdoor) mm²</td>
<td></td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
</tr>
<tr>
<td>Air volume</td>
<td>Cooling / Heating m³/h</td>
<td>1,160 / 1,734</td>
<td>1,722 / 1,824</td>
<td>1,722 / 1,824</td>
<td>1,722 / 1,824</td>
</tr>
<tr>
<td>Sound pressure level</td>
<td>Heating (Hi) dB(A)</td>
<td>47 / 48</td>
<td>47 / 48</td>
<td>47 / 48</td>
<td>47 / 48</td>
</tr>
<tr>
<td>Dimensions / Net weight</td>
<td>H x W x D mm / kg</td>
<td>462 x 780 x 289 / 32</td>
<td>462 x 780 x 289 / 32</td>
<td>462 x 780 x 289 / 32</td>
<td>462 x 780 x 289 / 32</td>
</tr>
<tr>
<td>Piping connections</td>
<td>Liquid / Gas pipe Inch (mm)</td>
<td>1/4 (6,35) / 5/8 (9,52)</td>
<td>1/4 (6,35) / 5/8 (9,52)</td>
<td>1/4 (6,35) / 5/8 (9,52)</td>
<td>1/4 (6,35) / 5/8 (9,52)</td>
</tr>
<tr>
<td>Piping length range / Elevation difference (in/out) m</td>
<td>3 - 15 / 5</td>
<td>3 - 15 / 15</td>
<td>3 - 15 / 15</td>
<td>3 - 15 / 15</td>
<td>3 - 15 / 15</td>
</tr>
<tr>
<td>Pipe length for additional gas / Additional gas amount m / m²</td>
<td>7,5 / 10</td>
<td>7,5 / 10</td>
<td>7,5 / 10</td>
<td>7,5 / 10</td>
<td>7,5 / 10</td>
</tr>
<tr>
<td>R32 Refrigerant amount kg</td>
<td>0,67</td>
<td>0,87</td>
<td>0,87</td>
<td>0,87</td>
<td>1,14</td>
</tr>
</tbody>
</table>

#### Accessories

<table>
<thead>
<tr>
<th>Panasonic ER-WIFI1</th>
<th>(A) bidirectional WiFi interface for Internet control</th>
<th>Panasonic ER-WIFI1</th>
<th>(A) bidirectional WiFi interface for Internet control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panasonic ER-WIFI1</td>
<td>(A) bidirectional WiFi interface for Internet control</td>
<td>Panasonic ER-WIFI1</td>
<td>(A) bidirectional WiFi interface for Internet control</td>
</tr>
</tbody>
</table>

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1) EER and COP classification is at 230 V in accordance with EU directive 2010/32/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 0,8 m below the unit. The sound pressure level is measured in accordance with Eurovent A/C/01-97 specification. G-i: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for RE18/24). 4) Add 70mm for piping port.
### Technical Focus

- **Wired Controller (optional)**
- This units can be installed on R22 pipings
- Complete line-up of standard Inverter models
- Quieter indoor units
- High energy savings
- Long connection distance (from 15 m up to 30 m)

### RE Inverter models

RE Inverter models are powerful and efficient, with an outstanding energy ranking of A++/
A+, unique in the market! The RE works up to an outdoor temperature of -15°C in heating
mode and -10°C up a outdoor temperature of -15°C in heating and -10 in cooling and still
with a high efficiency and capacity! Furthermore, the annual energy consumption has never
so low.

### Outdoor Unit

#### Technical Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Source</strong></td>
<td>120</td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td><strong>Recommended fuse</strong></td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Connection (indoor/outdoor)</strong></td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
</tr>
<tr>
<td><strong>Air volume</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cooling / Heating</strong></td>
<td>172 / 1,072</td>
<td>1,998 / 1,998</td>
<td>1,998 / 1,998</td>
<td>2,362 / 2,274</td>
<td>3,072 / 3,012</td>
</tr>
<tr>
<td><strong>Sound power level</strong></td>
<td>47.4 dB(A)</td>
<td>49.5 dB(A)</td>
<td>47.4 dB(A)</td>
<td>52.6 dB(A)</td>
<td>52.6 dB(A)</td>
</tr>
<tr>
<td><strong>Dimensions / Net weight</strong></td>
<td>542 x 780 x 289 / kg 31</td>
<td>619 x 824 x 299 / kg 34</td>
<td>619 x 824 x 299 / kg 34</td>
<td>695 x 875 x 320 / kg 46</td>
<td>799 x 875 x 320 / kg 67</td>
</tr>
<tr>
<td><strong>Piping connections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid / Gas pipe</strong></td>
<td>1/4 (6,35) / 9/32 (9,52)</td>
<td>1/4 (6,35) / 9/32 (9,52)</td>
<td>1/4 (6,35) / 9/32 (9,52)</td>
<td>1/4 (6,35) / 9/32 (9,52)</td>
<td>1/4 (6,35) / 9/32 (9,52)</td>
</tr>
</tbody>
</table>

#### Accessories

<table>
<thead>
<tr>
<th>PWB-W-RMT-1</th>
<th>PWB-W-RMT-1</th>
<th>PWB-W-RMT-1</th>
<th>PWB-W-RMT-1</th>
<th>PWB-W-RMT-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IR WiFi interface for Internet control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# WALL MOUNTED UZ
## STANDARD INVERTER • R32 GAS

**New UZ series inverter powerful and efficient.**

**Technical focus**
- **NEW!** R32 gas environmental friendly
- **NEW!** New design
- **NEW!** Wired Controller (optional)
- Super Quiet! Only 20 dB(A)
- High energy savings
- Long connection distance

### Kit

<table>
<thead>
<tr>
<th>Indoor Unit</th>
<th>CS-UZ9SKE</th>
<th>CS-UZ12SKE</th>
<th>CS-UZ18SKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling capacity</td>
<td>Nominal (Min - Max) kW</td>
<td>2.50 (0.85 - 3.00)</td>
<td>3.40 (0.85 - 3.90)</td>
</tr>
<tr>
<td>SEER</td>
<td>Nominal</td>
<td>5.90</td>
<td>6.50</td>
</tr>
<tr>
<td>Power input cooling</td>
<td>Nominal kW/a</td>
<td>0.60 (0.250 - 0.900)</td>
<td>1.070 (0.255 - 1.260)</td>
</tr>
<tr>
<td>Annual electricity consumption</td>
<td>Cooling (cooling) kW/a</td>
<td>0.40</td>
<td>0.50</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>Nominal kW</td>
<td>3.15 (0.80 - 3.60)</td>
<td>3.84 (0.80 - 4.40)</td>
</tr>
<tr>
<td>Heating capacity at -7°C</td>
<td>Nominal kW</td>
<td>2.14</td>
<td>2.60</td>
</tr>
<tr>
<td>COP</td>
<td>Nominal</td>
<td>3.66 (3.10 - 3.44)</td>
<td>3.42 (2.80 - 3.06)</td>
</tr>
<tr>
<td>SCOP</td>
<td>Nominal</td>
<td>3.80</td>
<td>3.80</td>
</tr>
<tr>
<td>Pörsön (cooling)</td>
<td>kV</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Power input heating</td>
<td>Nominal kW</td>
<td>0.780 (0.195 - 1.040)</td>
<td>1.050 (0.195 - 1.290)</td>
</tr>
<tr>
<td>Annual electricity consumption (heating)</td>
<td>kW/a</td>
<td>0.44</td>
<td>0.63</td>
</tr>
</tbody>
</table>

### Indoor Unit

<table>
<thead>
<tr>
<th></th>
<th>CS-UZ9SKE</th>
<th>CS-UZ12SKE</th>
<th>CS-UZ18SKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power source</td>
<td>V</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Recommended fuse</td>
<td>A</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Connection indoor / outdoor</td>
<td>m²</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
</tr>
<tr>
<td>Air volume</td>
<td>Cooling / Heating</td>
<td>640 / 840</td>
<td>642 / 872</td>
</tr>
<tr>
<td>Moisture removal volume</td>
<td>l/h</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Dimensions / Net weight</td>
<td>H x W x D mm / kg</td>
<td>190 x 820 x 199 / 8</td>
<td>290 x 870 x 214 / 9</td>
</tr>
</tbody>
</table>

### Outdoor Unit

<table>
<thead>
<tr>
<th>CU-UZ9SKE</th>
<th>CU-UZ12SKE</th>
<th>CU-UZ18SKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air volume</td>
<td>Cooling / Heating</td>
<td>1.872 / 1.872</td>
</tr>
<tr>
<td>Sound pressure level</td>
<td>Cooling / Heating (Hi) dB(A)</td>
<td>48 / 49</td>
</tr>
<tr>
<td>Dimensions / Net weight</td>
<td>H x W x D mm / kg</td>
<td>562 x 700 x 290 / 9</td>
</tr>
<tr>
<td>Piping connections</td>
<td>Liquid pipe / Gas pipe Inch (mm)</td>
<td>1/4 (6,35) / 3/8 (9,52)</td>
</tr>
<tr>
<td>Piping length range / Elevation difference (in/out) m</td>
<td>3 – 15 / 15</td>
<td>3 – 15 / 15</td>
</tr>
<tr>
<td>Pipe length for additional gas / Additional gas amount m / g/m</td>
<td>7,5 / 10</td>
<td>7,5 / 10</td>
</tr>
<tr>
<td>R32 Refrigerant amount</td>
<td>kg</td>
<td>0,58</td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th></th>
<th>[IR WiFi interface for Internet control]</th>
<th>[Wired remote control for wall type]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAW-IR-WIFI-1</td>
<td>Accessories</td>
<td>Accessories</td>
</tr>
<tr>
<td>CZ-RD514C</td>
<td>PAW-IR-WIFI-1</td>
<td>PAW-IR-WIFI-1</td>
</tr>
</tbody>
</table>

1) EER and COP classification is at 230 V as according to EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. Hi: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for UE18) 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. * Available in March 2016.
**WALL MOUNTED UE**

**STANDARD INVERTER**

New UE series inverter powerful and efficient.

Technical focus
- Wired Controller (optional)
- This units can be installed on R22 pipings
- Quieter indoor units
- High energy savings
- Long connection distance

### Wall Mounted UE

#### Specifications

**CS-UE9RKE**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Nominal (Min - Max) kW</th>
<th>EER</th>
<th>COP</th>
<th>SCOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling</td>
<td>2.50 (0.85 - 3.00)</td>
<td>3.47</td>
<td>4.00</td>
<td>3.64</td>
</tr>
<tr>
<td>Heating</td>
<td>2.20 (0.85 - 4.00)</td>
<td>3.29</td>
<td>3.64</td>
<td>3.50</td>
</tr>
</tbody>
</table>

**CS-UE12RKE**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Nominal (Min - Max) kW</th>
<th>EER</th>
<th>COP</th>
<th>SCOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling</td>
<td>3.50 (0.85 - 3.90)</td>
<td>3.47</td>
<td>4.00</td>
<td>3.64</td>
</tr>
<tr>
<td>Heating</td>
<td>3.90 (0.85 - 3.90)</td>
<td>3.29</td>
<td>3.64</td>
<td>3.50</td>
</tr>
</tbody>
</table>

**CS-UE18RKE**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Nominal (Min - Max) kW</th>
<th>EER</th>
<th>COP</th>
<th>SCOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling</td>
<td>5.00 (0.98 - 5.60)</td>
<td>3.57</td>
<td>3.95</td>
<td>3.69</td>
</tr>
<tr>
<td>Heating</td>
<td>5.60 (0.98 - 5.60)</td>
<td>3.57</td>
<td>3.95</td>
<td>3.69</td>
</tr>
</tbody>
</table>

**Note:**
- EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC.
- 1) The EER and COP values are calculated according to EU directive 2002/31/EC.
- 2) The Sound pressure level of the outdoor unit shows the value measured at a position 1 metre in front of the unit.
- 3) The Sound pressure level of the indoor units shows the value measured at a position 1 metre in front of the main body and 0.8 m below the unit.
- 4) The Sound pressure level of the units shows the value measured at a position 1 metre in front of the main body and 0.8 m below the unit.
- 5) The Sound pressure level of the units shows the value measured at a position 1 metre in front of the main body and 0.8 m below the unit.

### Accessories

1 | PAW-IR-WIFI-1 | Optional wired remote control
2 | CZ-RD514C | Optional wired remote control

---

**CU-UE9RKE**

- **Power source:** V 230
- **Recommended fuse:** A 16
- **Connection indoor / outdoor (mm):** 4 x 1.5
- **Air volume (Cooling / Heating):** 702 / 768
- **Piping connections:** 1/4 (6.35) / 3/8 (9.52)
- **Piping length range:** 3 ~ 15 m

**CU-UE12RKE**

- **Power source:** V 230
- **Recommended fuse:** A 16
- **Connection indoor / outdoor (mm):** 4 x 1.5
- **Air volume (Cooling / Heating):** 762 / 804
- **Piping connections:** 1/4 (6.35) / 3/8 (9.52)
- **Piping length range:** 3 ~ 15 m

**CU-UE18RKE**

- **Power source:** V 230
- **Recommended fuse:** A 16
- **Connection indoor / outdoor (mm):** 4 x 1.5
- **Air volume (Cooling / Heating):** 870 / 910
- **Piping connections:** 1/4 (6.35) / 1/2 (12.70)
- **Piping length range:** 3 ~ 15 m
New PZ Inverter models are powerful and efficient.

Technical focus
- NEW! R32 gas environmental friendly
- NEW! New design
- Wired Controller (optional)
- Super Quiet! Only 20 dBA
- High energy savings
- Long connection distance

### New PZ Inverter models

- Power source V: 230
- Recommended fuse A: 16
- Connection indoor / outdoor mm²: 4 x 1.5
- Air volume Cooling / Heating m³/h: 618 / 660
- Moisture removal volume l/h: 1.5
- Sound pressure level 3) Cooling / Heating (Hi/Low/Lo-Q-Lo) dB(A): 37/26/20 — 37/27/24
- Dimensions / Net weight H x W x D mm / kg: 290 x 850 x 199 / 8

### Outdoor Unit

- Air volume Cooling / Heating m³/h: 1.872 / 1.872
- Sound pressure level 3) Cooling / Heating (Hi): dB(A): 48 / 49
- Dimensions / Net weight H x W x D mm / kg: 542 x 780 x 289 / 25
- Piping connections Liquid pipe / Gas pipe Inch (mm): 1/4 (6.35) / 3/8 (9.52)
- Piping length range / Elevation difference (in/out) m: 3 ~ 15 / 15
- R32 Refrigerant amount kg: 0.58
- Operating range Cooling / Heating Min ~ Max °C: +5 ~ +43 / -10 ~ +24

### Accessories

- Type: AC-AC
- Function: Outdoor controller
- Type: AC-RC
- Function: Wall mounted remote controller

### Technical specifications

- Kit Cooling capacity Nominal (Min - Max) kW: 2.10 (0.85 - 3.00)
- SEER Nominal (Min - Max) kW/W: 3.42 (3.30 - 4.00)
- SEER Nominal kW/W: 5.60
- Power source V: 230
- Air volume Cooling / Heating m³/h: 618 / 660
- Piping connections Liquid pipe / Gas pipe Inch (mm): 1/4 (6.35) / 3/8 (9.52)
- Piping length range / Elevation difference (in/out) m: 3 ~ 15 / 15
- R32 Refrigerant amount kg: 0.58
- Operating range Cooling / Heating Min ~ Max °C: +5 ~ +43 / -10 ~ +24

### Indoor Unit

- Power source V: 230
- Recommended fuse A: 16
- Connection indoor / outdoor mm²: 4 x 1.5
- Air volume Cooling / Heating m³/h: 618 / 660
- Noise level Cooling-Heating Hi/Low/Lo-Q-Lo dB(A): 37/26/20 — 37/27/24
- Dimensions / Net weight H x W x D mm / kg: 290 x 850 x 199 / 8

### Outdoor Unit

- Power source V: 230
- Recommended fuse A: 16
- Connection indoor / outdoor mm²: 4 x 1.5
- Air volume Cooling / Heating m³/h: 1.872 / 1.872
- Noise level Cooling-Heating Hi/Low dB(A): 48 / 49
- Dimensions / Net weight H x W x D mm / kg: 542 x 780 x 289 / 25
- Piping connections Liquid pipe / Gas pipe Inch (mm): 1/4 (6.35) / 3/8 (9.52)
- Piping length range / Elevation difference (in/out) m: 3 ~ 15 / 15
- R32 Refrigerant amount kg: 0.58
- Operating range Cooling / Heating Min ~ Max °C: +5 ~ +43 / -10 ~ +24

### Accessories

- Type: AC-AC
- Function: Outdoor controller
- Type: AC-RC
- Function: Wall mounted remote controller

1) EER and COP classification is at 230 V in accordance with EU directive 2002/12/EC. 2) The annual energy consumption is calculated in accordance with the ErP-directive. 3) The sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 0.8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. G-La: The lowest fan speed. Lo: The second lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.  * Available in March 2016.
PE Inverter models are powerful and efficient.

<table>
<thead>
<tr>
<th>Kit</th>
<th>KIT-PE9-RKE</th>
<th>KIT-PE12-RKE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooling capacity</strong></td>
<td>Nominal (Min - Max) kW</td>
<td>2.50 (0.85 - 3.00)</td>
</tr>
<tr>
<td><strong>EER</strong></td>
<td>Nominal (Min - Max) kW</td>
<td>3.47 (1.42 - 2.54)</td>
</tr>
<tr>
<td><strong>SEER</strong></td>
<td>Nominal</td>
<td>5.60</td>
</tr>
<tr>
<td><strong>Pdc</strong> (cooling) kW</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Power input cooling</strong></td>
<td>Nominal (Min - Max) kW</td>
<td>0.18 (0.250 - 1.020)</td>
</tr>
<tr>
<td><strong>Annual electricity consumption (cooling)</strong></td>
<td>kWh/a</td>
<td>1.94</td>
</tr>
<tr>
<td><strong>Heating capacity</strong></td>
<td>Nominal (Min - Max) kW</td>
<td>3.30 (0.80 - 4.10)</td>
</tr>
<tr>
<td><strong>Heating capacity at -7°C</strong></td>
<td>Nominal</td>
<td>2.64</td>
</tr>
<tr>
<td><strong>COP</strong></td>
<td>Nominal (Min - Max) kWh/a</td>
<td>3.84 (4.10 - 3.47)</td>
</tr>
<tr>
<td><strong>SCOP</strong></td>
<td>Nominal</td>
<td>3.80</td>
</tr>
<tr>
<td><strong>Pdc</strong> at -10 °C kW</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Power input heating</strong></td>
<td>Nominal (Min - Max) kW</td>
<td>0.86 (0.195 - 1.180)</td>
</tr>
<tr>
<td><strong>Annual electricity consumption (heating)</strong></td>
<td>kWh/a</td>
<td>700</td>
</tr>
</tbody>
</table>

**Indoor Unit**
- **CS-PE9RKE**
- **CS-PE12RKE**

**Outdoor Unit**
- **CU-PE9RKE**
- **CU-PE12RKE**

**Recommended fuse**
- **V**
  - **A**
    - **16**
  - **16**

**Air volume**
- **Cooling / Heating**
  - **m³/h**
    - **792 / 768**
    - **762 / 844**

**Outdoor Unit**
- **CU-PE9RKE**
- **CU-PE12RKE**

**Sound pressure level**
- **Cooling / Heating**
  - **dB(A)**
    - **47 / 48**
    - **48 / 50**
  - **Hi**
  - **Lo**
  - **Q-Lo**

**Accessories**
- **PAW-AC-DIO**
  - **PCB for wall mounted with dry contacts, On/Off, Error message**
- **CZ-RD514C**
  - **Wired remote control for wall type**

**Technical focus**
- Wired Controller (optional)
- This units can be installed on R22 pipings
- Quieter indoor units
- High energy savings
- Long connection distance

**Specifications**
1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0.8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. D-lo: The lowest fan speed. Lo: The second lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

**CU-PE9RKE**
- **Optional wired remote control**
  - **CZ-0051SC**
Complete line-up with high efficiency even at -20°C
This Wall Mounted air conditioner is especially designed for professional applications such as computer rooms where cooling in the room is necessary even when the outside temperature is low. Furthermore this air conditioner has an automatic changeover system, in order to maintain the inside temperature even when sharp outside temperature changes occur.

Technical focuses:
- This unit can be installed on R22 pipings
- Designed for 24h/7d a week operation
- Highly efficient even at -20°C
- High durability rolling bearings
- Additional piping sensors to prevent freezing

**WALL MOUNTED PROFESSIONAL**

**INVERTER -20°C**

---

**Kits**

<table>
<thead>
<tr>
<th>Kit</th>
<th>KIT-E9-PKEA</th>
<th>KIT-E12-PKEA</th>
<th>KIT-E15-PKEA</th>
<th>KIT-E18-PKEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOP</td>
<td>4.40</td>
<td>4.20</td>
<td>4.00</td>
<td>3.80</td>
</tr>
</tbody>
</table>

**Recommended fuse**

A16

---

**Piping**

- **Power input cooling**
  - Nominal (Min - Max): kW 2.5 - 4.2

- **Heating capacity**
  - Nominal: kW 3.40 (0.85 - 5.40)

- **Sound pressure level**
  - dB(A) 46 / 47

---

**Dimensions**

- **Indoor Unit**
  - CS-E9PKEA
  - CS-E12PKEA
  - CS-E15PKEA
  - CS-E18PKEA

---

**Power source**

V 230

---

**Connection indoor / outdoor**

- mm 4 x 1.5

---

**Air Volume**

- Cooling / Heating m³/h 796 / 876

---

**Ratings**

- **Heating capacity at -20°C**
  - Nominal kW 2.61

---

**Warranty**

- 5 YEARS

---

**Accesories**

- PAW-GRDSTD40 Outdoor elevation platform
- PAW-DRST40G Outdoor floor support for noise and vibration absorption
- PAW-SERVER-PKEA PCB for installation in server rooms with security
- PAW-CAPRA1 H-Generation interface to ECOi control integration (available in June 2016)
- CZ-CAPRA1 H-Generative interface to ECOi control integration
Console designed for discreet integration on walls, and for high performance, specifically in heat mode even when the outside temperature is as low as -20°C. Double airflow for improved comfort and temperature dispersion: through the top for an efficient cooling mode, through the bottom for quick heating.

Technical focus
- This units can be installed on R22 pipings
- More efficient than ever for improved energy consumption and higher savings
- Heating mode down to -20°C with high efficiency
- Double airflow for better efficiency
- Powerful mode for quick temperature setting
- R410A refrigerant gas

Specifications
- EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ERP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70mm for piping port.

<table>
<thead>
<tr>
<th>KIT</th>
<th>KIT-E9-PFE</th>
<th>KIT-E12-PFE</th>
<th>KIT-E18-PFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling capacity Nominal (Min - Max) kW</td>
<td>2,50 (0,85 - 3,00)</td>
<td>3,50 (0,85 - 3,80)</td>
<td>5,00 (0,98 - 5,60)</td>
</tr>
<tr>
<td>EER 1) Nominal W/W</td>
<td>4,50 A</td>
<td>3,72 A</td>
<td>3,75 A</td>
</tr>
<tr>
<td>SEER Nominal W/W</td>
<td>6,10</td>
<td>5,80</td>
<td>6,25</td>
</tr>
<tr>
<td>Power input cooling Nominal kW</td>
<td>0,560</td>
<td>0,940</td>
<td>1,540</td>
</tr>
<tr>
<td>Heating capacity Nominal (Min - Max) kW</td>
<td>3,40 (0,85 - 5,00)</td>
<td>4,00 (0,85 - 6,00)</td>
<td>5,80 (0,98 - 7,10)</td>
</tr>
<tr>
<td>Heating capacity at -7°C Nominal kW</td>
<td>2,35</td>
<td>2,86</td>
<td>3,07</td>
</tr>
<tr>
<td>COP 1) Nominal W/W</td>
<td>4,20 A</td>
<td>4,00 A</td>
<td>3,63 A</td>
</tr>
<tr>
<td>SCOP Nominal W/W</td>
<td>3,00</td>
<td>3,20</td>
<td>3,15</td>
</tr>
<tr>
<td>Power input heating Nominal kW</td>
<td>0,810</td>
<td>1,000</td>
<td>1,600</td>
</tr>
<tr>
<td>Annual electricity consumption (heating) 2) kWh/a</td>
<td>995</td>
<td>1.179</td>
<td>1.579</td>
</tr>
<tr>
<td>Dimensions / Net weight H x W x D mm / kg</td>
<td>542 x 780 x 289 / 33</td>
<td>619 x 824 x 299 / 34</td>
<td>695 x 875 x 320 / 46</td>
</tr>
<tr>
<td>Piping connections Liquid pipe / Gas pipe Inch (mm)</td>
<td>1/4 (6,35) / 3/8 (9,52)</td>
<td>1/4 (6,35) / 3/8 (9,52)</td>
<td>1/4 (6,35) / 1/2 (12,70)</td>
</tr>
<tr>
<td>Piping length range / Elevation difference (in/out) m</td>
<td>3 ~ 15 / 5</td>
<td>3 ~ 15 / 5</td>
<td>3 ~ 20 / 15</td>
</tr>
<tr>
<td>Pipe length for additional gas / Additional gas amount m / g/m</td>
<td>7,5 / 20</td>
<td>7,5 / 20</td>
<td>7,5 / 20</td>
</tr>
<tr>
<td>Operating range Heating / Cooling Min ~ Max °C</td>
<td>+16 ~ +43 / -15 ~ +24</td>
<td>+16 ~ +43 / -15 ~ +24</td>
<td>+16 ~ +43 / -15 ~ +24</td>
</tr>
</tbody>
</table>

**FLOOR CONSOLE**

INVERTER+

**NEW**

**DOMESTIC**
Specially designed for offices, retail and restaurant applications, this cassette fits perfectly into 60x60 or 70x70 ceiling grids. Featuring the best efficiency in its category (heating and cooling up to -10°C), this new cassette in 9 and 12 kW versions can also be connected to KNX, Modbus, EnOcean interfaces for easy integration with your BMS systems. Interfaces have dry contacts (ON/ OFF, error message) to enable easy integration.

With the new Intesishome interface, you can also control the cassette from your smartphone and internet very easily!

Fit Panasonic’s Cassette Type, and start to save all year round!

### Technical focus
- **Cassettes can be controlled by Intesishome, KNX, EnOcean and Modbus**
- **This units can be installed on R22 pipings**
- **Designed for easy installation in the standard European 60x60 ceiling grid**
- **Operation down to -10°C in cooling and heating modes**
- **Piping length up to 30 m**
- **Maximum elevation difference up to 20 m**
- **Ultra compact outdoor units for easy installation**
- **High pressure selector in case of high ceilings (higher than 2.7 m)**
- **Drain pump included (max. 750 mm high)**
- **Air fresh entry available on the cassette**

### Inverter 4 WAY 60x60 Cassette

#### Indoor Unit
- **Panasonic’s Cassette Type**
- **Start to save all year round!**
- **With the new Intesishome interface, you can also control the cassette from your smartphone and internet very easily!**

#### Technical parameters

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Heating Capacity kW</th>
<th>Nominal Cooling Capacity kW</th>
<th>EER</th>
<th>SEER</th>
<th>COP</th>
<th>SCOP</th>
<th>Design (cooling) kW</th>
<th>Design (heating) kW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CU-E9PB4EA</strong></td>
<td>2,60 (0,85 - 3,00)</td>
<td>2,50 (0,85 - 3,00)</td>
<td>4,50</td>
<td>5,80</td>
<td>4,00</td>
<td>2,50</td>
<td>0,800 (0,230 - 1,300)</td>
<td>0,800 (0,230 - 1,300)</td>
</tr>
<tr>
<td><strong>CU-E12PB4EA</strong></td>
<td>3,00 (0,85 - 3,56)</td>
<td>3,40 (0,85 - 4,00)</td>
<td>5,60</td>
<td>5,60</td>
<td>5,00</td>
<td>3,70</td>
<td>0,890 (0,248 - 1,380)</td>
<td>0,890 (0,248 - 1,380)</td>
</tr>
<tr>
<td><strong>CU-E18RBEA</strong></td>
<td>3,56 (0,90 - 4,05)</td>
<td>4,30 (0,85 - 5,60)</td>
<td>6,00</td>
<td>6,00</td>
<td>5,60</td>
<td>4,50</td>
<td>1,400 (0,255 - 1,950)</td>
<td>1,400 (0,255 - 1,950)</td>
</tr>
<tr>
<td><strong>CU-E21RBEA</strong></td>
<td>4,05 (1,90 - 4,55)</td>
<td>5,30 (1,90 - 5,80)</td>
<td>6,60</td>
<td>6,60</td>
<td>6,00</td>
<td>5,50</td>
<td>2,050 (0,260 - 2,200)</td>
<td>2,050 (0,260 - 2,200)</td>
</tr>
</tbody>
</table>

#### Accessories
- **F-WIFI Interface for Internet Control**
- **Wired remote control for Cassette and Hide Away**

---

### AIR CONDITIONER

- **Power input cooling** Nominal (Min - Max) kW: 0,550 (0,240 - 0,740)
- **Power input heating** Nominal (Min - Max) kW: 0,890 (0,240 - 1,200)

---

### ECONOMY

- **Annual energy consumption (cooling)** kWh/a: 151
- **Annual energy consumption (heating)** kWh/a: 230

---

### INSTALLATION

- **Operation down to -10°C in cooling and heating modes**
- **Maximum elevation difference up to 20 m**

---

### Cassettes can be controlled by Intesishome, KNX, EnOcean and Modbus
Designed for homes, offices, retail and restaurants, this Duct is ideal for small rooms where the air conditioning and the heating should be nicely integrated and where high comfort and efficiency is needed.

The new 9 and 12kW duct can also be connected to KNX, Modbus, EnOcean interfaces for easy integration with your BMS systems. These interfaces have dry contacts (ON/OFF, error message) for easy integration.

With the new Intesishome interface, you can control the Duct also from your smartphone and internet very easily!

Technical focus
- Duct type can be controlled by Intesishome, KNX, EnOcean and Modbus
- This units can be installed on R22 pipings
- Eco mode for 20% energy saving
- Extremely compact indoor units without losing static pressure (only 235 mm high)
- Weekly timer, 42 settings per week
- Easy check mode for failure detection
- Drain pump included (max. 200 mm)

KIT

<table>
<thead>
<tr>
<th>KIT</th>
<th>KIT-E9-PD3EAE</th>
<th>KIT-E12-QD3EAE</th>
<th>KIT-E18-RD3EAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coating capacity</td>
<td>Nominal (Min - Max) kW</td>
<td>2.50 (0.85 - 3.00)</td>
<td>3.40 (0.85 - 4.00)</td>
</tr>
<tr>
<td>EER</td>
<td>Nominal</td>
<td>4.25 (3.54 - 3.85)</td>
<td>3.86 (3.34 - 3.45)</td>
</tr>
<tr>
<td>SEER</td>
<td></td>
<td>5.60 A</td>
<td>5.60 A</td>
</tr>
<tr>
<td>Pděsage (cooling) kW</td>
<td>2.50</td>
<td>3.40</td>
<td>5.10</td>
</tr>
<tr>
<td>Power input cooling Nominal (Min - Max) kW</td>
<td>0.90 (0.240 - 0.760)</td>
<td>0.880 (0.234 - 1.160)</td>
<td>1.600 (0.255 - 1.820)</td>
</tr>
<tr>
<td>Annual electricity consumption (cooling)</td>
<td>kW/h</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>Capacity Heating</td>
<td>Nominal (Min - Max) kW</td>
<td>2.60</td>
<td>3.00</td>
</tr>
<tr>
<td>COP</td>
<td>Nominal</td>
<td>3.25 (3.21 - 3.21)</td>
<td>3.25 (3.21 - 3.21)</td>
</tr>
<tr>
<td>SCOP</td>
<td>Nominal</td>
<td>4.20 A</td>
<td>4.20 A</td>
</tr>
<tr>
<td>Pděsage at -10°C kW</td>
<td>2.60</td>
<td>2.90</td>
<td>4.90</td>
</tr>
<tr>
<td>Power input heating Nominal (Min - Max) kW</td>
<td>0.60 (0.230 - 1.380)</td>
<td>1.130 (0.233 - 3.150)</td>
<td>1.880 (0.235 - 3.180)</td>
</tr>
<tr>
<td>Annual electricity consumption (heating) kW/h</td>
<td>667</td>
<td>1,660</td>
<td>2,436</td>
</tr>
</tbody>
</table>

Indoor Unit

<table>
<thead>
<tr>
<th>CS-E9-PD3EAE</th>
<th>CS-E12-QD3EAE</th>
<th>CS-E18-RD3EAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications subject to change without notice. For detailed information about ErP, please visit our websites <a href="http://www.aircon.panasonic.eu">www.aircon.panasonic.eu</a> or <a href="http://www.ptc.panasonic.eu">www.ptc.panasonic.eu</a>.</td>
<td>Specifications subject to change without notice. For detailed information about ErP, please visit our websites <a href="http://www.aircon.panasonic.eu">www.aircon.panasonic.eu</a> or <a href="http://www.ptc.panasonic.eu">www.ptc.panasonic.eu</a>.</td>
<td>Specifications subject to change without notice. For detailed information about ErP, please visit our websites <a href="http://www.aircon.panasonic.eu">www.aircon.panasonic.eu</a> or <a href="http://www.ptc.panasonic.eu">www.ptc.panasonic.eu</a>.</td>
</tr>
</tbody>
</table>
TZ MULTI SPLIT
STANDARD INVERTER

TZ Multi Inverter models are powerful and efficient and are always there when you need them.

New TZ Inverter models are powerful and efficient, with an outstanding energy ranking of A++/+A+, unique in the market!

Day & Night. Ideal for 2 day and night areas. Simultaneous use possible. Simultaneous. When indoor units are most time working at same time.

Technical focus
- **NEW!** design
- This units can be installed on R22 pipings
- Wired Controller (optional)
- Complete line-up of standard Inverter models
- High energy savings
- Long connection distance (from 15 m up to 30 m)

Top Sellers Kits

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Day &amp; Night 2 Rooms</th>
<th>Day &amp; Night 3 Rooms</th>
<th>Day &amp; Night 3 Rooms</th>
<th>Day &amp; Night 3 Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Unit</td>
<td>CS-T25SRKE CS-T25SRKE CS-TZ15SRKE CS-TZ15SRKE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor Unit</td>
<td>CU-3RE15SRBE CU-3RE15SRBE CU-3RE15SRBE CU-3RE15SRBE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling capacity</td>
<td>Nominal (Min - Max)</td>
<td>kW</td>
<td>4,40 (1,50 - 4,80)</td>
<td>4,40 (1,50 - 4,80)</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>Nominal (Min - Max)</td>
<td>kW</td>
<td>4,80 (1,50 - 5,00)</td>
<td>4,80 (1,50 - 5,00)</td>
</tr>
<tr>
<td>EER</td>
<td>Nominal</td>
<td>kW/W</td>
<td>3,38</td>
<td>3,38</td>
</tr>
<tr>
<td>COP</td>
<td>Nominal</td>
<td>kW/W</td>
<td>4,00</td>
<td>4,00</td>
</tr>
<tr>
<td>Indoor dimensions</td>
<td>mm</td>
<td>H x W x D</td>
<td>290 x 970 x 290</td>
<td>290 x 970 x 290</td>
</tr>
<tr>
<td>Indoor net weight</td>
<td>kg</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Other Multi Combinations TZ with Multi Standard Outdoors

<table>
<thead>
<tr>
<th>Wall Mounted TZ / RE</th>
<th>1.6 kW</th>
<th>2.2 kW</th>
<th>2.5 kW</th>
<th>3.2 kW</th>
<th>4.0 kW</th>
<th>5.0 kW</th>
<th>7.1 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Unit RE</td>
<td>CS-MTZ5SKE</td>
<td>CS-MTZ5SKE</td>
<td>CS-TZ15SKE</td>
<td>CS-TZ15SKE</td>
<td>CS-TZ15SKE</td>
<td>CS-TZ15SKE</td>
<td>CS-TZ15SKE</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>Nominal (Min - Max)</td>
<td>kW</td>
<td>1,00 (1,30)</td>
<td>2,00 (1,70)</td>
<td>2,50 (1,90)</td>
<td>3,20 (2,70)</td>
<td>4,00 (3,40)</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>Nominal (Min - Max)</td>
<td>kW</td>
<td>5,60 (4,80)</td>
<td>6,40 (5,80)</td>
<td>7,20 (6,40)</td>
<td>8,00 (7,20)</td>
<td>9,00 (8,00)</td>
</tr>
<tr>
<td>COP</td>
<td>Nominal</td>
<td>kW/W</td>
<td>4,17</td>
<td>4,17</td>
<td>4,17</td>
<td>4,17</td>
<td>4,17</td>
</tr>
<tr>
<td>Indoor dimensions</td>
<td>mm</td>
<td>H x W x D</td>
<td>290 x 970 x 204</td>
<td>290 x 970 x 204</td>
<td>290 x 970 x 204</td>
<td>290 x 970 x 204</td>
<td></td>
</tr>
<tr>
<td>Indoor net weight</td>
<td>kg</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 2) The annual energy consumption is calculated in accordance with the EUP directive. 3) Add 70 or 95 mm for piping port. Minimum quantity of connection: 2 indoor units. * Available in April 2016. ** Available in May 2016.
Etherea with enhanced Econavi sensor and new Nanoe air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design

Using a Multi Split Inverter+ system you reduce consumption and thus save more! Up to 34%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces.

Technical focus
- **NEW!** design
- This units can be installed on R22 pipings
- Maximum efficiency and comfort with Econavi, now with sunlight detection
- Nanoe air purifying system, 99% effective on both airborne and adhesive mould, viruses and bacteria
- Optional smartphone control
- More powerful airflow to quickly reach the desired temperature

**Top Sellers Kits**

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Day &amp; Night 2 Rooms</th>
<th>Day &amp; Night 3 Rooms</th>
<th>Simultaneous 2 Rooms</th>
<th>Simultaneous 3 Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Unit Silver Plated</td>
<td>CS-XZ9SKEW</td>
<td>CS-XZ12SKEW</td>
<td>CS-XZ15SKEW</td>
<td>CS-XZ18SKEW</td>
</tr>
<tr>
<td>Indoor Unit White Glass</td>
<td>CS-2S5KEW</td>
<td>CS-2S7KEW</td>
<td>CS-2S9KEW</td>
<td>CS-2S12KEW</td>
</tr>
<tr>
<td>Indoor Unit White Matt</td>
<td>CS-2S9SKEW-M</td>
<td>CS-2S12SKEW-M</td>
<td>CS-2S15SKEW-M</td>
<td>CS-2S18SKEW-M</td>
</tr>
<tr>
<td>Outdoor Unit</td>
<td>CU-2E15SBE</td>
<td>CU-2E15SBE</td>
<td>CU-2E15SBE</td>
<td>CU-2E18SBE</td>
</tr>
<tr>
<td>Cooling capacity Nominal (Min - Max) kW</td>
<td>4.50 (1.50 - 5.20)</td>
<td>4.50 (1.50 - 5.20)</td>
<td>4.50 (1.50 - 5.20)</td>
<td>5.20 (1.90 - 7.20)</td>
</tr>
<tr>
<td>EER Nominal W/W</td>
<td>3.66</td>
<td>3.66</td>
<td>3.66</td>
<td>3.66</td>
</tr>
<tr>
<td>Heating capacity Nominal (Min - Max) kW</td>
<td>5.40 (1.10 - 7.00)</td>
<td>5.40 (1.10 - 7.00)</td>
<td>5.40 (1.10 - 7.00)</td>
<td>6.80 (1.60 - 8.30)</td>
</tr>
<tr>
<td>COP Nominal</td>
<td>4.62</td>
<td>4.62</td>
<td>4.62</td>
<td>4.77</td>
</tr>
<tr>
<td>Indoor dimensions H x W x D mm</td>
<td>295 x 870 x 255</td>
<td>295 x 870 x 255</td>
<td>295 x 870 x 255</td>
<td>295 x 870 x 255</td>
</tr>
<tr>
<td>Indoor net weight kg</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

* Available in April 2016.
FREE MULTI SYSTEM

Up to 5 indoor units with a single outdoor unit

Connect up to five different rooms with a single outdoor unit using the Free Multi system. With Free Multi you can take care of 2, 3, 4 or 5 rooms with a single outdoor unit.

With the Free Multi range, your clients will be able to save space at the time of installing the outdoor unit, and they will have more energy efficiency than with conventional 1x1 systems. They will be able to achieve energy savings of up to 30%.

Choose the indoor units according to the individual requirements of each of your client’s rooms, and calculate which outdoor unit best adapts itself to the combinations of indoor units.

The combination table will help you to select the best option.

Possible outdoor/indoor units combinations

<table>
<thead>
<tr>
<th>System</th>
<th>Indoor Unit Capacity</th>
<th>Indoor Unit</th>
<th>Ethersa</th>
<th>Multi System</th>
<th>Floor Console</th>
<th>Low Static Pressure</th>
<th>4 Way Airflow Cassette</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU-2E12PBE (2 Rooms)</td>
<td>3.5kW</td>
<td>CS-MZ5SKE / CS-MZ5SKE-M / CS-ME5PKE CS-MTZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>3.5kW</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
</tr>
<tr>
<td>CU-2E15PBE (2 Rooms)</td>
<td>3.5kW</td>
<td>CS-MZ5SKE / CS-MZ5SKE-M / CS-ME5PKE CS-MTZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>3.5kW</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
</tr>
<tr>
<td>CU-2E18PBE (2 Rooms)</td>
<td>3.5kW</td>
<td>CS-MZ5SKE / CS-MZ5SKE-M / CS-ME5PKE CS-MTZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>3.5kW</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
</tr>
<tr>
<td>CU-2E21PBE (2 Rooms)</td>
<td>3.5kW</td>
<td>CS-MZ5SKE / CS-MZ5SKE-M / CS-ME5PKE CS-MTZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>3.5kW</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
<td>CS-MZ5SKE</td>
</tr>
</tbody>
</table>

For more information, please refer to the Panasonic website.
**NEW / DOMESTIC**

### Etherea

<table>
<thead>
<tr>
<th>Indoor Unit Silver Plated*</th>
<th>1,6 kW</th>
<th>2,0 kW</th>
<th>2,5 kW</th>
<th>3,2 kW</th>
<th>4,0 kW</th>
<th>5,0 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Unit White (SKY-E) / Moti (SKU-E)</td>
<td>CS-M55EKW</td>
<td>CS-X55EKW</td>
<td>CS-X10EKW</td>
<td>CS-X15EKW</td>
<td>CS-X20EKW</td>
<td>CS-X25EKW</td>
</tr>
<tr>
<td>Cooling capacity Nominal kW / kVA</td>
<td>1,6 / 1,380</td>
<td>2,0 / 1,770</td>
<td>2,5 / 2,150</td>
<td>3,2 / 2,760</td>
<td>4,0 / 3,440</td>
<td>5,0 / 4,300</td>
</tr>
<tr>
<td>Heating capacity Nominal kW / kVA</td>
<td>2,0 / 2,240</td>
<td>3,0 / 2,750</td>
<td>3,6 / 3,010</td>
<td>4,5 / 3,870</td>
<td>5,0 / 4,820</td>
<td>6,0 / 5,850</td>
</tr>
<tr>
<td>Connection mm²</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
<td>4 x 1,5</td>
</tr>
<tr>
<td>Sound pressure level¹ Cooling (Hi / Lo / S-Lo) dB(A)</td>
<td>—</td>
<td>—</td>
<td>40 / 26 / 20</td>
<td>42 / 30 / 20</td>
<td>44 / 31 / 29</td>
<td>44 / 37 / 34</td>
</tr>
<tr>
<td>Wall Mounting TZ / RE</td>
<td>1,6 kW</td>
<td>2,0 kW</td>
<td>2,5 kW</td>
<td>3,2 kW</td>
<td>4,0 kW</td>
<td>5,0 kW</td>
</tr>
<tr>
<td>Indoor Unit TZ</td>
<td>CS-M55SKKE</td>
<td>CS-M55SKE*</td>
<td>CS-T52SKE*</td>
<td>CS-T92SKE*</td>
<td>CS-T92SKE*</td>
<td>CS-T92SKE*</td>
</tr>
<tr>
<td>Cooling capacity Nominal kW / kVA</td>
<td>1,6 / 1,380</td>
<td>2,0 / 1,770</td>
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</tr>
<tr>
<td>Sound pressure level¹ Cooling (Hi / Lo / S-Lo) dB(A)</td>
<td>—</td>
<td>—</td>
<td>40 / 26 / 20</td>
<td>42 / 30 / 20</td>
<td>44 / 31 / 29</td>
<td>44 / 37 / 34</td>
</tr>
</tbody>
</table>

### Outdoor Unit

- **EER ¹** Nominal W/W: 4,20 (6,42 - 3,42)
- **SGER** Nominal kW: 6,50 kW
- **Psd³, PHS³** kW: 4,00 kW
- **Power input cooling kW** | 3,880 (1,00 - 1,070) | 2,30 (1,025 - 1,360) | 1,520 (1,250 - 1,580) | 1,270 (1,360 - 2,350) | 3,95 (2,70 - 4,20) | 8,38 (2,80 - 3,70) |
- **Annual energy consumption (cooling) kW/a** | 194 | 242 | 240 | 260 | 340 | 400 |
- **Heating capacity kW** | 4,40 (1,10 - 4,80) | 5,40 (1,10 - 7,80) | 5,40 (1,10 - 7,80) | 6,80 (1,50 - 8,30) | 8,10 (3,00 - 10,00) | 10,0 (3,00 - 10,00) |
- **Heating efficiency at -10°C** | 3,54 | 3,54 | 3,65 | 4,95 | 6,05 | 7,85 |
- **EPA¹** kW | 3,54 | 3,54 | 3,65 | 4,95 | 6,05 | 7,85 |
- **SCOP¹** | 4,80 | 4,80 | 4,2 | 3,80 | 3,08 | 2,58 |
- **Psd³, PHS³** kW: 4,00 kW
- **Power input heating kW** | 4,950 (1,013 - 1,287) | 1,700 (1,360 - 1,700) | 1,700 (1,360 - 1,700) | 1,700 (1,360 - 1,700) | 3,80 (1,700 - 3,80) | 7,80 (3,80 - 7,80) |
- **Annual performance factor (heating) kW/a** | 1,40 | 1,40 | 1,40 | 1,40 | 1,40 | 1,40 |
- **Power source V** | 230 | 230 | 230 | 230 | 230 | 230 |
- **Recommended fuse A** | 16 | 16 | 16 | 16 | 16 | 16 |
- **Recommended power cable section mm²** | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
- **Sound pressure level ² Cooling (Hi / Lo / S-Lo) dB(A) | 47 / 49 | 47 / 49 | 47 / 49 | 47 / 49 | 47 / 49 | 47 / 49 |
- **Dimensions / Net weight mm / kg** | 619 x 624 x 279 / 39 | 619 x 624 x 279 / 39 | 619 x 624 x 279 / 39 | 795 x 875 x 320 / 71 | 979 x 875 x 320 / 71 | 979 x 875 x 320 / 71 |
- **Elevation difference (in/out)** m | 10 | 10 | 10 | 10 | 10 | 10 |
- **Piping length Min - max m** | 30 | 30 | 30 | 30 | 30 | 30 |
- **Piping length to one unit Min - max m** | 30 | 30 | 30 | 30 | 30 | 30 |
- **Piping length to additional gas min / max g/m³** | 20 | 20 | 20 | 20 | 20 | 20 |
- **Operating range Cooling min °C** | -10 | -14 | -14 | -14 | -14 | -14 |

1) EER and COP classifications is at 22°C in accordance with EU directive 2002/88/EC. 2) The annual energy consumption is calculated in accordance with the ERP directive. 3) The sound pressure level of the units shows the value measured at a position 1 metre in front of the main body and 0.8 m below the unit. The sound pressure is measured in accordance with ISO 3744-97 specifications. 4) Add 70 or 95 mm for piping part. Minimum quantity of connection: 2 indoor units. * Available in June 2016. ** Available in April 2016. *** Available in May 2016.