With more than 30 years of experience, exporting to more than 120 countries around the world, Panasonic is unquestionably one of the leaders in the air conditioning sector. The company is also a world leader in innovation as it has filed more than 91,539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products, particularly residential air conditioners, now hold the No.1 market share in Japan and other major countries in Asia. You can be assured of the extremely high quality of Panasonic’s air conditioners.

This wish to excel has made Panasonic the international leader in air conditioning solutions. The company’s industrial capacity and firm commitment to the environment has enabled it to open new avenues of research and to develop innovative technologies which enhance its customers’ way of life.

Panasonic offers a range of turnkey air conditioning solutions for homes and medium-sized buildings such as offices and restaurants. These offer maximum effectiveness, comply with the strictest environmental standards, and meet the most avant-garde construction requirements of our time.

At Panasonic we know what a great responsibility it is to install cooling and heating systems. Because offering you the best solutions in cooling and heating matters.

EVERY BUILDING MATTERS
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Quality Assurance from Japan to the World

With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide. Expanding globally, Panasonic provides superior international products transcending borders.

PAPAMY-Malaysia
Established April 1972
• Air conditioners
• Air to water heat pump

PAPARADMY-Malaysia
Established June 1991
• R&D for air conditioners
• Air to water heat pump

PAPAMY Compressor-Malaysia
Established January 1987
• Rotary compressors for air conditioners

PAPAMY Compressor R&D-Malaysia
Established September 1997
• R&D for rotary compressors

PMI-Indonesia
Panasonic Manufacturing Indonesia
Established September 1965
• Air conditioners
• Home appliance products

PMPC-Philippines
Panasonic Manufacturing Philippines Corporation.
Established September 1967
• Air conditioners
• Home appliance products

Panasonic Air Conditioning Training Centre Asia (PACT)
Location: PAPAMY-Malaysia
Established July 2011
• Global training facility for all BtoB air conditioners including VRF
With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide. Expanding globally, Panasonic provides superior international products transcending borders.

Panasonic Manufacturing Indonesia
Panasonic Manufacturing Philippines Corporation.
Panasonic Taiwan Co., Ltd.
Panasonic R&D Center Suzhou Co., Ltd.
Panasonic Appliances Air-Conditioning Guangzhou Co., Ltd.
Panasonic Wanbao Appliances Compressor (Guangzhou) Co., Ltd.
Panasonic Taiwan Co., Ltd.

Established April 1972
Appliances Company HQ
Home Appliances Business Group
Corporate Engineering Division

Established April 2002
Air conditioners
R&D for home appliance products

Established June 1993
Air conditioners
R&D for air conditioners
Rotary compressors for air conditioners
Compressors for car air conditioners
Air conditioners
Car air conditioners
Home appliance products

Established December 1995
Air conditioners

Established March 1993
Air conditioners

Established June 1993
Air to water heat pump
Air to water heat pump

Established June 1991
Rotary compressors for air conditioners

Established September 1997
Air conditioners

Established September 1967
Air conditioners
Home appliance products
Air conditioners
Home appliance products

Established September 1965
Air conditioners
Home appliance products
Air conditioners

Established October 1962
Air conditioners
Car air conditioners
Home appliance products

Established July 1959
Air conditioners
Cold-Chain/Refrigoration products

Established July 2011
Global training facility for all BtoB air conditioners including VRF
The Global Trusted Air Conditioning Brand

53 years since its establishment, the Panasonic Aircon Group has grown into a global multinational company. Through the continuous quest for product innovation, the Group has evolved from manufacturing Compressors to now providing Comprehensive Air Conditioning solutions. This has made Panasonic a trusted brand for continuous reliability and superior quality products.

HISTORY of the Air Conditioning Group

1958-2011

1958 | Started production and sales of Home Coolers
The Electrical Appliance Business Group (Kadoma) started to manufacture air conditioners in March 1958. Started sales in May under the “Home Cooler” name.

1961 | Started exports of Home Coolers (to South Vietnam)

1965 | Launched Room Coolers

1968 | Began development of Rotary Compressors
High efficiency and high quality attracted domestic and overseas air conditioner manufacturers. Began external sales.

1972 | Established overseas business base in Malaysia
MAICO was established in Malaysia as the Aircon Group’s first overseas base. From this time, MAICO started to export to Japan, Indonesia, Australia, and other markets. Panasonic started operating a twin base system with a presence in Japan and Malaysia.

1983 | Launched inverter Air Conditioner
Started sales of Panasonic’s first inverter air conditioners and these have gained increased popularity ever since. Inverter became the future technology of the air conditioning market.

1985 | Began development of Scroll Compressors

1990 | Launched world’s first Compact Scroll Compressor-equipped Air Conditioner

1993 | Established Matsushita-Vanbao (Guangzhou) Air Conditioner (MWAC)
Established Matsushita-Vanbao (Guangzhou) Compressor (MWCC)
Established Matsushita Air Conditioner Engineering (Matsushita ACE)

2003 | Launched EcoCute on the back of better energy-saving technology
Launched accumulator-less, high-efficiency, CO₂, scroll compressor for EcoCute

2005 | Began production of Multi-split packaged air conditioner (mini-VRF)
Launched air conditioner automatic filter cleaning function (AC robot)

2006 | Product became extremely successful in the Japanese market. Since then Panasonic has launched a series of innovative products such as airstream robots and motion sensors which significantly improve Panasonic’s air conditioning market share.

2008 | Aggregated global production of Panasonic compressors reached 200 million units
In the 2008 Energy Conservation Grand Prizes, EcoCute won its first Director General Prize from the Agency of Natural Resources and Energy, while Panasonic air conditioning won the Chairmans’ Prize from the Energy Conservation Centre of Japan

2009 | Started Air to Water heat pump business in Europe
Established air conditioner dedicated sales company in Europe (PHAEC)
Panasonic HA Air-Conditioning Europe (PHAEC) strengthened the commercial air conditioning business

2010 | Started collaboration with SANYO air conditioner business
Panasonic corporation(HK) announces that it has made SANYO and Panasonic Electric Works its wholly-owned Subsidiary through Share Exchange

2011 | Launched Large capacity VRF air conditioner "F5V series"

2012 | New Panasonic Group started
Established overseas business base in Malaysia

MAICO was established in Malaysia as the Aircon Group's first overseas base. From this time, MAICO started to export to Japan, Indonesia, Australia, and other markets. Panasonic started operating a twin base system with a presence in Japan and Malaysia.

Making 'environment' the central theme for all product innovations

CO₂ heat pump hot water heater (EcoCute)
- CO₂ scroll compressor requires smaller installation area
- Quiet, compact, lightweight

Introduced mini-VRF
Using inverter control, Panasonic developed new energy saving mini-VRF series for residential applications.

Accumulator-less, high-efficiency, CO₂ scroll compressor for EcoCute
Using a non-toxic, non-combustible natural refrigerant (CO₂) as replacement for Freon to help reduce global warming.

New growth for the next generation

Europe: Started Air to Water heat pump business
With environmental awareness growing around the world, hot water heating attracts considerable attention, particularly in Europe, as an alternative to conventional fuel-type heating systems. This market is expected to continue to grow in the future.
New Panasonic Group

Contributing to the progress and development of society and enriching people’s lives through manufacturing

Our extensive range of products deliver customer satisfaction
Ideas from consumers’ viewpoint, ideas that are practical and useful, ideas that bring surprises and discoveries, ideas that make people happy, ideas that are innovative and interesting – ideas for life.

We Like to Challenge Our Ideas and Products
The Panasonic robot-mascot powered by rechargeable EVOLTA batteries completed a two-month-long, 500-kilometre trip from Tokyo to Kyoto. The seven-inch-tall robot, Mr EVOLTA, weighing just 1 kilogram is a small green character made of plastic and carbon fibre with two Panasonic rechargeable EVOLTA batteries on its back, pulling a trailer containing ten more EVOLTA batteries. Human team mates helped Mr EVOLTA by pushing a device with an infra-red signal which the robot followed and by stopping once a day to recharge its batteries. Panasonic set this challenge to demonstrate the performance and durability of its new rechargeable AA batteries made from nickel-metal-hydride. The batteries combine the convenience of a disposable battery with the performance and cost benefits of a rechargeable battery. Two years ago, Mr EVOLTA, powered by two EVOLTA alkaline batteries, climbed a 530-metre rope to the top of the Grand Canyon in six hours and 46 minutes. The following year, it finished the 24-hour Le Mans endurance race of 23.7km and was subsequently recognised in the Guinness World Records for the longest distance covered by a battery-operated remote control car.

U-Vacua Technology
Panasonic U-Vacua is a high-performance vacuum insulation panel (VIP) with very low thermal conductivity that performs about 20 times better than standard urethane foam. U-Vacua’s improved performance saves space while increasing the energy efficiency of refrigeration applications, home appliances, buildings, and any products that require low energy loss from heat transfer. It is powerful enough to make a snowman survive in a hot sauna for 24 hours. We have tested it.

Built for Extreme Conditions
Toughbooks are, like the name indicates, the perfect companion to conditions that require durability and reliability. With a rugged build, they are the choice for the German skijump team, which uses them in various weather conditions – from rain to -20°C temperatures.

Connected at 35,000 Feet
Just Like on the Ground
Beside being a world leader in state-of-the-art in-flight entertainment and communication systems manufacture, Panasonic Avionics has teamed up with Lufthansa to provide passengers with in-flight broadband connectivity on Lufthansa flights. Passengers will be able to use their own devices, such as laptops and smart phones, to wirelessly connect to the Internet – to browse, access social media sites, send/receive e-mails and more.
Realising eco-conscious solutions for entire towns

ECO CITY -Tianjin-

Toward a low-carbon future

Tianjin Eco-City (China) is an environmentally conscious city being built in Tianjin by the Chinese and Singaporean governments. Business districts and apartment blocks are built on a reclaimed former saltpan, and people will start living here from 2011. By 2020, around 30 square kilometres of city capable of accommodating a population of approximately 400,000 will be completed. Panasonic is participating in this Eco City project, which brings together leading technologies from around the world.

HEMS ~Home Energy Management System~

A Home Energy Management System (HEMS) is a support system for saving energy in homes. By linking a whole range of home appliances, solar power generation equipment, domestic EV chargers, storage batteries, and other devices, HEMS systems show the amount of energy used throughout the home, indicate whether energy-saving goals are being achieved, and display advice for energy saving.

Panasonic is supplying mini-VRF and HEMS systems to the homes being built in Tianjin Eco City, with the aim to effectively leverage Panasonic’s comprehensive strengths in eco-conscious technologies.
Panasonic’s vision for Comprehensive energy solutions

Based on the four pillars of “energy creation” for making energy, “energy storage” for storing energy, “energy saving” for individual products, and “energy management” to control these in an integrated manner, Panasonic will realise energy solutions for “entire houses and buildings” and contribute to eco cars and community grids.

Linking Equipment in the Home

~ Solution for the Missing Link ~

Centrally controlling the amount of energy consumed in the home is the key to saving energy. Being able to display HEMS information on all screens within the home makes it easy for the family to see whether energy saving targets have been met and to check advice. Making energy “visible” makes users conscious of energy-saving activities and helps them adopt a more natural and eco-friendly lifestyle.
Panasonic Air Conditioner product range for

**EVERY BUILDING MATTERS**

All driven by Panasonic Inverter Technology for Energy Savings

**INVERTER**

**Wide range of products**

**Panasonic Air Conditioner product range for**

---

**Single-Split Packaged Air Conditioner**  
From 11.2kW to 15.5kW  
Up to 8 indoor units

**VRF Air Conditioner**  
From 12.1kW to 168.0kW  
Up to 64 indoor units

---

**Single-Split Room Air Conditioner**  
From 2.6kW to 8.0kW

---
All driven by Panasonic Inverter Technology for Energy Savings

Panasonic Air Conditioner product range for

- Single-Split Packaged Air Conditioner
  - From 2.6kW to 8.0kW
- Multi-Split Packaged Air Conditioner (mini-VRF)
  - From 11.2kW to 15.5kW
  - Up to 8 indoor units
- VRF Air Conditioner
  - From 12.1kW to 168.0kW
  - Up to 64 indoor units

From 6.0kW to 14.0kW
Panasonic have a solution for every application

Single-Split System solution

Single-Split Packaged Air Conditioner solution
Panasonic have a solution for every application.

Single-Split Packaged Air Conditioner solution

Single-Split System solution

VRF Large Building solution

Mini-VRF solution
VRF Air Conditioner  
NEW FSV SYSTEMS

2-WAY FSV ME1
Newly designed next generation VRF!

- Line up from 22.4kW to 168kW
- Top class EER = 4.04 / COP = 4.56 (in the case of 22.4kW)
- Wide range of systems up to 168kW
- Longer max piping length (up to 1000 m)
- Increased max number of connectable indoor units (up to 64)
- Extended operating range to provide heating at outdoor temperature as low as -25°C
- Cooling operation is possible up to 46°C outdoor temperature
- Suitable for renewal projects

2-WAY FSV ME1
HIGH COP SETTING MODEL
Enables further energy saving

- Line up from 28kW to 135kW
- Wide range of system up to 135kW
- High COP especially large capacity zone (107kW=COP:4.08)

2-WAY mini-FSV LE1
For small-scale commercial and residential use

- Top-class EER:3.76 / COP:4.21 (In case of 12.1kW)
- Cooling operation is possible up to 46°C outdoor temperature
- Available for both single and three phase power supplies
- Piping length:120m (Total piping length:150m)
- System difference of elevation:50m /40m (outdoor UP/DOWN)
- 8 units connectable to one outdoor units (in the case of 15.5kW)
Exclusive features for ME1 series

A large number of indoor units can be connected

Possible to combine single outdoor units up to 168kW

Increased piping length for greater design flexibility

High external static pressure on condensers

Excellent energy savings
Wide range of indoor units

Wide choice of models depending on the indoor requirements

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<th>Class</th>
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<td>22.4/25.0</td>
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</table>

- **U1 type**
  - 4-Way Cassette
- **Y1 type**
  - 4-Way Cassette 60x60
- **L1 type**
  - 2-Way Cassette
- **D1 type**
  - 1-Way Cassette
- **F2 type**
  - Low Silhouette Ducted
- **M1 type**
  - Slim Low Static Ducted
- **E1 type**
  - High Static Pressure Ducted
- **T1 type**
  - Ceiling
- **K1 type**
  - Wall Mounted
- **P1 type**
  - Floor Standing
- **R1 type**
  - Concealed Floor Standing

Note: If more than 100% indoor units are operated with a high load, the units may not perform at the rated capacity. For the details, please consult with an authorised Panasonic dealer.
Wide choice of models depending on the indoor requirements:

- 2-WAY mini-FSV LE1 Series
- 2-WAY FSV ME1 Series

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>U-8ME1R8</th>
<th>U-10ME1R8</th>
<th>U-12ME1R8</th>
<th>U-14ME1R8</th>
<th>U-16ME1R8</th>
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<td>28.0</td>
<td>33.5</td>
<td>40.0</td>
<td>45.0</td>
<td>50.0</td>
<td>56.0</td>
</tr>
</tbody>
</table>
| 3rd party BMS integration adopters

Connectable indoor / outdoor unit capacity ratio up to 200%

FSV systems attain maximum indoor unit connection capacity of up to 200% of the unit’s connection range, depending on the outdoor and indoor models selected. So for a reasonable investment, FSV systems provide an ideal air conditioning solution for locations where full cooling/heating are not always required.

| System (KW) | 22.4 | 28.0 | 33.5 | 40.0 | 45.0 | 50.0 | 56.0 | 61.5 | 68.0 | 73.0 | 80.0 | 85.0 | 90.0 | 96.0 | 101.0 | 107.0 | 113.0 | 118.0 | 124.0 | 130.0 | 135.0 | 140.0 | 145.0 | 151.0 | 156.0 | 162.0 | 168.0 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MNcIU: 130% | 13   | 16   | 19   | 23   | 26   | 29   | 33   | 36   | 40   | 43   | 47   | 50   | 53   | 56   | 59   | 64   | 64   |       |       |       |       |       |       |       |       |
| MNcIU: 200% | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   |       |       |       |       |       |       |       |       |

Note: If more than 100% indoor units are operated with a high load, the units may not perform at the rated capacity. For the details, please consult with an authorised Panasonic dealer.

Controllers for all applications

- **ON/OFF controller**
- **Wireless controller**
- **Simplified controller**
- **Smart controller**
- **Web Intelligent Controller**
- **64 x 4 systems**
- **Max. 256 units**
- **Load Distribution Ratio (LDR)**
- **Weekly program time reading**
- **Energy distribution calculation**
- **Max. 1024 units**

Features:

- **Web Interface**
- **3rd party BMS integration adopters**
- **Web AIMS**
- **Max. 64 units**
Simple Design

FS Multi cutting edge VRF technology is perfectly suitable for medium or small areas. With single-phase power sources, together with advanced Inverter technology, FS Multi opens up unlimited possibilities in the world of air conditioning.

Air conditioning spaces can now take on a new dimension. If you have bought a new property, residence, office or commercial property which is still under construction, or if you are refurbishing, Panasonic offers you the chance to enjoy FS Multi air conditioning.
Indoor units: 5 different types / 26 models from 2.2kW up to 9.0kW

Outdoor units

FS Multi cutting edge VRF technology is perfectly suitable for medium or small areas. With single-phase power sources, together with advanced Inverter technology, FS Multi opens up unlimited possibilities in the world of air conditioning.

Air conditioning spaces can now take on a new dimension. If you have bought a new property, residence, office or commercial property which is still under construction, or if you are refurbishing, Panasonic offers you the chance to enjoy FS Multi air conditioning.

System 11.2kW 14.0kW 15.5kW

Connectable Indoor Unit 6 8 8

The FS Multi is a refrigerant charge-free system that does NOT require a charge of additional refrigerant even when using a full pipe length of up to 90m.

Single-Split

When installation space is limited

A single compact FS Multi system outdoor unit enables air conditioning in multiple rooms, solving the problems of narrow or limited installation space.

Installation and Commissioning simplified

The FS Multi system solves the air conditioning design and construction problems that arise due to pipes at different heights and the location of the installation site. Exceptional installation flexibility makes installation easy and maintains the attractive appearance of buildings.

Space saving

Indoor units: 5 different types / 26 models from 2.2kW up to 9.0kW
Performance of Panasonic Intelligent Inverter air conditioners ranks among the highest in the industry. The secret lies in its precision control. After reaching the set temperature, an air conditioner continues to operate with minimum power—giving you up to 50%* energy savings 64%** energy savings during heating operation. By contrast, a Non-Inverter unit operates on an ON-OFF cycle to maintain the temperature—so it uses twice as much electricity.

The exceptional energy-saving performance of Panasonic Inverter technology benefits from multiple high precision sensors and control program technologies to optimise air conditioner operation according to room conditions. How does it save energy? By utilising these technologies to detect where energy is normally wasted and self-adjusts cooling/heating power, ECONAVI helps you to save energy efficiently with uninterrupted cooling/heating, comfort and convenience.

**Inverter technology**

Panasonic’s ECONAVI concept applies high precision Sensors and Control Program technologies to optimise air conditioner operation according to room conditions. How does it save energy? By utilising these technologies to detect where energy is normally wasted and self-adjusts cooling/heating power, ECONAVI helps you to save energy efficiently with uninterrupted cooling/heating, comfort and convenience.

ECONAVI technology

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ECONAVI provides up to 30%* energy-savings in cooling mode, and up to 40%** energy-savings in heating mode.

One-touch ECONAVI reduces waste in three simple steps:

**EXAMINE**

- Level of activity.
- Human presence.

**EVALUATE**

- Changes in human location.
- Changes in human activity.
- Changes in human presence.

**EXECUTE**

- Adjusts airflow direction.
- Low activity: Auto decrease output.
- Absence: Gradually decrease output.

**UPTO 30%* ENERGY SAVINGS**

Comparison of 3.5kW Inverter model with ECONAVI ON and OFF (Cooling)

ECONAVI ON Outside temperature: 35°C/24°C Remote setting temperature: 25°C with Fan Speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode Setting temperature goes up 1ºC controlled by ECONAVI activity level ECONAVI OFF Outside temperature: 35°C/24°C Remote setting temperature: 25°C with Fan Speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: Front Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size:16.2m²)

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This is the maximum energy saving value, and the effect differs according to conditions in installation and usage.

*1 Up to 40% Energy-Savings
Comparison of 3.5kW Inverter model with ECONAVI ON and OFF (Heating)

ECONAVI ON Outside temperature: 7ºC/6ºC Remote setting temperature: 25°C with Fan Speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode Setting temperature goes down 2ºC controlled by ECONAVI activity level ECONAVI OFF Outside temperature: 7ºC/6ºC Remote setting temperature: 25°C with Fan Speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: Front Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size:16.2m²)

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*1 Contact your Panasonic distributor for further details.

*2 The system integration company is responsible for the external network.

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ECONAVI technology

Inverter technology

Serial connectivity

Up To 50%* ENERGYSAVINGS

Comparison of 3.5kW Inverter model and 3.5kW Non-Inverter model (Cooling)
Outside temperature: 35°C/24°C, Remote setting temperature: 25°C with Fan speed AUTO
Vertical Airflow direction: Auto, Horizontal Airflow direction: Front
Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size: 16.2m²)

Comparison of 3.5kW Inverter model (Heating)
Outside temperature: 7°C/6°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 1 hour in stable condition. At Panasonic Amenity Room (size: 16.2m²)

Panasonic’s Inverter Room Air Conditioners are equipped with a serial port on indoor unit PCB. This serial port allows link-up with more advanced 3rd party centralised control systems like BMS or home automation systems.

*1 Contact your Panasonic distributor for further details.
*2 The systems integration company is responsible for the external network.
Energy saving operation by Inverter

The Inverter constantly adjusts compressor rotation speed to provide optimum performance at all times. This extremely precise operation enables quick cooling and heating while reducing power consumption.
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Indoor units 3 different type / 13 models

**Design flexibility**

<table>
<thead>
<tr>
<th></th>
<th>6.0kW</th>
<th>7.1kW</th>
<th>10.0kW</th>
<th>12.5kW</th>
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<tbody>
<tr>
<td>Cassette type</td>
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<td>Ceiling type</td>
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<tr>
<td>Ducted type</td>
<td>●</td>
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</tbody>
</table>

Pipe length: Max. 75m
Height difference: Max. 50m

*Gas is pre-charged for 30m. (Additional gas is required when pipe length is extended.)

Hyper Wave Inverter
The Panasonic group’s experiences and actual results in the development of inverters are released in the control. This control of the inverter demonstrates the optimum compressor torque. The FS series quickly cools the room up to the set temperature and maintains a comfortable condition, whilst ensuring energy efficiency and savings.

**Our conventional inverter**
Power is wasted.

The current waveform deviates from the motor voltage waveform, so power is wasted.

**Hyper Wave Inverter**
The current waveform closely matches the motor voltage waveform, so power consumption is reduced.

**75m Long Piping**
Piping can be extended up to 30 metres without additional gas charging, and up to 75 metres with additional gas charging.
By giving you more flexibility in positioning the outdoor unit, this gives you a wider range of installation options.

<table>
<thead>
<tr>
<th></th>
<th>6.0-7.1kW</th>
<th>10.0-14.0kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Length #</td>
<td>50 m</td>
<td>75 m</td>
</tr>
<tr>
<td>Max. Chargeless Length</td>
<td>30 m</td>
<td>30 m</td>
</tr>
<tr>
<td>Max. Height Difference #</td>
<td>30 m*1</td>
<td>30 m*1</td>
</tr>
</tbody>
</table>

*1 When installing the outdoor unit at a higher position than the indoor unit.
*2 When installing the outdoor unit at a lower position than the indoor unit.
Panasonic Air Conditioning Training Centre Asia (PACT)

Set up in July 2011, Panasonic Air Conditioning Training Centre Asia (PACT) represents Panasonic's strong and unwavering commitment to our business partners, sales companies, distributors and authorised sales agents and service/support teams for its VRF air conditioning systems in the Asia Pacific region.

As the region's first Panasonic VRF training hub, PACT comes equipped with a full range of FS Multi and FSV VRF systems. PACT is also staffed with experienced engineers and certified installers offering up-to-date product knowledge, technical know-how and hands-on skills training essential for preparation of system design and product specification, installation, repair and troubleshooting of FS Multi and FSV VRF systems.

**FSV Training Module (4 days)**

Gain better understanding and working knowledge of the FSV VRF air conditioning system. Attendees will come away with valuable pointers on installation, in-depth technical advice and a step-by-step guide to error troubleshooting.

**FSV VRF AIR CONDITIONING SYSTEM**

- Easy-to-install, energy saving and high efficiency.
- Ideal for large-space facilities where full or continuous cooling/heating is not always required.
- Wide range of systems up to 168kW
- Extensive line up of up to 64 indoor units connectable up to 200% of the outdoor unit’s capacity.
- Various FSV Centralised controllers controls up to 256 indoor units, monitoring of up to 1,024 indoor units.

**FS Multi Training Module (2 days)**

Attendees are given a fundamental working knowledge on the FSM VRF air conditioning system, plus the do’s and don’ts of installation and a step-by-step guide to error trouble-shooting.

**FS Multi VRF AIR CONDITIONING SYSTEM**

- Easy-to-install, energy-efficient systems for homes and small commercial buildings.
- Wide line up of up to 26 indoor unit models
- Outdoor unit ratings: 11.2kW, 14.0kW, 15.5kW (Single-phase)

Panasonic’s strong and unwavering commitment
Overview of PACT

Set up in July 2011, Panasonic Air Conditioning Training Centre Asia (PACT) represents Panasonic’s strong and unwavering commitment to our business partners, sales companies, distributors and authorised sales agents and service/support teams for its VRF air conditioning systems in the Asia Pacific region. As the region’s first Panasonic VRF training hub, PACT comes equipped with a full range of FS Multi and FSV VRF systems. PACT is also staffed with experienced engineers and certified installers offering up-to-date product knowledge, technical know-how and hands-on skills training essential for preparation of system design and product specification, installation, repair and troubleshooting of FS Multi and FSV VRF systems.

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Large Commercial Buildings

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**Extensive Project Experience**

<table>
<thead>
<tr>
<th>Country</th>
<th>Project Description</th>
<th>System Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thailand</strong></td>
<td>Boy Tarprajun Football Club Project</td>
<td>FS Inverter</td>
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<tr>
<td><strong>Singapore</strong></td>
<td>The Sound Condominium Project</td>
<td>Multi-Split System Inverter</td>
</tr>
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<td></td>
<td>Nathan Suite Project</td>
<td>FS Multi, FS Inverter</td>
</tr>
<tr>
<td></td>
<td>Tresalve Condominium Project</td>
<td>Multi-Split and Single-Split</td>
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<tr>
<td></td>
<td>Caltex Petrol Station Project</td>
<td>FS Inverter</td>
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<tr>
<td><strong>Hong Kong</strong></td>
<td>DD100 Fan Kam Rd. Project</td>
<td>FS Multi System Inverter, FS Inverter</td>
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<td>Welfare Rd. Project</td>
<td>FS Multi</td>
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<tr>
<td>Location</td>
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<td>System</td>
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<tr>
<td>Vietnam</td>
<td>Saigon Pavilion Project</td>
<td>FS Multi, FS Series and Single-Split</td>
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<td>India</td>
<td>Vikram Traders Project</td>
<td>FS Multi</td>
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<td></td>
<td>Hari Narayanan Project</td>
<td>FS Multi</td>
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<tr>
<td>China</td>
<td>Tianjin Ecocity Project - Condominium First Phase</td>
<td>Master series (FS Multi)</td>
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<tr>
<td></td>
<td>Guangzhou Sky River Bay Project</td>
<td>Master series (FS Multi)</td>
</tr>
<tr>
<td>Australia</td>
<td>Office Complex Project - Perth</td>
<td>FS Multi</td>
</tr>
<tr>
<td></td>
<td>Medical Research Facility Project - Perth</td>
<td>FS Multi</td>
</tr>
</tbody>
</table>
One Panasonic will fulfill your needs

One window
same language

One Panasonic will fulfill your needs
One Panasonic for BtoB Business Concept

One Panasonic for BtoB is a concept to bring together the sales units of four companies to better serve BtoB customers such as hotels, apartment blocks, housing projects, industrial plants, offices, shops, hospitals, and schools. A new one-stop service operates under the Systems & Equipment Business Division.

Panasonic is promoting energy saving in the area of the three main energy resources that account for most of the power consumed.

Example for convenience stores

Panasonic provides eco-conscious solutions throughout the entire store through its extensive product line-up.

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EVERY BUILDING MATTERS

Quality Management System Certificate

Certified to ISO 9001: 2008
Panasonic HAC (Electrical Products & Systems),
Cert. No.: AU00000001

Environmental Management System Certificate

Certified to ISO 14001: 2004
Panasonic HAC (Electrical Products & Systems),
Cert. No.: AU00000002

Panasonic Home Appliances
Electrical Products & Systems

Certified to ISO 9001: 2008
Panasonic Home Appliances
Electrical Products & Systems
Cert. No.: AU00000003

Certified to ISO 14001: 2004
Panasonic Home Appliances
Electrical Products & Systems
Cert. No.: AU00000004

eco ideas
Panasonic leads the way... with "eco ideas"

'eco ideas' for Lifestyles
We will promote lifestyles with virtually zero CO2 emissions all throughout the world

'eco ideas' for Business-styles
We will create and pursue a business-style which makes the best use of resources and energy

Panasonic Australia Pty. Limited.
ACN 001 592 187    ABN 83 001 592 187

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