Panasonic
BUSINESS



















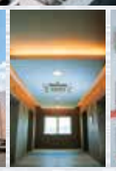


Building Passion, Building Solutions.

Panasonic Air Conditioning Systems

FSV EX Flexi System VRF Eco Extreme

FSV Flexi System VRF ECONAVI INVERTER

BPBS2015-FSVEX1

Panasonic®

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JOIN US ON

THE GAME CHANGER

FSV Flexi System VRF

EX Eco Extreme

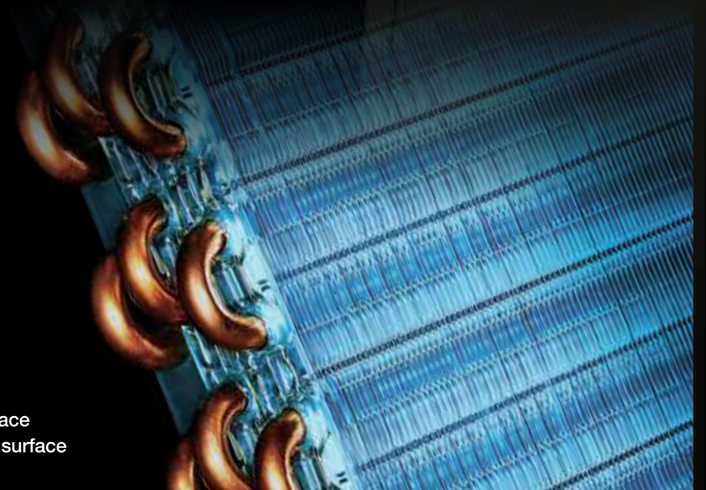
VRF with Extraordinary Energy-Saving Performance and Powerful Operation

EER 5.3* (8HP model)

A game-changing VRF system delivering energy-saving performance, powerful operation, reliability and comfort surpassing anything previously possible.
It represents a true paradigm shift in air conditioning solutions.
Taking quality to the extreme — that's the Panasonic challenge.

* for Asia model

Multiple large-capacity all inverter compressors (more than 14HP)



Enlarged heat exchanger surface area with triple surface

FSV-EX Advantages

- Extraordinary EER throughout the product range
- Extraordinary EER in Part load throughout the product range
- Extended Operation Range Up to 52°C
- Low-Noise Operation
- Intelligent 3-stage Oil Management System
- ECONAVI

Newly designed curved air discharge bell mouth for better aerodynamics

FSV-EX Advantages

The most efficient, powerful and quiet system in Panasonic's history.
There has never been a VRF system like it.
It's the story of a true game changer.

Extraordinary Energy-Saving Performance

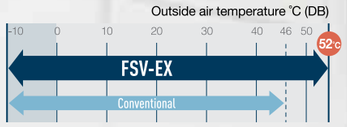
The FSV-EX marks a revolutionary step forward in VRF efficiency. A look at the incredible EER value clearly indicates that. What's more, this high EER value is achieved even during part load operation.
This shows the extraordinary energy-saving performance the FSV-EX is capable of providing.

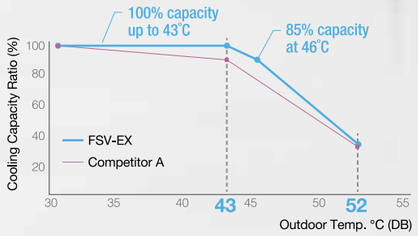
Extraordinary **EER** throughout the product range

Extraordinary **EER** in Part load throughout the product range

Extended Operation Range Up to 52°C

The FSV-EX can provide cooling even when the outside temperature reaches a maximum of about 52°C.
And amazingly, it can still operate at 100% capacity when the outside temperature is as high as 43°C.
This high power capability enables reliable operation even under extremely high temperature conditions.

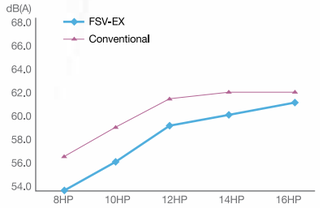




<Test Condition> 12HP model, IU/OU capacity ratio:100%, Indoor Condition:27°C[DB]/19°C[WB]
Competitor A spec is from technical data book.

Low-Noise Operation

Numerous technological innovations, including an improved compressor and a newly designed bell mouth and larger fan, have dramatically reduced the outdoor noise level. The result is an even more comfortable building environment.



Intelligent 3-stage Oil Management System

Panasonic VRF system compressors feature an oil level sensor. When using multiple outdoor units, low oil in one compressor can be compensated for by recovering oil from another compressor in the same outdoor unit, a compressor in an adjacent outdoor unit, or a connected indoor unit. This provides a comfortable environment while saving energy.

ECONAVI

Panasonic VRF systems feature ECONAVI to sense people in various areas and adjust cooling power to reduce wasted electricity.

Up to 15%* Energy Savings

* Panasonic in-house data

New FSV Systems

VRF Air Conditioners

FSV EX Flexi System VRF Eco Extreme ALL INVERTER

2-Way FSV ME2 / Next-generation VRF /

Hi-durable models are available.

Space-saving Combination Model (Available 2016)

- Wide range of systems from 8HP to 80HP
- Class-leading EER of 5.3 (for 8HP model)
- Industry-leading low noise of 54dB (8HP model)
- Cooling operation possible with outdoor temperature as high as 52°C (DB)
- Long maximum pipe length (up to 1,000 m)
- Up to 64 indoor units connectable
- External static pressure of 80 Pa
- Extended operating range allows heating with outdoor temperatures as low as -20°C (WB)
- Suitable for R22 refurbishing projects

Hi-durable models are available.

High Efficiency Combination Model

- Wide range of systems from 8HP to 64HP
- Class-leading EER of 5.3 (for 8HP model)
- Higher EER than the Space-saving Combination Model
  e.g., a combination of two 10HP units delivering 20HP reduces compressor load.

FSV INVERTER Flexi System VRF

3-Way FSV MF2 / For simultaneous heating and cooling operation /

Heat Recovery Type

Hi-durable models are available.

Simultaneous Cooling and Heating Series

- Wide range of systems from 8 HP to 42 HP
- Class-leading EER of 3.94, COP of 4.49 (for 8HP model)
- Long maximum pipe length (up to 500 m)
- Increased maximum number of connectable indoor units (up to 52)
- Cooling operation possible with outdoor temperature as high as 46°C (DB)

2-Way Mini-FSV LE1 / For small-scale commercial and residential use /

Industry-Leading EER and COP

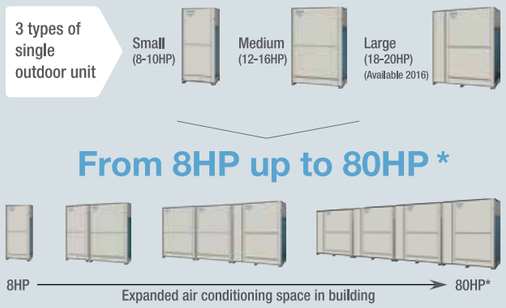
Cooling or Heating Series, 1-Phase or 3-Phase

- Available in both single-phase and triple-phase power supply models
- Class-leading EER of 4.30, COP of 4.62 (for 4HP model)
- Cooling operation possible with outdoor temperature as high as 46°C
- Heating operation is possible when outdoor temperature as low as -20°C (WB)
- 9 units connectable to single outdoor unit (for 6HP model)
- Piping length: 120 m (total piping length: 150 m)

Exclusive Features for FSV-EX ME2 Series

Single outdoor units combine to expand capacity up to 80HP

Single outdoor units combine to expand capacity up to 80HP, thereby supporting expanded air-conditioned space.



*High efficiency model provides capacity up to 64HP.

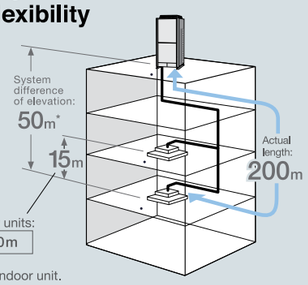
Up to 64* indoor units can be connected

Flexibility in piping layout makes it easier to design air conditioning systems for locations such as train stations, airports, schools, and hospitals.

*Maximum number of indoor units depends on outdoor unit capacity.

Increased piping length for greater design flexibility

The ME2 Series supports greater distances between indoor units and outdoor units, making it adaptable to buildings of various types and sizes.



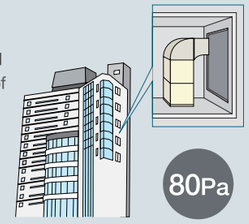
*40 m if the outdoor unit is below the indoor unit.

Extended cooling operation range: up to 52°C

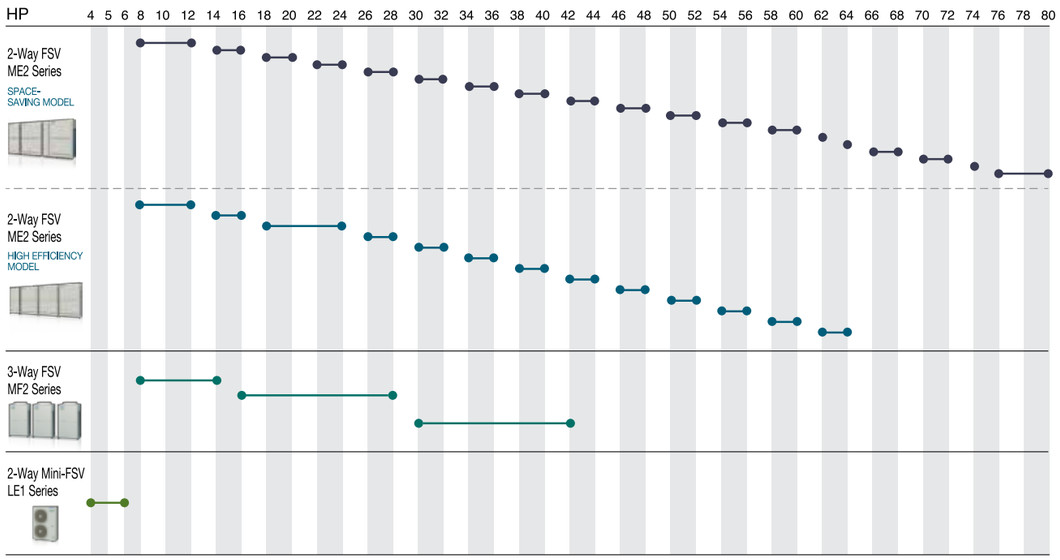
The FSV-EX can provide cooling even when the outside temperature reaches a maximum of about 52°C amazingly, it can still operate at 100% capacity when the outside temperature is as high as 43°C. This high power capability enables reliable operation even under extremely high temperature conditions.

High external static pressure on condensers

With a newly designed fan, fan guard, motor, and casing, new models can be custom-installed on-site to provide up to 80 Pa of external static pressure. An air discharge duct prevents shortages of air circulation, allowing outdoor units to be installed on every floor of a building.



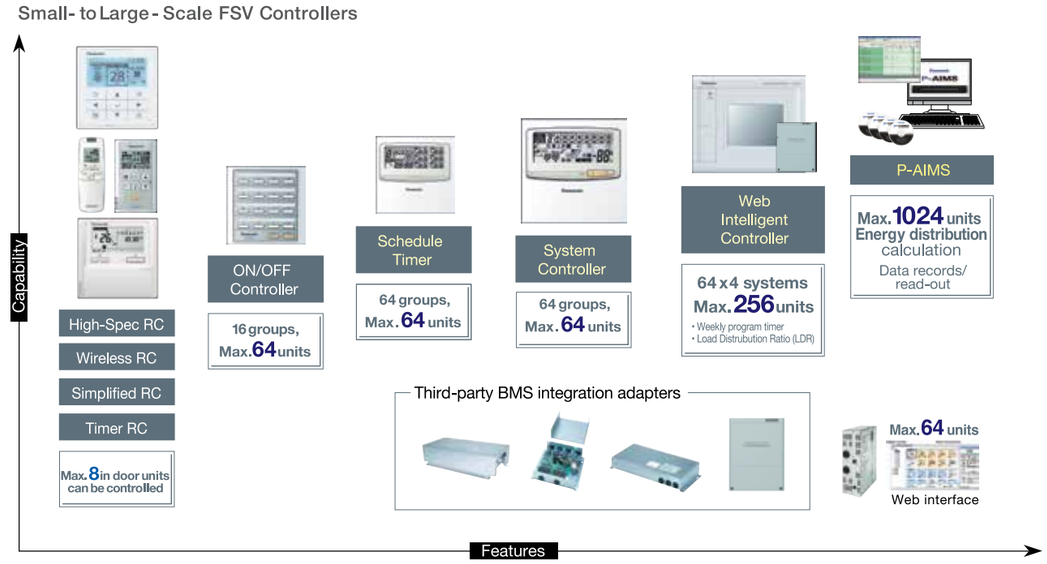
FSV Outdoor Unit Lineup



FSV Indoor Unit Lineup — Wide choice of models to meet different indoor requirements

Type	Class	22	28	36	45	56	60	73	90	106	140	160	180	224	280
	Capacity	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating	Cooling/ Heating
	kW	2.2/2.5	2.8/3.2	3.6/4.2	4.5/5.0	5.6/6.3	6.0/7.1	7.3/8.0	9.0/10.0	10.6/11.4	14.0/16.0	16.0/18.0	18.0/20.0	22.4/25.0	28.0/31.5
	BTU/h	7,500/8,500	9,600/11,000	12,000/14,000	15,000/17,000	19,000/21,000	20,400/24,200	25,000/27,000	30,000/34,000	36,000/39,000	47,800/54,600	54,600/61,500	61,400/68,200	76,400/85,300	95,500/107,500
F2 type Mid-Static Ducted		●	●	●	●	●	●	●	●	●	●	●			
M1 type Slim Low-Static Ducted		●	●	●	●	●									
Z1 type Slim Low-Static Ducted Twenty Series		●	●	●	●	●	●	●							
E2 type High Static Ducted/ Energy Saving High-Fresh Air Ducted													●	●	●
E1 type High-Static Ducted								●		●	●			●	●
H1 type High Fresh Air Ducted											●			●	●
K2 type K1 type Wall Mounted		●	●	●	●	●		●		●					
U1 type 4-Way Cassette Panel No.CZ-KPU2		●	●	●	●	●	●	●	●	●	●	●			
Y2 type 4-Way Mini Cassette Panel No. CZ-KPY3		●	●	●	●	●									
L1 type 2-Way Cassette Panel No. CZ-02KPL2 Panel No, CZ-03KPL2 (only for S-73ML1E5)		●	●	●	●	●		●							
D1 type 1-Way Cassette Panel No. CZ-KPD2			●	●	●	●		●							
T2 type Ceiling				●	●	●		●		●	●				
P1 type Floor Standing		●	●	●	●	●		●							
R1 type Concealed Floor Standing		●	●	●	●	●		●							

Advance Control Solutions to Meet Different Applications



Panasonic Design Support Software for FSV

Modeling Large-Scale Customised Solutions

Panasonic knows that the air conditioning industry is one that places ever-greater emphasis on energy efficiency as well as on speed and precision in customer service. With these goals in mind, we are pleased to announce the launch of the latest generation of our VRF Designer software. This proprietary system design software gives architects, consultants, and end users the ability to calculate cooling and heating loads and generate data about the performance of FSV air conditioners under simulated usage conditions.

VRF Designer software allows the user to quickly and easily implement customised selections and design processes. Simple and complex systems alike can be created by utilising the software's system wizards and import tools. Users can drag and drop icons representing outdoor and indoor units onto the interactive desktop. This enables them, for example, to make graphic installation guides or create realistic floor plans—including detailed piping and wiring schematics—that can be included with quotations sent out to potential clients.

Panasonic VRF DESIGNER

Project References

Malaysia

Gapurna Project

This commercial office building is located 20 kilometers from Kuala Lumpur. Project development was handled by the Gapurna Group, one of Malaysia's most successful construction and development groups. Panasonic had worked with Gapurna before, supplying security cameras for Kuala Lumpur International Airport (KLIA) during the airport's second phase of construction. On that project, Panasonic was commended not only for providing the products but also for offering a one-stop design and installation service through Panasonic System Engineering (M) Sdn. Bhd., a subsidiary of Panasonic Malaysia. The Gapurna Group therefore had no hesitation in looking to Panasonic when it began construction of this new office building. The building owner asked for the VRF system to be integrated with the building management system (BMS) via the BACnet communications protocol, and Panasonic complied accordingly.

Air Conditioning System
VRF 2-way FSV ME1 series:109 systems

Cooling Capacity:
5,370 kW / 1,526 USRT

Indoor Units:
4-way cassette: 537 units

Control System:
System controller: 10 systems
Communication adapter: 5 systems
(for 3rd party BACnet IFU)

Plaza 33

Plaza 33 is a grade-A commercial complex located in the bustling commercial district of Petaling Jaya, near central Kuala Lumpur. It comprises two blocks—Towers A and B—that contain modern, high-spec office space along with a variety of restaurants and retail establishments.

Words from M&E Contractor

Because each floor of the building is sold or leased separately, an air conditioning system was required that would support independent operation on different floors. The Panasonic VRF ducted unit system fitted the bill, offering high quality, cost-efficiency, low noise levels, and the assurance of a Japanese brand.
The Plaza 33 building comprises two blocks, one of which uses a Panasonic system and the other of which uses a rival system. Clients prefer the Panasonic system, as it operates with much less noise. Along with the benefit of its quiet operation, the VRF system was able to be installed without the need for additional system equipment.

Air Conditioning System
VRF 2-way FSV ME1 series: 99 systems

Cooling Capacity:
3,667 kW / 1,042 USRT

Indoor Units:
High-static ducted: 153 units

Control System:
System controller: 2 systems;
Schedule timer: 2 systems;
Intelligent controller: 1 system
(with web monitoring)

Spain

Hotel Claris

The five-star Grand Luxe hotel boasts 124 rooms and suites, along with meeting rooms, event spaces, an outdoor pool, and a range of top-class amenities. Rooms are decorated with unique works of art that create an atmosphere of luxury and comfort. In keeping with this theme of high-class comfort, the hotel sought a comprehensive Panasonic VRF system when renovating its rooms in 2012.

A High-Class Modular Air Conditioning Solution

The main challenge for this project was to replace the old air conditioning system without affecting the day-to-day operations of the hotel. The client was also concerned with reducing energy consumption, improving the comfort level of the temperature in the rooms, and maintaining a quiet environment throughout the hotel. Also influencing the hotel's decision was Panasonic's guarantee of excellent after-sales service and reliable 24-hour operation throughout the year. For a hotel of this type, an effective heat-recovery system is vital. Combining smartly with Panasonic's two-way design, the heat-recovery system helped to reduce fixed costs without compromising hotel standards. The modularity of Panasonic's ECOi systems allowed them to be installed on a floor-by-floor basis, without affecting normal hotel operations.

Air Conditioning System
VRF 2-way ECOi ME1 & LE1 series: 11 systems
VRF 3-way ECOi MF1 series: 14 systems

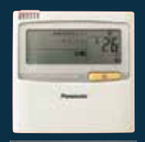
Cooling Capacity:
769 kW / 218 USRT

Indoor Units:
High- & mid-static ducted: 23 units
Slim low-static ducted: 189 units

Control System:
Wired controller: 233 units
Intelligent controller: 1 system
KNX/EIB IFU PAW-AC-KNX-128: 2 systems

Parque Tecnológico de Andalucía

The main challenge in this project was finding the most efficient heating and cooling solution for such a large glass-clad building. There were also ecological considerations, as the premises are located near several small lakes that host migratory birds. Furthermore, it was necessary for the installed system to be modular and flexible in design, so that tenants could adapt their office space to suit changing needs. The client, PTA, was highly satisfied with the seamless installation of a cost-effective Panasonic 2-way ECOi system comprising 20 outdoor units.



Air Conditioning System
VRF 2-way ECOi ME1 s
eries: 20 systems

Cooling Capacity:
908 kW / 258 USRT

Indoor Units:
Mid-static ducted: 74 units

Control System:
Intelligent controller: 1 system
(with web monitoring)

Project References

Indonesia

Patra Jasa Bandung Hotel

This hotel in Bandung is part of the Patra Jasa hotel chain, which operates in many locations around Indonesia. Opened in 2012, the hotel has 85 guest rooms shared across two buildings, with all of the hotel's facilities housed in one of those buildings. Here, Panasonic's DC motor mid-static ducted indoor units work to make guest rooms quiet and comfortable.

Air Conditioning System
VRF 2-way FSV ME1 series:
14 outdoor units

Cooling Capacity:
677 kW / 193 USRT

Indoor Units:
High- & mid-static ducted: 94 units
4-way cassette: 17 units
Wall mounted: 21 units

Control System:
Wired remote controller: 132 units

Bekasi Hospital

The Bekasi Hospital is a government hospital that serves the community of the Indonesian city of Bekasi, West Java.

Air Conditioning System
VRF 2-way FSV ME1 series:
42 outdoor units

Cooling Capacity:
1,834 kW / 524 USRT

Indoor Units:
Wall mounted: 135 units
4-way cassette: 128 units
High-static ducted: 20 units

Control System:
Intelligent controller: 2 systems
(with web monitoring)
Wired remote controller: 283 units

Australia

Travelodge Hobart

Air Conditioning System
VRF 3-way FSV MF2 series: 8 systems

Cooling Capacity:
302 kW / 86 USRT

Indoor Units:
Wall mounted K1 series: 112 units
4-way cassette U1 series: 4 units

Control System:
P-AIMS central controller: 1 system
Wired remote controller: 116 units

United States

Shippensburg University

Air Conditioning System
VRF 3-way ECOi MF1 series: 55 systems

Cooling Capacity:
1,498 kW / 426 USRT

Indoor Units:
1-way cassette: 235 units
4-way cassette: 61 units
Slim low-static ducted: 142 units
Low-silhouette ducted: 74 units
Wall mounted: 18 units

Control System:
Intelligent controller: 3 systems
Communication adapter: 3 systems
Simplified remote controller: 530 units

Italy

Le Centurie Centro Commerciale

Air Conditioning System
VRF 3-way ECOi MF1 series: 18 systems

Cooling Capacity:
656 kW / 186 USRT

Indoor Units:
4-way cassette: 6 units
High- & mid-static ducted: 51 units

Ventilation System:
ERV ZDY2 series: 46 units

Control System:
Wired remote controller: 51 units
T10 connection for ERV: 36 points
Intelligent controller: 2 systems

Thailand

Areeya

Air Conditioning System
VRF 2-way FSV ME1 series: 19 systems
Single split: 67 systems

Cooling Capacity:
1,519 kW / 432 USRT

Indoor Units:
4-way cassette: 46 units
Mid-static ducted: 39 units

Control System:
P-AIMS basic software with communication adapter: 1 system
Wired remote controller: 46 units
Wireless remote controller: 39 units

Reliability and Durability

At Panasonic, we believe that the best air conditioner is one that works quietly and effectively in the background whilst minimising its impact on the environment. People who use our products can look forward to long years of high-quality performance without the need for constant maintenance.
As part of our rigorous design and development process, Panasonic air conditioners undergo a variety of stringent tests to ensure their effectiveness and long-term reliability. Tests for durability, waterproofing, shock resistance, and noise are conducted on component parts or on the finished products themselves.
As a result of all of these painstaking efforts, Panasonic air conditioners meet even the most demanding industrial standards and regulations in every country where they are sold.

Japan Quality

Applying advanced technologies that truly make life better, we live by an unparalleled commitment to product quality. Our approach to product development originates in the DNA of Japanese craftsmanship.
Panasonic is building on the Japanese tradition of uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.

Testing laboratory Panasonic Gunma, Japan (PAPARS)

Durability

At Panasonic we know the importance of a long service life with minimal maintenance.
That's why we subject our air conditioners to a wide range of stringent durability tests.

Long-Term Durability Test

To ensure durability and stable operation for many years, we conduct a long-term continuous operation test under conditions that are much more severe than actual operating conditions.

Compressor Reliability Test

After the continuous operation test, we remove the compressor from a selected outdoor unit, disassemble it, and examine the internal mechanisms and parts for potential failure. This helps ensure reliable long-term performance under harsh conditions.

A resin-potted circuit board

Waterproofing Test

The outdoor unit, which is subject to rain and wind, complies with IPX4 waterproof specifications. Contact sections on printed circuit boards are resin-potted to prevent adverse effects caused by exposure to water (an unlikely occurrence).

International Standard Quality

To uphold the company's reputation around the world, Panasonic strives continuously to offer the highest quality with the lowest possible environment impact.

The strength of the resin material used in a propeller fan is confirmed by a tension test

Reliable Parts That Meet or Exceed Industrial Standards

In every country where they are sold, Panasonic air conditioners comply with all required industrial standards and regulations. In addition, Panasonic conducts stringent testing to ensure the reliability of parts and materials.

RoHS / REACH Compliant Parts

All Panasonic parts and materials comply with Europe's strict RoHS/REACH environmental regulations. During the development and production of parts, stringent inspections are conducted on over 100 materials to ensure that no hazardous substances are included.

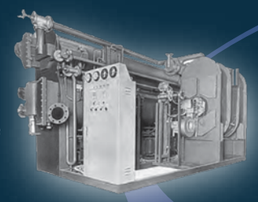
Sophisticated Production Process

Panasonic's air conditioner production lines employ state-of-the-art factory automation technologies to ensure products are manufactured efficiently and with uniformly high levels of quality and reliability.

A Globally Trusted Air Conditioning Brand

With roots going back 56 years, the Panasonic Air Conditioning Business Division has grown to become a multinational company recognised around the world. Driven by a never-ending quest for product innovation, the group has evolved from manufacturing compressors to providing comprehensive air conditioning solutions. Panasonic has become a brand that people trust to deliver products with superior quality and reliability.

Panasonic's persistent innovation spurs the evolution of air conditioning solutions.



Starts production of absorption chillers

1971

Introduces first GHP (gas heat pump) VRF air conditioner

1985

1989

Introduces world's first simultaneous 3-pipe heating / cooling VRF system

1993

Releases world's first large-capacity modular combination VRF system

1995

Releases world's first large-capacity modular combination VRF system with simultaneous heating / cooling

1958

- Panasonic (using the National brand) introduces its first Home Cooler, a window-type air conditioner model

- Electrical Appliance Business Group (Kadoma) starts manufacture of Home Coolers
- Sales of Home Coolers begin

1961

- Starts exports of Home Coolers to South Vietnam

1965

- Launches Room Coolers

1968

- Begins development of rotary compressors
- The high efficiency and quality of these compressors draws interest from domestic and overseas air conditioner manufacturers
- External sales begin

1972

- MAICO, the Division's first overseas manufacturing base, established in Malaysia
- Starts exports from MAICO to Japan, Indonesia, Australia, and other markets
- Begins operating twin-base system out of Japan and Malaysia

1983

- Launches inverter air conditioners
- Starts sales of Panasonic's first inverter air conditioners
- Inverters grow to become core technology in air conditioner industry
- Starts shipments of air conditioners to Panasonic America

1985

- Begins development of scroll compressors
- Scroll compressors bring high efficiency, low noise, and low vibration in comparison to rotary compressors

1990

- Launches world's first air conditioner equipped with compact scroll compressor

1993

- Establishes Matsushita-Wanbao (Guangzhou) Air Conditioner (MWAC)
- Establishes Matsushita-Wanbao (Guangzhou) Compressor (MWCC)
- Establishes Matsushita Air Conditioner Engineering (Matsushita ACE)

1995

- Releases world's first large-capacity modular combination VRF system with simultaneous heating/cooling

2003

- Debuts quiet, lightweight, compact EcoCute systems with improved energy-saving technology
- EcoCute adopts highly efficient, accumulator-less CO2 scroll compressor
- Begins production of new energy-saving mini-VRF series multi-split packaged air conditioners for residential use
- CO2 heat-pump hot water heater (EcoCute) uses non-toxic, non-combustible natural refrigerant (CO_2) instead of Freon, to reduce environmental impact
- Launches automatic filter-cleaning function for air conditioners (AC robot)

2005

- Panasonic products become extremely successful in Japan's air conditioner market
- Innovations such as airstream robots and motion sensors help grow Panasonic's market share

2006

- Cumulative global production of Panasonic compressors reaches 200 million units

2008

- Starts air-to-water heat pump business in Europe
- Hot water heating considered eco-friendly alternative to conventional fuel-type heating systems
- At the Energy Conservation Grand Prize awards, Panasonic air conditioners win Chairman's Award, whilst EcoCute wins Director General Prize (prizes presented by Energy Conservation Center of Japan)

2009

- Establishes sales company in Europe (PHAAE) dedicated to selling air conditioners
- Panasonic HA Air-Conditioning Europe (PHAAE) strengthens company's commercial air conditioning business

2010

- Begins collaboration with SANYO air conditioner business
- Through share exchange, SANYO and Panasonic Electric Works become wholly owned subsidiary

2011

- Launches FSV series of large-capacity VRF air conditioners

2012

- New Panasonic Group inaugurated

2013

- Expands VRF operation in Malaysia

Global Networking of Air Conditioning Solutions

In any indoor environment, eco-friendly air conditioning plays a vital role in maintaining our health, comfort, and productivity. Whether it's an office, a hotel, or a shopping mall, every building matters. That's why Panasonic has developed energy-efficient large-scale air conditioning solutions to suit a variety of business applications.
As one of the pillars of Panasonic's BtoB operations, our air conditioning sector provides comprehensive solutions to businesses around the world. Harnessing our advanced technology and extensive on-site expertise, we serve clients in a diverse range of environments throughout the world. Panasonic air conditioning solutions are designed from the ground up to meet the specific needs of each location, whilst placing a premium on efficiency and reliability. At every stage, we seek to make optimal use of resources and energy to create solutions that benefit the environment.

PACT Training Facilities

The 24 Panasonic Air Conditioning Training Centers (PACTs) around the world provide a wide range of support for Panasonic's business-use air conditioning systems. PACT represents Panasonic's unwavering commitment to our sales partners, distributors, and service teams in Europe, Asia, Oceania, and the Americas.

FS MULTI AIR CONDITIONING SYSTEM

FSV

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. As our business expands globally, we strive to transcend borders with our superior-quality products.

Japan

Air Conditioning Division
(Appliances Company) (Shiga, Japan)

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

PAPARS
Panasonic Appliances Air Conditioning & Refrigeration System
(Gunma, Japan)

Established July 1959
- Air conditioners
- Cold-chain/refrigeration products

Malaysia

PAPAMY
Panasonic Appliances Air Conditioning Malaysia Sdn Bhd.

Established April 1972
- Air conditioners
- Air-to-water heat pumps

PAPARADMY
Panasonic Appliances Air Conditioning R&D Malaysia Sdn. Bhd.

Established June 1991
- R&D for air conditioners
- Air-to-water heat pumps

PAPAMY Compressor

Established January 1987
- Rotary compressors for air conditioners

PAPAMY Compressor R&D

Established September 1997
- R&D for rotary compressors

China

PAPAGZ
Panasonic Appliances Air Conditioning (Guangzhou) Co., Ltd.

Established June 1993
- Air conditioners

PWAPCGZ
Panasonic Wanbao Appliances Compressor (Guangzhou) Co., Ltd.

Established June 1993
- Rotary compressors for air conditioners
- Compressors for automotive air conditioners

PRDCS
Panasonic R&D Center Suzhou Co., Ltd.

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

PAPARDL
Panasonic Appliances Air-Conditioning and Refrigeration (Dalian) Co., Ltd .

Established December 1995
- Air conditioners

Taiwan

PTW
Panasonic Taiwan Co., Ltd.

Established October 1962
- Air conditioners
- Automotive air conditioners
- Home appliance products

Indonesia

PMI
Panasonic Manufacturing Indonesia

Established September 1965
- Air conditioners
- Home appliance products

Philippines

PMPC
Panasonic Manufacturing Philippines Corporation

Established September 1967
- Air conditioners
- Home appliance products

India

APIN
Appliances Panasonic Company India

Established December 2012
- Air conditioners

PACT Headquarters and Bases

EUROPE

Germany Wiesbaden

Nordic Stockholm

Hungary Budapest

Russia (CIS) Moscow

Spain Barcelona

Spain Madrid

France Paris

Italy Milan

Czech Rep. Prague

France Lyon

UK Bracknell

ASIA

Malaysia Shah Alam

Vietnam Hanoi

India New Delhi

Thailand Bangkok

Taiwan Zhonghe

Indonesia Jakarta

China

Hong Kong

India Mumbai

OCEANIA

Australia Sydney

New Zealand Auckland

AMERICAS

Latin America Panama

USA Atlanta