

Panasonic

BUSINESS

Branch of Panasonic Asia Pacific Pte. Ltd.

Panasonic Cambodia Service Centre
#327-329, Sihanouk Blvd., Sangkat Vealvong Khan 7 Makara, Phnom Penh, Cambodia
Tel: 023 215 503
Panasonic Cambodia Office Tel: 023 260 156

Cambodia Facebook Page: <https://www.facebook.com/PanasonicBusinessKH/>
PROClub: [panasonicproclub.global](https://www.facebook.com/panasonicproclub.global)
Global Site: aircon.panasonic.com

Panasonic

BUSINESS



• AIR CONDITIONING











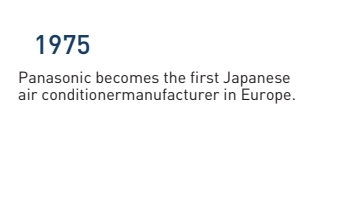

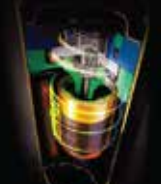



• SYSTEM SOLUTIONS









• ECO SOLUTIONS

• COLD CHAIN

History of Panasonic AC

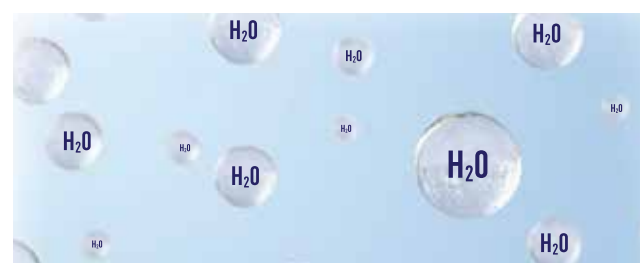


 <p>1958</p> <ul style="list-style-type: none"> Panasonic (using the National brand) introduces its first Home Cooler, a window-type air conditioner model Electrical Appliance Business Group (Kadoma) starts manufacture of Home Coolers Sales of Home Coolers begin <p>1961</p> <p>Starts exports of Home Coolers to South Vietnam</p>	<p>1989</p> <p>Introduces world's first simultaneous 3-pipe heating/cooling VRF system</p> <p>1990</p> <p>Launches world's first air conditioner equipped with compact scroll compressor</p>	 <p>1993</p> <ul style="list-style-type: none"> Releases world's first large-capacity modular combination VRF system Establishes Matsushita-Wanbao (Guangzhou) Air Conditioner (MWAC) Establishes Matsushita-Wanbao (Guangzhou) Compressor (MWCC) Establishes Matsushita Air Conditioner Engineering (Matsushita ACE)
<p>1965</p> <p>Launches Room Coolers</p>	 <p>1968</p> <ul style="list-style-type: none"> 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 	 <p>1965</p> <p>Launches Room Coolers</p>
 <p>1971</p> <p>Starts production of absorption chillers</p>	<p>1968</p> <ul style="list-style-type: none"> 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 	 <p>1971</p> <p>Starts production of absorption chillers</p>
 <p>1972</p> <ul style="list-style-type: none"> 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 	 <p>1972</p> <ul style="list-style-type: none"> 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 	<p>2002</p> <p>The Ion and Oxygen Generator - two of the most important contributions to air conditioning systems.</p>
 <p>1975</p> <p>Panasonic becomes the first Japanese air conditioner manufacturer in Europe.</p>	<p>2003</p> <ul style="list-style-type: none"> 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 (CO2) instead of Freon, to reduce environmental impact Launches automatic filter-cleaning function for air conditioners (AC robot) 	 <p>2003</p> <ul style="list-style-type: none"> 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 (CO2) instead of Freon, to reduce environmental impact Launches automatic filter-cleaning function for air conditioners (AC robot)
 <p>1975</p> <p>Panasonic becomes the first Japanese air conditioner manufacturer in Europe.</p>	 <p>1975</p> <p>Panasonic becomes the first Japanese air conditioner manufacturer in Europe.</p>	<p>2011</p> <p>Launches FSV series of large-capacity VRF air conditioners</p>
 <p>1983</p> <ul style="list-style-type: none"> 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 	<p>1983</p> <ul style="list-style-type: none"> 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 	 <p>1983</p> <ul style="list-style-type: none"> 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
<p>1985</p> <ul style="list-style-type: none"> Introduces first GHP (gas heat pump) VRF air conditioner Begins development of scroll compressors Scroll compressors bring high efficiency, low noise, and low vibration in comparison to rotary compressors 	 <p>1985</p> <ul style="list-style-type: none"> Introduces first GHP (gas heat pump) VRF air conditioner Begins development of scroll compressors Scroll compressors bring high efficiency, low noise, and low vibration in comparison to rotary compressors 	 <p>1985</p> <ul style="list-style-type: none"> Introduces first GHP (gas heat pump) VRF air conditioner Begins development of scroll compressors Scroll compressors bring high efficiency, low noise, and low vibration in comparison to rotary compressors

<p>Deodorises</p>  <p>Odours</p>	<p>Inhibits 5 Types of Pollutants</p>  <p>Bacteria & Viruses</p>  <p>Mould</p>  <p>Allergens</p>  <p>Pollen</p>  <p>Hazardous Substances</p>	<p>Moisturises</p>  <p>Skin & Hair</p>	<p>Dust Removal (PM2.5)</p>  <p>Dust (PM2.5)</p>
<p>nanoe™ X Deodorises and inhibits various pollutants in the air and on surfaces, even in fabrics.</p> <p>nanoe™ G</p>			

Purifies your air all day

- nanoe™ Technology is able to function independently to continue purifying and deodorising your living space.



Natural H₂O particles

- nanoe™ X is generated from moisture in the air that contains highly reactive components known as hydroxyl (OH) radicals.



Effective on fabrics and surfaces

- nanoe™ X particles deodorise and inhibit pollutants on surfaces and even penetrate deeply into fabrics.



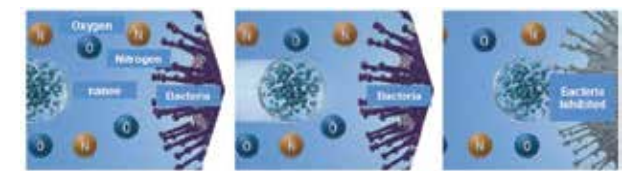
Safe and non-chemical particles

- Safety of nanoe™ X has been tested and proven by institutes and laboratories. Visit our website for a list of safety test data.

<https://www.panasonic.com/global/corporate/technology-design/technology/nanoe.html>

Asthma and allergy friendly

- nanoe™ X is approved by Sensitive Choice that helps consumers worldwide live better with asthma and allergies.

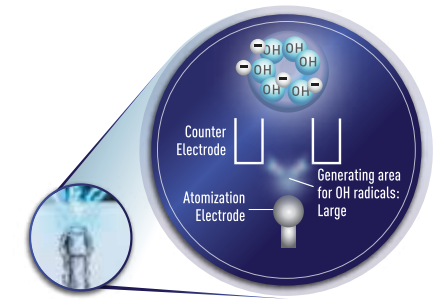


Lasts more than 600 secs in the air

Longer life span of nanoe™ X particles

- 6-fold* longer lifespan enables OH radicals to reach a greater area.

*The lifespan of general air ions (negative ions) ranges from the tens of seconds to 100 seconds









































Maintenance-free

- nanoe™ X generator device requires no maintenance as nanoe™ X is generated from water in the air.

AIR CONDITIONING

Residential Air Conditioners

Capacity [Btu/h]	9,000	10,000	12,000	13,000	18,000	24,000	28,000	45,000	Features
Wall-Mounted ELITE INVERTER Page 30-31									nanoE TECHNOLOGY i AutoX INTELLIGENT, DYNAMIC, COOL. SKYWING INVERTER XTRA QUIET18dB (CS-VU10UKH)
Wall-Mounted X-PREMIUM INVERTER Page 32-33									nanoE TECHNOLOGY i AutoX INTELLIGENT, DYNAMIC, COOL. AEROWINGS INVERTER
Wall-Mounted PREMIUM INVERTER R32 Page 34-35									nanoE TECHNOLOGY i AutoX INTELLIGENT, DYNAMIC, COOL. AEROWINGS INVERTER
Wall-Mounted PREMIUM INVERTER R410A Page 36-37									nanoE TECHNOLOGY i AutoX INTELLIGENT, DYNAMIC, COOL. AEROWINGS INVERTER INTELLIGENT ECO SENSOR ECONAVI
NEW Wall-Mounted STANDARD INVERTER R32 Page 38-39									BIG FLAP INVERTER ECO+A.I. POWERFUL
Wall-Mounted STANDARD INVERTER R410A Page 40-41									BIG FLAP i Auto INTELLIGENT AUTO MODE INVERTER
NEW Wall-Mounted STANDARD NON-INVERTER R32 Page 42-43									BIG FLAP POWERFUL
Wall-Mounted STANDARD NON-INVERTER R410A Page 44-45									BIG FLAP i Auto INTELLIGENT AUTO MODE
FLOOR-STANDING Page 46									INVERTER
FLOOR-STANDING Page 47									CS-C18FFH-E (CU-C18FFH-E) CS-C28FFH-E (CU-C28FFH-E) CS-C28FFH8-E (CU-C28FFH8-E) CS-C45FFH-E (CU-C45FFH-E)

[]: Outdoor Unit Cooling Models

























AIR CONDITIONING

Single-Split Packaged Air Conditioner

INVERTER

Capacity (Btu/h)	11,600	16,000-17,100	19,400-20,500	24,200	29,000	34,100	39,200-42,700	47,800
4-WAY CASSETTE NEW Standard Equipped  P.14-15		 S-18PU2H5 	 S-21PU2H5 	 S-24PU2H5 	 S-30PU2H5 	 S-34PU2H5 	 S-43PU2H5 	 S-48PU2H5 
MINI CASSETTE P.16-17	 CS-S12MB4ZW	 CS-S18MB4ZW	 CS-S24MB4ZW					
CEILING EXPOSED P.18-19		 S-18PT2H5	 S-21PT2H5	 S-24PT2H5	 S-30PT2H5	 S-35PT1H5	 S-45PT1H5	 S-55PT1H5
CEILING DUCTED P.20-21		 S-18PF2H5	 S-21PF2H5	 S-24PF2H5	 S-30PF2H5	 S-35PF1H5	 S-45PF1H5	 S-55PF1H5

NON - INVERTER

Capacity (Btu/h)	17,400-18,500	22,200-23,000	24,600-25,000	27,000-28,000	30,000	36,000-36,500	42,600	42,500-45,000	48,500	51,000
4-WAY CASSETTE Optional  P.14-15 NEW	 S-18PU1H5	 S-22PU1H5	 S-25PU1H5	 S-28PU1H5	 S-30PU1H5		 S-40PU1H5	 S-45PU1H5	 S-50PU1H5	
MINI CASSETTE P.16-17	 CS-PC18DB4H	 CS-PC24DB4H								
CEILING P.18-19		 S-22PT1H5		 S-28PT1H5		 S-35PT1H5		 S-45PT1H5		 S-55PT1H5
DUCTED P.20-21		 S-22PF1H5		 S-28PF1H5		 S-35PF1H5		 S-45PF1H5		 S-55PF1H5
FLOOR STANDING P.22-23	 CS-C18FFH		 CS-C28FFH					 CS-C45FFH		

AIR CONDITIONING

FSV VRF SYSTEMS



2-WAY FSV-EX ME2 Series NEW

Extraordinary energy-saving performance and powerful operation

Space-saving Combination Model

Cooling or Heating Type

New Hi-Durability Model

- Wide range of systems from 8HP to 80HP
- Class-leading EER of 5.3 (for 8HP model)
- Industry-leading low noise of 53.0 DB (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 -25°C (WB)
- Suitable for R22 refurbishing projects



High Efficiency Combination Model

Cooling or Heating Type

New Hi-Durability 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



2-WAY Mini-FSV LE1 & LE2 For small-scale commercial and residential use

Industry - Leading EER and COP

Cooling or Heating Series, 1 phase or 3 phase

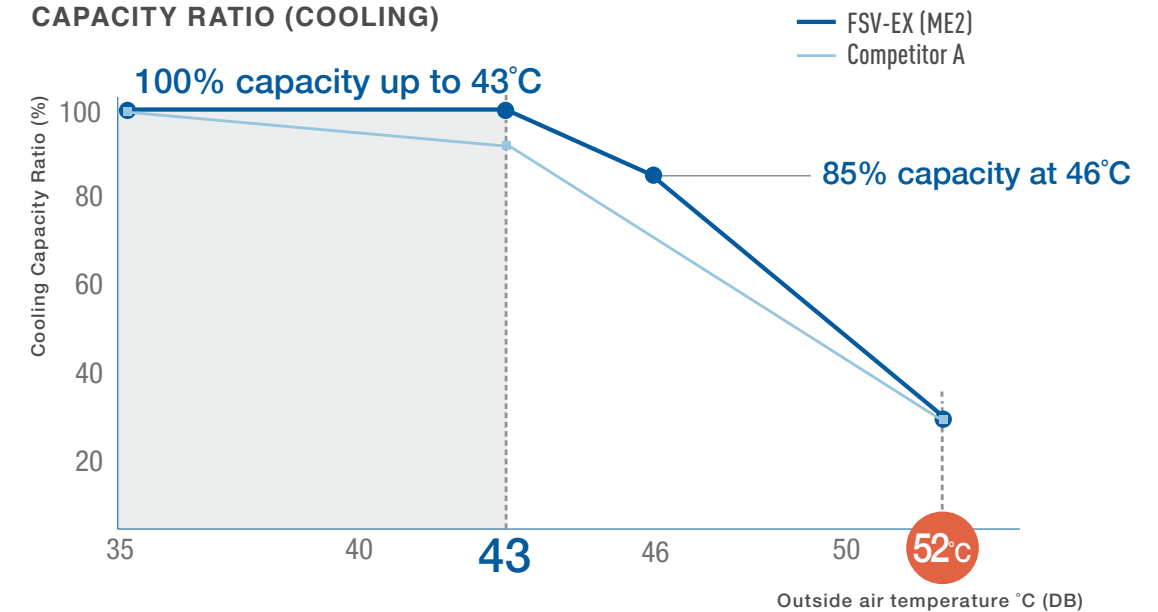
- Class-leading EER: 4.3 / COP: 4.62 (for 4HP model)
- Cooling operation is possible when outdoor temperature is as high as 46°C DB
- Wide range of system from 4HP to 10HP
- 4,5,6 HP for LE2 model available from Oct 2017



Full-capacity Operation up to 43°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.

CAPACITY RATIO (COOLING)

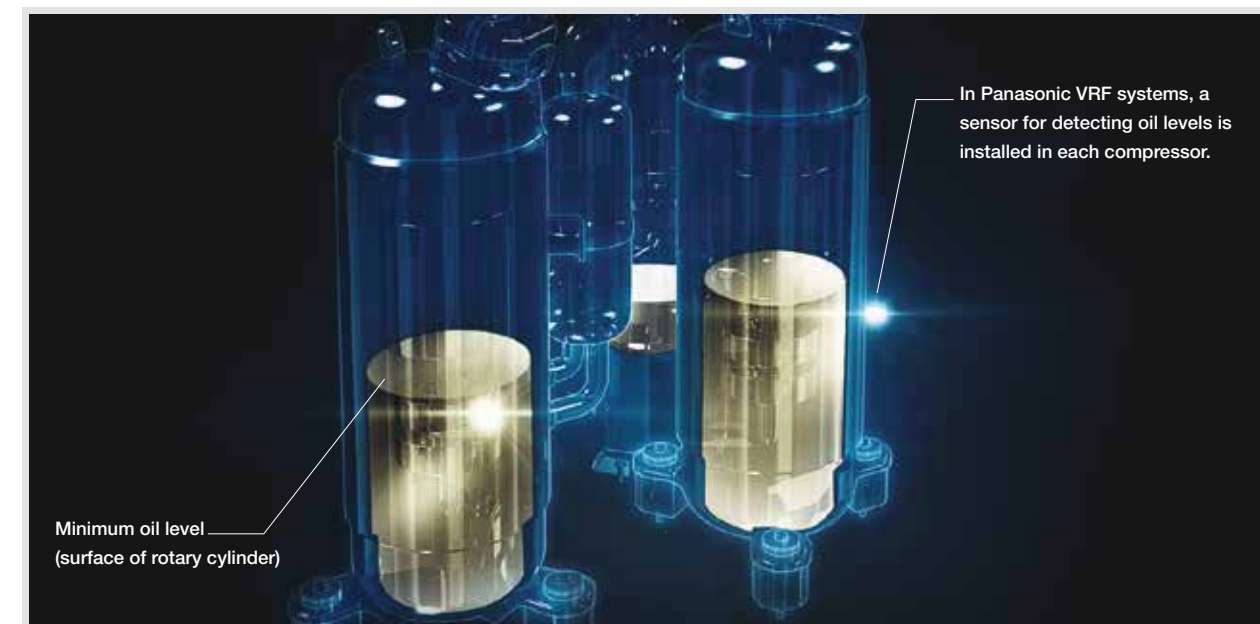


<Test Condition> 12HP model, IU/OU capacity ratio:100%, Indoor Condition:27°C(DB)/19°C(WB)
Competitor A spec is from technical data book.



VRF with Extraordinary Energy-Saving Performance and Powerful Operation
EER5.3(U-8ME2H7)

LE2 Series
5.08*
EER



SYSTEM SOLUTIONS

VIDEO INTERCOM

Analogue



Single House



IP



Stylish Design and Rich Features



Wireless



Pic. & SD-card rec



User-friendly & multilingual UI



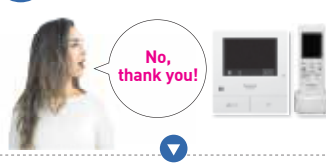
PBX compatible



Wide angle & PTZ



Voice changer



Easy installation (non polar, 2-wire)



BATHROOM INNOVATIONS

Tank Type Home Shower

Maintenance-Free¹
Anti-Corrosion Stainless Steel Tank²
 • Withstands temperatures up to 90°C, lowering corrosion rate.
 • Durable and cleaner water storage.

Compact Design
1. Lightweight and Compact Structure
 • Easy installation with space-saving and large capacity Storage Water Heater.
2. Easy-To-See LED Indicator
 • Easy to see and access when installed at high, overhead position.

Ultimate Safety
1. IPX4 Waterproof Case
 • Multi-directional water resistance.
 • Complies to high safety standards: IPX4
2. Non-Combustible Material
 • Protection against fire and burns.

Energy Saving
Patented Heat Insulation
 • Good heat insulation material.
 • Curve-shaped insulation styrofoam minimises heat loss.

Maintenance-Free¹
Stainless Steel Tank²
 Material Made in Japan

Ultimate Safety
IPX4 Waterproof Case

Energy Saving
Patented Heat Insulation
 Styrofoam Material

Compact Design
Compact & Lightweight
 30L, 700mm width

Ultimate Safety
Built-In Earth Leakage Breaker (ELB)
 • Prevents electric shocks with mechanical, double pole switch.
 • Power supply (Neutral and Live lines) cuts off automatically when there is current leakage.

Energy Saving
Superior Heating Technology
 • Placed at an optimum position for effective and consistent heat convection.
 • Shorter heating time to heat maximum volume of water from 20°C to 75°C.

Maintenance-Free¹
Maintenance-Free¹ Heating Rod
 • No anode bar needed to prevent corrosion.
 • No periodical placement is required.

COLD CHAIN



Bottle Cooler



Electric Bidet

Comfort, clean and environmentally friendly Bidet solution



PROJECT REFERENCE

RESIDENTIAL

China Star River Group Luxury Condominium



Air Conditioning System:
VRF Master series 966 systems
Indoor Units: 3,948 systems
Cooling Capacity:
16,737 kW / 4,755 USRT



Singapore Punggol Eco-Town



Air Conditioning System:
Inverter multi-split
room air conditioner
Indoor Units:
Wall mounted S series (with ECOVAVI)
Control System: Panasonic HEMS



Hong Kong Gloucester Road Project



Air Conditioning System:
VRF FSM LA1 series 67 systems
Twenty series 105 systems
Indoor Units: 255 units
Cooling Capacity: 1,391 kW / 395 USRT

Hong Kong The Green Project



Air Conditioning System:
VRF FSM LA1 series 239 systems
Twenty series 538 systems
Indoor Units: 999 units
Cooling Capacity:
6,425 kW / 1,825 USRT



India Royal Orchids Eco-Green Homz



Air Conditioning System:
VRF 2-way FSV ME1 series
22 systems,
Indoor Units: 139 units
Cooling Capacity:
802 kW / 228 USRT



India Heera Windfaire



Air Conditioning System:
VRF 2-way FSV ME1 series 96 systems,
VRF 3-way 12 systems
Indoor Units: 479 units
Cooling Capacity: 2,184kW / 620 USRT

Panama Mosaic Building PANAMA PACIFICO



Air Conditioning System:
VRF 2-way FSV LE1 series 156 systems
Indoor Units: 357 units
Cooling Capacity: 2,338 kW / 664 USRT

Cambodia HCN Mall and Resident



Air Conditioning System:
FSV VRF series 4 systems
Indoor Units: 100 units

Cambodia TK Royal



Air Conditioning System:
FSV VRF
15 systems
Indoor Units: 740 units



Cambodia The Penthouse Residence



Air Conditioning System:
FSV VRF series
83 systems
Indoor Units: 1357units

Cambodia The Gateway



Air Conditioning System:
FSV VRF series
20 systems
Indoor Units: 314 units



Cambodia Chip Mong Noro Mall



Air Conditioning System:
FSV VRF series
10 systems
Indoor Units: 125units

