

2011
SAMSUNG
System Air
Conditioner

For Lasting Peace in Comfort, Samsung Air Conditioner

The Fresh, Purified air is one of the most important elements to stay healthy,
Samsung air conditioner lets you live in pleasant environment with completely
purified comfortable air.



2011 SAMSUNG SYSTEM AIR CONDITIONERS USP BOOK

Learn more by visiting
www.dvmsystem.com

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Space for Partnership

※ Specification may be subject to change without prior notice
for the continuous product improvement. Ver.1.0

Ver.1.0

2011 SAMSUNG AIR CONDITIONER

open
ICONS

One Step Ahead for Better Air-Solution

Samsung air conditioner is a perfect solution for your desired environment.

The refreshing air delivers the utmost comfort to keep you invigorated.

Stay comfortable all day long with clean and healthy breeze brought to you by Samsung air conditioner.



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Samsung is moving with and ahead of our customers

A brand is created by its customers and that's the novel perspective at Samsung. With all the customer attention, Samsung had another successful year. Business Week and Interbrand ranked Samsung 19th in Global Brands.



Samsung has overtaken Sony as the world's biggest producer of televisions and its strong product development has resulted in global leadership in the television segment. Samsung improved its position from third to the second leading player in mobile phones worldwide. The philosophy of bringing people the latest technology at a fair price has quickly made it a firm consumer favorite. New concept shops have been successful in translating to a more expert and demanding audience by showing the benefits of engaging with the brand.

As a global leader, Samsung will continue to create future with the customers.

Global Business Network

● 6 Global Operation Centers ● 7 Design Centers ● 11 Global Headquarters ● 4 HA R&D Centers



'Eco-friendly' Samsung



Preserves the nature you live in.

Thinking of you and the environment, Samsung plans for the future. Realizing your hopes for a greener, healthier life for you and the generations that follow, Samsung's environmentally friendly technologies work to make the world a more beautiful place.



Air & Water Conservation

As a leading innovator of environment-friendly products and technologies, Samsung products already drastically reduce the strains on nature's valuable resources. Samsung uses R-600, a natural refrigerant, and cyclopentane insulation in its refrigerators, which do not promote global warming and does not add to the greenhouse effect. Samsung's water-efficient washing machines also use less detergent and water without effecting cleanliness, helping to conserve water.



Use Less, Save More

Samsung products are energy efficient, receiving Energy Grade A+ in the EU and ENERGY STAR in the U.S. Samsung washers with its ceramic heaters use less power, which saves you energy, money, and time. This energy-efficient technology protects you and nature, giving you a greener lifestyle.



Global Recycling

Samsung Electronics is making significant efforts to save the environment and complies with the WEEE (Waste Electrical and Electronic Equipment) directive by joining or establishing the recycling schemes for each country.

Samsung Eco-Friendly Air Conditioner

Making continuous efforts to stay eco-friendly, Samsung's air conditioners use R-410a, an environmentally friendly refrigerant to help rid the air of pollutants and restrain the use of materials with high global warming potential (GWP). Samsung air conditioners have taken a leading role in reducing energy consumption and lowered significant amount of energy. These energy-efficient air conditioners not only save you money, but help conserve the environment.

World Widely Recognized!

Samsung Air Conditioner



Galeria de Innovacion
2009

Samsung attended Europe's largest air-conditioner exhibition "Climatization" in Madrid, Spain. Samsung air conditioner's beautiful design with innovative features was awarded the "Galeria de Innovacion". The idea behind this award is to encourage innovation in the practical application of know-how and technologies in industrial development. Once again, Samsung proves its unsurpassed standards in quality.



iF Product Design Award
2009

As one of the world's oldest & prestigious design competitions, the iF product design award has stood for qualitatively outstanding design awards for over 50 years. And Samsung's air conditioner with its design innovations has won the iF product design award for the year 2009. Samsung air conditioner continues to receive worldwide recognition and awards, proving high quality of function and beauty.



Comfort & Design
2010

Organized by Fiera Milano International, 37th Mostra Convegno Expocomfort / Expobagno 2010 aimed to reward the best product that shows a high level of environmental quality, providing a complete overview of the sector along the lines of "Comfort & Living Technology". And Samsung air conditioner won the prize conferring a valid and professional recognition for the best product in the ceremony.

Received Certifications and awards



Global Operation of Samsung System Air Conditioner

Samsung system air conditioners are chosen by various groups from different countries all around the world for their proven performance.



Perfect System Air Conditioners for Anywhere

The various product lineups of Samsung system air conditioners offer the perfect solutions for different type of places with unique air conditioning needs.

Grocery Store, Belgium

DVM System

For Large Buildings

With a wide range of capacities and special features such as long piping and high level difference allowance, the DVM system is a perfect fit for large buildings and high-rise buildings in which the exterior is an important factor.




Outlet Store, Greece

CAC System

For Commercial Places

A single outdoor unit connected to a single indoor unit, this system is more than enough to cool commercial places.




Residence, Turkey

FJM System

For Large Residential Places

This single outdoor unit supports up to 5 indoor units! Samsung's FJM system is best for large residential places with multiple rooms.




2011 New Products

Always working to provide you the best quality products, Samsung is finally ready to unveil a few new products that will enhance our lives and comfort our minds.

Strong and Compact **NEW** **DVM PLUS IV** DIGITAL VARIABLE MULTI

Samsung DVM PLUS IV is an optimized cooling and heating system that is the ideal air conditioning solution for large sized buildings. The DVM PLUS IV also has a variety of indoor units to fulfill the interior needs of different types of places.

- High Efficiency
- Large Capacity
- Advanced and Reliable Protection
- Easy Installation & Maintenance
- Eco-friendly
- Pleasant Operation



Simple and Beautiful **NEW** **Wall-Mounted**

Two wall-mounted type indoor units have been added to this year's lineup. Both of these indoor units are attractively designed and also deliver the most fresh, clean, and purified air with low energy consumption.

- Double Cleaning
- 3D Wind
- good' sleep
- Smart Saver

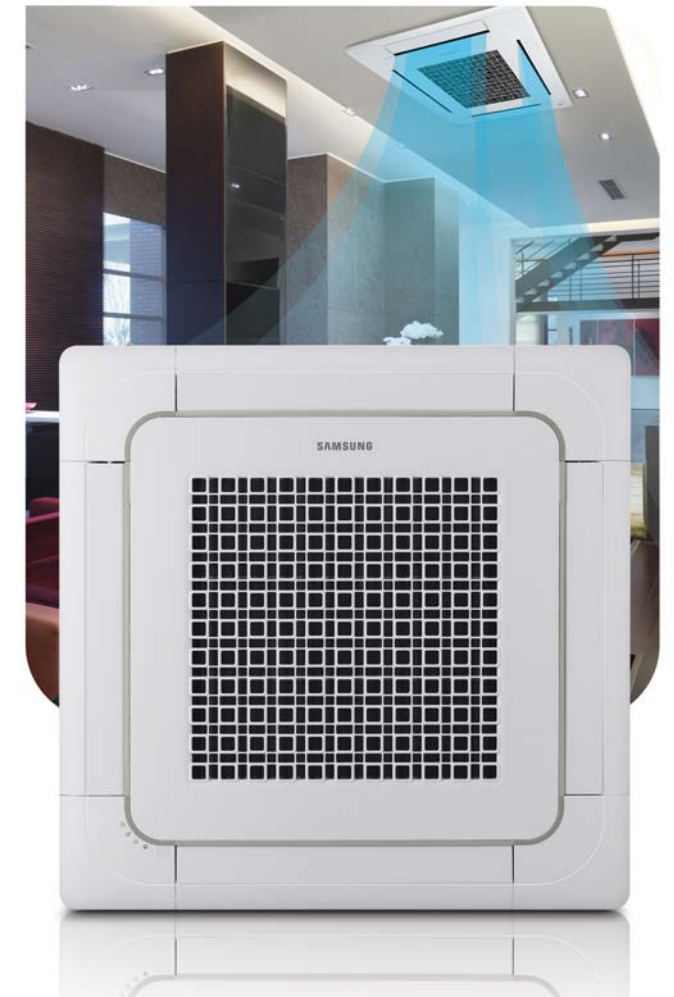


* New Wall-mounted type indoor units are only available with the FJM system.

Smart and Stylish **NEW** **4Way Cassette S**

We proudly introduce our new 4Way Cassette S indoor unit: experience the real meaning of powerful cooling and comfort for yourself.

- Filter Cleaning Robot
- S-Plasma ion
- Motion Detect Sensor
- Individual Blade Control
- Stylish Interior
- Surround Air Distribution



Clean Air Provider **NEW** **ERV PLUS**

Samsung provides our new ERV unit equipped with advanced accessories that will improve your indoor air quality. It can be installed almost anywhere thanks to its compact size and design.

- Enjoy Fresh Air without Temperature Loss (Direct Expansion Coil)
- Maintain the Best Indoor Humidity Level (Humidifier Element-Optional)



OUTDOOR UNITS Experience the Power



Project **Business Park**
 Location **Munchen, Germany**
 Type **Office Building**
 Indoor units **219EA**
 Outdoor units **13EA**

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DVM System

DVM PLUS IV

DIGITAL VARIABLE MULTI

System air conditioner for large buildings

Designed for strong power and high efficiency, DVM PLUS IV outdoor units provide optimized cooling and heating for large buildings that contain a variety of spaces that require different air solutions.



Volkswagen Arena, Germany

Main Features

Strong and Compact **NEW**

DVM PLUS IV

DIGITAL VARIABLE MULTI

DVM PLUS IV is a high-tech digital hybrid system that is the perfect cooling and heating solution: this system is able to create comfort in variable environments by adopting third generation PHE (Plate Heat Exchangers) to achieve the industry's highest energy efficiency and improve low temperature heating performance.



■ High Efficiency

- DVI (Digital Vapor Injection) Compressor
- Vapor Injection
- PHE (Plate Heat Exchanger)
- Bigger and Better Heat Exchanger
- World Class Energy Efficiency in Heating and Cooling

■ Large Capacity

- 20HP Single Outdoor Unit
- 80HP Outdoor Unit Module
- Smallest Footprint Area and Lighter Weight
- Economical Installation Cost

■ Advanced and Reliable Protection

- Sequential Operation of Compressor
- Oil Balancing Control
- Self-diagnosis Mode
- Corrosion & Frost Resistant
- Pre-protection System

■ Easy Installation & Maintenance

- Longest Piping Length and Highest Elevation
- Optimized Refrigerant Distribution Control
- Automatic Data Backup
- Easier Access for Status Check and Option Settings

■ Eco-friendly

- Decreased CO₂ Emission
- R410a Refrigerant
- Europe Eco-friendly RoHS Technology Certification
- WEEE

■ Pleasant Operation

- Silent Operation at Nighttime
- Top Heating Performance at Low Ambient Temperature
- Stable Heating Operation

DVM System

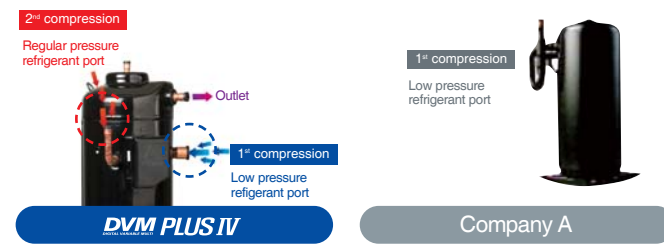
High Efficiency Perfect Comfort with DVM PLUS IV!

Highly efficient compressor demonstrates perfect performance in both cooling and heating operation.

DVI (Digital Vapor Injection) Compressor

2-stage compression effect with single compressor!

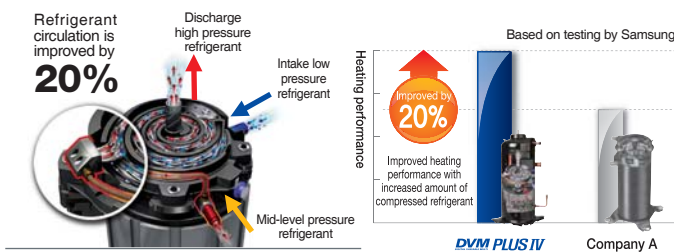
This high-tech and highly efficient compressor achieves a 2-stage compression effect with just a single compressor. This allows you to save on energy cost since the compression efficiency is increased by about 16% by using a method that intakes regular refrigerant and discharges it in a high refrigerant state after second compression.



Vapor Injection

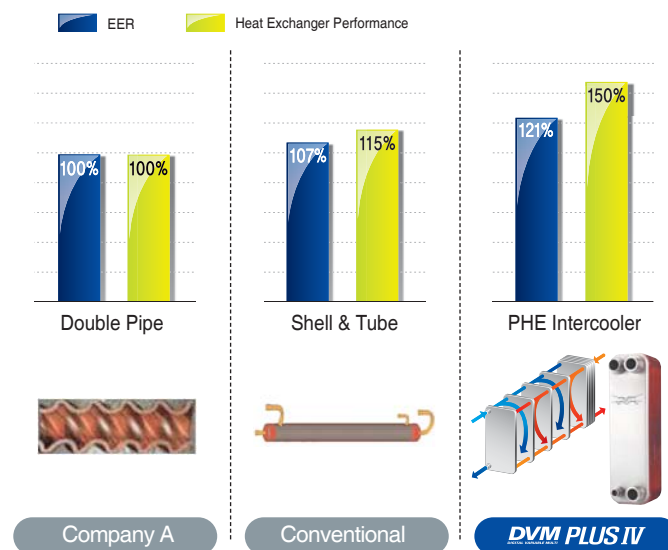
Improved refrigerant flow rate and heating performance!

Vapor injection is a double compression technology that re-injects mid-pressure refrigerant in a vaporized state from the PHE intercooler to increase the refrigerant flow rate. This technology improves both the refrigerant flow rate and heating performance by 20%, thus maximizing efficiency.



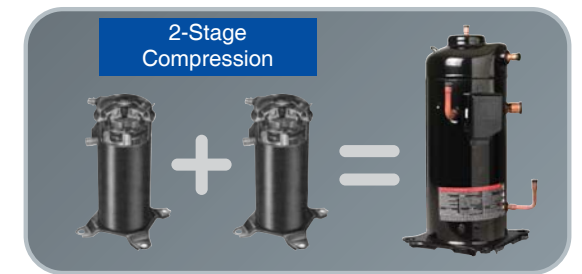
PHE (Plate Heat Exchanger)

Plate Heat Exchanger type intercooler was adopted on DVM PLUS IV to improve cooling and heating COP. Heating efficiency with PHE has been improved by 35% compare to our conventional products with Shell & Tube type intercooler and 50% compare to the competitor's products with Double pipe type intercooler.



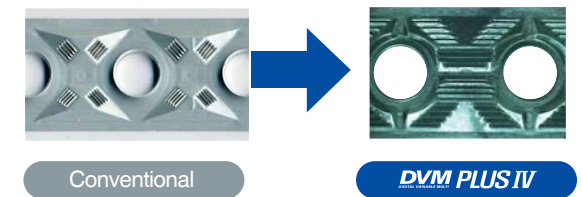
High Speed Vapor Injection

High vapor injection is used to control the injection volume through EVI EEV to increase the amount of refrigerant circulation by up to 20%, resulting in improved cooling/heating performance and energy efficiency.

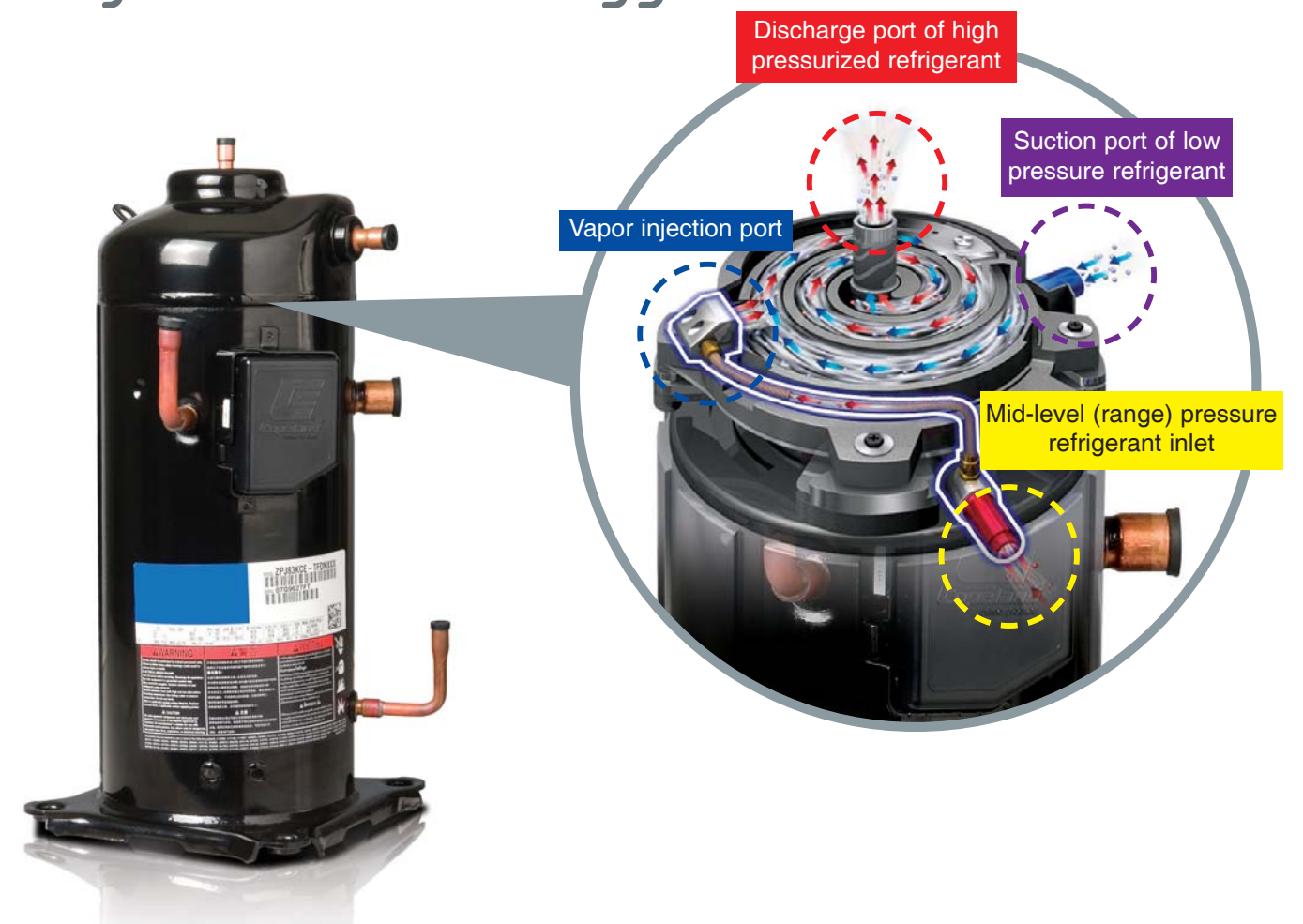


Bigger and Better Heat Exchanger

The outdoor unit heat exchanger has grown in size: it now has 60 columns, which is about 10% larger than the conventional product's 56 columns. The DVM chassis also uses a newly optimized fin design that enhances the performance of the heat exchanger.



High Efficiency Vapor Injection Technology



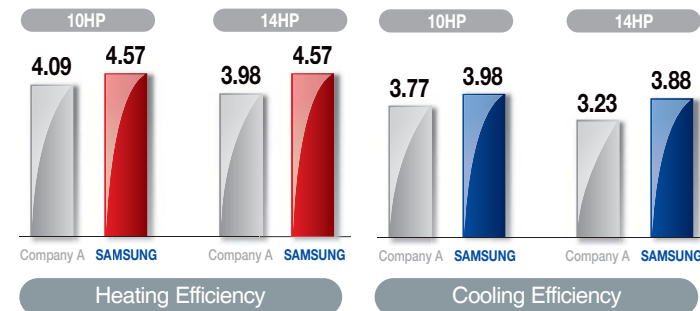
DVM System

High Efficiency Perfect Comfort with DVM PLUS IV!

Highly efficient compressor demonstrates perfect performance in both cooling and heating operation.

World Class Energy Efficiency in Heating and Cooling

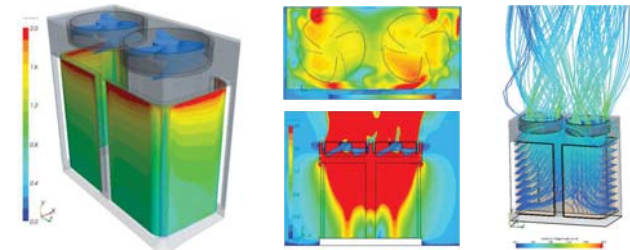
The DVM PLUS IV has achieved the highest level for COP (4.57) and EER (3.98) in the 10 HP category, as well as in the 14 HP category (4.57 in COP and 3.88 in EER), which surpasses our competitors' performance by 15% in COP and 20% in EER.



* Based on catalog data

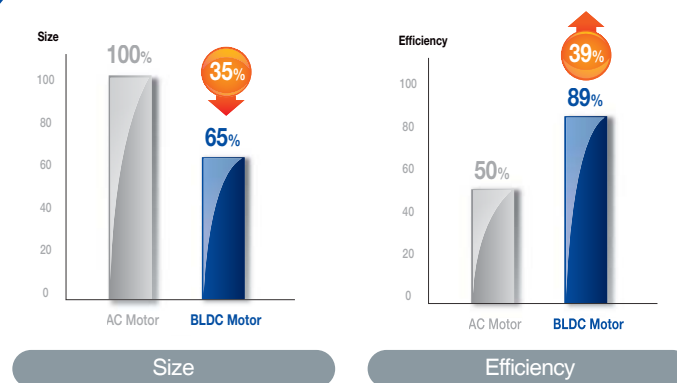
Optimized Air Discharge Profile

The air discharge profile within the Fan and the Fan Guard is optimized for faster heat exchange, which increases efficiency and provides faster cooling and heating.



Outdoor Unit BLDC Fan Motor

The DVM PLUS IV uses a BLDC motor, which is 35% smaller and 39% more efficient than conventional AC motors.



DVM System

Large Capacity Smaller and Stronger!

The DVM PLUS IV can be installed in more compact installation spaces, allowing you to make the best use of your space while providing the perfect air conditioning solution.



World's Largest Module Capacity 80HP

Single piping installation is possible from mid-sized buildings to high-rise buildings

World's Largest Single Capacity 20HP

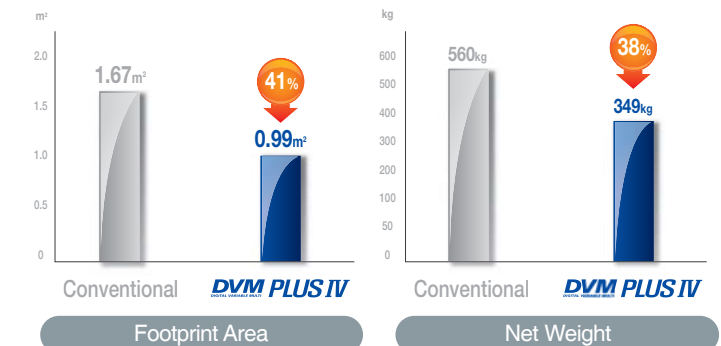
Economical with smaller footprint area and lighter weight

*If you wish to install an outdoor unit module with a capacity of over 60 HP, then please contact your local Samsung Dealer.

Smallest Footprint Area and Lighter Weight

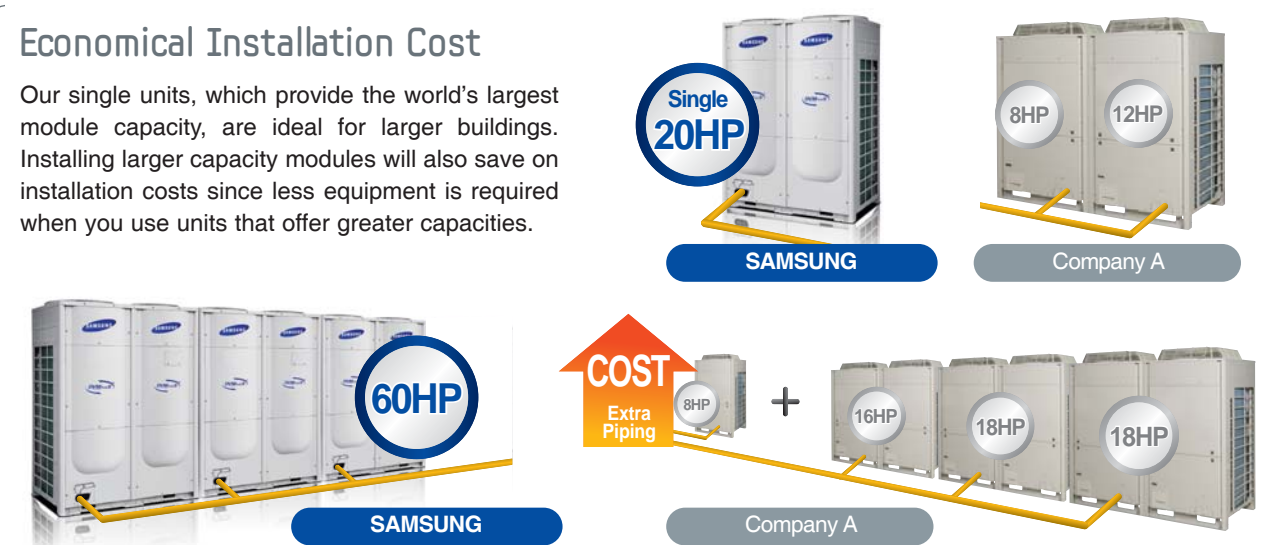
The unit's footprint area has been reduced by 41%, and the product's weight is 38% lighter compared to conventional models.

*Comparison based on 20 HP Outdoor Units.



Economical Installation Cost

Our single units, which provide the world's largest module capacity, are ideal for larger buildings. Installing larger capacity modules will also save on installation costs since less equipment is required when you use units that offer greater capacities.



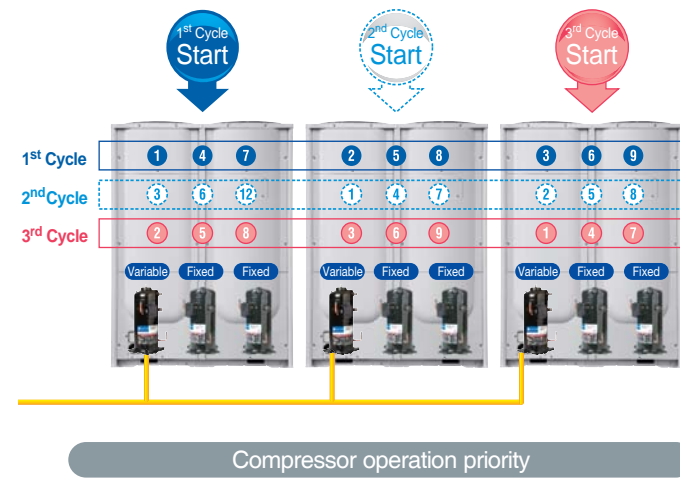
DVM System

Advanced and Reliable Protection

The DVM PLUS IV can protect outdoor units and provides a stable air conditioning solution by using a variety of smart and reliable functions.

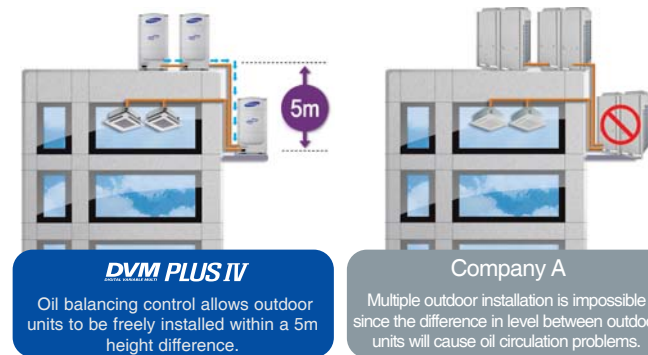
Sequential Operation of Compressor

When the outdoor unit is not operating at full capacity, the compressor will start up the operation in sequence to prevent one particular compressor from overworking. This sequential operation for compressors will prolong the life of the compressor and ensure the reliability of performance.



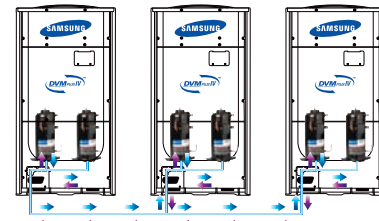
Oil Balancing Control

DVM PLUS IV uses oil balancing technology that ensures that oil distribution is stable and equal, even when multiple outdoor units are installed. This oil balancing technology is reliable, even if the outdoor units are far apart or are not level. This allows flexible installation options for these units.



Internal Oil Balancing Control

The amount of oil will be evenly balanced between the compressors within the outdoor units. Both compressors that are in operation and in stop status will secure the optimized amount of oil so that they will be supplied with a stable amount of oil, regardless of their On/Off status.



External Oil Balancing Control

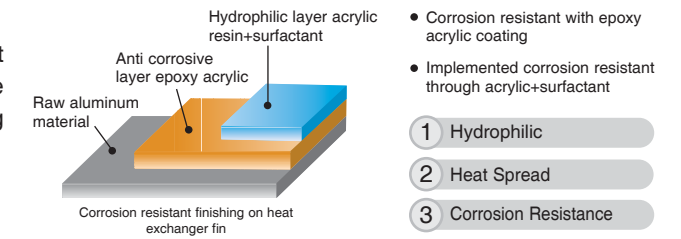
Amount of oil will be balanced between the outdoor units within the module. This technology will effectively control flow of the oil to increase reliability, even when the outdoor units are installed away from each other or at different heights.

Self-diagnosis Mode

The DVM PLUS IV monitors the operation status, and will display an error code in response to any sign of abnormal activity, thus enabling you to easily solve the problem.

Corrosion & Frost Resistant

The highly hydrophilic coating facilitates efficient heat exchange and delays the onset of frost formation to provide consistent heating performance. An anti corrosive coating also helps units to resist corrosion from the elements.



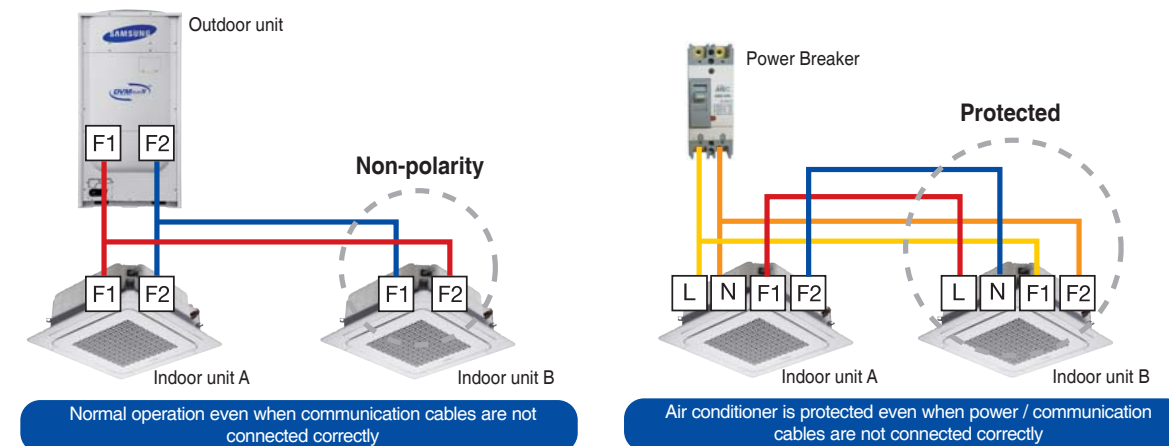
Pre-protection System

The DVM PLUS IV uses special internal fuse devices to protect the compressors from possible damage caused by overcurrent.



Easy and Safe Wiring Work

Non-polar communication between indoor and outdoor units makes wiring work much easier. This is also safer since the outdoor unit will protect itself if the communication cable is connected to a power terminal by mistake.



Auto Snow Blowing Function

Snow that accumulates and covers the outdoor units during the winter must be removed so that these units can operate properly. These units' snow prevention function removes accumulated snow from them so that you won't have to get rid of it by yourself. Outdoor units will blow away covered snow every 30 minutes to prevent any damage that can be caused by this snow.



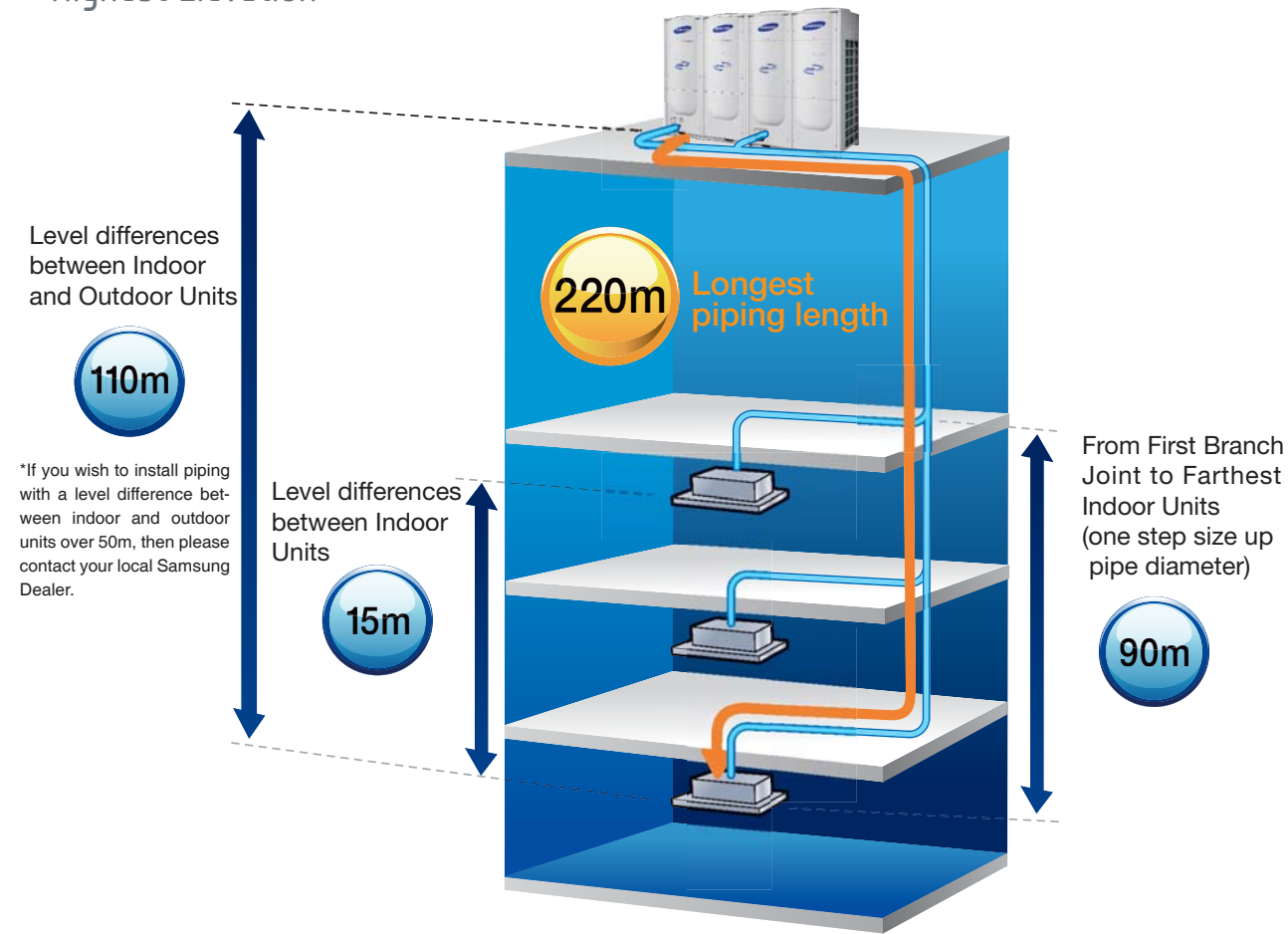
DVM System

Easy Installation & Maintenance

Perfect for Commercial Buildings

The DVM PLUS IV offers distinctive features that can make it easy for you to install and maintain this product in multi-story commercial buildings.

Longest Piping Length and Highest Elevation



1 Flexible Installation in High-rise Buildings

Installation is available with a maximum level difference of 110m, which is the equivalent of about 20 stories (each story is considered to be a height of 5m).

2 Flexible Installation over Wide Area

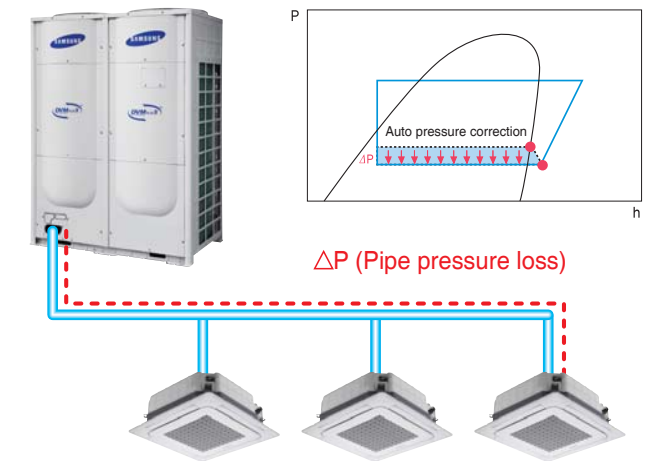
The DVM PLUS IV allows extended piping length up to 220m, and units will still display great performance over wide areas.

3 Flexible Selection of Indoor Units

You can choose indoor units which are suitable for each space from our indoor unit line up, which offers different options in capacity and composition. You can also use the indoor units more economically since each indoor unit can be individually controlled.

Optimized Refrigerant Distribution Control

When long piping is installed between the outdoor units and indoor units, the individual indoor units will use auto performance correction control technology and automatic refrigerant amount adjustment technology to secure even performance between the units.



Automatic Data Backup (Black box)

If a malfunction occurs with the DVM PLUS IV outdoor unit, it will automatically diagnose the problem and save the last 30 minutes of operation data. An optional accessory can be used to store operational data for over one year; this can be helpful in getting you quick and accurate repair service when you need it.



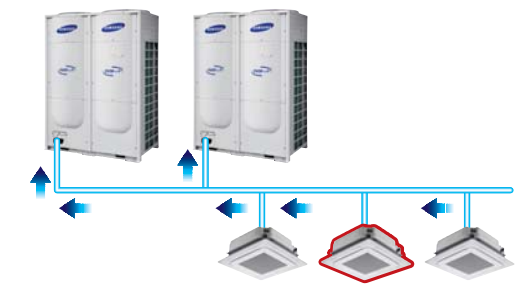
Refrigerant Pump-down and Pump-out

The DVM PLUS IV provides the following functions to facilitate easy and convenient replacement of the product, as well as additional installations and maintenance.



Refrigerant Pump-out Function

For outdoor unit maintenance, it is possible for the refrigerant to recover into indoor units or pipes.



Refrigerant Pump-down Function

It is possible to recover refrigerant into outdoor units when moving outdoor units, or performing maintenance of pipes between indoor units or pipes between outdoor units and indoor units.

DVM System

Easy Installation & Maintenance

Perfect for Commercial Buildings

The DVM PLUS IV offers distinctive features that can make it easy for you to install and maintain this product in multi-story commercial buildings.

Free Piping Connection with Various Knock-out Holes

The knock-out holes for piping, power, and communication cables are located in a variety of directions, allowing for more convenient installation of the DVM PLUS IV since the piping and cable direction can be freely selected from the front, left, and right side.



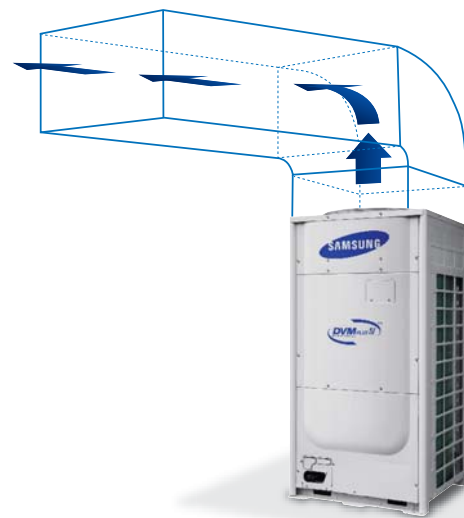
Easier Access for Status Check and Option Settings

Checking the outdoor unit status and setting option is easier and simpler since you don't need to remove the entire front cover, thanks to the small openings on the front side of the outdoor unit.



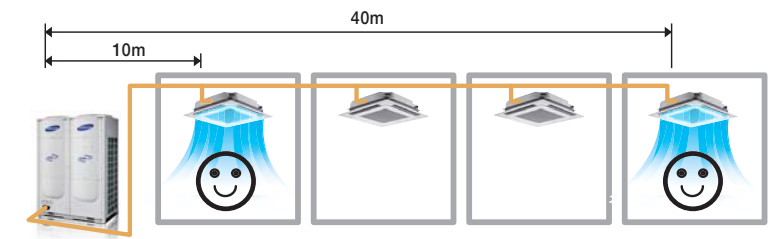
High External Static Pressure

To properly deal with unexpected various installation conditions, the DVM PLUS IV is designed to manage high external static pressures up to 8mmAq.

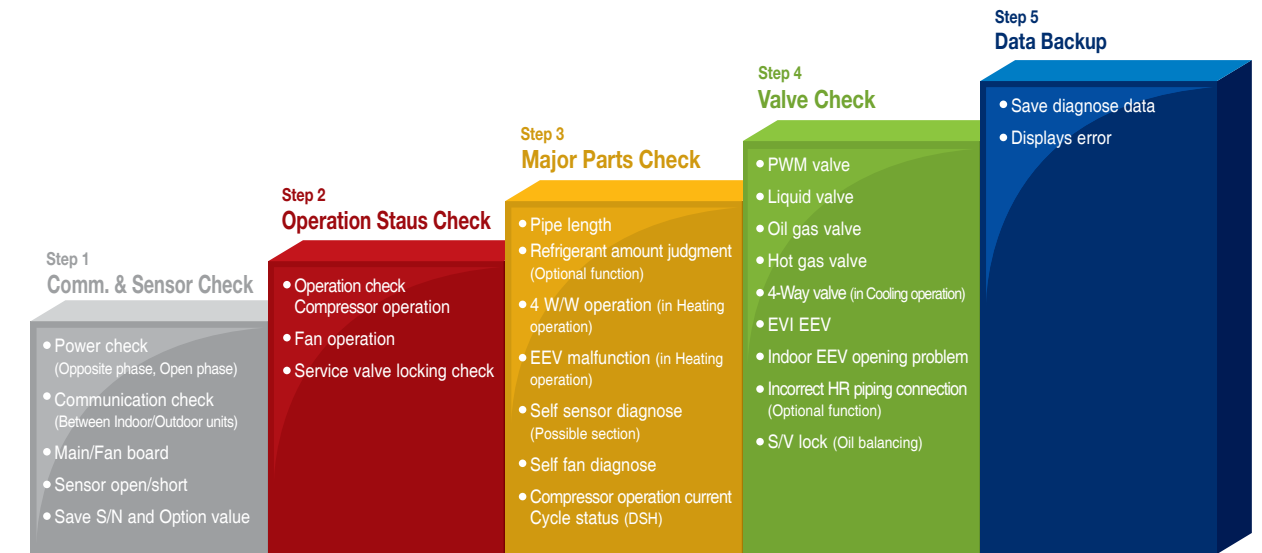


Automatic Pipe Length Recognition

The system provides evenly powerful cool and warm air, regardless of the distance between the indoor unit and outdoor unit.

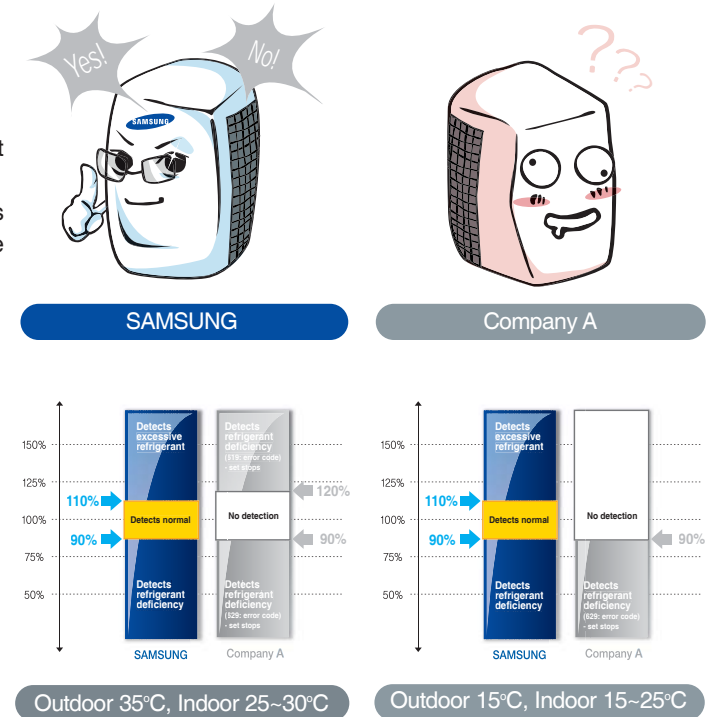


Multi-step Self Diagnosis Function



Precise Refrigerant Amount Detection

Deviations from the normal value of the refrigerant amount may cause damage or poor performance. Company A's outdoor unit cannot detect excess refrigerant, but the DVM PLUS IV can detect if the amount of refrigerant is excessive or insufficient.



DVM System

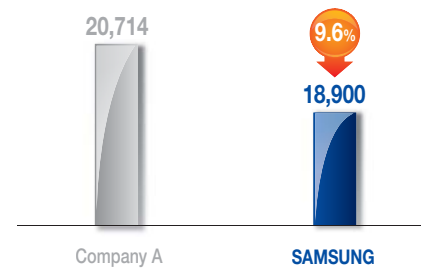
Eco-friendly Thinking of Our Planet First!

Samsung always considers our planet first, and produces eco-friendly systems to help ensure a cleaner future.

Decreased CO₂ Emission

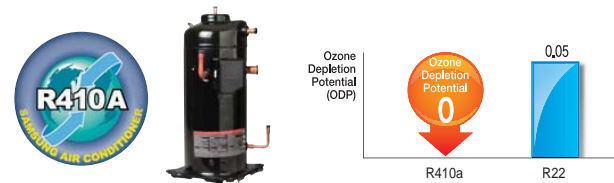
The DVM PLUS IV is a highly efficient product that uses advanced eco-friendly technology to reduce carbon dioxide (CO₂) emissions.

- CO₂ emission level: Data based on 0.42kg/kWh
- Time period: 5 months (Nov - Mar, 3,600 hours)
- Data based on 18HP model heating



R410a Refrigerant

The DVM PLUS IV uses a compressor that is optimized with eco-friendly R410a refrigerant, which has a "0" ODP value, to minimize environmental pollution. This also improves eco-friendly refrigerant operation efficiency and performance.



Europe Eco-friendly RoHS Technology Certification

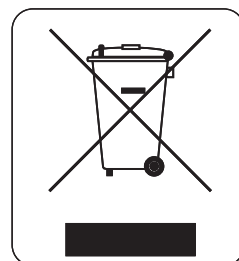
Samsung minimizes the use of toxic substances such as mercury, lead, and cadmium, attaining RoHS certification with its excellent eco-friendly technology.

RoHS compliant
 RoHS (Restriction Of Hazardous Substances)?
 RoHS sets eco-friendly regulations that ban the use of toxic substances, such as mercury, lead, and cadmium, that are obstacles in electronic recycling.



WEEE

SAMSUNG Electronics invests significant effort to help save the environment and comply with the WEEE directive by joining or establishing recycling schemes for each country.



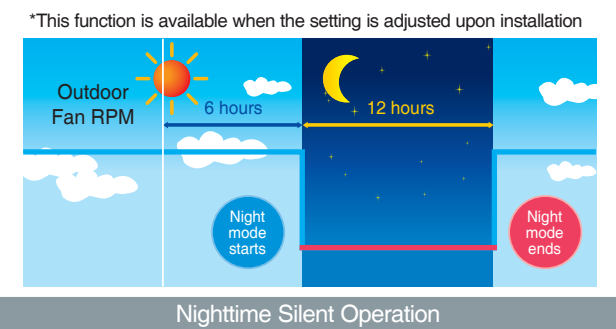
DVM System

Pleasant Operation Always Stay Comfortable

Samsung system air conditioners provide comfortable and stable air conditioning solutions without any noise disturbances.

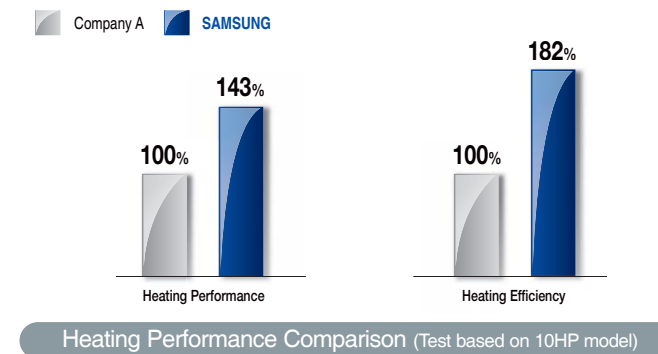
Silent Operation at Nighttime

Outdoor unit fan control allows outdoor units to operate silently during the nighttime so that you can enjoy a more pleasant sleep.



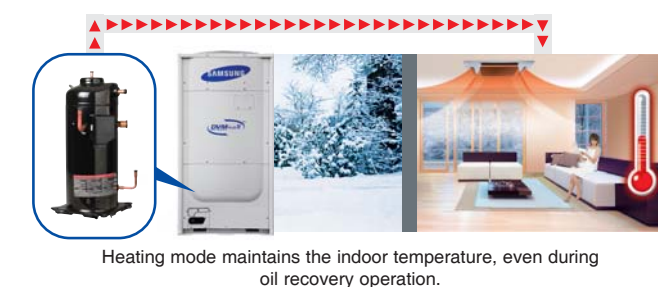
Top Heating Performance at Low Ambient Temperature

The DVM PLUS IV applies highly advanced technologies such as a super condenser, PHE intercooler, and Vapor Injection to achieve better heating performance, even at low ambient temperatures of (-)10°C.



Stable Heating Operation

DVM PLUS IV provides stable heating performance by constantly operating in heating mode, even when the outdoor unit recovers oil. The outdoor units from other companies cease heating operation while they recover oil.



*Performance Backup Function

While the outdoor unit is in oil balancing control operation, compressors that are not affected by this operation will keep operating in heating mode to minimize any reduction in performance.



DVM System

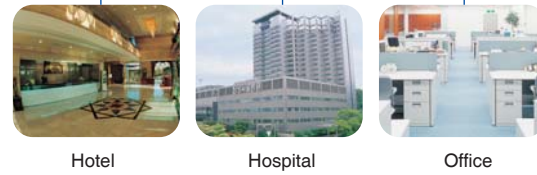
Premium Quality Control Heat Recovery

The DVM PLUS IV provides simultaneous heating and cooling in a very stable state for buildings or places that require both at the same time.

Simultaneous Cooling and Heating

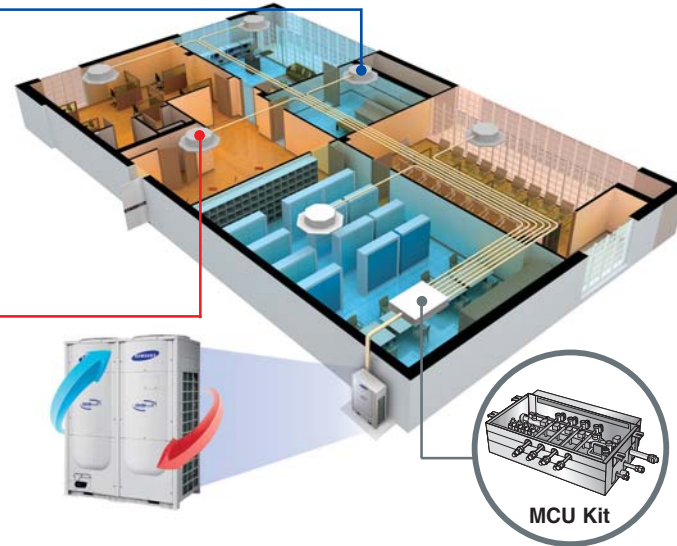
Single outdoor units can operate all the indoor units in both cooling and heating mode. They can also simultaneously operate in cooling and heating mode when it is necessary to provide more freedom for operation.

Recommended Sites



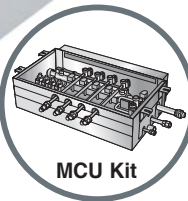
Cooling

Cooling operation for indoor environments where cooling load occurs all year round due to devices and lighting that generates heat.



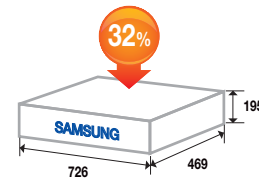
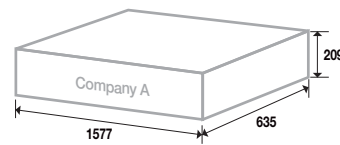
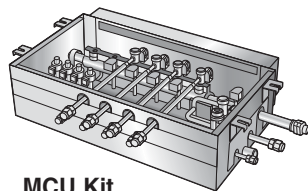
Heating

Heating operation for indoor environments where heating load occurs due to the outdoor environment

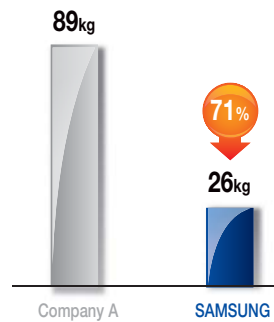


MCU Kit

The DVM PLUS IV HR uses an MCU kit that is 33% smaller than our competitor's MCU. Our MCU has an internal On/Off valve that enables fine control through the EEV valve control, and our improved sub-cooler also supports fine-tuned control. Enjoy a pleasant temperature controlled environment through improved performance and reduced noise.



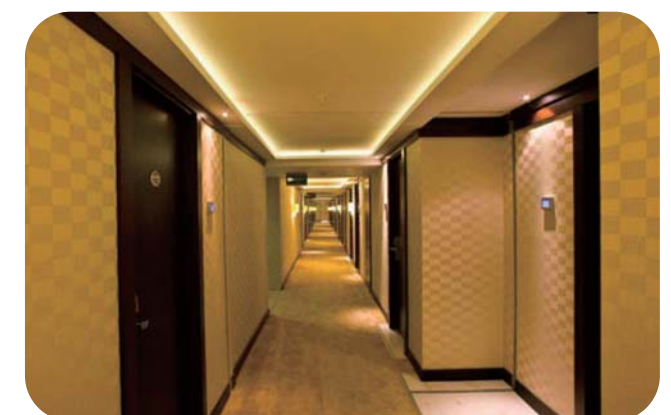
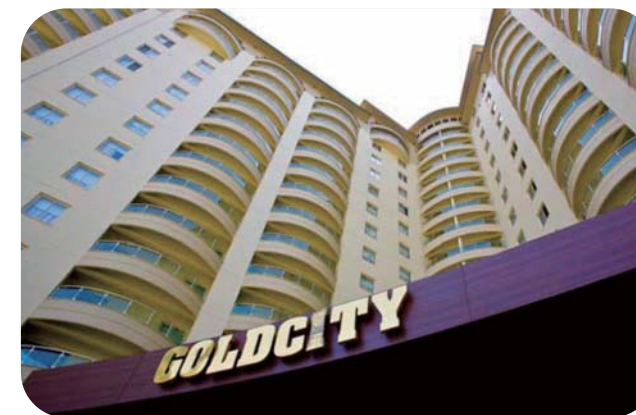
Volume Comparison



Weight Comparison



Project **Gold City**
 Location **Alanya / Antalya**
 Type **Hotel**



DVM System

DVM PLUS III

DIGITAL VARIABLE MULTI

Certified High Efficient Equipment for Buildings

The DVM PLUS III is a certified product that efficiently uses large amounts of energy needed to provide air conditioning for large buildings. Its advanced technologies and structures will provide economic cooling and heating all year long.



One Ortakoy Projesi, Turkey

Main Features

Certified and Advanced

DVM PLUS III

DIGITAL VARIABLE MULTI

DVM PLUS III is an outdoor unit that is certified as highly efficient equipment. It provides the industry's top energy efficiency while providing maximized, low temperature heating performance for any environmental condition.



■ High Efficiency

- Digital Hybrid System
- High Efficient Ø8 Heat Exchanger
- New G-fin
- High COP

■ Easy Installation & Maintenance

- Large Capacity
- Small Footprint Area
- Digital Unit Module
- Automatic Data Backup

■ Eco-friendly

- Decreased CO₂ Emission
- R410a Refrigerant
- Europe Eco-friendly RoHS Technology Certification
- WEEE

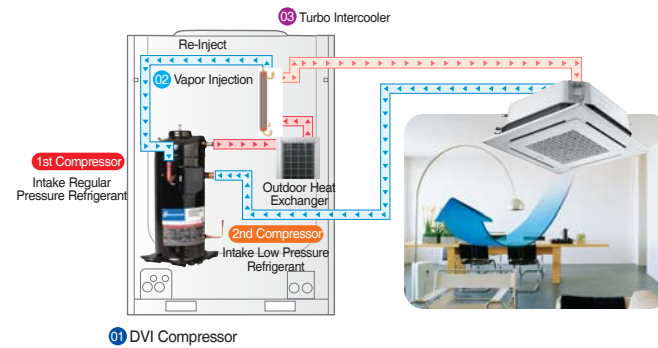
DVM System

High Efficiency

We use certified technologies to achieve some of the industry's highest efficiency rates to save energy and lower your energy bills.

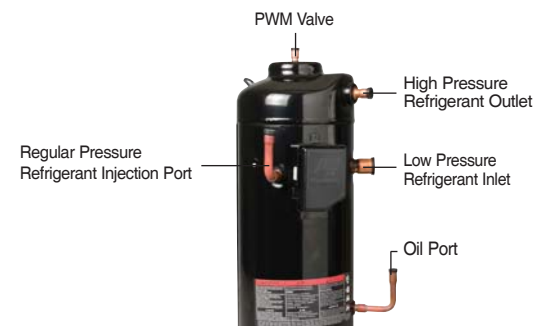
Digital Hybrid system

DHS (Digital Hybrid System) is a brand new concept system composed of a DVI compressor, vapor injection technology, and turbo intercooler. Used together, these three factors provide highly efficient performance.



DVI Compressor

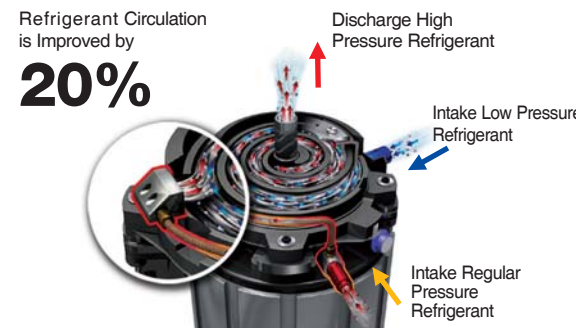
Our efficient and reliable DVI Compressor coupled with Vapor Injection technology is applied to improve cooling and heating performance and energy efficiency.



Vapor Injection Technology

Cooling and heating performance and COP is improved by using two stage compression technology. This new technology achieves high heating performance and COP under the lowest temperature, setting new standards in the industry.

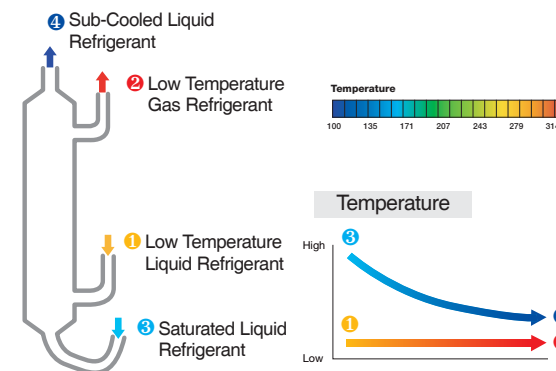
- Refrigerant flow rates are increased with new Vapor Injection technology.
- Sub-cooling is improved for long piping runs while increasing cooling and heating performance and COP.



Turbo Intercooler

Our turbo intercooler (Shell & Tube Type) improves cooling and heating COP to secure reliability for long piping installations.

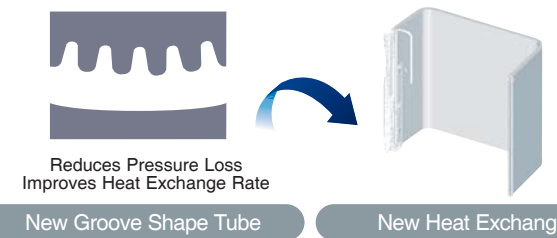
- Improve COP by applying Turbo intercooler.
- Adequate sub-cooling ensures reliable operation for installations with long piping (200m).



High Efficient Ø8 Heat Exchanger

Efficient Ø8 Grooved tubes reduce pressure loss while increasing heat exchange rates to improve COP.

- The groove shape is designed to be high and slim to increase heat transfer performance inside the tube.

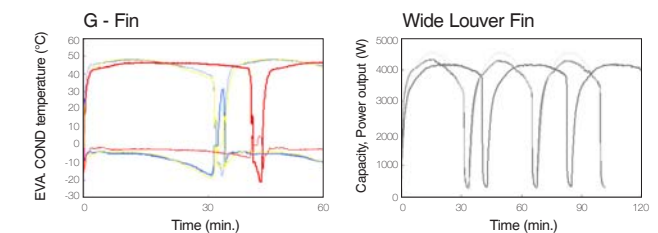
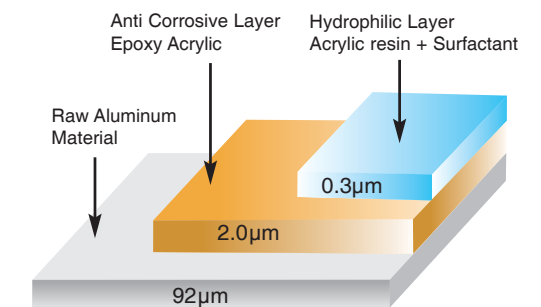
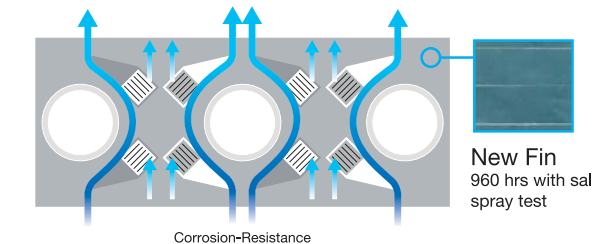


Item	Improved Heat Exchanger	
Diameter	Ø7 → Ø8	
Heat Transfer Surface Area	19% ↑	
Pressure Loss Heat Exchanger	Evaporation	14.1% ↓
	Condensation	10.3% ↓
Internal Heat Transfer Performance	30.8% ↑	
Pressure Resistance	same	

New G-Fin

Our new, highly efficient G-Fin increases heat transfer performance, reinforces corrosion resistance, and increases operating duration under frosting conditions.

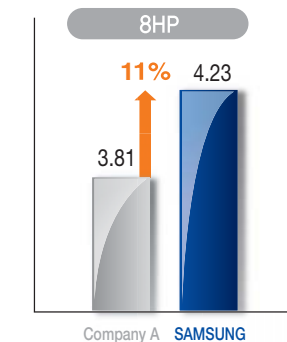
- Heat transfer performance is improved by 13% compared to conventional fins, even with the equivalent pressure loss.
- Corrosion resistance is reinforced by an Epoxy Acrylic Coating.
- Heating operation time is 1.4 times longer under frosting conditions by applying the new G-Fin.



High COP

The high efficiency DVM PLUS III has improved average cooling and heating COP compared to conventional products, achieving world class energy efficiency.

- DHS (Digital Hybrid System) technology increases refrigerant flow rate and evaporation enthalpy difference.
- Wide Ø8 Grooved pipe and G-Fin increases heat exchange efficiency.
- The best BLDC Motor in the industry and the Optimum Fan Guard design increase efficiency.



DVM System

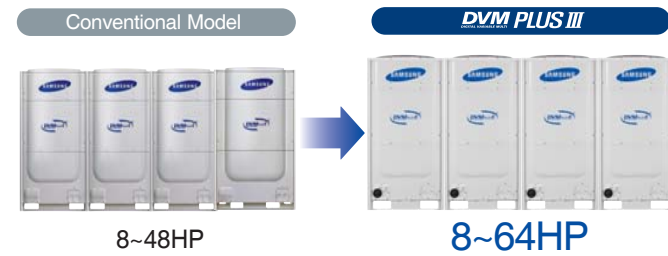
Easy Installation & Maintenance

Easy and convenient installation is made possible with flexible piping installation options and many other features.

Large Capacity

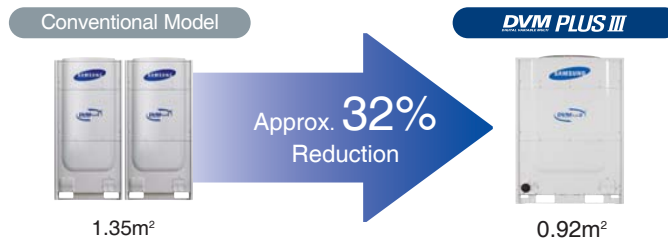
Samsung has achieved large capacities of 64 HP by combining a maximum of 4 outdoor units with 5 different capacities.(8, 10, 12, 14 and 16 HP) Many combinations of heat pumps or heat recovery types support up to 64 indoor units to provide consumers a variety of choices for any installation condition.

- Compact Combinations (8~64 HP)
Create combinations to customize systems that will fit in even the smallest installation spaces.
- High-efficiency Combinations (16~56 HP)
Combination with high-efficiency models



Small Footprint Area

Small footprint provides the small installation space which saves incredible amount of time.



Model	12HP	16HP
Conventional Model	0.92m ²	1.35m ²
DVM PLUS III	0.67m ²	0.92m ²
Comparison to Conventional Model	73%	68%

Digital Unit Module

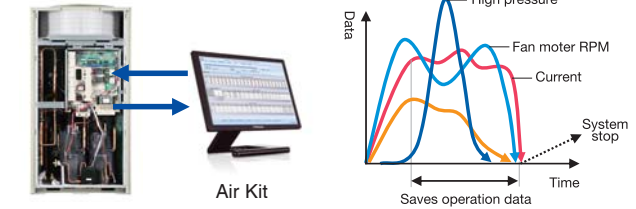
Digital unit module combinations enable the systems to alternate compressor operation to prolong each compressor's life cycle and improve COP with part loads.

- Precisely control the compressor capacity.
- Ensure a long life cycle by alternating operation of the DVI compressors.
- Improve COP by using multiple heat exchangers from outdoor units at part loads.



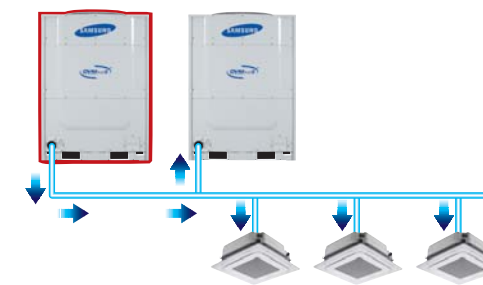
Automatic Data Backup (Black box)

If there is a problem with the product, the operation information from the last 30 minutes is stored before system shutdown. This allows rapid diagnosis of the DVM PLUS III, meaning that you can receive even quicker service.



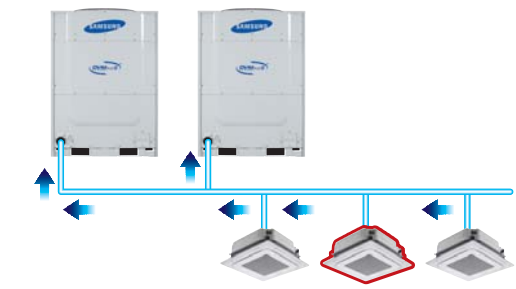
Refrigerant Pump-down and Pump-out

The DVM PLUS III provides the following functions to facilitate easy and convenient replacement of the product, as well as additional installations and maintenance.



Refrigerant Pump-out Function

For outdoor unit maintenance, it is possible for the refrigerant to recover into indoor units or pipes.

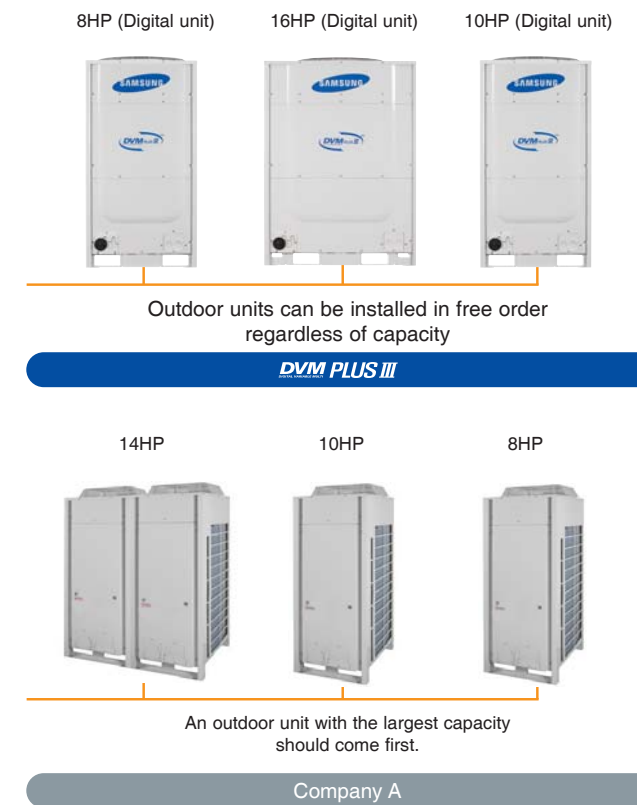


Refrigerant Pump-down Function

It is possible to recover refrigerant into outdoor units when moving outdoor units, or performing maintenance of pipes between indoor units or pipes between outdoor units and indoor units.

Free Installation

DVM PLUS III provides more freedom in terms of installation options since you don't need to consider priority of capacity when installing outdoor units and modules.



DVM System

Easy Installation & Maintenance

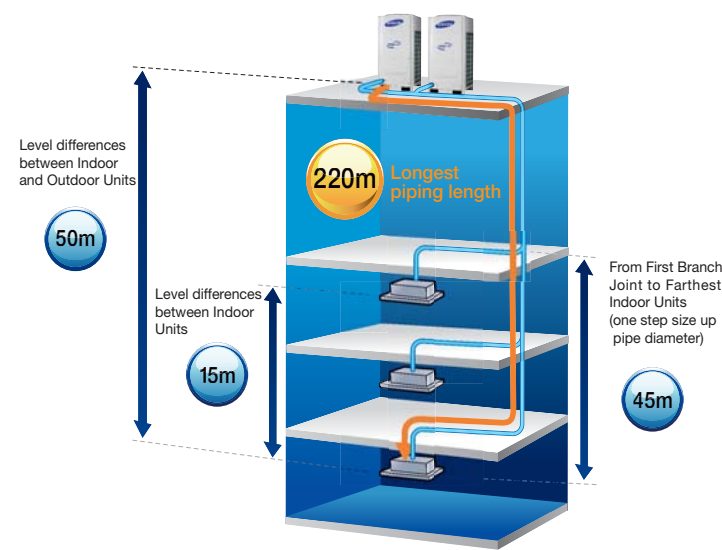
Easy and convenient installation is made possible with flexible piping installation options and many other features.

Flexible Piping Installation

DVM PLUS III has an actual piping length up to 200m, with a maximum piping length of 45m from the first branch joint to the farthest indoor unit, thereby providing greater convenience and flexibility for installations in commercial buildings.

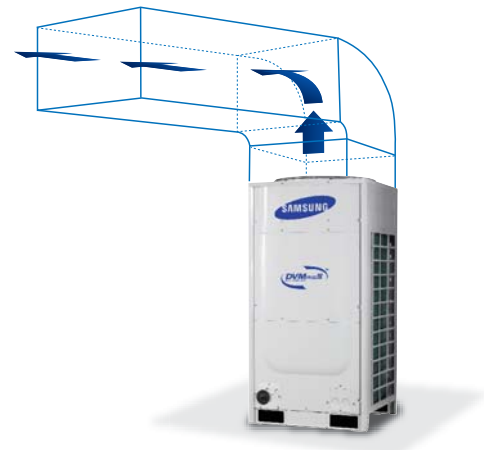
Summary

- Longest Piping Length: 220m (Equivalent Length)
- Total Piping Length: 1000m
- From First Branch Joint to Farthest Indoor Unit : 90m (with one piping Size Up)



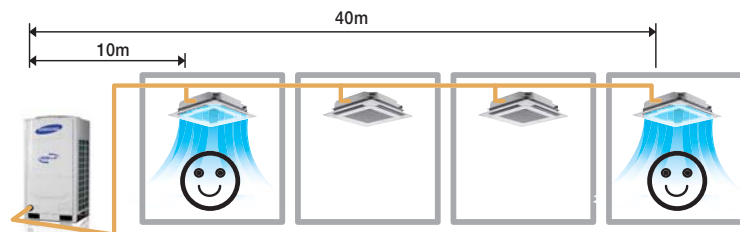
High External Static Pressure

To respond to a range of various installation environments, the DVM PLUS III is designed to be used up to an external static pressure of 8mmAq.



Automatic Pipe Length Recognition

Evenly powerful cool and warm air is provided, regardless of the distance between the indoor unit and outdoor unit.



DVM System

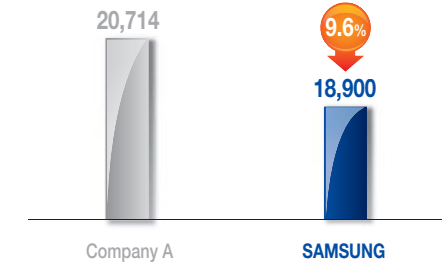
Eco-friendly

Samsung always considers our planet first, and produces eco-friendly systems to help ensure a cleaner future.

Decreased CO₂ Emission

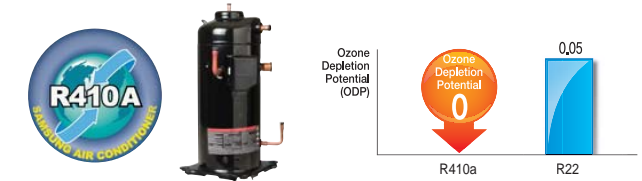
The DVM PLUS III is a highly efficient product that uses advanced eco-friendly technology to reduce carbon dioxide (CO₂) emissions.

- CO₂ emission level: Data based on 0.42kg/kWh
- Time period: 5 months (Nov ~ Mar, 3,600 hours)



R410a Refrigerant

The DVM PLUS III uses a compressor that is optimized with eco-friendly R410a refrigerant, which has a "0" ODP value, to minimize environmental pollution. This also improves eco-friendly refrigerant operation efficiency and performance.



Europe Eco-friendly RoHS Technology Certification

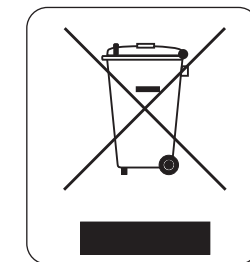
Samsung minimizes the use of toxic substances such as mercury, lead, and cadmium, attaining RoHS certification with its excellent eco-friendly technology.

RoHS (Restriction Of Hazardous Substances)?
RoHS sets eco-friendly regulations that ban the use of toxic substances, such as mercury, lead, and cadmium, that are obstacles in electronic recycling.



WEEE

SAMSUNG Electronics invests significant effort to help save the environment and comply with the WEEE directive by joining or establishing recycling schemes for each country.



DVM System

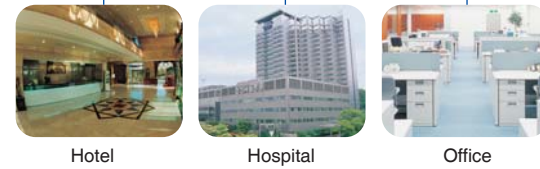
Heat Recovery System

Samsung's superb heat recovery technology will provide stable heating and cooling even when they are operating simultaneously.

Simultaneous Cooling and Heating

Single outdoor units can operate all the indoor units in both cooling and heating mode. They can also simultaneously operate in cooling and heating mode when it is necessary to provide more freedom for operation.

Recommended Sites



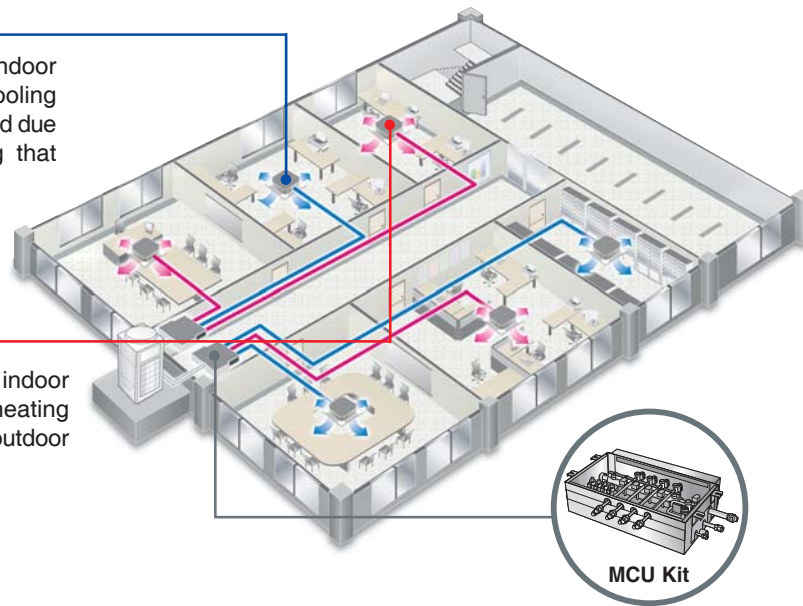
Cooling

Cooling operation for indoor environments where cooling load occurs all year round due to devices and lighting that generates heat.



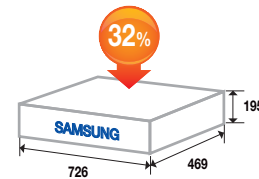
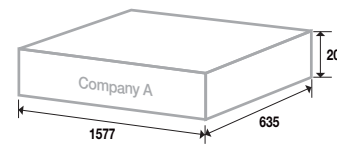
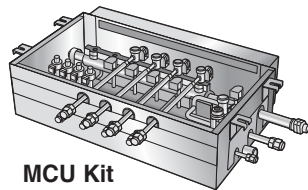
Heating

Heating operation for indoor environments where heating load occurs due to the outdoor environment

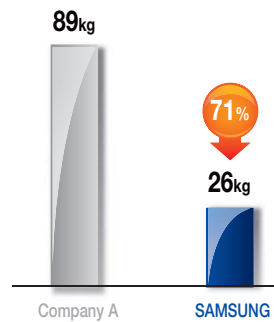


MCU Kit

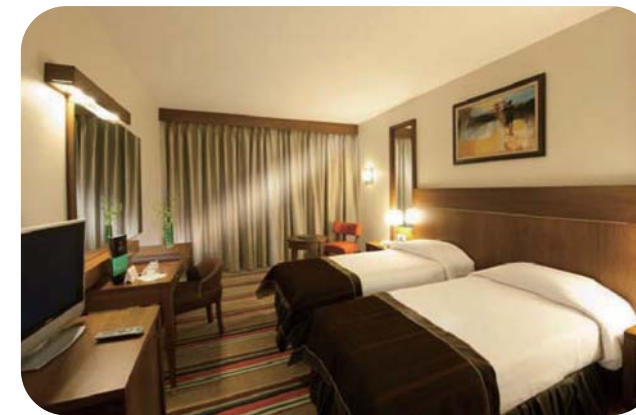
The DVM PLUS III HR uses an MCU kit that is 33% smaller than our competitor's MCU. Our MCU has an internal On/Off valve that enables fine control through the EEV valve control, and our improved sub-cooler also supports fine-tuned control. Enjoy a pleasant temperature controlled environment through improved performance and reduced noise.



Volume Comparison



Weight Comparison



Project **Asteria Elit Resort**
 Location **Manavgat / Antalya**
 Type **Hotel**



DVM System

DVM SLIM
DIGITAL VARIABLE MULTI

The Best Solution for Luxury Apartments

The DVM Slim's convenient installation options, system stability, and low noise will satisfy all solution needs for high-rise apartment buildings and increase their value.



Imperial Palace Hotel, Philippines

Main Features

Slim and Stable

DVM SLIM
DIGITAL VARIABLE MULTI

The DVM Slim is an optimized system air conditioner for high-rise apartment buildings. It has a separate mechanical area for convenient maintenance, and reduces noise by applying a sirocco fan. The footprint area's size has also been reduced, making it a perfect fit for high-rise apartment buildings.



* Only available in the Philippines

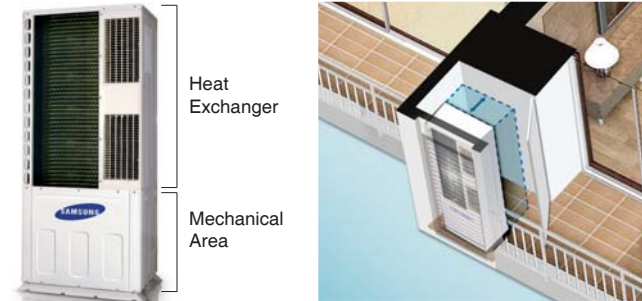
- Compact Footprint Size for Minimized Installation Space
- Properly Discharged without Interference from the Front
- Hermetically Sealed Outdoor System for Low Noise
- Compressor Noise Reduction
- No Electromagnetic Waves in Digital Scroll Compressor
- Easy Installation and Repair

DVM System

Slim and Stable DVM Slim

Compact Footprint Size for Minimized Installation Space

DVM Slim has separated space for the heat exchanger and mechanical parts (such as compressor and piping).

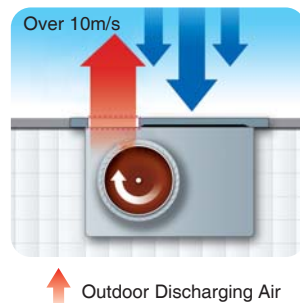


Footprint Size for the Small Chassis: 500x750mm
Footprint Size for the Big Chassis: 500x880mm

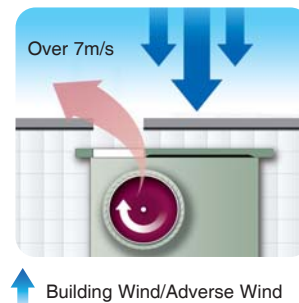
Properly Discharged without Interference from the Front

Very Fast Discharged Air to the Extent of 10m/s

Higher buildings experience faster building winds, meaning there is a risk that discharged air from the unit can flow back into the heat exchanger again. The DVM Slim prevents discharged air from flowing back into the heat exchanger to the extent of 10m/s.



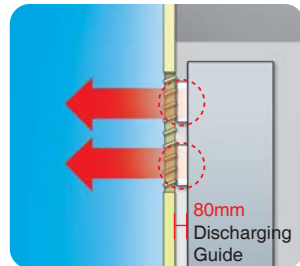
↑ Outdoor Discharging Air
DVM SLIM



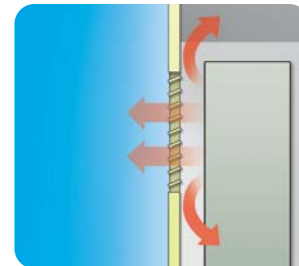
↑ Building Wind/Adverse Wind
Company A

80mm Guide Slider Assembled Inside the Unit for Discharged Air

The Guide Slider is able to lead air from the unit to be discharged without interference from the front surroundings.



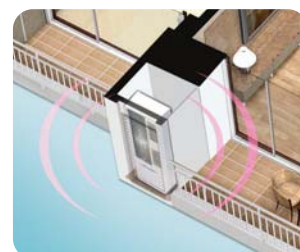
80mm Discharging Guide
DVM SLIM



Company A

Hermetically Sealed Outdoor System for Low Noise

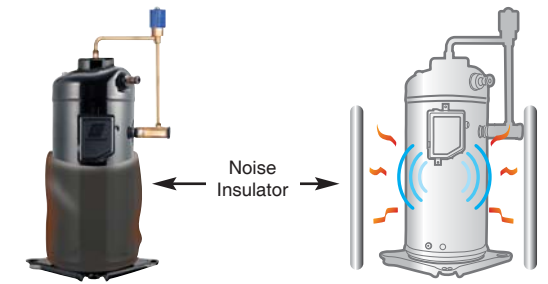
The thoroughly sealed outdoor unit and 2 sirocco fans prevent operating noise and vibration from disturbing the living area.



2 Sirocco fans

Compressor Noise Reduction

Noise insulation covers the compressor to reduce noise and prevent it from transferring into indoor areas.



No Electromagnetic Waves in Digital Scroll Compressor

The DVM Slim does not generate electromagnetic waves because of a digital scroll compressor, unlike our competitors' products. This means that that your cell phone calls can maintain high quality without any electromagnetic interference.



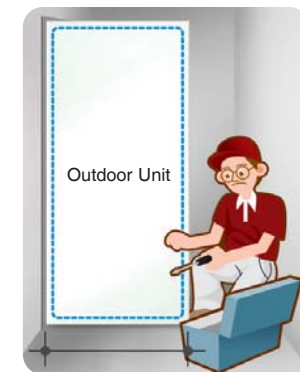
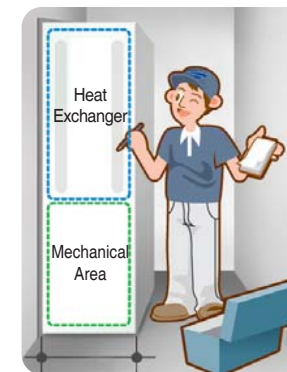
DVM SLIM



Company A

Easy Installation and Repair

The compartmentalized mechanical area enables easier and improved serviceability.



DVM System

Mini DVM DIGITAL VARIABLE MULTI

Clean and Efficient Air Provider

The Mini DVM uses a control system for improved energy efficiency. It is a suitable air conditioning solution that is economically perfect for small and medium sized areas.



Banca Transilvania, Romania

Main Features

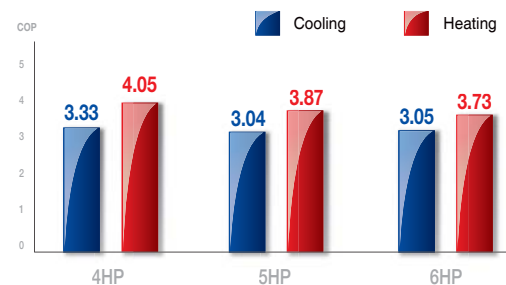
Economical and Efficient

Mini DVM DIGITAL VARIABLE MULTI

The single Mini DVM outdoor unit can support up to 9 indoor units to provide a suitable air solution for large residential and small and medium sized commercial areas. The newest compressor technology and eco-friendly refrigerant has been applied to increase this product's reliability, while the system's outstanding energy efficiency provides economical cooling and heating.

High Energy Efficiency

Our digital scroll compressor offers a very high cooling and heating COP.



Compact Design

The Mini DVM can be easily installed because of its slim, compact, and space saving design.

Dimension

	4HP	5HP	6HP
Capacity			
Volume (m ³)	0.39	0.39	0.39
Foot print (m ²)	0.35	0.35	0.35
Height (mm)	1,128	1,128	1,128
Weight (kg)	124	125	125

Easy Maintenance

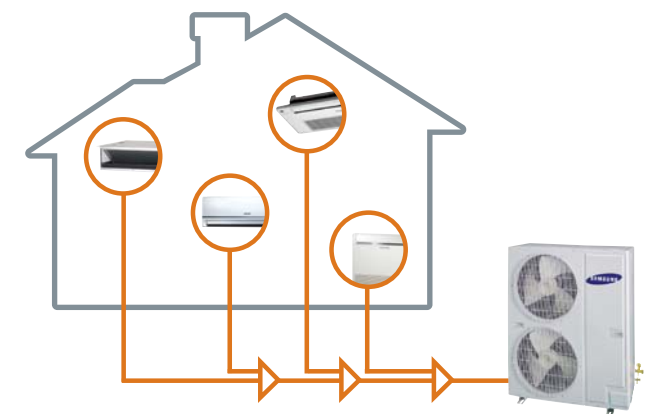
The Mini DVM makes it possible to control the compressor, PCB, and EEV with the front panel, meaning that maintenance is effortless and simple. The outdoor units also display error codes via LED, enabling you to react promptly if problems occur.

High Reliability

The Mini DVM offers great reliability through adopting the easily controlled Digital Scroll Compressor. The Digital Scroll Compressor only needs one control PCB, thus achieving a simple structure and high dependability.

Various Indoor Units

The Mini DVM can be combined with up to 11 stylish indoor units, and visually blends with any interior design.



Wide Compatibility

The Mini DVM can be controlled with control systems which are the same as DVM PLUS IV, DVM PLUS III, and FJM.

CAC System

CAC SINGLE SMART INVERTER

CEILING AIR CONDITIONER

Energy Saving Solution for Commercial Places

The CAC Single is a suitable air solution for small and medium size commercial places. Save on energy and maintenance costs with the Smart inverter system that maximizes energy efficiency.



Timas, Turkey

Main Features

Energy Saving

CAC SINGLE

CEILING AIR CONDITIONER

The CAC Single is the smart choice for saving money and energy. Samsung employs advanced technology to minimize energy waste, improve efficiency, and achieve cooling and heating performance that is faster than conventional products. Enjoy the pleasantness of silent operation without any vibration.

- All A/A Grade
- World's Top Class Energy Efficiency
- Simultaneous On/Off Function
- Smaller and Lighter
- Flexible Pipe Installation
- High Efficiency
- Save Up to 50% in Energy Costs
- Wide Temperature Performance
- Comfortable Temperature
- Fast Cooling and Heating
- Silent Operation



CAC System

Smart Inverter

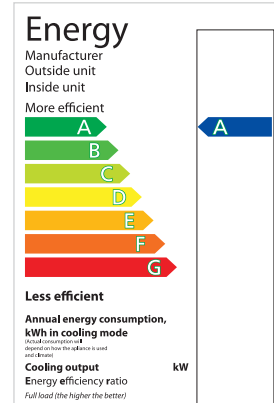
Revolutionary inverter technology maximizes energy efficiency and provides pleasant and powerful temperature control.

New Features

All A/A Grade

All models of the 4Way Cassette S indoor unit have earned an A/A energy efficiency grade.

Energy efficiency class of the unit in cooling mode:	Energy efficiency class of the unit in heating mode:
A EER > 3.20	A COP > 3.60
B 3.20 ≥ EER > 3.00	B 3.60 ≥ COP > 3.40
C 3.00 ≥ EER > 2.80	C 3.40 ≥ COP > 3.20
D 2.80 ≥ EER > 2.60	D 3.20 ≥ COP > 2.80
E 2.60 ≥ EER > 2.40	E 2.80 ≥ COP > 2.60
F 2.40 ≥ EER > 2.20	F 2.60 ≥ COP > 2.40
G 2.20 ≥ EER	G 2.40 ≥ COP



World's Top Class Energy Efficiency

1 Improved Compressor

The smart inverter outdoor unit has adopted a better energy efficiency compressor to achieve 4.8 COP and 4.5 EER.

2 Propeller Fan

Large 2 blade propeller fans have been applied to the outdoor units to increase efficiency by 10% and achieve lighter weight than models with 3 blade fans.

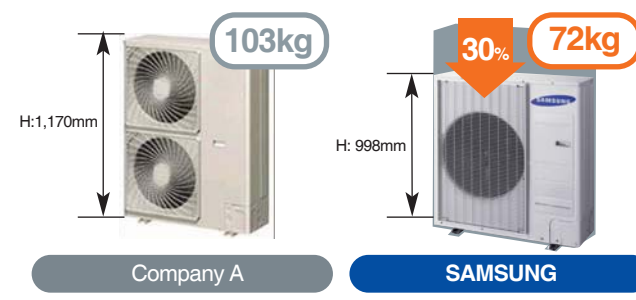
Simultaneous On/Off Function

Instead of just one indoor unit, why not have two? You can connect two 7kW 4Way Cassette S indoor units with a single 14kW Smart inverter outdoor unit for more efficient cooling and heating. You'll also be able to simultaneously control both indoor units as if they were one.



Smaller and Lighter * 10kW Deluxe Model

Samsung's new Smart inverter outdoor unit is smaller and lighter than our competitor's products. Our products are much easier to install since they are 25% lighter in weight, and are shorter in height thanks to the single fan structure. Although our units are smaller and lighter, they offer equal performance as our competitors' 2 fan structured outdoor units.



Flexible Pipe Installation

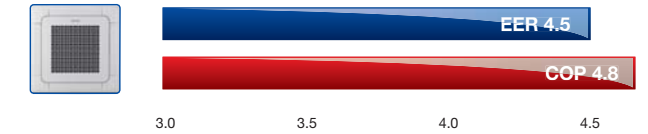
The pipe direction of our outdoor units can be freely selected as required. The internal pipe connection ports allow 4 different available pipe directions, meaning that the unit looks neater and organized once the pipe installation is done.



Common Features

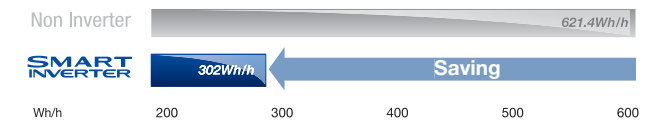
High Efficiency

The Smart inverter technology gives you powerful, quick cooling and heating with minimal electrical consumption, which means that you save money and reduce energy waste.



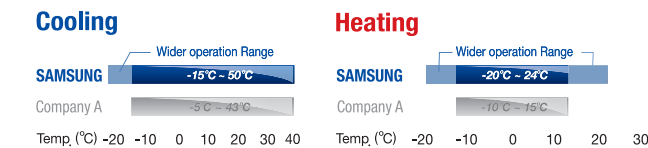
Save Up to 50% in Energy Costs

After reaching the set temperature, the Smart inverter Air Conditioner changes its operation mode to economic. By avoiding inefficient and frequent switching on and off of the compressor, the Smart inverter saves up to 50% in energy consumption compared to non-inverter air conditioners.



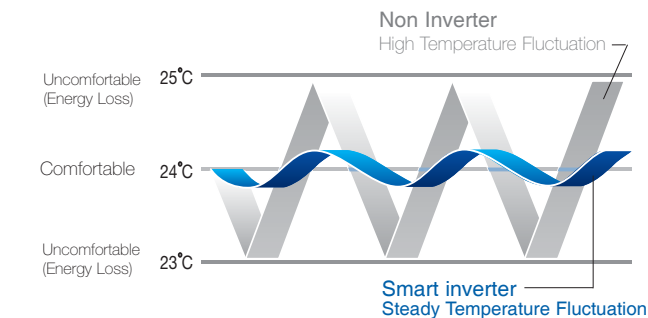
Wide Temperature Performance

When you use a Samsung air conditioner, there's no need to worry about using an additional unit for severe temperatures. Our units have a wider temperature allowance, meaning that they can cool in the burning heat of 50°C or provide heat in the freezing cold of -20°C to provide comfort in your home.



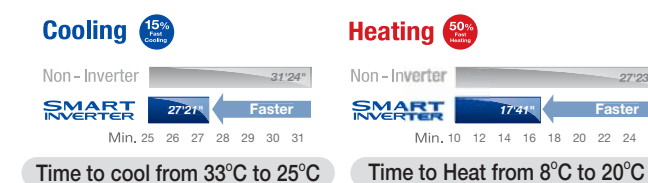
Comfortable Temperature

The Smart inverter Air Conditioner works at maximum capacity at start-up. As soon as the temperature reaches the desired/set temperature, it performs fine adjustments to cope with any changes. This means that there is less temperature fluctuation, and comfort can be achieved in a matter of minutes.



Fast Cooling and Heating

When you change the temperature setting, the air conditioner will use the compressor's maximum capacity to quickly reach the desired temperature, resulting in 15% faster cooling and 50% faster heating.



FJM System

Free Joint Multi SMART INVERTER

Single Outdoor Units for Multiple Indoor Units

The Free Joint Multi is the best solution for residential buildings seeking a flexible, efficient, and reliable air conditioning system. A single outdoor unit requires minimal installation space and can handle multiple indoor units to provide cooling and heating in different rooms.



Gyong Plaza, Hungary

Main Features

Universal

Free Joint Multi

The 2011 Free Joint Multi adds universal indoor units (Y & P series) that can be universally connected to single outdoor units. You can now connect a greater variety of up to 5 indoor units to one outdoor unit.

One Outdoor Unit, Multiple Indoor Units

One outdoor unit supports up to 5 indoor units, forming systems that are ideal for large residential areas.

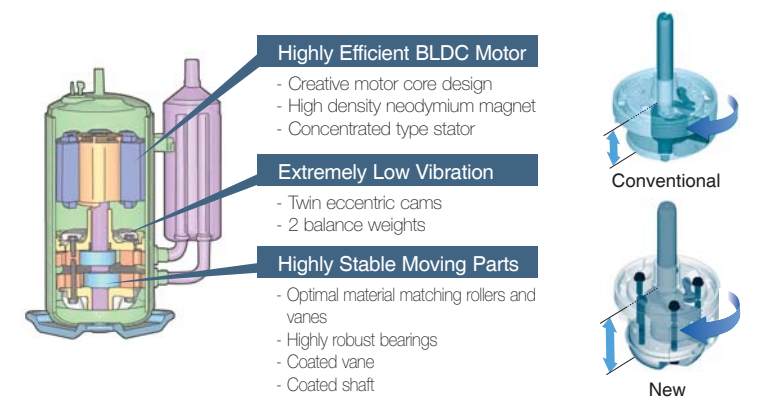


*Universal Indoor Units: Y Series and P Series indoor units can be used with Single outdoor units.



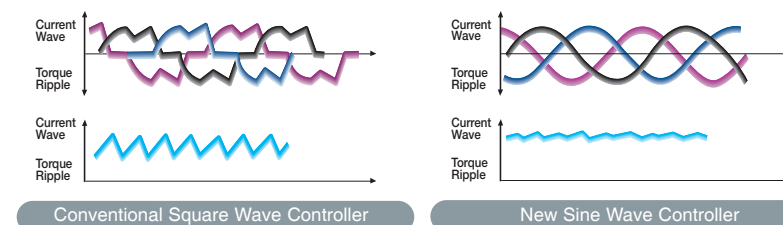
Twin BLDC Compressor

FJM outdoor units have applied Twin BLDC compressors with highly stable moving parts which reduce torque variation by 70% compared to the conventional single BLDC compressor.



Sine Wave Controller

All our FJM models have adopted this newly developed Sine Wave Controller. Smoother current waves result in a soft acoustic quality and overall noise reduction.



Sound Insulator for the Compressor

New, double layered sound insulation material fully covers the compressor to absorb and minimize the noise it generates for more quiet operation.

Easy Installation

This one button auto addressing solution makes installation easier for users to perform.

Enjoy the Beauty



Project Restaurant Patron
 Location Greece
 Type Restaurant
 Indoor units 13EA
 Outdoor units 2EA

- CASSETTE TYPE 56
- DUCT TYPE 66
- WALL-MOUNTED TYPE 70
- CONSOLE & CEILING TYPE 78



Cassette Type

Visually Harmonizes with Your Interior

Samsung's cassette type indoor units, which come in a variety of patterns to better match your interior design. By integrating the most advanced technologies, these units add the value of optimized comfort and a pleasing appearance.



Agir Haddecilik, Turkey

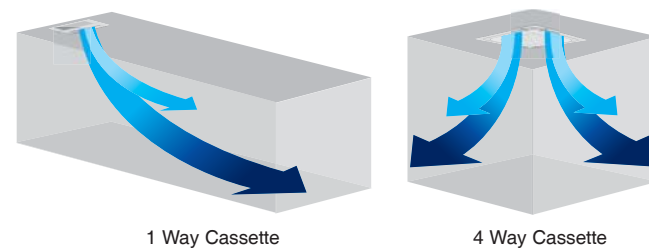
Icon Description

Powerful Airflow



Wide blades in the indoor unit deliver cool or warm air at greater distances to provide even cooling and heating throughout the room.

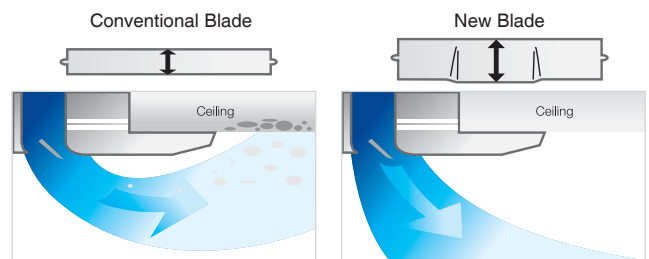
■ New Blade ■ Conventional



Ceiling Dust Prevention



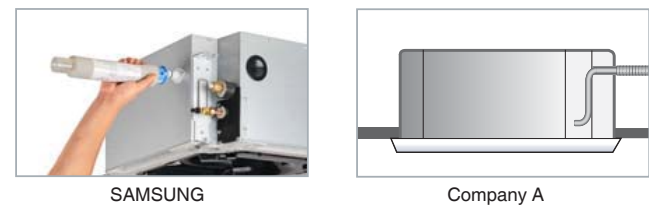
The newly designed panel will control air direction to avoid contact with the ceiling. This new design will prevent dust from accumulating on the ceiling after long periods of operation, keeping your interior cleaner than ever.



Quick Connection of Drain Pipe



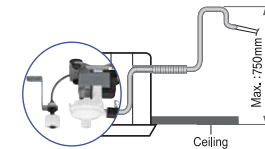
Samsung's unique drain pipe prevents leaks, and is easier to install since tape or adhesives aren't required.



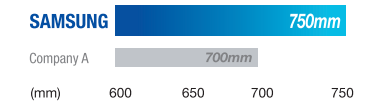
High Lift-up Drain Pump



The lift-up drain pump lifts condensed water up to 750mm, compared to our competitors' limit of 700mm, allowing for more flexible and convenient installation.



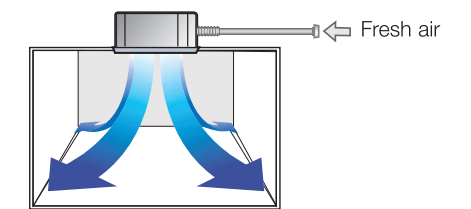
Lift-up Range



Fresh Air Intake



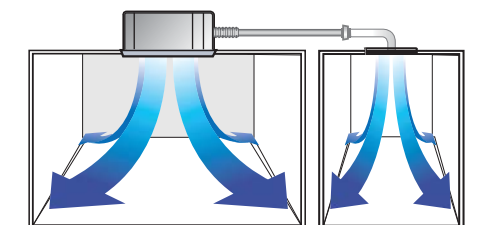
Fresh air can enter through the cassette unit so that you can enjoy even fresher air in your room.



Sub Duct



The Sub Duct enables you to use the same air conditioner unit to cool an additional smaller space that is nearby. (The cassette unit is fitted with a knock-out component to accommodate for this.)

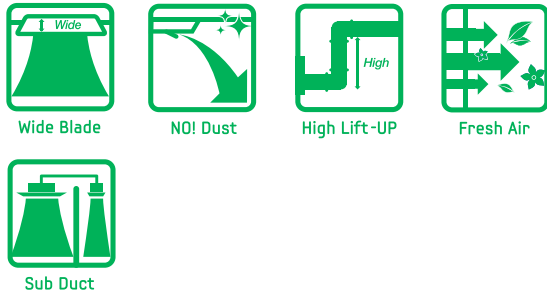


4 Way Cassette S

Smart and Stylish



General features



Features

New Improved Design

1 Stylish and Aesthetic Panel

The new 4Way Cassette S supports two panels with different pattern designs. You can select between the Waffle and Classic pattern, depending on your interior's look or personal preference.



2 Simple Display

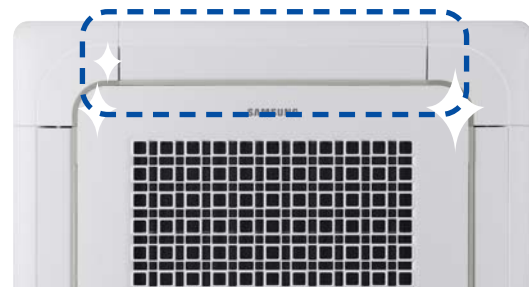
The simple display design with its rounded corners adds a neat and tidy feeling to your interior.



3 Neat and Clean Design

The new 4Way Cassette S uses a new neat and clean design. The completely hermetic blade structure keeps the indoor unit clean since it prevents dust or other foreign substances from entering it.

The internal parts of the indoor unit are also out of sight once the blade is shut, thus improving the unit's appearance.



S-Plasma ion (Optional)

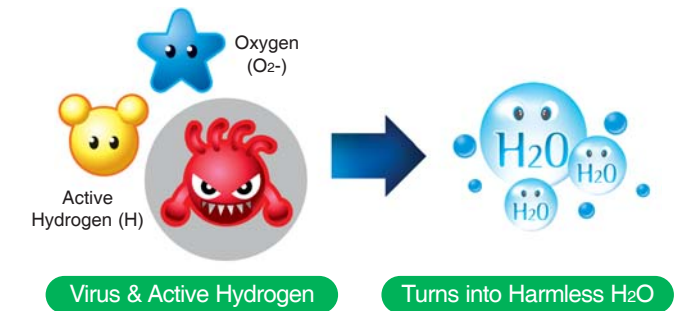
1 S-Plasma ion-Healthy Air Provider

Sanitize your indoor air with Samsung's S-Plasma ion! Priority-filtered air is made even healthier through the S-Plasma ion device which eliminates airborne contaminants (such as bacteria, virus etc.) and neutralizes OH-radicals. This optional device can be easily installed by simply inserting the S-Plasma ion kit into the indoor unit.



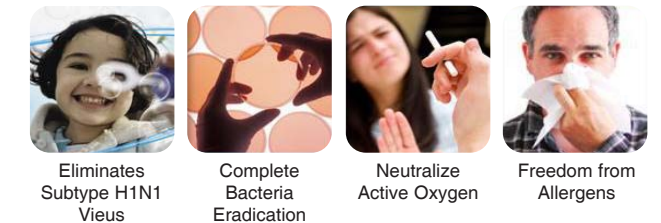
2 Operation & Algorithm

Active hydrogen (H) and oxygen ion (O₂⁻) emitted from the S-Plasma ion device react to viruses, turning them into harmless H₂O.



3 Benefits of the S-Plasma ion

- Eliminates airborne virus & bacteria (Subtype H1N1).
- Completely eradicates bacteria.
- Relieves allergies by eradicating airborne allergens.
- Neutralizes OH-radical (as known as active oxygen).

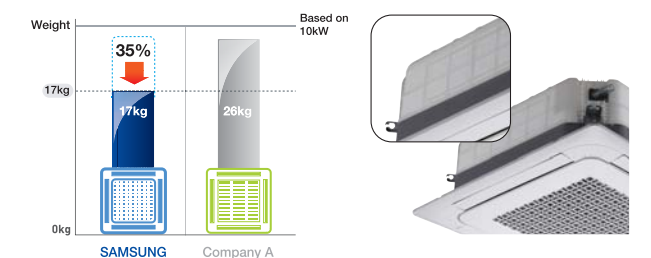


4 Safety from OH-radicals

Tests have shown that Samsung's S-Plasma ion neutralizes harmful OH-radicals. Ironically, it has been shown that our competitors' ionizing devices produce OH-radicals, which adversely affect human skin during the ionizing process.

Light yet Robust Design

Samsung's 4Way Cassette S indoor unit is now lighter in weight at 17kg. It is the lightest indoor unit in the industry, about 35% lighter than our competitors' products.

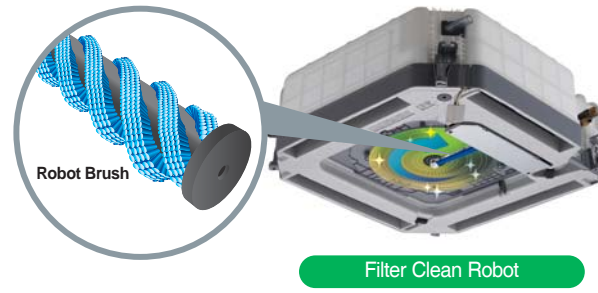


4 Way Cassette S

Smart and Stylish

Filter Cleaning Robot

The filter cleaning robot automatically cleans the filter on a regular basis. This ensures that the filter is always kept clean, unnecessary energy waste is minimized, and that your air will be as fresh as it can possibly be.



MDS (Motion Detect Sensor)

The MDS will detect the movement of people within the area so that the unit only operates when someone is in the area. This function will save energy since it minimizes unnecessary energy usage by stopping operation when the area is empty.



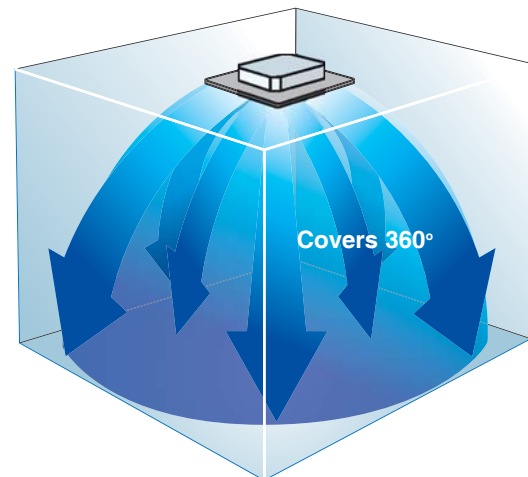
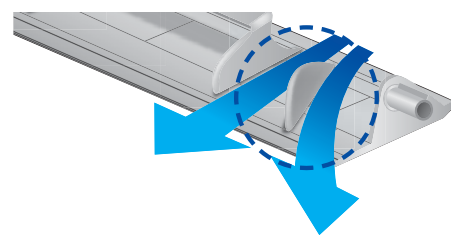
Individual Blade Control

By using the new remote controller, the opening angles of the 4 blades can be individually set at the same or different angles within a 32°~65° range for more efficient cooling.



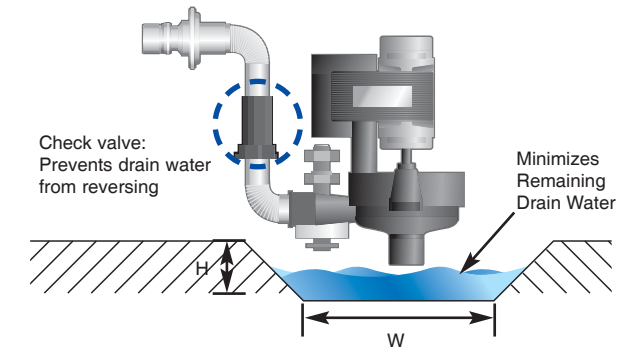
Surround Air Flow

The 4-way outlet can cool every portion of your interior. The new and practical design of the blades minimizes blind spots at the corners of the panel, and can almost cover a full 360° around the indoor unit.



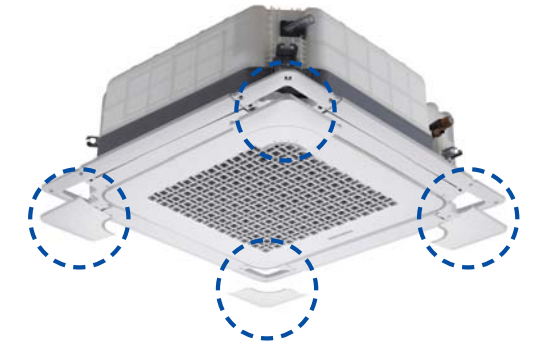
No Overflowing Drain Water

The check valve on the drain pump prevents drained water from flowing backward into the drain pan. This minimizes the the drain pan's water level so that you will never have to worry about water stagnation or overflowing drain water that could drip into your interior.



Easy Leveling

Each corner portion of the panel is detachable: this makes it easier for you to adjust the height, and makes installation and leveling much easier and quicker.



Easy Blade Cleaning

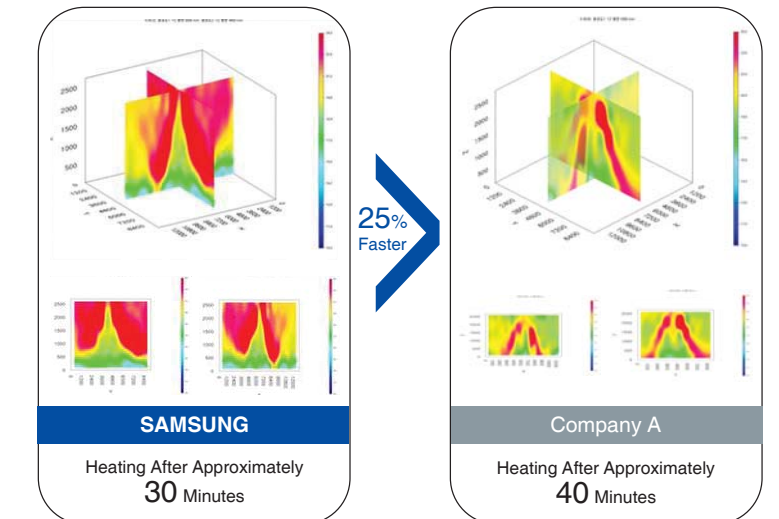
The 4Way Cassette S indoor units have detachable air flow blades so that you don't need to remove the entire panel to clean the blades.



Quick Cooling and Heating

Samsung's 4Way Cassette S indoor unit achieves the desired set temperature much faster than our competitors' products.

>Temperature Distribution Chart

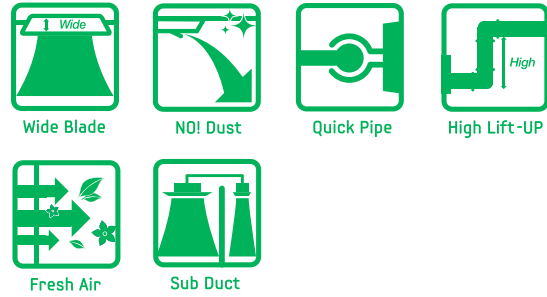


4 Way Cassette

Evenly Distribute Cool Air



General features



Features

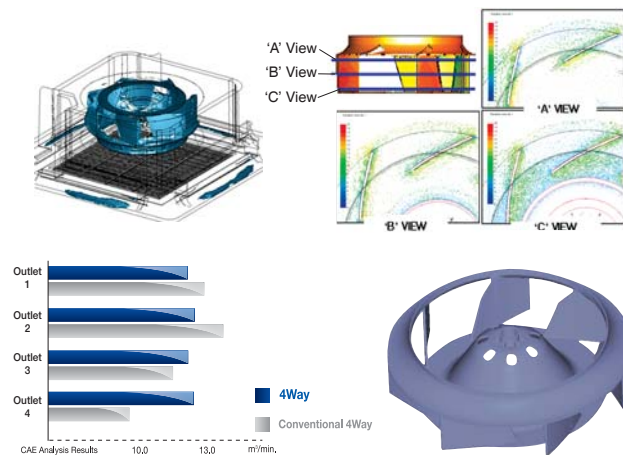
New Turbo Fan

1 Silent Operation

Imagine a room of cool calmness. The aerodynamically designed <Turbo Fan> minimizes noise from the turbulence of blade movement, meaning that our units make less noise than conventional models.

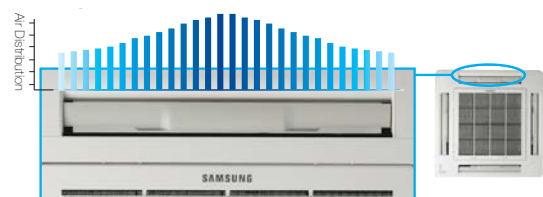
2 Uniform Distribution

The new <Turbo Fan> with wide blades provides extreme cooling and heating power from 4 separate outlets so the entire room cools down or warms up faster. This unit can extend comfort to every nook and cranny.



Efficient Cooling

The 3-dimensional shaped blade, which has a world wide patent, is able to evenly spread cool or warm air at greater distances, meaning that comfort can reach every inch of your interior space.



Easy Leveling

Each corner portion of the panel is detachable, which allows easier access to adjust the height. This makes leveling and installation much easier and quicker for you.

Detachable corners make installation and height adjustments much easier.

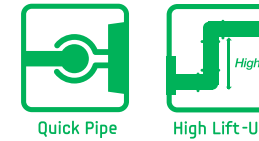


Mini 4 Way Cassette

Ideal and Efficient



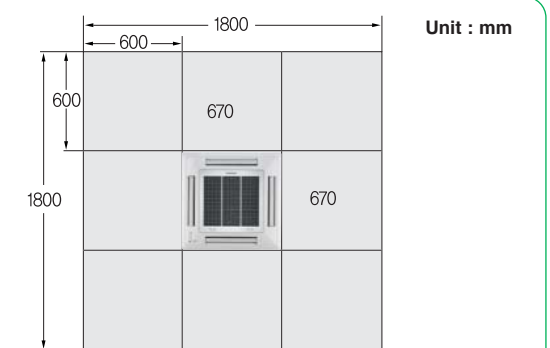
General features



Features

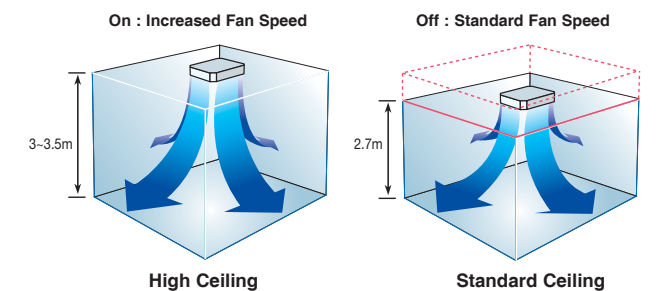
Ideal Compact Size

The Mini 4Way Cassette air conditioner can be installed on one standard ceiling tile (600Wx600D), which can reduce installation time.



Fan Speed Adjustment

The fan speed can be adjusted according to the ceiling height by adjusting the dip switch of the indoor unit's PCB.



Slim 1Way Cassette

Slim and Quiet



General features



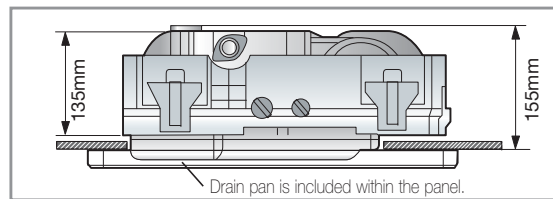
Features

Slim and Compact Design

Want a cassette type air conditioner, but have limited ceiling space? Samsung's new Slim 1Way Cassette type air conditioner is the answer.

1 Slim Design

Samsung's Slim 1Way Cassette indoor unit is only 135mm thick and can be installed on ceilings, taking up little space.



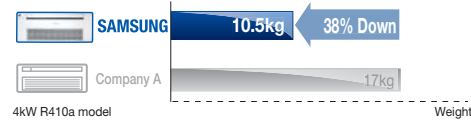
— NOTE —

Make sure that there is enough installation space. Allow at least 170mm for the installation.



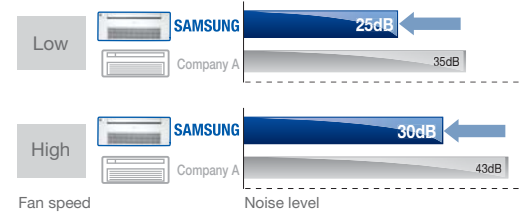
2 Lighter Indoor Unit

Samsung was the first to apply ABS cabinets into its indoor units to provide the lightest units on the market. The slim, lightweight design makes installation and maintenance a breeze.



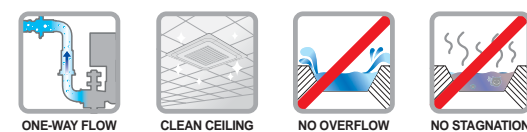
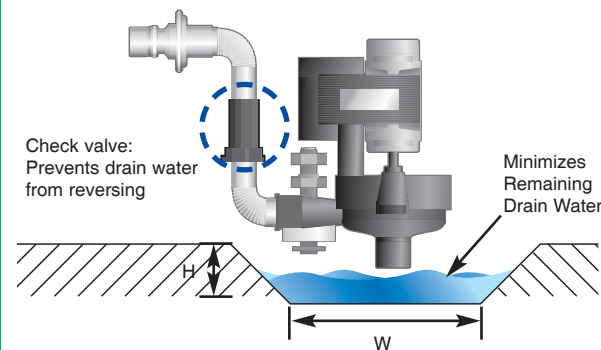
Quiet Operation

Samsung's new blade design drastically reduces noise levels so that you can relax in peace and quiet.



No Overflowing Drain Water

The check valve on the drain pump prevents drained water from flowing backward into the drain pan. This minimizes the the drain pan's water level so that you will never have to worry about water stagnation or overflowing drain water that could drip into your interior.

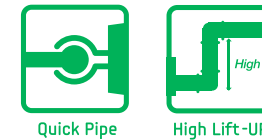


2Way Cassette

Compact but Powerful



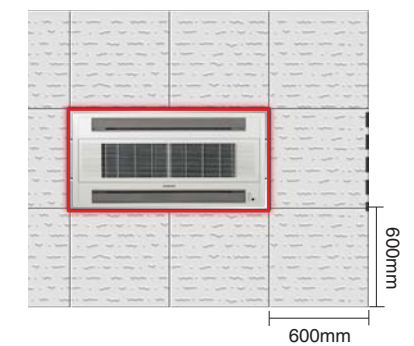
General features



Features

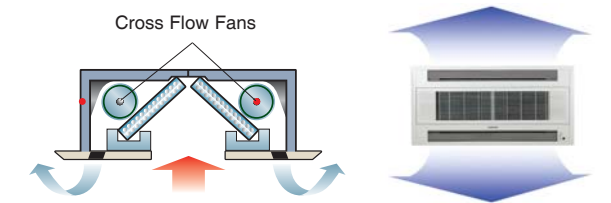
Standard Formula for Easy Installation

The dimensions of the 2Way Cassette air conditioner allow for easy installation into standard ceiling grids (600Wx600D) everything just falls into place.



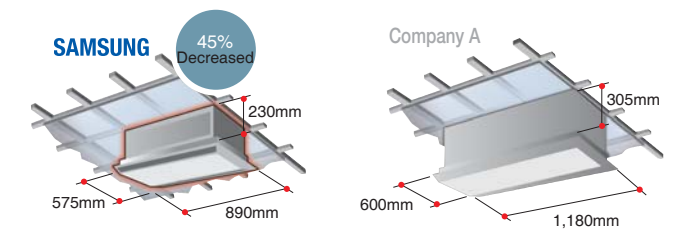
Twin Cross Flow Fan

The 2Way Cassette type unit is a perfect fit for long and narrow rectangular spaces. The Twin Cross Flow Fan inside the 2Way Cassette will spread cool or warm air even further and wider with less noise.



Small Size, Big Performance

The 2Way Cassette air conditioner is now 45% smaller than our competitors' models, making it even easier to incorporate into building design.



Duct Type

Hidden Source of Cool and Warm Air

Feel the power of cool air coming out from outlets that blend into the ceiling. This powerful indoor unit, concealed behind the ceiling, will constantly provide you with cool and warm air through multiple ducts, thanks to available variety of flexible installation options.



MSP Duct



Slim Duct



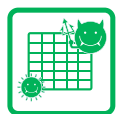
3 Star Hotel, Portugal

Icon Description

Clean Filter System

The anti-bacteria filter and the filter cleaning indicator provide you with cleaner, healthier air. Easily improve the quality of your life by breathing fresh air every day.

Anti-bacteria Filter



Anti-Virus Filter

The anti-bacteria filter not only traps dust particles, but suppresses the proliferation of mold and bacteria.

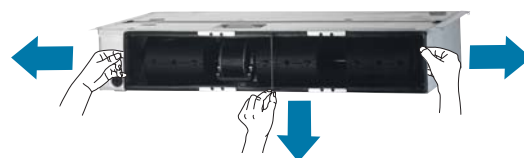


Easy Filter Cleaning

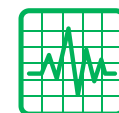


Easy Filter

After 1,000 hours of operation, the filter clean indicator will notify you that the filter should be cleaned. The filter can be easily removed from the bottom, left, or right of the unit. (1,000 hours is the default set time, which can be adjusted to 2,000 hours on the internal PCB.)

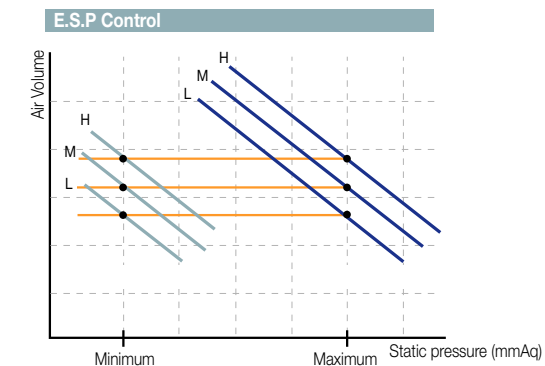


Smart Pressure Control



Smart Control

The Smart Pressure Control System adjusts fan speed according to E.S.P (External Static Pressure) so the air conditioner always provides you with consistent cooling and heating power, regardless of the surrounding environment.

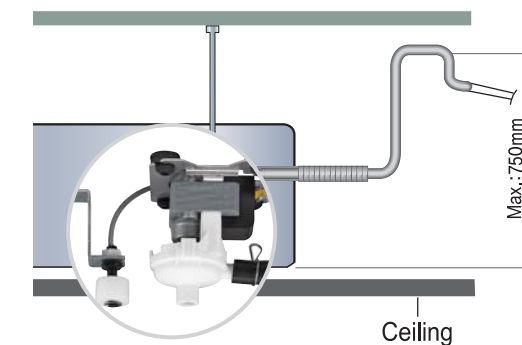


High Lift-up Drain Pump (Optional)



High Lift-UP

The lift-up drain pump lifts condensed water up to 750mm, compared to our competitors' limit of 700mm, allowing for flexible and convenient installation.

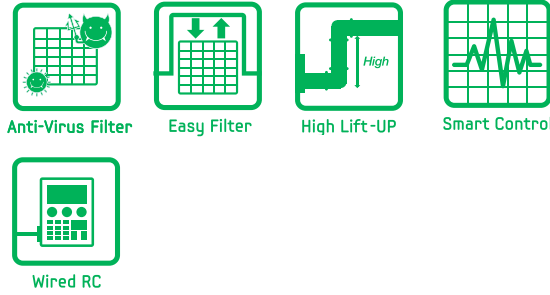


MSP Duct

Silent with Pressure Control

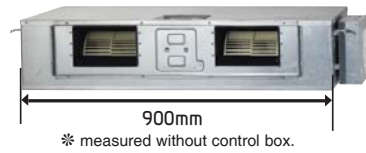


General features



Features

Narrow Width

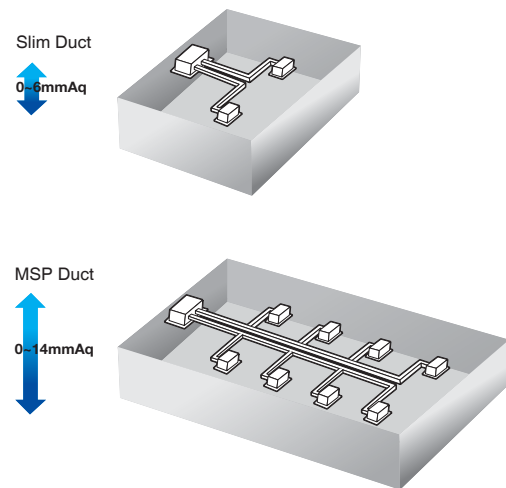


Silent Operation with the Static Pressure Control

The external static pressure control makes it easy to design the duct work to ensure efficiency and silent operation.

Strong and Large Coverage Area

The MSP duct features greater static pressure than most slim ducts: this enables you to design more inlets and outlets with longer duct work to provide even more cool or warm air to larger areas.



Easy to Maintain

Time and maintenance costs are reduced since parts are easily accessible.

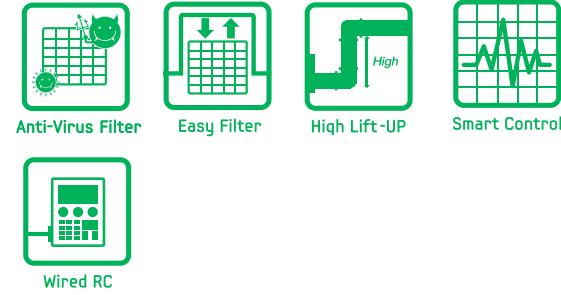


Slim Duct

Slim and Flexible



General features

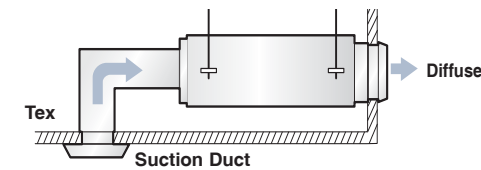


Features

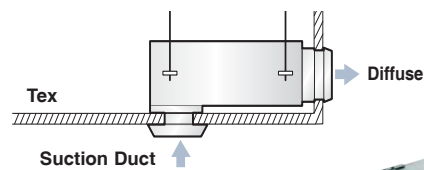
Flexible Installation

The air inlet can be set up on either the bottom or rear of the unit, giving you greater flexibility in installation.

1 Rear Side Air Inlet



2 Bottom Side Air Inlet



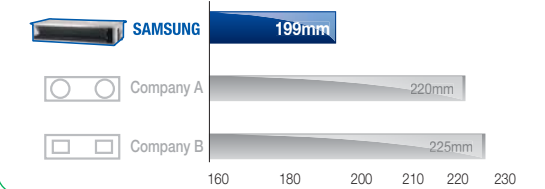
Easier Drain Pump Installation

New drain pump can be installed from the side by simply removing the right side panel. You no longer need to disassemble the top cover to install, check, or repair the drain pump.



Slim Design

Only 199mm thick, this slim design makes installation, maintenance, and repair easy to perform.



Easy to Maintain

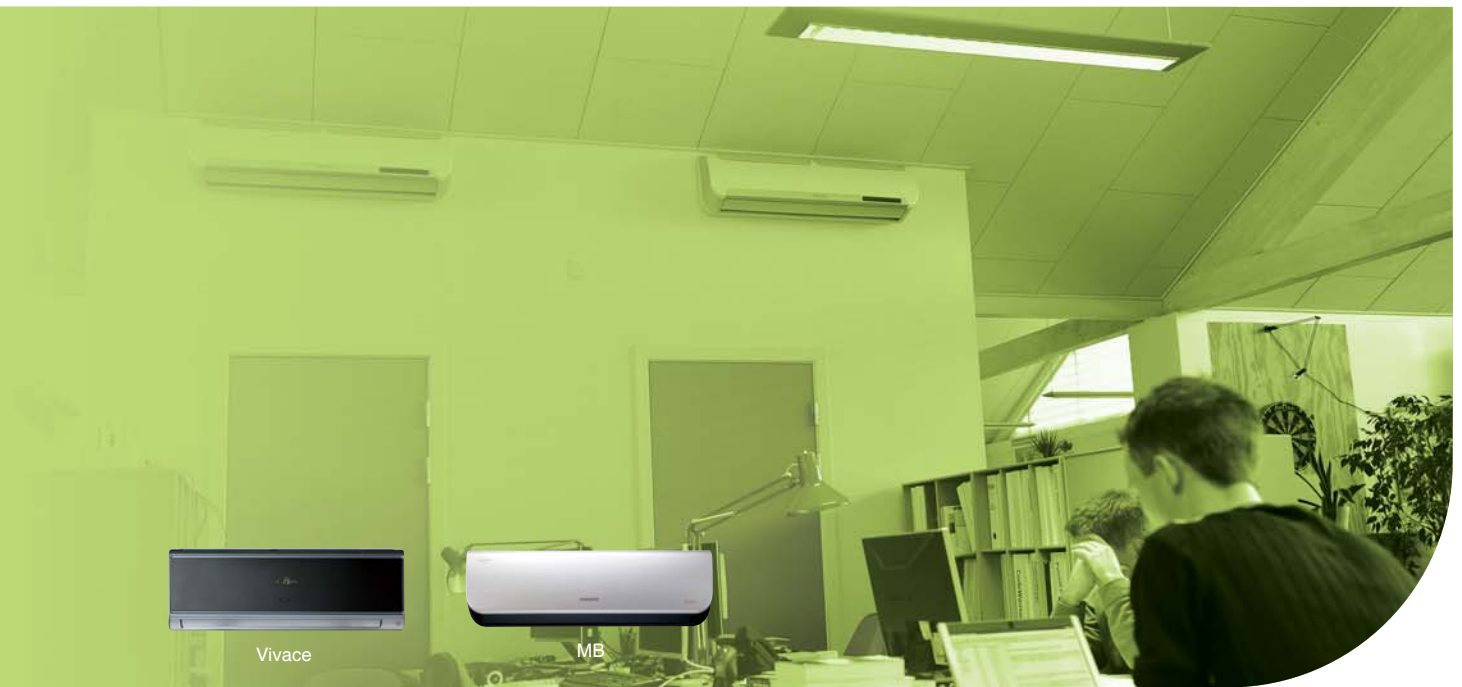
Parts are easily accessible by simply opening the bottom panel, which reduces time and maintenance costs for you.



Wall-mounted Type

Simple Design, Sophisticated Beauty

Installing a Samsung wall-mounted type indoor unit on your wall will add a sense of stylish sophistication to your decor. Not only are these indoor units attractively designed, but they also use advanced technologies to optimize your comfort.



Public Library, Italy

Icon Description

Double Cleaning

Samsung enhanced purifying system with advanced filter and smart S-Plasma ion. S-Plasma ion further cleans the air that has already been filtrated by the Full HD Filter to ensure a fresher and healthier environment.

step 1.

FULL HD FILTER

Samsung's high density filter blocks out dust and allergy-causing bacteria.

step 2.

S-Plasma ion

The air purifying device eliminates 99% of contaminant bacteria and viruses in the air.



FULL HD FILTER



Full HD Filter

Improved dust removability!

Samsung's Full HD Filter creates cleaner air with outstanding dust collection!



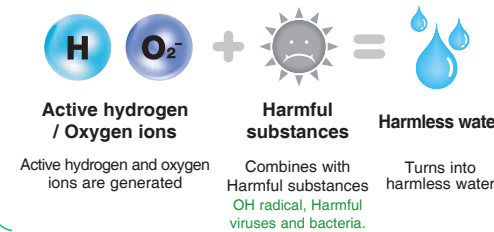
S-Plasma ion









S-Plasma ion

Do you know that harmful substances and viruses breed in the space you live in?

How S-Plasma ion Works



-  Active oxygen
-  molds
-  Ticks
-  Dust in the air
-  Airborne bacteria and viruses
-  Bacteria
-  High-allergen agents

S-Plasma ion improves your Indoor Air Quality and eliminates all your worries.

- Creation of an Intensely Purified Zone
- Protection against disease
- Safe from allergy-causing agents
- Controls active oxygen which can cause disease, cancer and accelerated aging

3D Wind

With Samsung's Wide Twin Blades, the air flows throughout the room evenly. The wider and longer blades provide advanced airflow in the room allowing you to experience a cooler environment in a shorter time.



Wide Twin Blade



Wide Twin Blade

Samsung's Wide Twin Blade can open up to 90 degrees for a more effective and reaching air flow. The longer twin blade ensures air reaches every corner of the room being cooled and more control in flow. Samsung offers the perfect solution in effective cooling with the Wide Twin Blade.



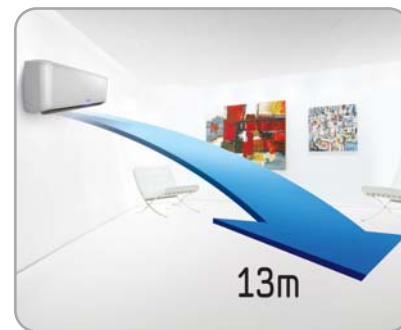
120° wide airflow

The airflow covers 120° angle for complete comfort.



90° airflow to the floor

Two blades individually flows air down to floor in 90°.



13m Longer distance coverage

The air distributes further throughout the room with long-range airflow.

Smart Saver



Smart Saver

In Smart Saver mode, the air conditioner's compressor operates in the least amount of time to cool the room, which saves electricity. With the Smart Saver, you can stop worrying about your electricity bill and start enjoying cool comfort.

*Outdoor Temperature at 30°C **Up to 31% Saving!**

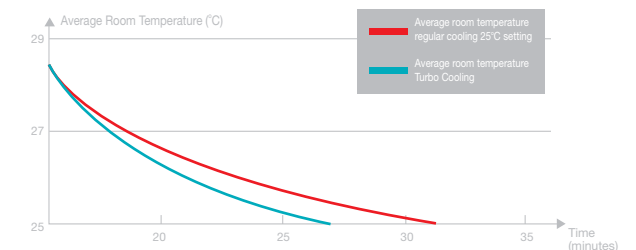
Model	Set Temperature	Mode	Power Consumption (4hr)	Power Saving Rate (Compared to regular mode)
Crystal (12K)	26°C	Regular Mode	1778	-
		Smart Saver	1230	31%
	24°C	Regular Mode	2201	-
		Smart Saver	1930	12%

Turbo Cooling



Turbo Cooling

Samsung's new air conditioner operates in its maximum speed in Turbo mode to quickly reach the set temperature. Instantly cool down your space with Samsung's Turbo Cooling technology.



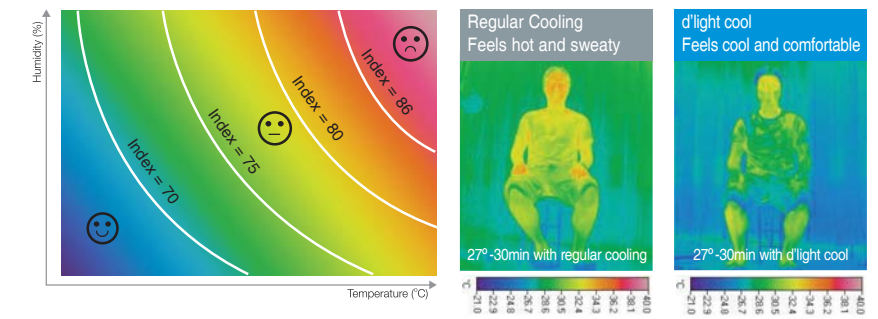
d'light cool



d'light Cool

Optimum temperature for best comfort

People can feel comfort or discomfort even at the same temperature due to the varying level of humidity in the air. Samsung's d'light cool system automatically checks the current humidity and temperature and adjusts for the most pleasant environment.



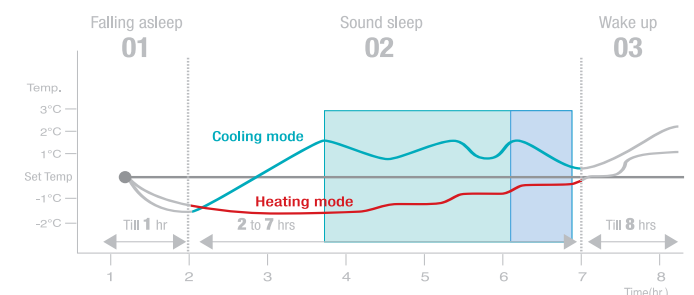
good'sleep



good'sleep

Best temperature for deep sleep

- 01 Falling asleep stage**
Eases you into sleep by dropping the temperature.
- 02 Sound sleep stage**
Relaxes your body and raises your temperature slightly.
- 03 Wake up stage**
Allows you to wake up from comfortable intermittent air and it makes you feel refreshed.



Y Series (Jungfrau Premium)

Extreme Saving with Style



NEW

General features



Smart Inverter

Smart inverter maintains ideal temperature without constant shutting off and on the compressor.



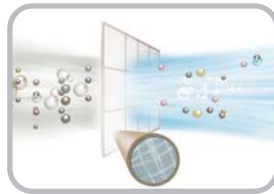
3D wind

The Wide Twin Blades and 4Way Auto Swing provide advanced airflow all around the room for even distribution.



Full HD filter

The Full High Density Filter collects up to 90% of dust and allergy causing bacteria.



d'light cool

This system automatically adjusts the temperature and humidity level to maintain the most pleasant degree.



S-Plasma ion

S-Plasma ion eliminates up to 99% of the biological contaminants in the air such as dust, bacteria and even H1N1 virus.

good'sleep

good'sleep automatically adjusts temperature and humidity for your good night's sleep.



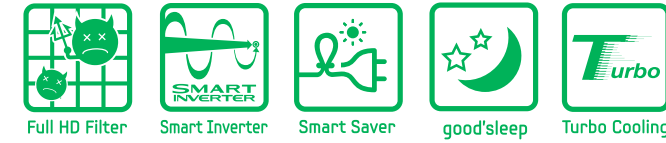
P Series (Maldives)

Maximum Cooling, Minimum Energy



NEW

General features



Smart Inverter

Smart inverter maintains ideal temperature without constant shutting off and on the compressor.



good'sleep

good'sleep automatically adjusts temperature and humidity for your good night's sleep.



Smart Saver

Smart Saver operates the air conditioner automatically in the least amount of time necessary to cool the room.

Quiet Mode

With less noise and vibration, you can always have quiet, peaceful life while staying comfortably cool.



Turbo Cooling

Turbo Cooling maximizes the speed of cooling and heating to quickly reach the set temperature.



Triple Protector (Option)

The powerful cooling system, constant volt control and effective anti-corrosion coating offer fresh cooling air for a long time.



Crystal

Feel Pure Ideal Comfort

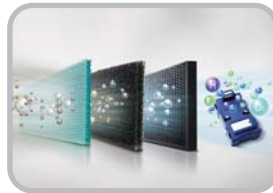


General features



Multi Filter System

Multi Filter System is composed of Catechin, Deodorizing and S-Plasma ion to keep your air clean and fresh.



Filter Cleaning Indicator

Always know when to clean the filter. The Filter Clean Indicator automatically alerts you when the filter needs to be cleaned with its illuminating blue light, usually after about 500 hours of use. Now, you can always keep your air conditioner clean. lowered energy consumption up to 50% and reduced the vibration to bring peace into your life.

Neo Forte/ Neo Forte-E

Fresh and Pleasant Cooling



General features



Multi Filter System

Multi Filter System is composed of Deodorizing filter to keep your air clean and fresh.



Internal EEV (Neo Forte-E)

EEV (Electronic Expansion Valve) equipped inside

- Easy installation and maintenance

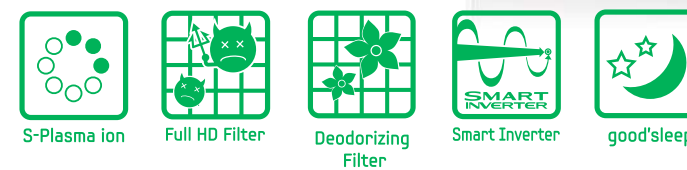


Vivace

Shadow Mirror

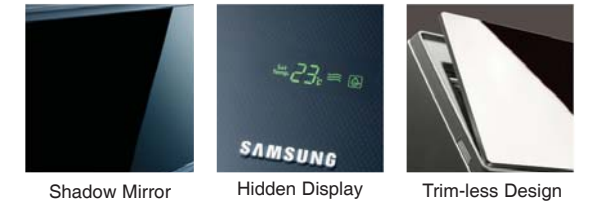


General features



Multi Filter System

Multi Filter System is composed of Deodorizing filter and S-Plasma ion to keep your air clean and fresh.



MB

Luxurious Refreshness



General features



Multi Filter System

Multi Filter System is composed of Deodorizing and optional DNA filters and S-Plasma ion to keep your air clean and fresh.



Auto Roof Shutter

This unique air conditioner automatically seals off to prevent dirt infiltration when not in operation.

Console & Ceiling Type

Small Idea, Big Difference

Console and Ceiling type indoor units are quiet unique inventions based on a small idea. By realizing the simple concept of having a different number of outlets for floor type units, and using an indoor unit on the both floor and ceiling, we've developed new products that offer a big improvement in air conditioning quality.



Console



Ceiling



Beynova Hotel, Turkey

Icon Description

Interior Design



Interior Design

By designing our products so they can be attractively placed almost anywhere, Samsung air conditioners add both comfort and style to your room.



Lightweight Unit



Lightweight

The extremely lightweight design makes maintenance and installation easy.



Silent Mode



Silent Mode

Indoor units operate quietly with the least possible noise.



S-Plasma ion

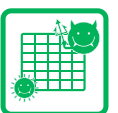


S-Plasma ion

The S-plasma ion improves your indoor Air Quality (IAQ) by eliminating biological contaminants that threaten your health such as viruses, bacteria, and allergens. S-Plasma ion, an advanced air purifying technology, offers you fresher, healthier air for you to enjoy.

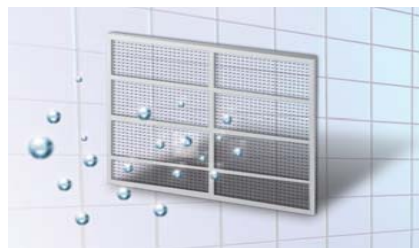


Anti-bacteria Filter



Anti-Virus Filter

The anti-bacteria filter not only traps dust particles, but also suppresses the proliferation of mold and bacteria.



Flexible Pipe Installation



Flexible

The drain pipe can be installed in 6 different places, giving you more options for where you can place your air conditioner.

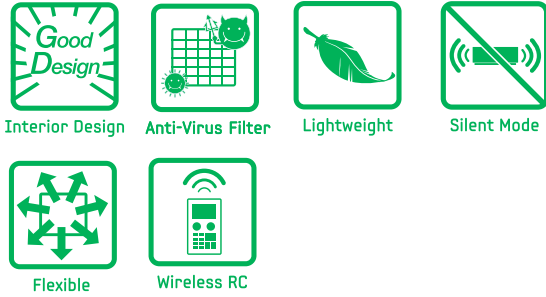


Console

Slim and Elegant



General feature



Features

Slim & Smart Design

This extremely slim design with Clean Panel adds aesthetic value to any interior.

1 Slim Design

You won't find anything slimmer than this: this new console type air conditioner is only 199mm thick, the slimmest on the market, and its unobtrusive design easily integrates into your decor.



2 Clean Panel

Stay clean with the intelligently designed Clean Panel. This unique panel keeps dust from accumulating, so the unit and your room stay cleaner.



3 Black Display

The touch screen display maximizes the convenience of control, and is an elegant example of functional art.

2Way Air Outlets

There are two separate air outlets for cooling and heating. The warmer air comes out from the bottom part of the air outlet to spread the warm air evenly throughout the room. Stay cooler and warmer in every corner of your room.



Silent Operation (23dB)

This silent yet powerful and efficient cooling and heating system makes your room more comfortable than ever before. Silent mode is available in 4 different operating modes: choose from High/Medium/Low/Silence.

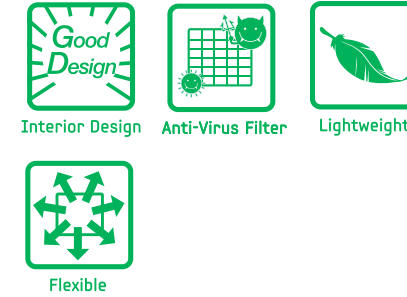


Ceiling

Powerful Air from Your Ceiling or Floor



General features



Features

2Way Installation

Depending on the available space and the purpose of the air conditioner, the indoor unit can be installed under the ceiling or on the floor.



Under Ceiling

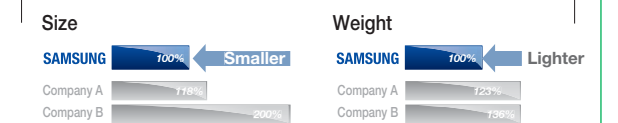


Floor Standing

Compact but Powerful

Samsung's ceiling type air conditioner boasts a slim, compact design –half the size of our competitors' –with cooling power comparable to our competitor's larger products.

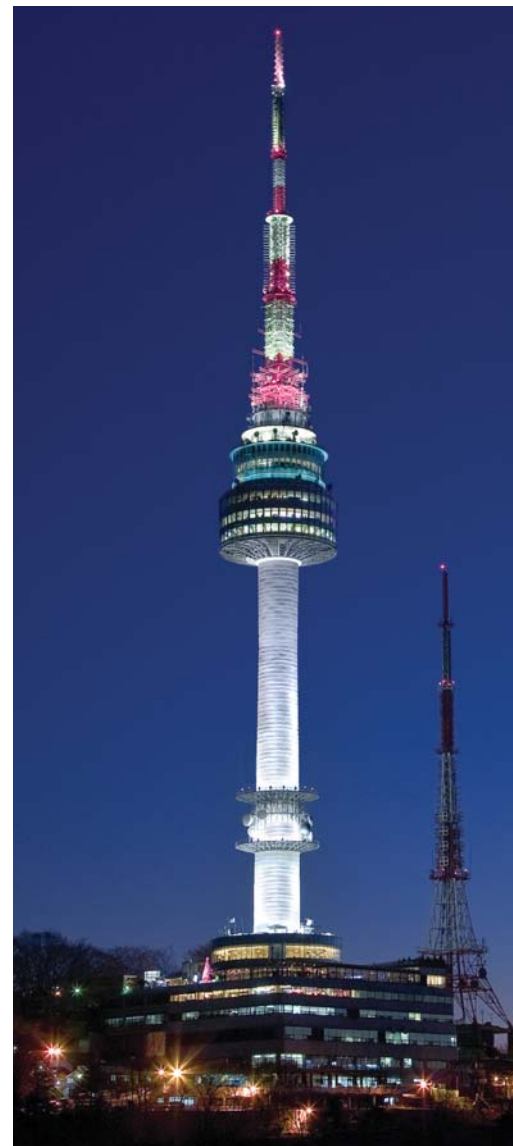
7.1kW Model



Breathe in the Freshness



Project N-Tower
 Location Korea
 Type Tourist Attraction



Project Tower Palace
 Location Korea
 Type Apartment



ERV System

Fresh and Healthy Air Supplier

Feel totally refreshed by breathing pure air anywhere and anytime indoors. Samsung's ERV system provides you with fresh and healthy air from outside while minimizing energy loss to maximize the efficiency.



ERV PLUS



ERV



Restaurant Kioupia, Greece

Overview

Necessity of Ventilation

Indoor air quality is gaining more and more attention since people are getting sick from contaminants within the air. Indoor air contaminants are often the cause behind sick house syndrome, asthma, headaches, dizziness.



Indoor Air Contaminants

Harmful Substances in Indoor Air and Illnesses they may Cause



Cigarette Smoke

Cancer, mucous membrane irritation, heart disease, and stroke



Asbestos

Asbestosis, Cancer



Formaldehyde (HCHO)

Irritations, allergic reactions, cancer



Volatile Organic Compound

Damage central nerve system, cancer



Carbon Monoxide (CO)

Laryngitis, decrease in heart and lung function



Nitrogen Dioxide

Decrease in lung function



Particle Contaminants

Cancer, respiratory ailments

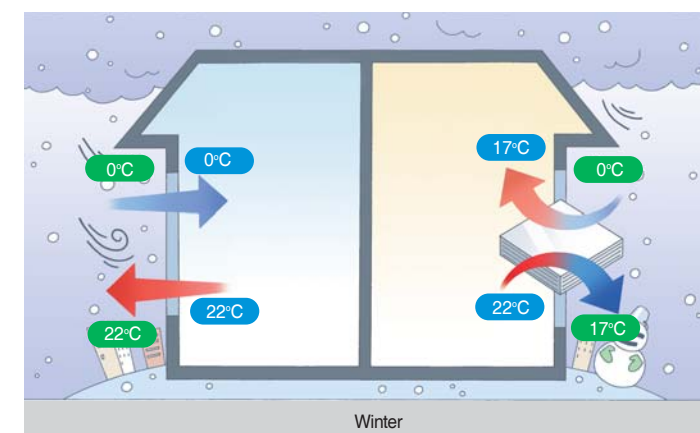
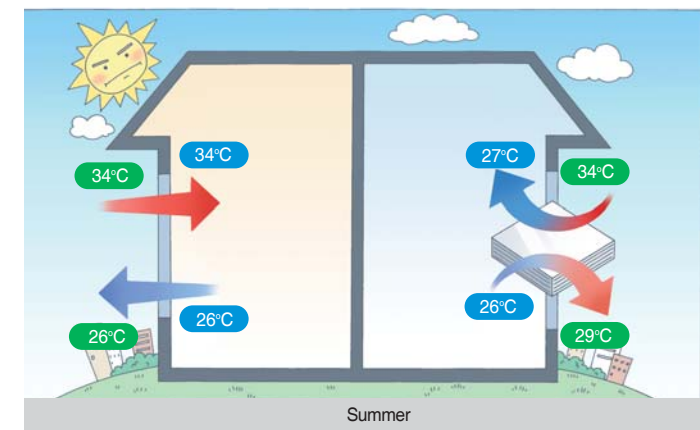


Insecticide

Ototoxic, hepatotoxicity

Energy Recovery Ventilation

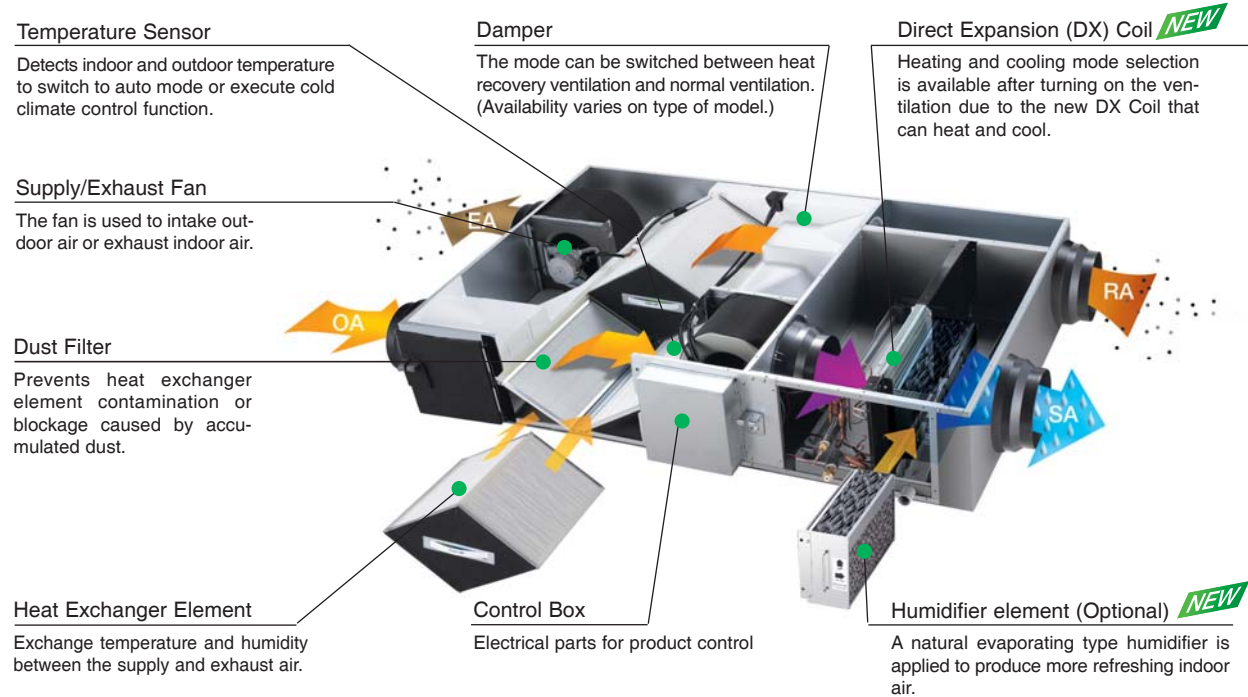
When ventilation is naturally achieved by opening your windows, the temperature inside your home is changed by the outdoor temperature during natural ventilation. Ventilation through ERV will have the same ventilation effect while maintaining the desired temperature inside your home.



ERV / ERV PLUS

ERV units are now available in two different product lineups. Conventional models are still available, and the new units are equipped with more advanced technologies to provide cleaner, more refreshing air.

ERV PLUS System Structure



Features of ERV/ERV PLUS



	ERV PLUS	ERV
Damper	●	●
Direction Expansion (DX) Coil	●	
Humidifier element (Optional)	●	
Supply/Exhaust Fan	●	●
Dust Filter	●	●
Heat Exchanger Element	●	●
Control Box	●	●
Temperature Sensor	●	●

Get Fresh Air without Temperature Loss

Direct Expansion Coil

The ERV Plus is equipped with a direct expansion coil to pre-condition the outdoor air that enters your indoor environment. Outdoor air will pass through the DX coil to produce fresh air without any temperature loss.



Maintain the Best Indoor Humidity Level

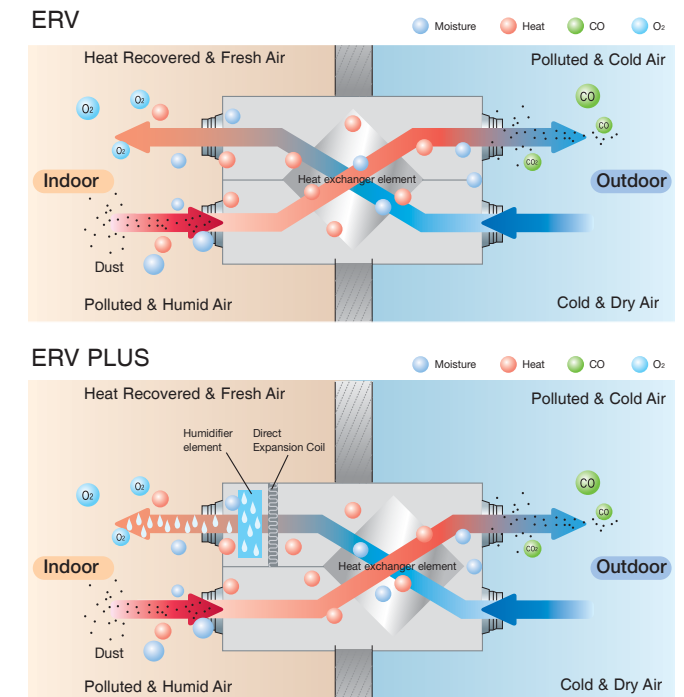
Humidifier Element (Optional)

Maintain the best indoor humidity level with our clean humidifier kit. Samsung's humidifier kit boasts high efficiency humidification with its large humidification area. Its self cleaning function, which sprays water from the top of the device when the set starts, also prevents bad smells.



Heat Recovering Method of ERV System

- Great ventilation efficiency is achieved with a 2Way ventilation design that has air inlets and outlets on both sides of the units.
- The remaining surface of the heat exchanging area is specially processed and structured to exchange heat energy while preventing the discharged contaminants from re-entering.
- Energy is recovered up to 70% (differs depending on the model) of the energy needed to cool or heat. This maintains the indoor temperature and humidity during the winter, and prevents outdoor heat and moisture from entering indoors during the summer.



Smart CO₂ Sensor and Humidity Stat

ERV automatically operates to give fresh air into room by detecting CO₂ with the CO₂ sensor (optional). You can also attach a humidity stat (procured locally) which will detect the humidity of the room and adjust its humidity level.



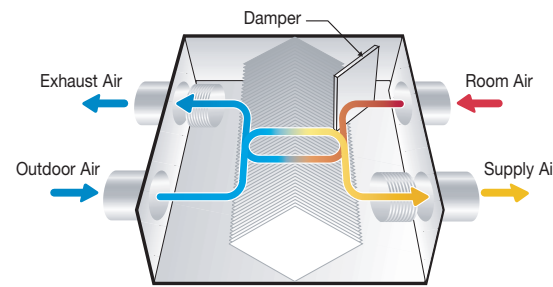
ERV / ERV PLUS

ERV units are now available in two different product lineups. Conventional models are still available, and the new units are equipped with more advanced technologies to provide cleaner, more refreshing air.

Common Features

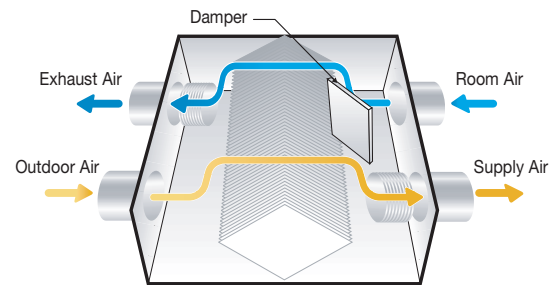
Energy Saving Operation (Auto Mode)

ERV automatically changes its operation mode depending on the temperature difference between your indoor and outdoor environment to save energy.



Extreme Climates (Winter & Summer)

The unit operates as ERV when there is a great difference in the temperature and humidity level between your indoor and outdoor environment.



Mild Climates (Spring & Fall)

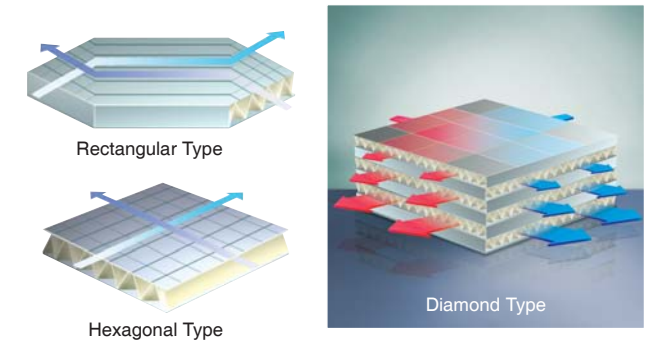
When the temperature and humidity level difference between your indoor and outdoor is small, it operates as conventional ventilation fan.

High Efficient Motor(BLDC)

Constant air volume is provided by BLDC motor.

New Diamond Type

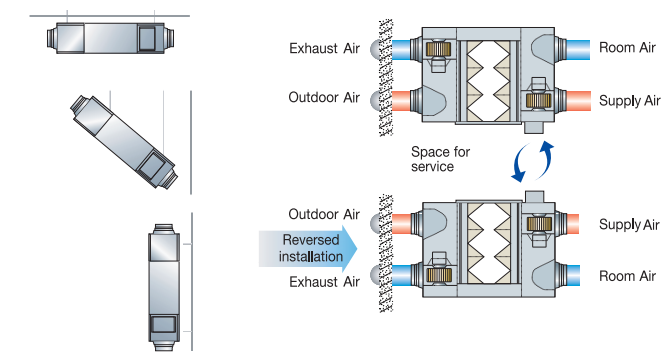
The new diamond type heat exchanger features optimized airflow design. This part is compact in size, but has high efficiency compared to conventional rectangular and hexagonal type heat exchangers.



Flexible Installation

The ERV system can be installed horizontally, vertically, and even diagonally. This installation flexibility will save you time on maintenance when installing more than one unit since you can reduce the number of service holes by installing the ERV with the control box facing a single service hole.

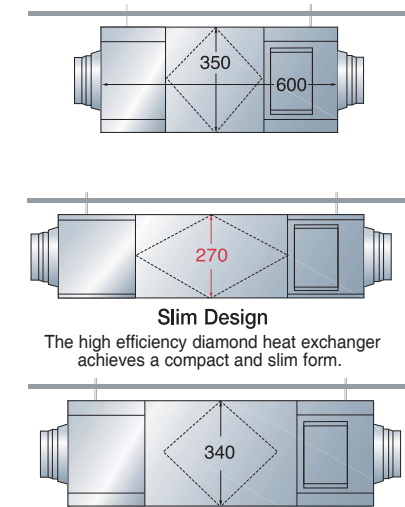
*Not applicable for ERV PLUS models.



Slim Design

Samsung's advanced technology has enabled us to design a slim and compact sized product.

By applying a highly efficient heat exchanger element, Samsung has been able to reduce the product's height to 270mm. Compared to units with rectangular type heat exchangers, Samsung's ERV units use space more efficiently with their slim design.



Silent Operation

Samsung's ERV units operate much more quietly compared to ordinary ventilators.



Convenient Management



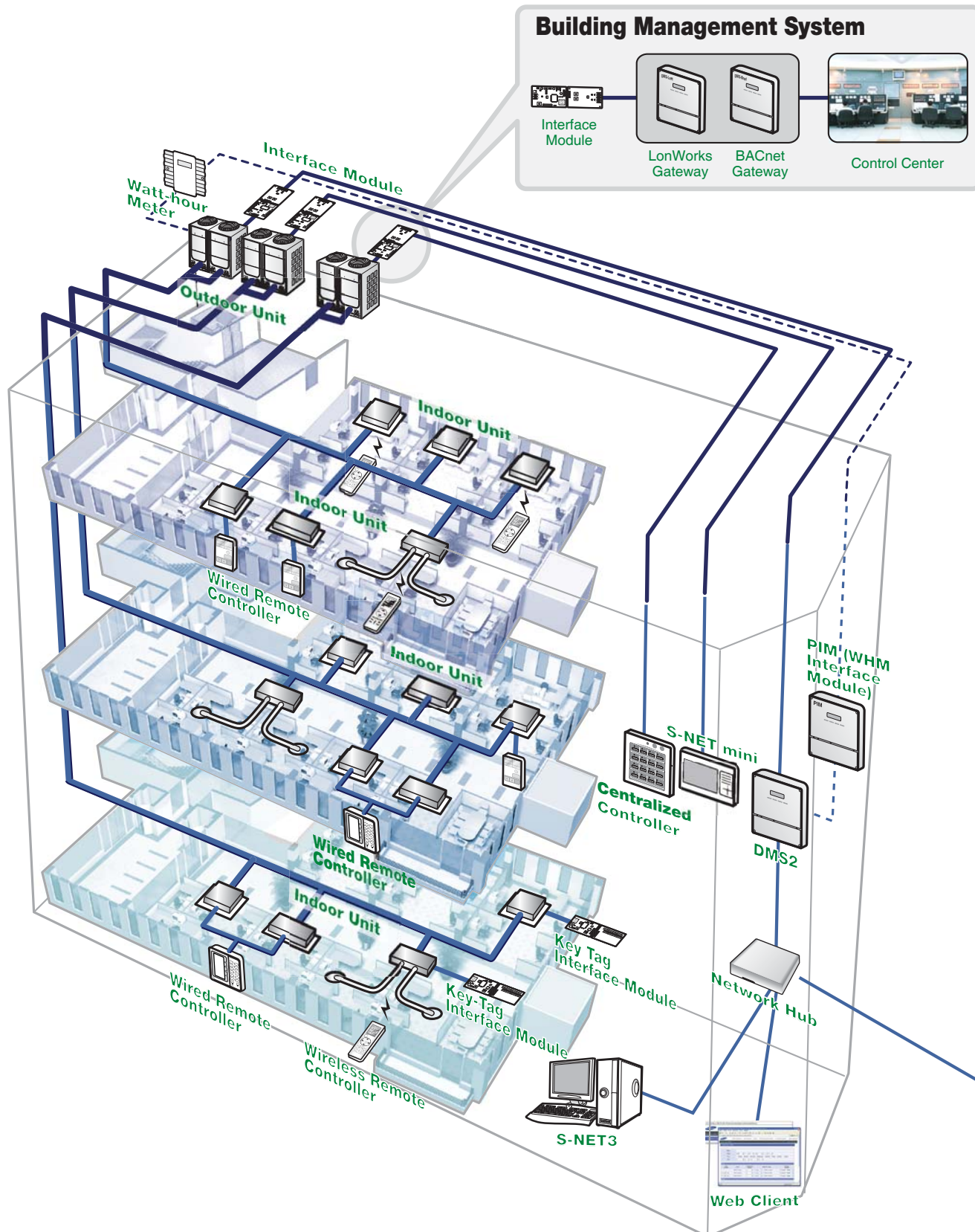
Project **DVM Building**
 Location **Croatia**
 Type **Business & Apartment Building**
 Indoor units **5328EA**
 Outdoor units **641EA**
 ERV **12EA**



- INTEGRATED MANAGEMENT 94
- CENTRALIZED CONTROL 103
- INDIVIDUAL CONTROL 104
- BUILDING MANAGEMENT 106

DVM System Structure

Samsung provides efficient management solutions ranging from a single product to a group of products to form a structured air conditioning system. Samsung's optimized management system is designed to ensure operational reliability and your satisfaction.



S-NET3

This integrated software connects to the internet to manage system air conditioners through DMS. S-NET3 supports up to 16 different DMSs installed in different buildings, enabling you to control system air conditioners in 16 different places from a single computer connected to the internet.



S-NET Mini

This upper level controller features a touch screen and can be directly connected to the system air conditioners through the centralized controllers or interface modules, allowing up to 256 indoor units to be controlled. S-NET mini also supports up to 4 DMSs to provide the same remote control functions as the S-NET3.



DMS2

DMS2 is an internet-based management device that stores and manages all the data relevant to the system air conditioner. It controls up to 256 indoor units –including ERV and AHU units –and its built-in web server allows access from multiple upper-level controllers. (S-NET3, S-NET mini, Web Client)



Centralized Controller

The centralized controller controls up to 16 groups (256 indoor units) of system air conditioners. It can control the system air conditioners individually or in groups, and it supports many other functions.



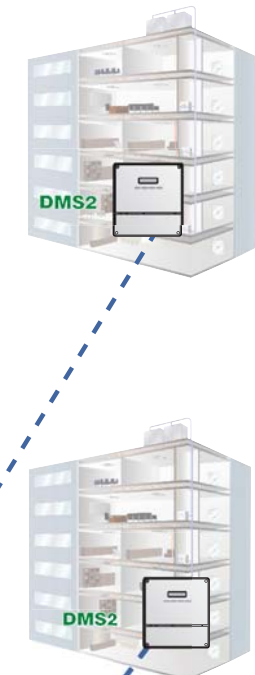
Interface Module

The interface module transmits data between the outdoor units and the upper level controllers.



Wired Remote Controller/ Wireless Remote Controller

These individual controllers are used to control single indoor units.



Integrated Management

For relatively larger places with many indoor and outdoor units to manage, you need a control solution that is easy and convenient to manage. Samsung's Integrated management system is the perfect choice for managing large and middle-sized buildings.

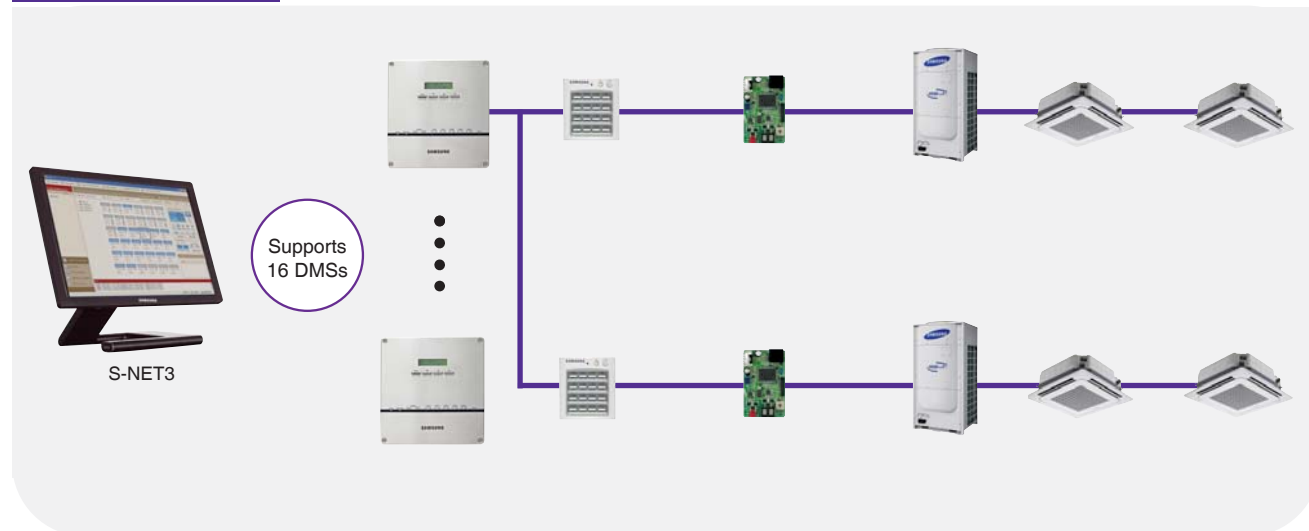
S-NET3 You can manage a group of buildings with the S-NET3 through Data Management Servers that individually manage each building. The S-NET3 provides flexible and complete control for a wide variety of applications.



MST-P3P

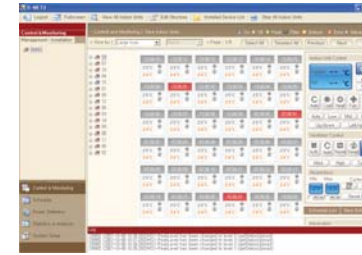
- Fully integrated PC management software.
- Up to 16 DMSs connection through the Ethernet.
- Central management of up to 4,096 indoor units including ERV, ERV PLUS, AHU
- Schedule/Zone control.
- Error/Operation history management.
- Power distribution management and analysis.

S-NET3 System



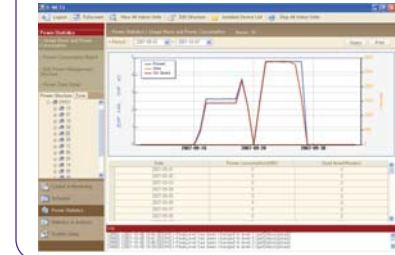
Control and Monitoring

- Control & monitoring of up to 4,096 indoor units including ERV, ERV PLUS, AHU
- Wireless/wired remote control restriction
- Temperature limit setting
- Operation mode lock
- Multiple/full indoor unit selection
- Icon-based indoor unit display mode



Power Distribution Management

- Data query for power distribution and operation time
- Power distribution report generation and printing
- Time section setting for different electricity rates
- Group setting for power distribution summary



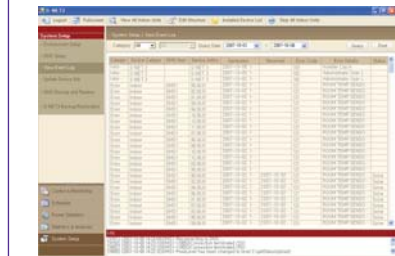
Schedule Control

- Graphical schedule settings
- Weekly, Daily schedule control
- Exception date setting



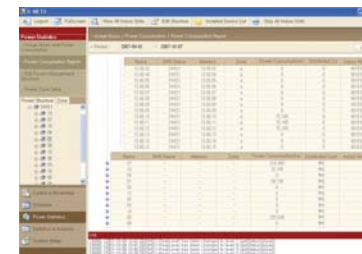
History Management

- Error/Event history management
- Indoor unit operation history management
- Report generation and printing



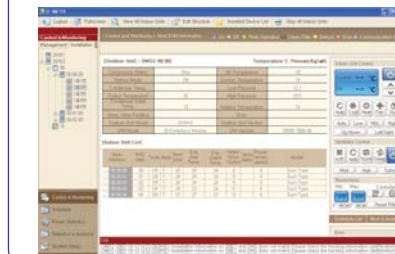
Zone Management

- Management structure customization regardless of installation structure
- Control zone creation/edition/deletion
- Tree structure zone management control



Cycle Monitoring

- Monitoring outdoor/indoor unit cycle data (Supported for specific outdoor unit models)



Integrated Management

For relatively larger places with many indoor and outdoor units to manage, you need a control solution that is easy and convenient to manage. Samsung's Integrated management system is the perfect choice for managing large and middle-sized buildings.

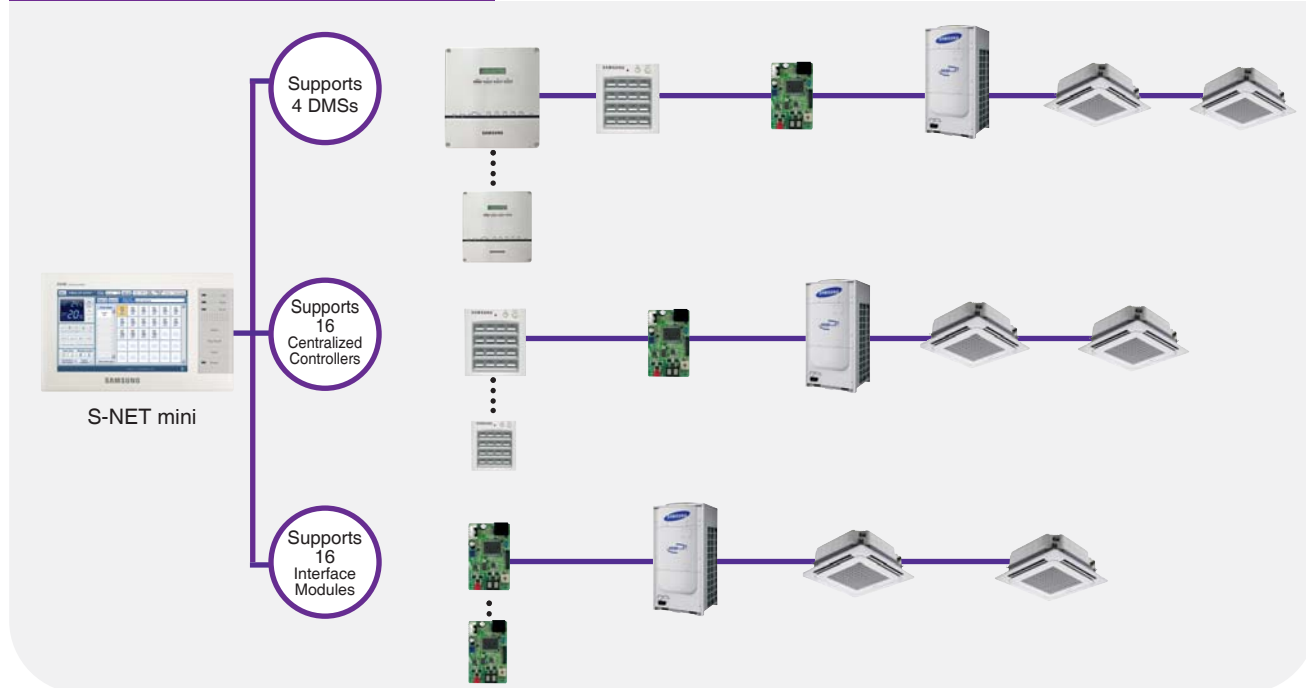
S-NET Mini The S-NET mini supports up to 4DMSs to provide the same remote control functions as the S-NET3. This touch screen controller can be directly connected to the system air conditioner through the centralized controller or interface modules, allowing for control of up to 256 indoor units.



MST-S3W

- Flexible compatibility options (DMS, centralized controller, interface module)
- Central management of up to 256 indoor units including ERV, ERV PLUS, AHU
- Detailed cycling information monitoring
- Schedule function (Weekly, Daily)
- USB keyboard support
- Error display
- 7-inch wide LCD display
- Temperature limit setting
- Touch screen
- Zone control
- Child-lock setting
- Operation mode lock
- External contact control.

Dynamic Compatibility Option



Control and Monitoring

- Control & monitoring of up to 256 indoor units including ERV, ERV PLUS, AHU
- Operation control and monitoring
- Detailed operation cycling information monitoring
- Wireless/wired remote control restriction setting



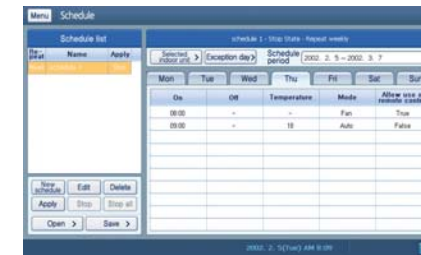
Central Restriction Function

- Upper/Lower temperature limit setting
- Operation mode lock



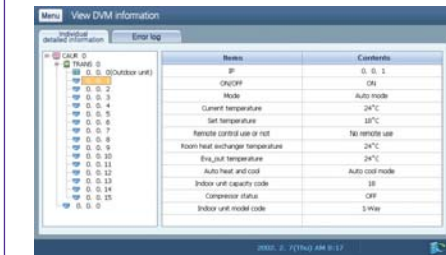
Schedule Control

- Maximum 256 Weekly, Daily schedule control
- Schedule repetition, exception date setting
- Schedule edit (add, edit, delete)
- Detailed operation schedule setting
- Remote control restriction option setting



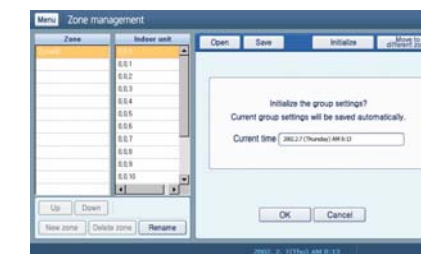
Cycle Monitoring

- Outdoor/Indoor unit cycling information monitoring (supported for specific outdoor unit models)



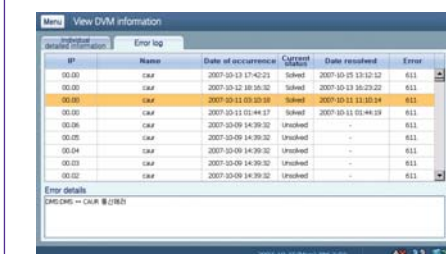
Zone Management

- Management structure customization regardless of installation structure
- Control zone creation/edition/deletion



Error Management

- Error history management
- Error management information query
- Detailed error information query



Integrated Management

For relatively larger places with many indoor and outdoor units to manage, you need a control solution that is easy and convenient to manage. Samsung's Integrated management system is the perfect choice for managing large and middle-sized buildings.

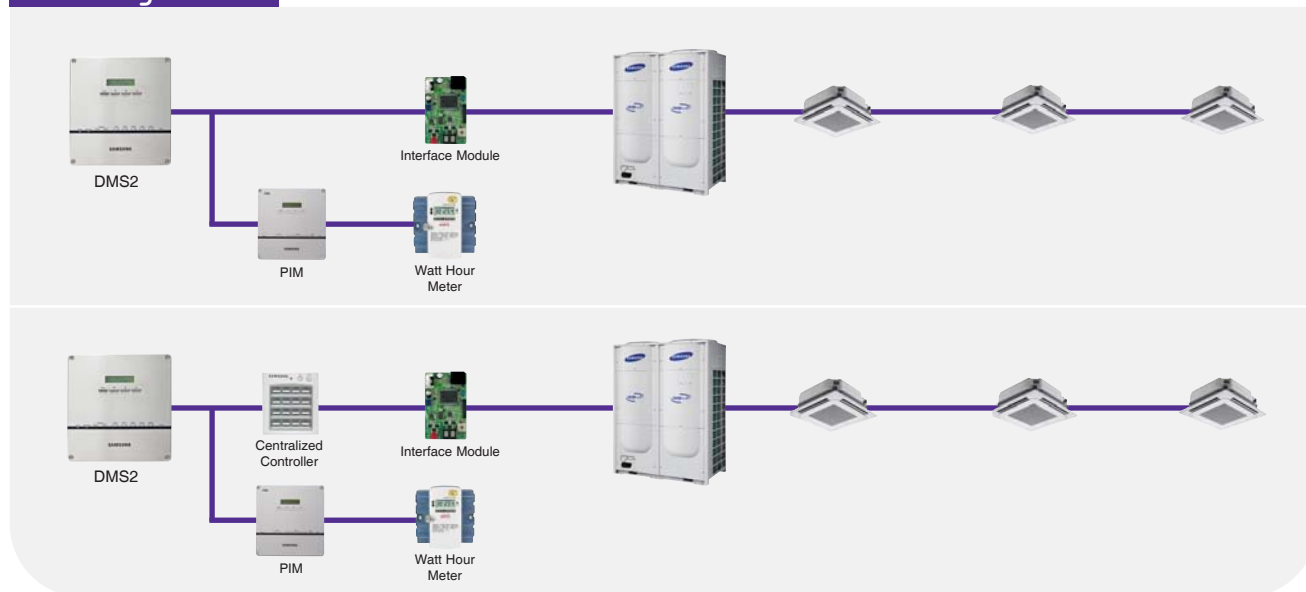
DMS2 The newly improved Data Management Server has gotten smarter: it can manage a variety of different air conditioning units, and the newly upgraded functions can automatically manage your air conditioning system for you.



MIM-D00A

- Built-in web server for PC-independent management and remote access control
- Multiple upper-level control access (S-NET3, S-NET mini, Web-client)
- Central management of up to 256 indoor units including ERV, ERV PLUS, AHU
- User editable control logic
- Accessible level management
- Dynamic security management
- Operation & error history management
- Weekly/Daily schedule control
- Power distribution function
- Current time management even during power failure (for 24 hours)
- Data storage in non-volatile memory & SD memory
- Emergency stop function with simple contact interface

DMS2 System



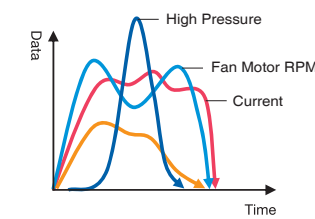
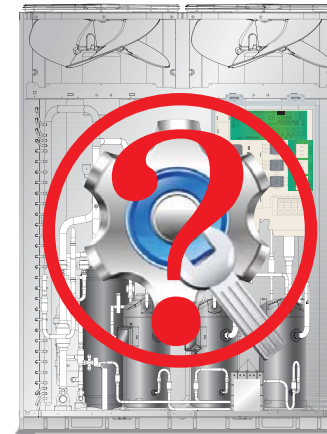
Easy Control & Monitoring

- Control and monitoring of up to 256 indoor units via internet network
- Operation on/off
- Operation mode, fan speed, temperature setting
- ERV, ERV PLUS, AHU support



Air-Conditioning Operation Monitoring

- No need to open each outdoor units
- Detailed refrigerant flow check in control room
- Reduced service lead time



Master Outdoor	01	Oil recovering	None	Operation Mode	Heat
Operation Status (start-up)	SafetyStart	Total capacity of Indoor	10.8KWh	Defrost status	Off
Heating capacity ratio	100.0%	Number of outdoor units	2	Oil balancing	11Step

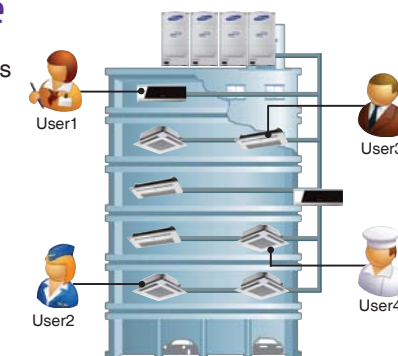
Unit address	00	Outdoor temperature	---	Model	DVM-PLUS3 HR
Suction temperature	13°C	Condenser outlet temp.	---	Oil / OLP temperature	75°C
Comp 1	Off	Comp 2	Off	Comp 3	On
Main cooling valve	On	Hot Gas Valve	Off	Outdoor capacity	0HP
4Way Valve	Off	Liquid Bypass Valve	On	EVT Bypass Valve	On
Running current(Comp.1)	7.8A	Running current(Comp.2)	7.4A	Running current(Comp.3)	0.0A
High pressure data	---	Low pressure data	---	Double tube temperature	12°C
Main expansion valve map	---	EVT(Liquid) EEV	---	HR EEV(Gas Liquid EEV)	---
Discharge-1 temperature	20°C	Discharge-2 temperature	59°C	Discharge-3 temperature	54°C
Outdoor Fan Step	0 STEP	Loading Time	36 Sec	Accumulator CCH	Off
CCH1	Off	CCH2	Off	CCH3	Off



Indoor Unit On/Off Time Storage

- Operation history that records data for up to 6 months

Device type	Occurrence time	Control Unit	Control type	Controlled device
DVM	2010.01.15 10:57:25	DMS Web	Upper controller control	00.00.00, 00.00.00, 00.00.00
DVM	2010.01.15 10:57:25	DMS Web	Upper controller control	00.00.00, 00.00.00
Control device(DMS)				
Control device type : DVM				
Power : On				
DVM	2010.01.15 20:02:37	DMS Web	Upper controller control	00.00.00, 00.00.00



Storage parameters

1. Indoor unit address and name
2. On/Off time (year, month, day, hour, min)
3. Operation mode (Cool, Heat, Auto, Fan, Dry, Stop)
4. Set/Room temperatures

Storage Period - At least 6 months

Smart Central Management

- Control & monitoring zone edition
- Wireless/wired remote control restriction
- Temperature limit setting
- Operation mode restriction

Zone A

- Cooling only/No remote controller/ Minimum setting temperature in cooling is 20°C

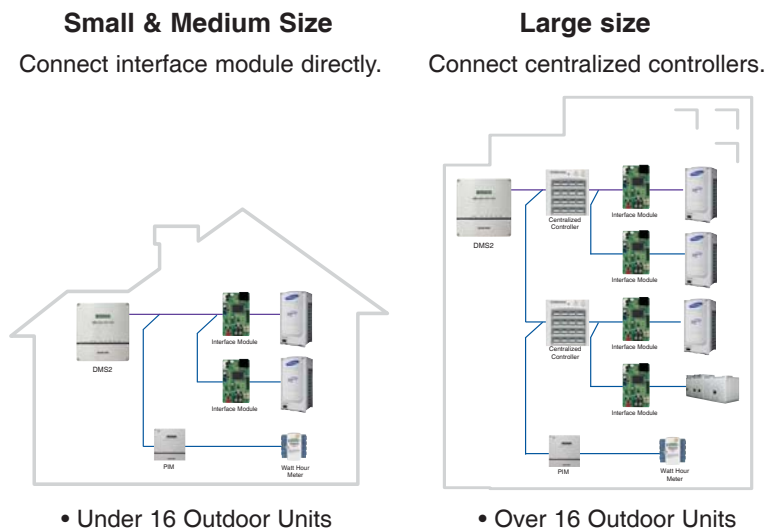
Zone B

- Cooling only/Remote controller use



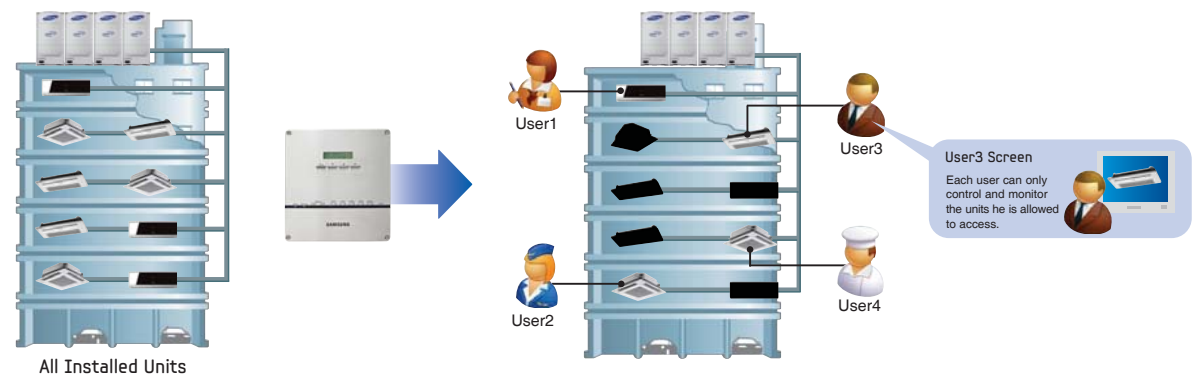
Flexible Connectivity

- Indoor unit control via Centralized controllers or interface modules directly
- Select connection point according to site



Accessible Level Management

- It is possible to specify the scope of control and monitoring unit by each user.



Enhanced Graphical Display

User friendly icon-based unit control

Zoom in & Zoom out icon display

Color indication and icons make it easy to recognize indoor unit status

Convenient & stylish controller

Dynamic User Security Management

General users, managers, and administrators can be registered separately by ID and password. Administrators (utility managers) have the authority to set access levels for DMS2 functions on users.

Functions	Admin	Manager	User
	Access All	Changeable	
Control / Monitoring	O	O	O
Zone Management	O	O	X
Schedule	O	O	O
Power Distribution	O	O	X
System Configuration	O	X	X

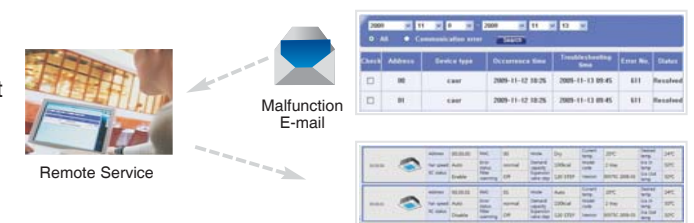
Powerful Data Backup

- Important data is safely stored on SD memory card.
1. Indoor/outdoor unit name
 2. Power distribution data
 3. Operation history (On/Off by DMS)
 4. DMS power On/Off history
 5. System configuration
 6. Others



Rapid & Easy Service Response

- Remote control and monitoring through the Internet (In case public IP is used)
- E-mail notification to private internet account in case of malfunction



Useful History Management

- DMS2 records indoor unit operation and error occurrence history.
- Recorded history makes it convenient to analyze air-conditioner operation and perform unit maintenance.

Operation History

1. Operation On/Off execution time
2. Daily accumulated operation On time
3. Schedule operation execution time

Error History

1. Error occurred unit name
2. Error details
3. Error occurrence/clear time
4. Error state (solved / unsolved)

Speed-up Hardware Improvement

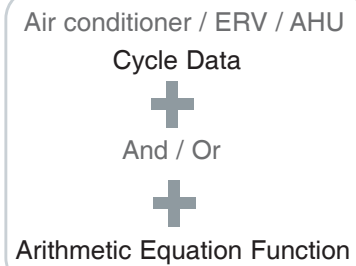
Improved hardware allows you to access your air conditioner faster than ever before.

- CPU upgrade (800MHz)
- Ethernet 100base-T (100Mhz)
- RS485 communication channel increase (1 channel → 5 channels)

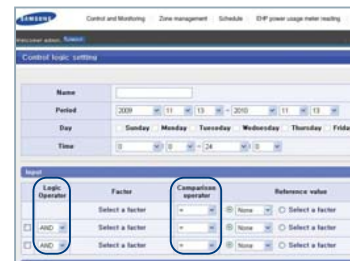
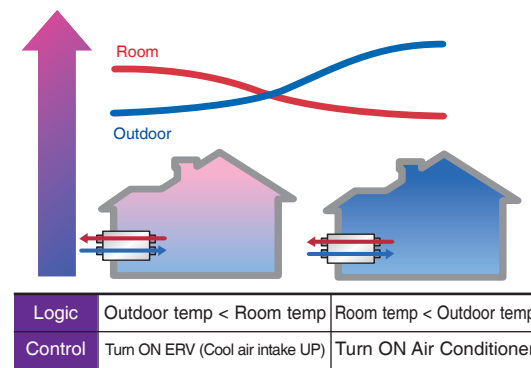


User Editable Control Logic

- User can edit control logic with arithmetic/ conditional operators and parameters.
- Energy can be efficiently used and reduced for various operation conditions.

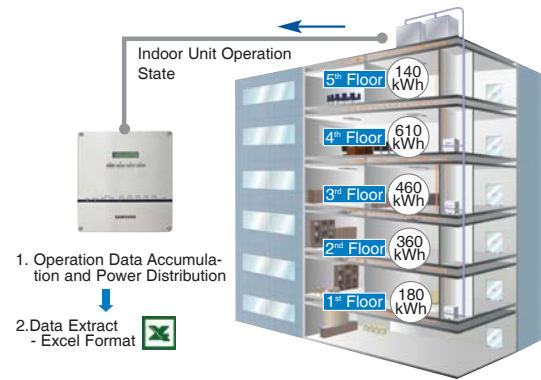


Example: Energy saving function, operation adjustment depending on outdoor temperature



Power Distribution System

- Power distribution to a maximum of 256 indoor units
- Data query for watt-hour, usage time, and usage ratio
- Files are saved in Microsoft Excel format.
- 1-year power distribution data is saved in storage.
- Current actual power consumption monitoring
- Current-type electricity meter support (CT ratio input)



1. Operation Data Accumulation and Power Distribution
2. Data Extract - Excel Format

More Extended Contact Interface

- Interlocking with external emergency system for emergency control
- System operation and error signal output
- Contact input and output for interface with a general purpose device (Maximum of 16 contacts)
- Direct contact output control and input monitoring



Centralized Control

Samsung's centralized control system offers easy and convenient control of individual indoor units or entire groups of multiple units.

Centralized Controller

MCM-A202D

- Maximum of 16 group controls (Maximum of 256 Indoor units)
- Unified/Individual indoor unit control (On/Off)
- Wireless/wired remote control restriction
- Cooling/Heating mode control
- Indoor unit error display

MCM-A202D is compatible with MCM-A202A and MCM-A202B



Function controller

MCM-A100

- ON/OFF, Operation Mode, Fan Speed, Airflow, Temperature setting
- Error display
- Filter replacement alarm reset
- Control and monitoring of up to 16 indoor unit groups

The Function Controller must be connected to MCM-A202D to operate.



Operation Mode Selection Switch

MCM-C200

- Operation mode selection (Cooling, Heating or Auto)
- Mixed operation mode protection



Interface module

MIM-B13D

- Communicator between indoor/outdoor units and the centralized controller
- MIM-B13D must be used when controlling a group of less than 16. (If it is not used for group control, then MIM-B13D has to be used.)
- MIM-B13D supports the DVM, FJM, CAC, ERV and ERV PLUS.



MIM-B13E

- Communicator between indoor/outdoor units and the centralized controller
- MIM-B13E is compatible with MIM-B13A and MIM-B13B.
- MIM-B13E must be used when controlling a group of more than 16.
- MIM-B13E supports the DVM, FJM, CAC and ERV. (It doesn't support the ERV PLUS.)



Individual Control

There is a variety of wired and wireless controllers that enable you to easily control your air conditioners. Take a look at which controllers offer the options you want, and choose the ones that best suit your air conditioning environment.

Wireless remote controller

MR-DH00

- ON/OFF, Operation Mode, Fan Speed, Airflow, Temperature Setting
- Filter replacement alarm reset
- Simple schedule control
- Wide display
- Soft touch button
- Individual blade control (supports specific indoor unit models)
- Multi-channel wireless remote control (maximum of 4 channels)



Wired remote controller

MWR-WE10

- ON/OFF, Operation Mode, Fan Speed, Airflow, Temperature Setting
- Individual and group control (Maximum to 16 indoor units)
- Error display
- Filter replacement alarm reset
- Sleep & Silent mode
- Built-in Room Temperature sensor
- Child lock
- Automatic stop mode
- Wireless remote control restriction
- Clear & Bright screen with LCD backlight
- Unified controller (AC, ERV, ERV PLUS, AHU)
- Different permission levels
- Weekly schedule setting (A/C, ERV, A/C+ERV)
- Exception date setting
- Individual blade control (Supported the specific indoor unit models)



MWR-WH00

- ON/OFF, Operation Mode, Fan Speed, Airflow, Temperature Setting
- Built-in Room Temperature sensor
- Child lock
- Automatic stop mode
- Sleep & Silent mode
- Simple schedule control
- Different permission levels



Wireless Signal Receiver

MRK-A00

- ON/OFF control
- Operation indication
- Error Indication
- Filter replacement sign
- Use with receiver wire, MRW-10A



Simplified Wired Remote Controller

MWR-SH00

- ON/OFF, Operation Mode, Fan Speed, Airflow, Temperature Setting
- Individual and group control (Maximum of 16 indoor units)
- Error display
- Filter replacement alarm reset
- Mode selection protection



ERV Wired Remote Controller

MWR-VH02

- Individual and group control (Maximum of 16 ERVs)
- On/Off control
- Operation mode (By-Pass, Heat Exchange), fan speed
- Simple schedule control
- Error display
- Synchronized operation with indoor units



External room sensor

MRW-TA

- External sensor to sense exact user environment temperature



7day Scheduler

MWR-BS00

- Up to 100 weekly and daily schedule settings
- Schedule setting based on 1-minute time units
- Digital clock display
- Permanent schedule setting storage
- Current time protection from blackout (maximum of 3 days)
- Use with wired remote controller or centralized controller (MCM-A202D)



Building Management

Samsung's excellent building management system with convenient monitoring makes management of your air conditioning units much easier.

BACnet gateway



MIM-B17

- Interface for BACnet management system
- Maximum of 256 indoor units. ERVs support with maximum of 16 interface modules
- Combinational use of BACnet and S-NET3/ S-NET mini
- Included DMS2 functions

Control

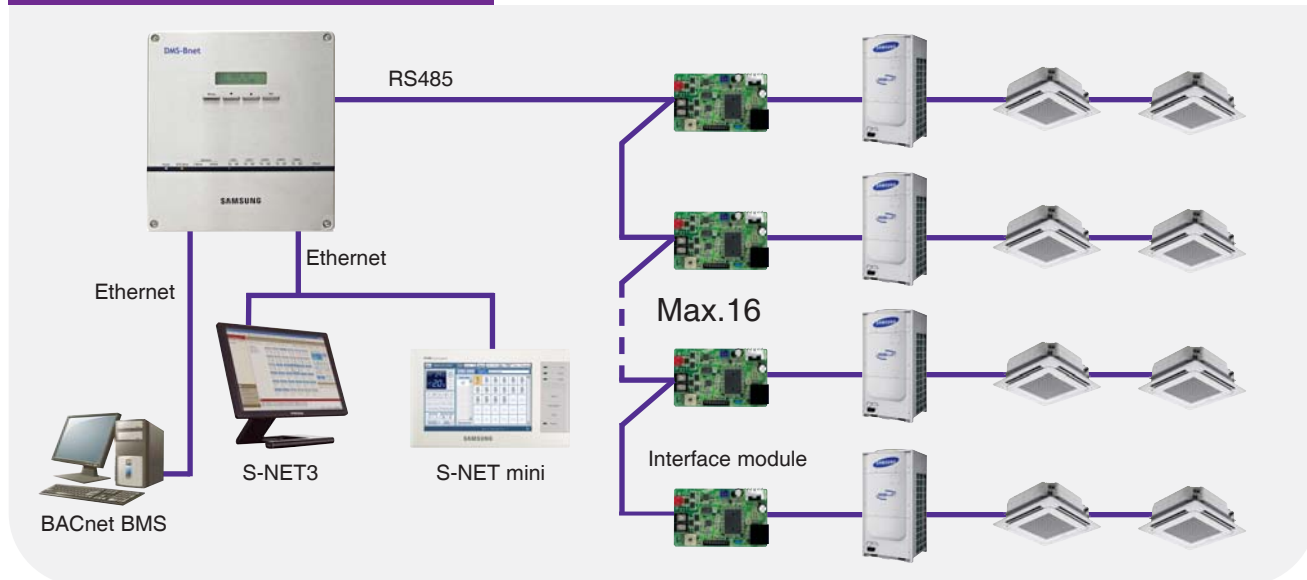
- On/Off control
- Operation mode
- Temperature setting
- Fan speed/direction
- ERV operation mode
- ERV fan speed

- Filter alarm reset
- User control restriction
- Operation mode lock
- Set temperature limit
- Emergency stop
- Output contact control

Monitoring

- On/Off control
- Operation mode
- Set/Room temperature
- Fan speed/direction
- ERV operation mode
- ERV fan speed
- Thermo Off/On
- Power distribution
- Operation mode lock
- Set temperature limit
- In/Out contact state
- Emergency stop
- Filter alarm
- Error code
- User control restriction

Connection



LonWorks gateway



MIM-B18

- Interface for Lon-Connection to LonWorks management system
- Max. 128 indoor units, ERVs support with a maximum of 16 interface modules
- Combinational use of LonWorks and S-NET3/ S-NET mini
- Includes DMS2 functions

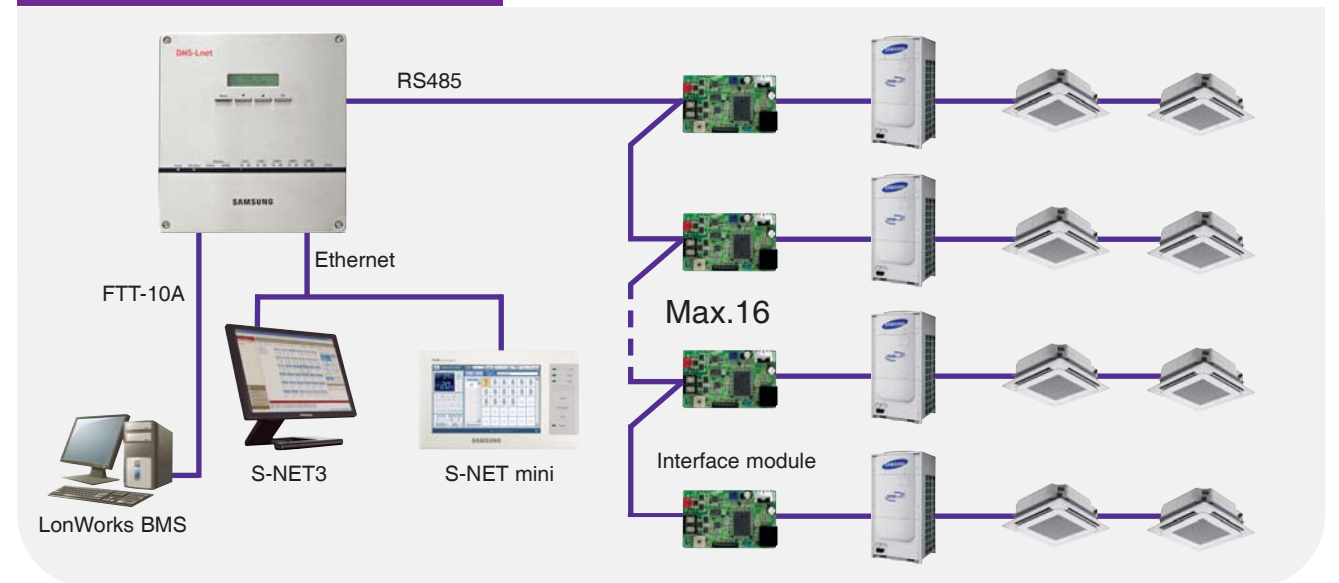
Control

- On/Off control
- Operation mode
- Temperature setting
- Fan speed/direction
- ERV operation mode
- ERV fan speed

Monitoring

- Filter alarm reset
- User control restriction
- Operation mode lock
- Set temperature limit
- Emergency stop
- Output contact control
- On/Off control
- Thermo Off/On
- Power distribution
- Operation mode lock
- Set/Room temperature
- Fan speed/direction
- Set temperature limit
- In/Out contact state
- Emergency stop
- Filter alarm
- Error code
- User control restriction

Connection



LonWorks Interface Module

MIM-B07

- Interface for Lon-Connection to LonWorks management system
- Quick and easy installation
- Up to 12 indoor units can be controlled
- Communication : RS485 to LonWorks
- Upper Physical Layer: FTT-10A



BMS Control Function

- On/Off control
- Temperature setting
- Operation mode
- Fan speed

Monitoring Function

- On/Off
- Operation mode
- Room temperature
- Error information

Building Management

Samsung's excellent building management system with its convenient monitoring functions make management of your air conditioning units much easier.

Watt-hour Meter Interface Module

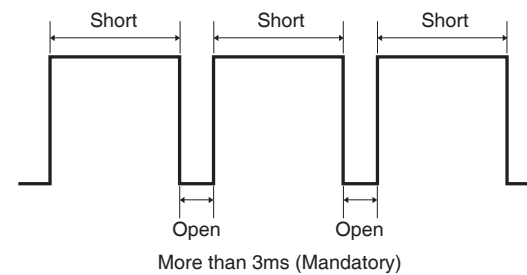


MIM-B16 PIM (Pulse Input Module)

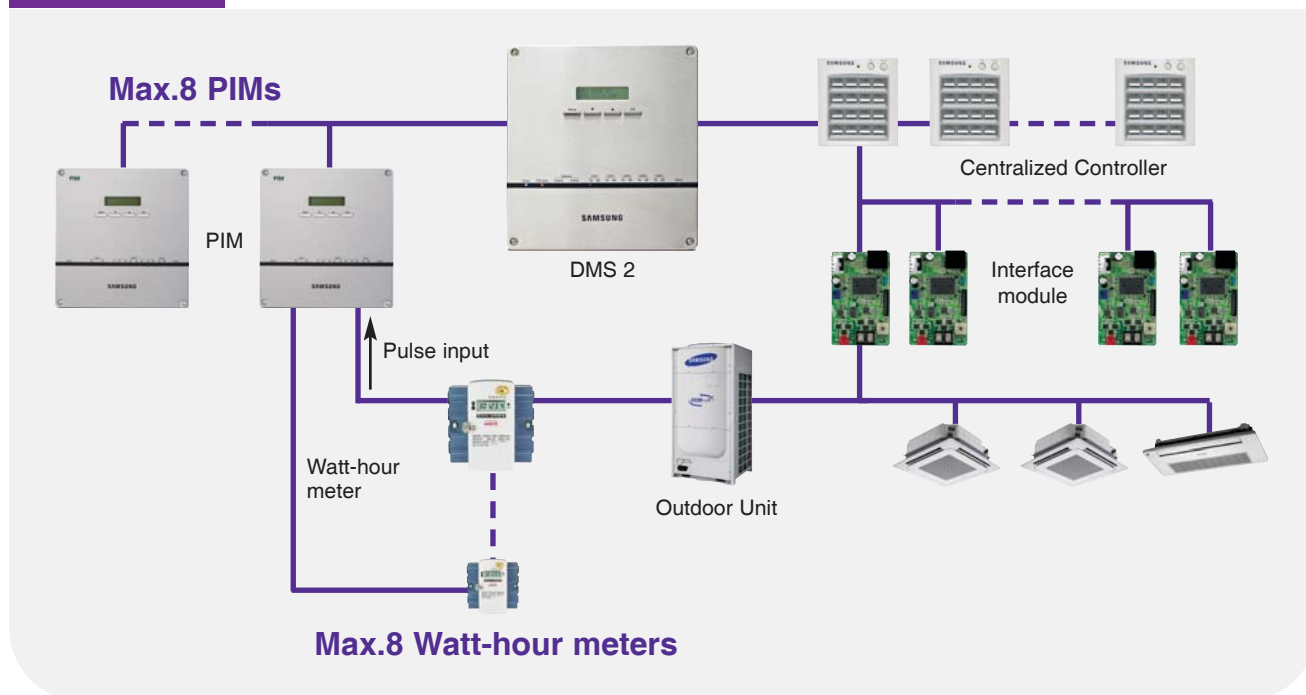
- Exclusive use for DMS2 power distribution
- Connection with up to 8 watt-hour meters
- Pulse interface with watt-hour meters
- Power consumption display for each watt-hour meter

Connectable Watt-hour meter with PIM

- Wh/Pulse Range : 1~10000 Wh/Pulse (no decimal place)
- Pulse Width Range : 20~400ms
- Interval between Pulses : Minimum of 3ms



Connection



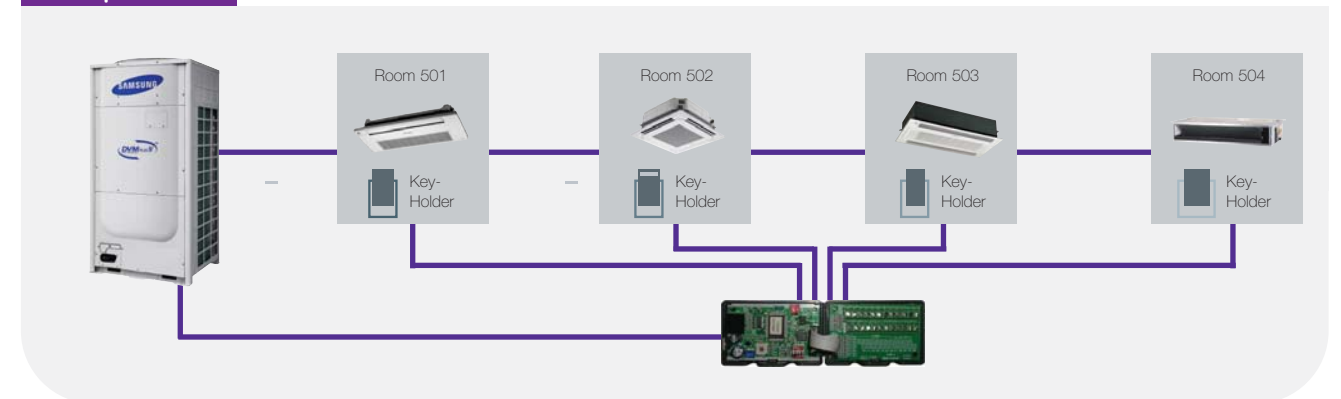
Guest Room Management

The Guest Room Management System is a smart way for saving energy and money: the air conditioner is activated when the Key-Tag is in place, and turns off when the Key-Tag is removed. By avoiding the waste of energy on cooling an unoccupied room, you can reduce energy usage and costs.

Key Tag Interface Module

- Indoor unit control by external contact signals
- Individual / Group control of up to 16 indoor units
- Combinational use with sensor / timer / emergency inputs

Example



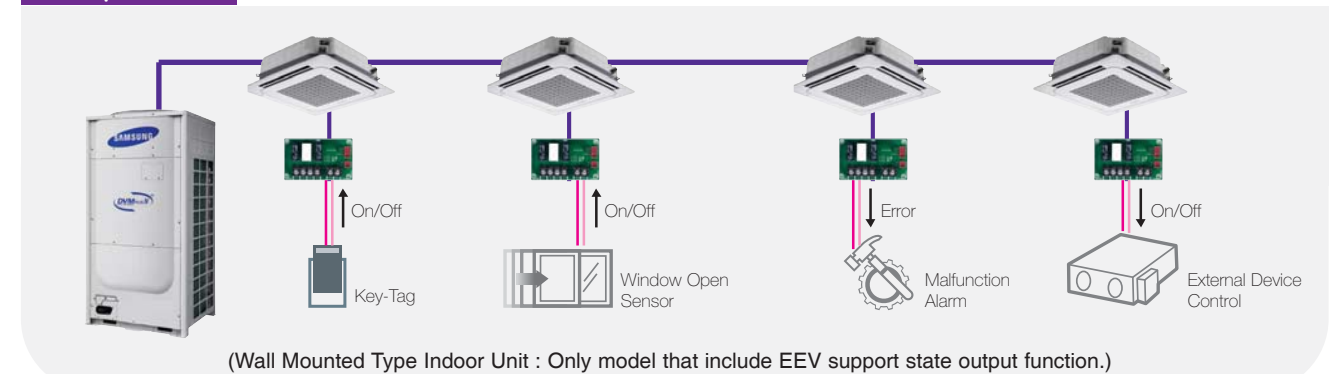
External Contact Interface Module



MIM-B02

- Direct indoor unit control by external contact signal
- Window-synchronized indoor unit control
- Emergency control with simple contact input
- Indoor unit operation / error state output through relay contacts

Example

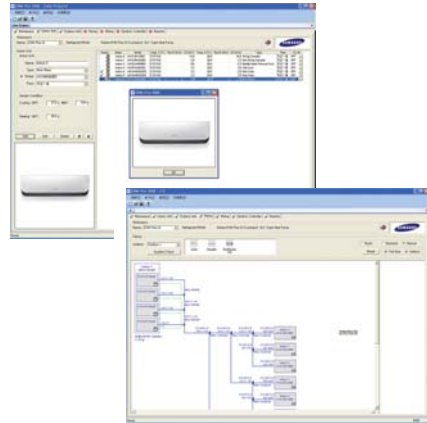


DVM-PRO

DVM Pro will help you select the products, accessories, and other things you require to customize your air conditioning system.

DVM-Pro sales mode

- **Workspace:** Creation 'Project' & 'Workspace (DVM, FJM, CAC)
- **Indoor Unit:** Indoor unit and accessory selection
- **Outdoor Unit:** Automatic selection and capacity simulation
- **Piping:** Basic, standard, or manual selection with system check
- **Wiring:** Automatic diagram with communication wiring of indoor/outdoor/control units and electric power meters
- **Control system:** Automatic control unit selection
- **Report:** Specifications, diagrams, and quotation

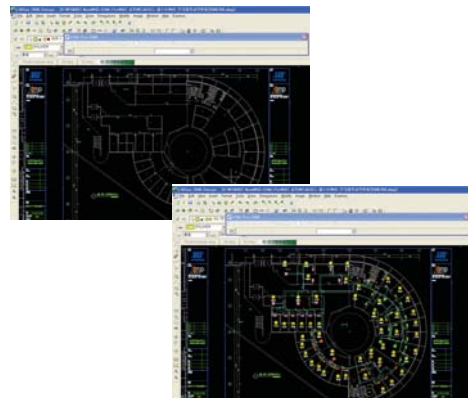


Download!

www.dvmsystem.com → Download Center → DVM-Pro

DVM-Pro CAD mode

- **Quick, Easy, Precise Design**
- **Compatibility with AutoCAD**
- **Automatic Calculation:** Refrigerant & drain pipe size
- **Automatic Selection:** Refnet joint, header & distributor kit
- **System Check:** Installation regulation & refrigerant addition
- **Simulation:** System capacities
- **Easy Control System Selection**
- **Automatic Report:** Piping installation diagram, equipment list & quotation



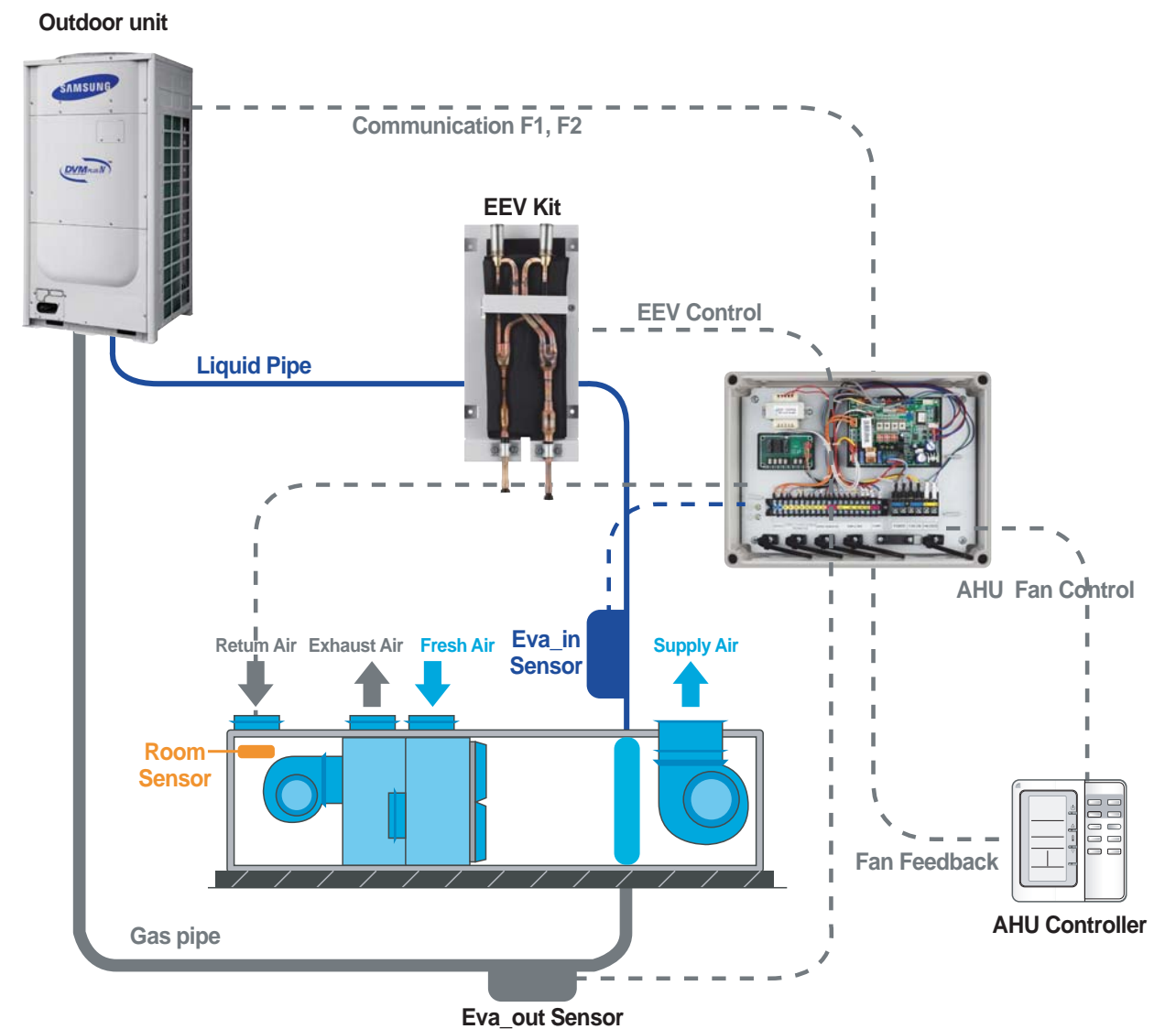
Contact to Samsung HQ or Distributors for DVM-Pro CAD!

Wide Application

Samsung provides a kit that allows DVM PLUS IV outdoor units to connect to AHU (Air Handling Units).

AHU Kit

- IP54 is Satisfied
- Variable Capacity
- 2.5HP / 5HP / 7.5HP / 10HP
- Simple BMS can be applied
- 0~10V control



ECO HEATING SYSTEM

Introducing Greener Heating



ECO HEATING SYSTEM



EHS

The Perfect Climate Control Solution for Your Home

Samsung EHS is an all-in-one system that uses highly efficient heat pump technology: this keeps your house at a comfortable temperature and your heating and cooling costs low all year round! This economical and ecological system not only lowers energy costs and CO2 emissions, but also provides various combinations of air and water solutions for heating and cooling that satisfy different user needs throughout all four seasons.



Parish Hall of Aveleda, Portugal

Samsung EHS story



The EHS Story

Samsung's new economical and ecological domestic heat pump system can be integrated into your home to provide heating, hot water, and air conditioning with only one system.



Global Warming?

Human activity has resulted in an increase in Greenhouse gas emissions (CO₂).



Oil is Running Out!

As the price of oil rises, we will need to turn to renewable energy resources.



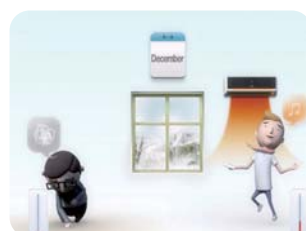
Unsustainable Resources

Rising oil prices have caused the operating costs of heating a home to increase.



EHS System

Samsung's EHS product is a highly efficient, all-in-one heat pump system that takes up limited space as an outdoor unit, and saves you money in operating costs.



Rapid Air Heating

During winter operation, Samsung's EHS Air-conditioning combined with under-floor heating provides a rapid & efficient response to the demand for heating by the user.



Air Cooling

During summer operation, the integrated high efficiency air conditioning system can be operated in cooling mode to create a more comfortable living environment.



Cost Saving?

Samsung's EHS, with its industry leading operating efficiencies, can reduce your operational costs by up to a third when compared to standard gas boiler systems.

What is a heat pump?

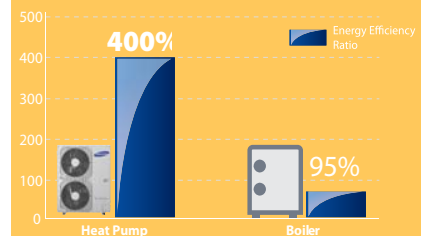
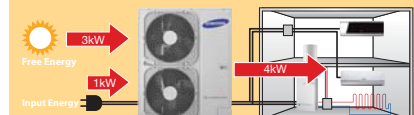
A heat pump is an energy efficient system that uses the heat from the ambient air for heating and hot water.

Using a heat pump system for basic heating and hot water in your home is an energy efficient and environmentally friendly solution.

How does it work?

By using the ambient air and transferring this heat into the house through a hydronic system, such as underfloor heating, a heat pump requires less power input and offers greater power output than conventional boilers.

For every 1kWh of energy input, a heat pump can deliver up to more than 4kWw in energy output. This is an energy efficiency ratio of more than 400%, which is superior to high energy efficiency boiler systems. Since conventional boiler systems can only reach an efficiency ratio of up to 95%, they consume more energy than they can ever deliver.



What are the benefits?

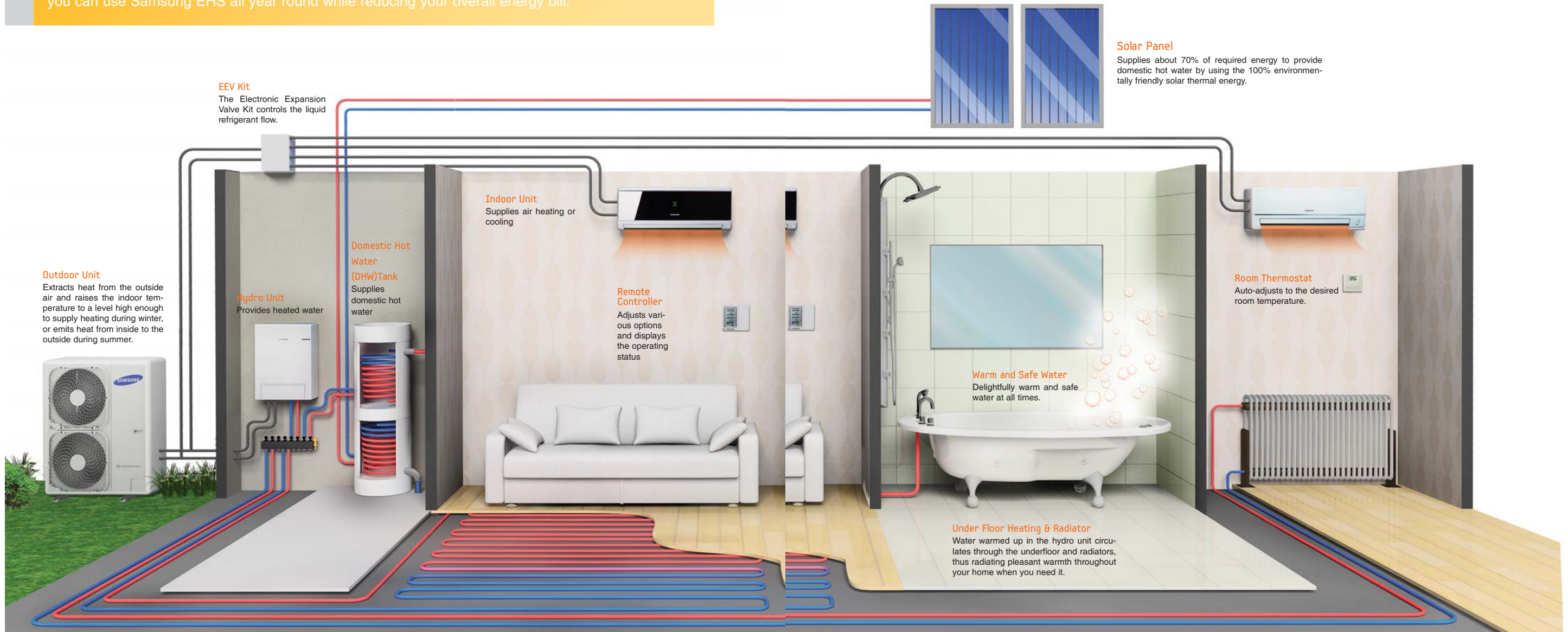
Using a heat pump system for basic heating and hot water in your house is an energy efficient and environmentally friendly solution. The most noticeable advantage of energy efficiency is a big reduction in your energy bills.

EU has defined heat pump systems as renewable energy products. Under this classification, the end users can apply for government subsidies or tax refunds when installing these heat pump systems. You can contact our local installer to find out if you can also apply for these government benefits.



Eco Heating System

Samsung EHS is the ultimate eco-friendly H & C system: EHS uses renewable energy for heating home floors and hot water, while providing warm or cool indoor air conditioning. Now you can use Samsung EHS all year round while reducing your overall energy bill.



Air-to-Water

This is the ideal cost efficient heating system in which the heat from outside is used to heat the floors and water in your home.



Air-to-Air

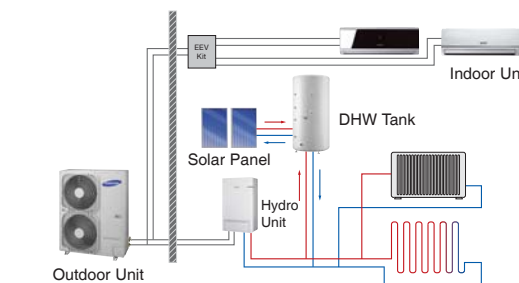
This feature brings comfort to your home by quickly calibrating a stable temperature level. It can also be used for cooling in the summer and heating in the winter.



Installation Diagram

1 Air-to-Air + Air-to-Water

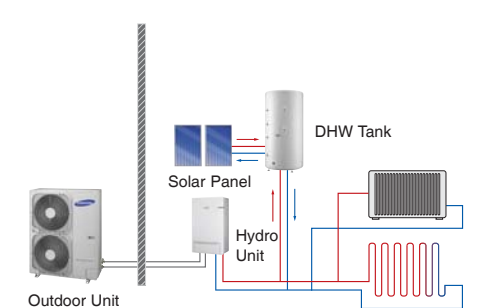
- Outdoor Unit + EEV Kit + Indoor Unit
- Outdoor Unit + Hydro Unit + Underfloor Heating + Radiator + DHW Tank + Solar Panel



- Solar Panel, Back-up Boiler, and DHW Tank are Optional.

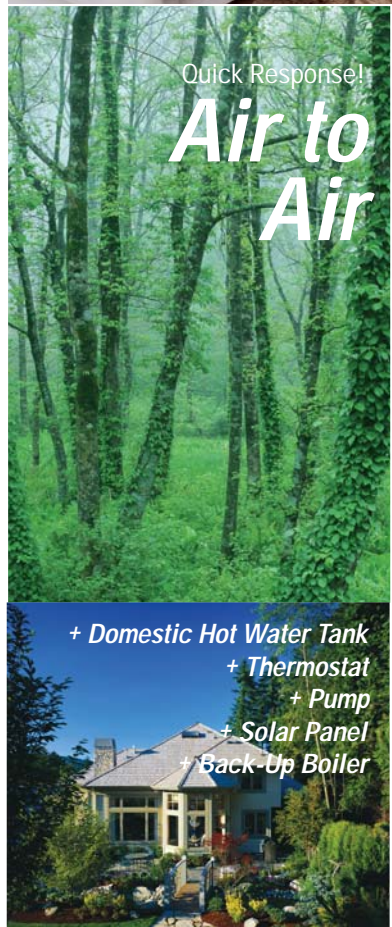
2 Air-to-Water Only

- Outdoor Unit + Hydro Unit + Underfloor Heating + Radiator + DHW Tank + Solar Panel



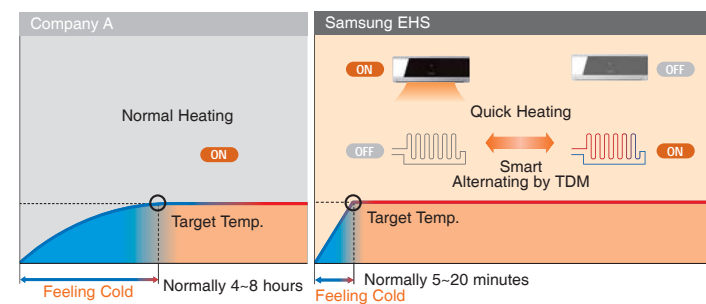
Human Friendly

EHS is a human friendly heating system: it provides pleasant air, reduces your energy bills in all seasons, and adds convenient comfort to your life without any hassle through its flexible installation options.



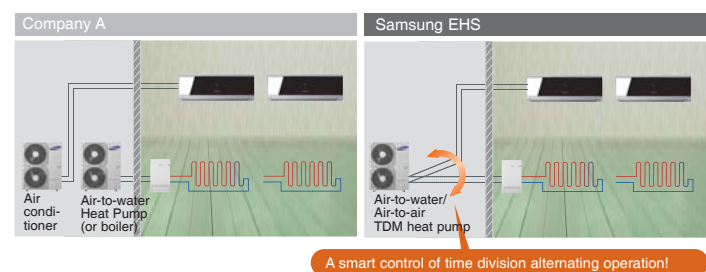
Quick Heating by TDM Technology

Floor heating is well known as the optimal heating option for indoor thermal comfort, but it usually takes 4~8 hours to heat up the room. Samsung EHS TDM technology speeds up this process by blowing hot air along with floor heating to warm up the room.

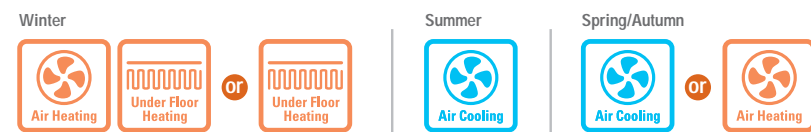


Integrated Heating & Cooling System at a Lower Cost

Time Division Multi (TDM), a smart alternating operation between air-to-water and air-to-air, enables one outdoor unit to operate both functions, resulting in a lower product cost and smaller units that take up less space.



Typical Seasonal Usage



Flexibility

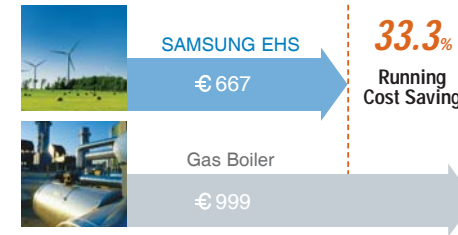
Samsung EHS can be implemented with other optional products: further increase your indoor system's versatility by adding a Domestic Hot Water Tank, Thermostat, Pump, Solar Panel, or Back-Up Boiler.

Environment Friendly

EHS not only reduces running costs, but also uses electricity instead of gas/oil to heat the room to help conserve our natural resources. The system also offers stable and dependable performance, even in harsh environments.

Running Costs-Reduction of Up to 33.3%

The Samsung EHS, known for its world class efficiency (11kW floor heating system with COP of 4.55), can reduce 33.3% of your running costs compared to a conventional gas boiler.



Cost and Space Reduction of Up to 50%

With an all-in-one outdoor unit capable of both air-to-water and air-to-air functions, Samsung EHS creates savings for you in terms of the low initial purchase cost & installation fee, as well as the space needed for an extra outdoor unit.



High Performance at Low Temperature

The Samsung EHS is comprised of an inverter compressor that is optimally operated according to the outdoor temperature, offering 90% heating performance at -10°C and reliable anti-freezing protection at -20°C.

Remote Controller Gives You Easy and Abundant Options

Smart user interface technology has been integrated into the Samsung EHS to allow easy and convenient control of the cooling and heating system at home. This control allows one-touch access to energy consumption statistics and monitoring of other components (Solar Panel, Back-Up Boiler, etc.).

- Outing:** Simple Stand-by Function at Outing. The system in "stand-by mode" stops all functions, except for the function that prevents the pipes from breaking/bursting due to weather changes. This system can also maintain the desired temperature in your home, even when you are out.
- Eco Level:** Real-time Energy Consumption Display. The 5 Eco-level bar indicator displays the level of energy consumption (Solar Panel, Back-Up Boiler and Back-Up Heater of the hydro unit).
- Solar Panel and Back-up Boiler:** Solar Panel and Back-up Boiler "Work in Progress" Display. The system indicates when Solar Panel and Back-up Boiler are in the process of hybrid heating.
- Automatic Anti-Freezing Function:** When the house is left unattended for an extended period during the winter and the temperature outside goes down, the system automatically runs its heat pump to keep the water flow above the sub-freezing point.

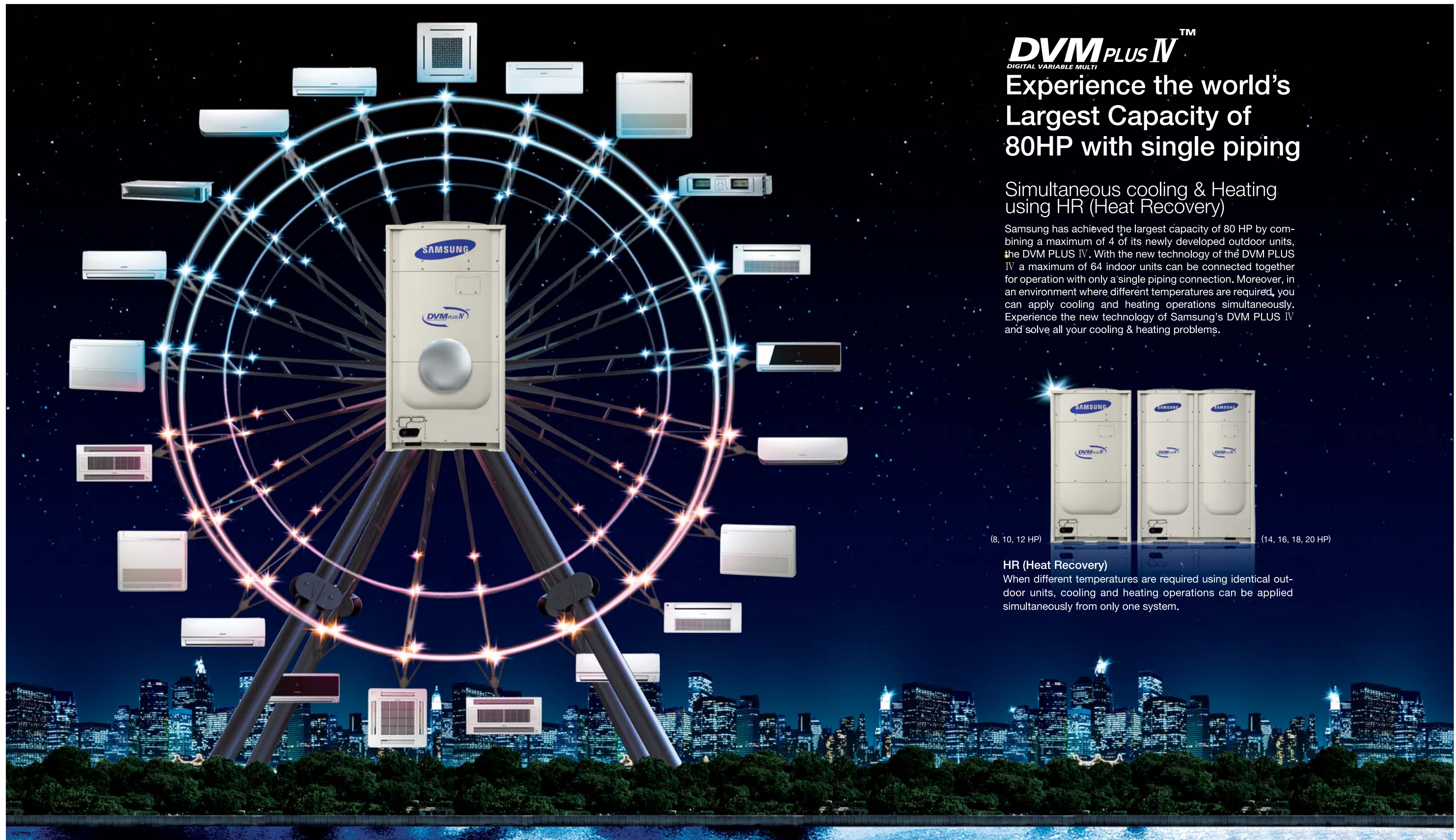


Operational Cost Reduction of Up to **33.3%**

Initial Price and Space Savings of **50%**



High Performance of **90%** at -10°C



DVM PLUS IV™

DIGITAL VARIABLE MULTI

Experience the world's Largest Capacity of 80HP with single piping

Simultaneous cooling & Heating using HR (Heat Recovery)

Samsung has achieved the largest capacity of 80 HP by combining a maximum of 4 of its newly developed outdoor units, the DVM PLUS IV. With the new technology of the DVM PLUS IV a maximum of 64 indoor units can be connected together for operation with only a single piping connection. Moreover, in an environment where different temperatures are required, you can apply cooling and heating operations simultaneously. Experience the new technology of Samsung's DVM PLUS IV and solve all your cooling & heating problems.



HR (Heat Recovery)

When different temperatures are required using identical outdoor units, cooling and heating operations can be applied simultaneously from only one system.

Effective COP

Average COP for cooling and heating has been improved and the world's top class energy efficiency has been achieved.

The World's Longest Piping Length

With an actual piping length of 220m flexibility and convenience of installation is provided for commercial buildings.

Improved Heating

By applying vapor been improved by

Performance

injection technology, the heating performance has 20% at a low ambient temperature of -10°C.

Low CO2 Emission

By adopting the distinctive eco-friendly technology, CO2 emission of DVM PLUS IV is substantially reduced compared to competitors'.

SAMSUNG Electronics Digital Air-Solutions Division Tel : +82-31-200-6125 Fax : +82-31-200-0938 Homepage Address :

www.dvmsystem.com



Icon Guide

Each product in the Samsung system air conditioner line-up offers a variety of features. The following icons include a brief explanation about the features that they signify. Following are the description of the icons and brief explanation of each feature.

Cassette type Icon



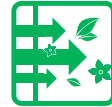
Wide Blade

Wider blades provide more even cooling power.



NOI Dust

Newly designed panel prevents dust build-up on ceiling.



Fresh Air

Optional air intake motor brings in fresh air from outside.



High Lift-UP

Lift-up condensed water up to 750mm, which is higher than our competitors' limit.



Quick Pipe

Unique drain pipe connection is easy to install.



Sub Duct

The Sub Duct makes it easy to provide air conditioning to a nearby smaller space.

Duct Type Icon



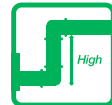
Anti-Virus Filter

Anti-virus Filter traps dust particles and suppresses proliferation of mold and bacteria.



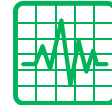
Easy Filter

Filter cleaning indicator will let you know when the filter needs to be cleaned.



High Lift-UP

Lift-up condensed water up to 750mm, which is higher than our competitors' limit.



Smart Control

Adjusts fan speed to provide constant cooling and heating performance.



Wired RC

Default wired remote controller is provided.

Wall-mounted Type Icon



S-Plasma ion

S-Plasma ion eliminates biological contaminants in the air such as viruses, bacteria, and dust.



Full HD Filter

Samsung's Full HD Density Filter blocks out dust, allergens, and bacteria.



DNA Filter

The DNA structure absorbs and eliminates microscopic carcinogenic agents.



Deodorizing Filter

Activated carbon is incorporated in the filter, efficiently absorbing all odors.



Catechin Filter

Catechin in the filter deactivates captured bacteria and unpleasant odors.



Smart Inverter

Smart inverter maintains ideal temperature without constantly turning the compressor on and off.



Smart Saver

Smart Saver automatically operates the air conditioner in the least amount of time necessary to cool the room.



d'light Cool

This system automatically adjusts the temperature and humidity level to maintain the most pleasant indoor environment.



good'sleep

good'sleep automatically adjusts temperature and humidity so you can enjoy a good night's sleep.



Wide Twin Blade

Samsung's Wide Twin Blades provide a more effectively controlled air flow.



3D Wind

The Wide Twin Blades and 4 Way Auto Swing provide advanced airflow all around the room for even distribution.



Turbo Cooling

Turbo Cooling maximizes the speed of cooling and heating to quickly reach the set temperature.



Auto Roof Shutter

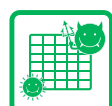
Air conditioner automatically seals off to prevent dirt infiltration.

Console & Ceiling



Interior Design

This clean, modern design complements any decor.



Anti-Virus Filter

Anti-virus Filter traps dust particles and suppresses proliferation of mold and bacteria.



Lightweight

Lightweight makes maintenance and installation easy.



Flexible

The pipe can be installed in 6 different places for more placement options.



Silent Mode

Indoor and outdoor unit operates silently.



Wired RC

Default wireless remote controller is provided.