Learn more by visiting www.dvmsystem.com

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Space for Partnership

Ver.1.0



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







INTODUCTION **OUTDOOR UNITS** INDOOR UNITS

NAIDMENTIC

One Step Ahead

Samsung air conditioner is a perfect solution

for Better

Air-Solution

for your desired environment.

comfort to keep you invigorated.

and healthy breeze brought to you by Samsung air conditioner.

The refreshing air delivers the utmost

Stay comfortable all day long with clean

BRAND VALUE **ECO-FRIENDLY POLICY OUR PORTFOLIO NEW PRODUCT** CAC SYSTEM CASSETTE DUCT **ERV SYSTEM**

DVM SYSTEM

FJM SYSTEM

WALL-MOUNTED

CONSOLE & CEILING

INTEGRATED MANAGEMENT 96

CENTRALIZED CONTROL

INDIVIDUAL CONTROL

BUILDING MANAGEMENT

ECO HEATING SYSTEM

106

108

Samsung is moving with and ahead of our customers

A brand is created by its customers and thatês 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.

1. Coca Cola
2. IBM
3. Microsoft

18. Mariboro

19. SAMSUNG Electronics

20. Honda
33. Cannon
34. Sony
42. Philips Electronics

Samsung has overtaken Sony as the worldis 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 10 Global Headquarters 4 HA R&D Centers CIS London Stuttgart Shanghai Nilano ME Asia Africa India SE Asia Mexico Latin America Latin America



'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). Most Samsung products have received Energy Grade A+ in the EU and ENERGY STAR in the U.S. 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 Europeis largest air-conditioner exhibition iClimatizationi in Madrid, Spain. Samsung air conditionerís beautiful design with innovative features was awarded the iGaleria de Innovacionî. 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 worldis oldest & prestigious design competitions, the iF product design award has stood for qualitatively outstanding design awards for over 50 years. And Samsungís 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 iComfort & Living Technologyî. And Samsung air conditioner won the prize conferring a valid and professional recognition for the best product in the ceremony.

Received Certifications and awards















































Globally Selected Samsung System Air Conditioner

Samsung system air conditioner has proven its performance and was chosen by groups in different countries all around the world.



















Perfect System Air Conditioner for Any Type of Places

Samsung system air conditioner has variety of product lineups that will provide perfect solutions to different type of places with air conditioning needs.



For Large Buildings

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





2011 New Products

Making continuous efforts to provide you the products with the best quality, Samsung have finally come up with few new products that will enrich our lives and refresh our minds.



Samsung DVM Plus IV provides the optimized cooling and heating system that fulfills the air conditioning solution required by large sized buildings. DVM Plus IV also have 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





Two wall-mounted type indoor units have been added to this year's line-up. Both indoor units have attractive design and they also deliver you the most fresh, clean and purified air even with low energy consumption.

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



Smart and Stylish AWAY
Cassette

We are proud to introduce our new 4way Cassette S indoor unit. With our new 4Way Cassette S indoor unit, you will know what powerful cooling means. Experience the power and comfort with this smart and stylish 4Way Cassette S indoor unit.

- Filter Cleaning Robot
- S-Plasma ion
- Motion Detect Sensor
- Individual Blade Control





Samsung's new 2011 ERV units have highly efficient lineup equipped with advanced accessories that will improve your indoor air quality. It also allows flexible installation with its compact size and design.

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



Experience the Power





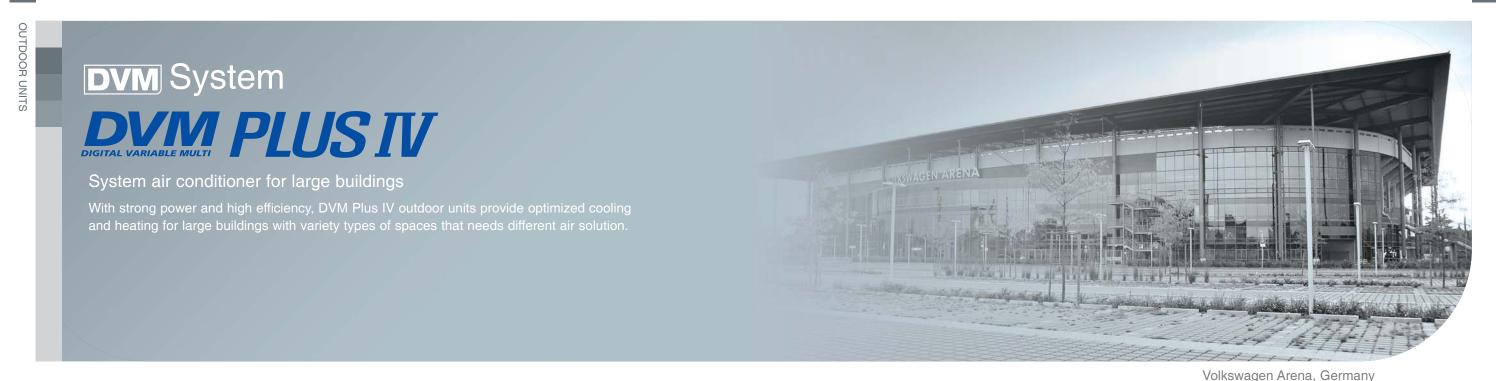
DVM SYSTEM

CAC SYSTEM

FJM SYSTEM







Main Features



DVM PLUS IV is a high-tech digital hybrid system, which adopted third generation plate intercooler to achieve industry's highest energy efficiency and improve low temperature heating performance for perfect cooling and heating solution on any type of space.



■ High Efficiency

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

■ Large Capacity

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

Advanced and Reliable Protection

- Sequential Activation of Compressor
- Oil Balancing Control
- Self Diagnose Mode
- Anti Corrosion Heat Exchanger
- Pre-protection System

■ Easy Installation & Maintenance

- Flexible Piping Installation
- Optimized Refrigerant Distribution Control
- Automatic Data Backup

■ Eco-friendly

- Decreased CO₂ Emission
- R410A Refrigerant
- Europe Eco-friendly RoHS Technology Certification
- WEEE

■ Pleasant Operation

- Silent Operation at Night-time
- Top Heating Performance at Low Ambient Temperature
- Stable Heating Operation

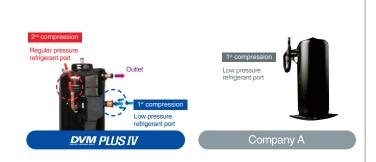
High Efficiency Be perfect, with DVM PLUS IV!

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

DVI (Digital Vapor Injection) Compressor

2-stage compression effect with single compressor!

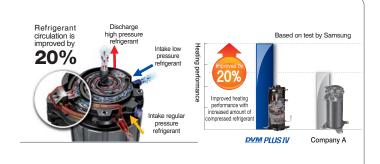
It is a high-tech and high efficient compressor that demonstrates 2-stage compression effect with just single compressor. With the method that intakes regular refrigerant and discharges in high refrigerant status after second compression, compression efficiency will be increased by about 16% and energy saving will be great.



Vapor Injection

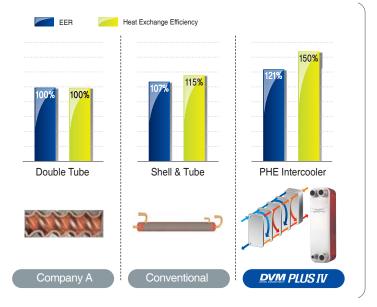
Improved refrigerant circulation and heating performance!

Vapor injection is a double compression technology which re-injects regular pressure refrigerant in vaporized status that occurred from Turbo intercooler to increase use of refrigerant. This technology improves both refrigerant circulation and heating performance by 20% to maximize the 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 tube type intercooler.



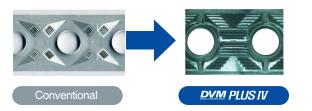
High Speed Vapor Injection

High vapor injection controls injection volume through EVI EEV to increase amount of refrigerant circulation up to 20%. Therefore pleasant cooling / heating performance will be provided while energy is being used more efficiently.



Bigger and Better Heat Exchanger

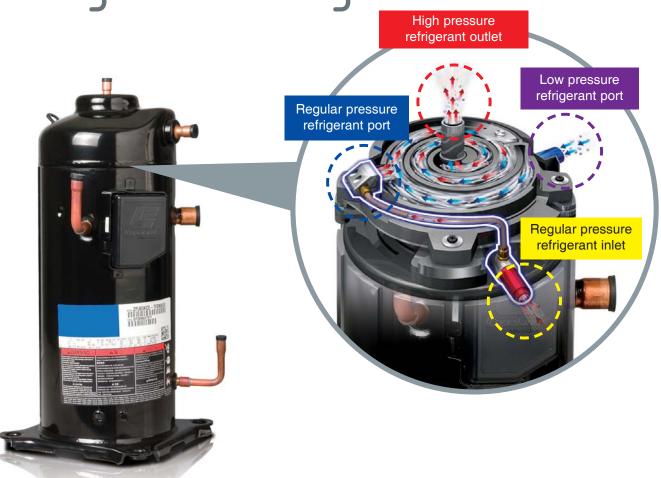
Outdoor unit heat exchanger has gotten bigger in size. It now has 60 columns, which is about 10% bigger from conventional product's 56 columns. Furthermore, DVM Chassis have new optimized fin shape which improved the quality of the heat exchanger.



Compression Technology is

the Source of

High Efficiency!

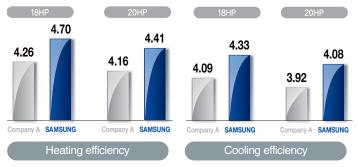


High Efficiency Be perfect, with DVM PLUS IV!

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

World's Top Class Heating and Cooling Efficiency

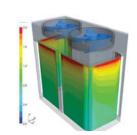
DVM Plus IV have achieved average heating efficiency rate of 4.7 and cooling efficiency rate of 4.33 which surpasses competitor's efficiency by 9.8 and 6.0%. It is world's top class efficiency rate.

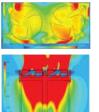


* Based on catalog data

Optimized Air Flow Structure

Air flow structure within the Fan and the Fan Guard is optimized for faster heat exchanging, which increases the efficiency and provides faster cooling and heating.







Outdoor Unit BLDC Fan Motor BLDC motor was applied to DVM Plus IV. It is 35% lighter but 39% more efficient than conventional AC motor. Size AC Motor BLDC Motor Size Efficiency AC Motor BLDC Motor Size Efficiency

DVM System

Large Capacity Smaller but Stronger!

DVM Plus IV have decreased its footprint area to save installation space, to make better use of a space while increasing its capacity to provide perfect air conditioning solution.





Industry's largest module capacity with 80HP

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

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

Industry's first single 20HP unit

Economical with smaller footprint area and lighter weight

Smallest Footprint Area and Lighter Weight

Footprint area has gotten smaller by 41% and product weight is 38% lighter compare to conventional model.

*Comparison based on 20HP Outdoor Unit



Economical Installation Cost

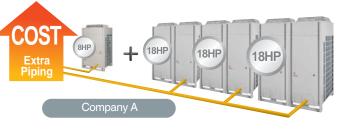
Increased capacity of single units provides world's largest module capacity and it is ideal for larger buildings. Also, installing larger capacity module will save money on installation since number of equipment decrease as capacity becomes larger.







Company A



OUTDOOR UNITS

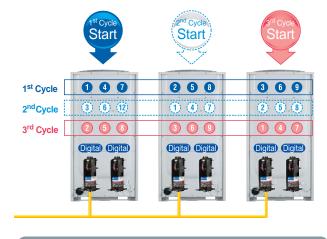
DVM System

Advanced and Reliable Protection

DVM Plus IV has number of smart and reliable protect systems to protect the outdoor units and provide stable air conditioning solution.

Sequential Activation of Compressor

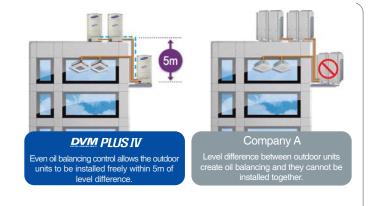
When the outdoor unit is not operating in full capacity, compressor will start up the operation in sequence to prevent one particular compressor from overworking. This sequential activation of compressor will prolong the life of the compressor and provide more reliable performance.



Compressor operation priority

Oil Balancing Control

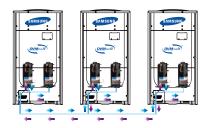
Oil balancing technology of DVM Plus IV is very stable and balances oil evenly even when multiple outdoor units are installed. Furthermore, oil balancing technology is still reliable when the distance between the outdoor units are far apart or when there is level difference between them therefore it allows flexible installation options.





Internal Oil Balancing Control

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



External Oil Balancing Control

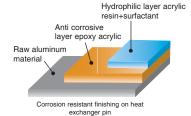
Amount of oil will be balanced between the outdoor units within the module. This technology will control flow of the oil effectively to increase reliability even when the outdoor units are installed away from each other or even when they are installed with height differential.

Self Diagnose Mode

DVM Plus IV monitors operation status and if there are any signs of abnormal activity, it display error code to solve the problem easily.

Anti Corrosion Heat Exchanger

Highly hydrophilic coating helps efficient heat exchange and delays onset of frost formation to provide consistent heating performance.



- Corrosion resistant with epoxy acrylic coating
- Implemented corrosion resistant through acrylic+surfactant
- 1 Hydrophilic
- 2 Heat Resistance
- 3 Corrosion Resistance

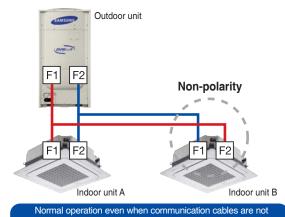
Pre-protection System

DVM Plus IV has fuses for compressor protection. Fuses within the electrical parts will protect the compressor from possible damage caused by unstable voltage.

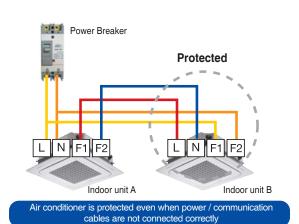


Easy and Safe Wiring Work

Non-polar communication between indoor and outdoor unit makes wiring work much easier and also it is safer since the outdoor unit will protect itself when the communication cable is mistakenly connected to power terminal.



Normal operation even when communication cables are not connected correctly



Auto Snow Blowing Function

When snow accumulates and covers the outdoor unit during winter time, it must be removed in order to operate normally. With snow prevention function, you won't have to remove accumulated snow on the outdoor unit by yourself. Outdoor unit will blow the covered snow every 30 minutes by itself to prevent any damages that can occur by covered snow.

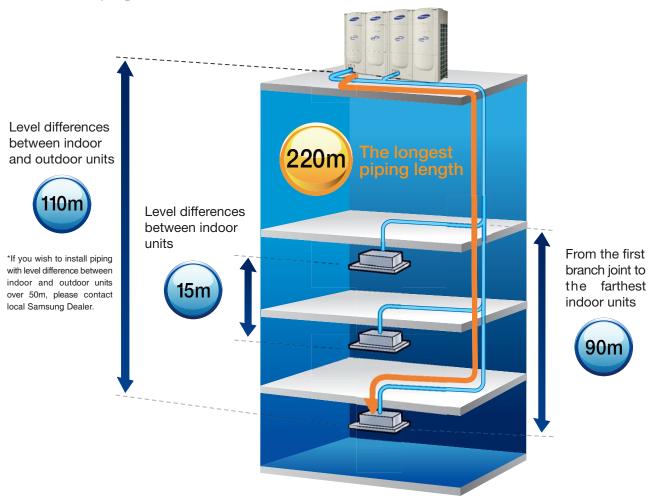




Easy Installation & Maintenance

Perfect for Large Buildings DVM Plus IV has many features that can be helpful when installing and maintaining the product in tall and large building.

Flexible Piping Installation



1 Flexible installation at high-rise building

Installation is available as a maximum level difference of 110m, which could be the equivalent of 20 stories, each with a height of 5m.

Plexible installation in wide area

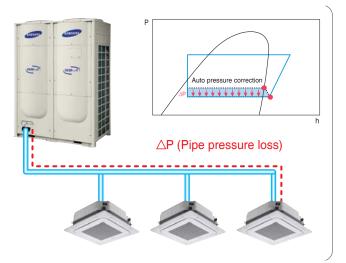
DVM Plus IV allows an extended piping length up to 220m and the units still show great performance even in wide areas.

3 Flexible selection of indoor units

You can choose indoor units which are suitable for each space with the wide selection and capacity of the indoor unit line-up composition and you can also use the indoor units economically since each indoor units can be controlled individually.

Optimized Refrigerant Distribution Control

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



Automatic Data Backup [Black box]

When DVM Plus IV outdoor unit malfunctions, it will automatically diagnose the problem and save the last 30 minutes of operation data. Furthermore, over an year worth of operation data can be stored when optional accessory is used an it will be helpful for quick and accurate repair service.



Refrigerant Pump-down and Pump-out

DVM Plus IV provides following functions to facilitate easy and convenient replacement of product, additional installation and maintenance.



Refrigerant pump-out function

In case of outdoor unit maintenance, it is possible for refrigerant to recover into indoor units or pipes.



Refrigerant pump-down function

In case of moving outdoor unit, maintenance of pipes between indoor units between outdoor units and indoor units, it is possible to recover refrigerant into outdoor units.

Easy Installation & Maintenance

Perfect for Large Buildings DVM Plus IV has many features that can be helpful when installing and maintaining the product in tall and large building.

Free Piping Connection with Various Knock-out Holes

There is various number of knock-out holes for piping, power and communication cables. Knock-out holes are located in variety of directions and therefore installation is much more convenient for DVM PLUS IV since piping and cable direction can be freely selected from front, left and right side.



Easier Access for Status Check and Option Settings

Checking outdoor unit status and setting option is easier and simpler. You don't have to remove the whole front cover thanks to the small openings on the front side of the outdoor unit.



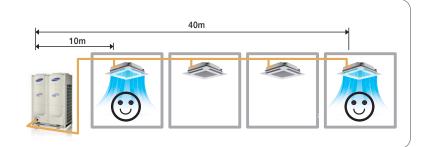
High External Static Pressure

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

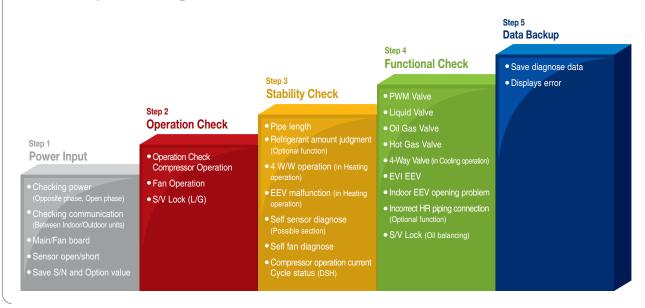


Automatic Pipe Length Recognition

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

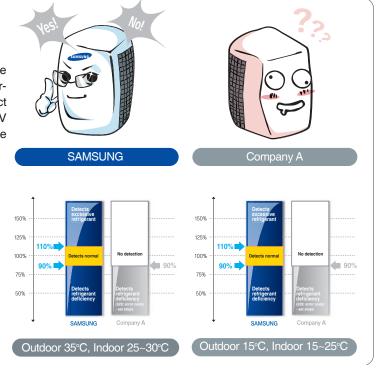


Multi-step Self Diagnose Function



Precise Refrigerant Amount Detection

When the refrigerant amount lacks or exceeds the normal value, it may cause damage or poor performance. Company A's outdoor unit cannot detect excessive amount of refrigerant, but DVM Plus IV can detect if the amount of refrigerant is excessive or insufficient.



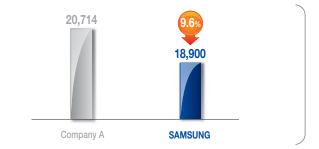
Eco-friendly Think About Our Planet First!

Samsung always think about our planet first and produce eco-friendly system that will lead to healthy

Decreased CO₂ Emission

DVM Plus IV is a highly efficient product with advanced eco-friendly technology which has decreased carbon dioxide (CO₂) emission.

- 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

DVM Plus IV uses compressor that is optimized with eco-friendly R410A refrigerant, which has "0" ODP value, and therefore minimizes environmental pollution. Furthermore with this eco-friendly refrigerant operation efficiency and performance has also been improved.









Europe Eco-friendly RoHS Technology Certification

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



RoHS (Restriction Of Hazardous Substances)?

RoHS is the eco-friendly regulation that bans use of toxic substances such as mercury, lead,

cadmium that interrupt the recycling of electronics.



WEEE

SAMSUNG Electronics is making significant efforts to save the environment and comply with the WEEE directive by joining or establishing the recycling schemes for each country.



DVM System

Pleasant Operation Always Stay Comfortable

Samsung system air conditioner will provide comfortable and stable air conditioning solution without

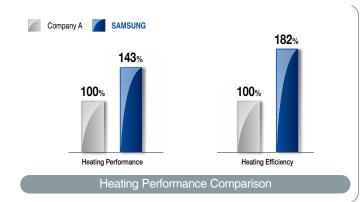
Silent Operation at Night-time

With outdoor unit fan control, outdoor unit will operate silently during night time for your pleasant



Top Heating Performance at Low Ambient Temperature

DVM Plus IV applied highly advanced technologies such as super condenser, PHE intercooler, Vapor injection to achieve better heating performance even at low ambient temperature of 10°C



Stable Heating Operation

DVM Plus IV provides stable heating performance by constantly operating in heating mode even when outdoor recovers oil. However, other company's outdoor unit stops heating operation while they recover oil

*Performance back up function

While the outdoor unit is in oil balancing contro operation, compressors that are not affected by this operation will keep operating in heating mode



and indoor temperature will maintain.



Heating mode stops when outdoor units recover oil and therefore indoor temperature will decrease

Premium Quality Control Heat Recovery

DVM Plus IV provides simultaneous heating and cooling in very stable state for buildings or places that requires both at the same time.

Simultaneous Cooling and Heating

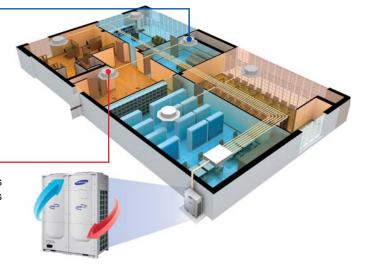
Single outdoor unit has ability to operate all the indoor units in both cooling and heating mode. Furthermore, it can operate in cooling and heating mode simultaneously when it is necessary to provide more freedom to operation mode.





Cooling

Cooling operation for indoors where cooling load occurs all year long due to devices and lightings that generates heat



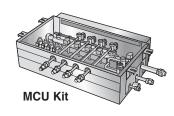


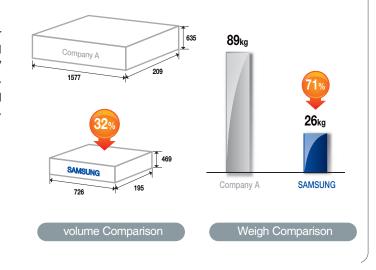
Heating

Heating operation for indoors where heating load occurs due to outdoor environment

MCU Kit

DVM Plus IV HR uses MCU kit that is 33% smaller than our competitor's MCU. MCU has internal On/Off valve to allow detail control through EEV valve control and improved sub-cooler will also support the detail control. Furthermore, decreased noise and improved performance will provide pleasantness.









Project Gold City
Location Alanya / Antalya
Type Hotel







One Ortakoy Projesi, Turkey

Main Features

Certified and Advanced



DVM Plus III is a outdoor unit which is certified as high efficient equipment. It still provides industry's top efficiency rate while providing maximized low temperature heating performance to fit into any type of environment conditions.



■ 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

JUTDOOR UNITS

DVM System

High Efficiency

Certified technologies achieved industry's higher efficiency rate to save energy and lower your energy bills

Digital Hybrid system

DHS (Digital Hybrid System) is a brand new concept system composed of DVI compressor, vapor injection technology and turbo intercooler. These 3 factors together provide highly efficient performance.







DVI Compressor

Efficient and reliable DVI Compressor coupled with Vapor Injection technology has been applied to improve cooling and heating performance and energy efficiency.

Vapor Injection Technology

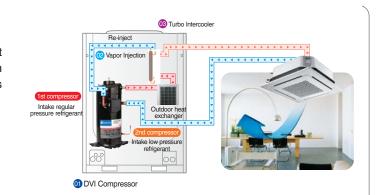
Improved cooling and heating performance and COP by a new technology of two stage compression. This technology achieved the high heating performance and COP under the lowest temperature, which leads the industry.

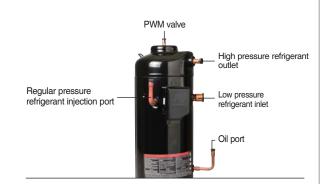
- Increase refrigerant flow rates with a new Vapor Injection technology.
- Improved Sub-cooling necessary for long piping runs while increasing cooling and heating performance and

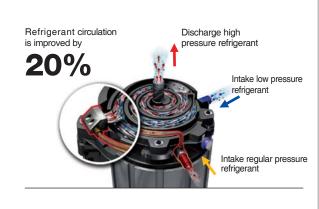
Turbo Intercooler

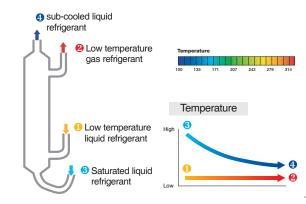
Turbo intercooler (Shell & Tube Type) improved cooling and heating COP, to secure reliability on long piping installation.

- Improve COP with the application of Turbo intercooler.
- Adequate sub-cooling to ensure reliable operation on installations with long piping (200m).





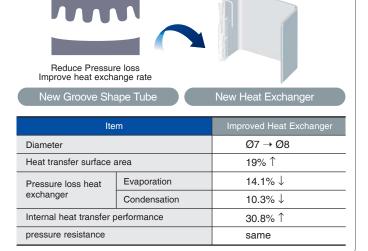




High Efficient Ø8 Heat Exchanger

Efficient Ø8 Grooved tube reduced pressure loss while increasing heat exchange rates to improve COP.

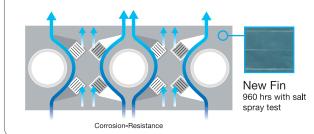
 Groove shape is designed to be high and slim to increase heat transfer performance inside the tube.

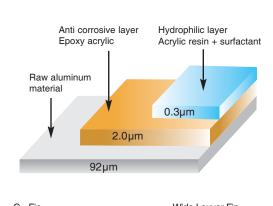


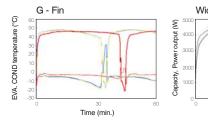
New G-Fin

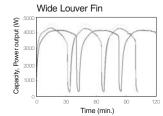
Highly efficient new G-Fin increases heat transfer performance, reinforces corrosion resistance, and increases operating duration under frosting conditions.

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









High COP

High efficiency DVM PLUS III has improved average cooling and heating COP compared to conventional products and achieved the world's Top Class energy efficiency

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





SUNG SYSTEN AIR CONDITIONE

Easy Installation & Maintenance

Long piping and high elevation options with other many features will allow easy and convenient

Large Capacity

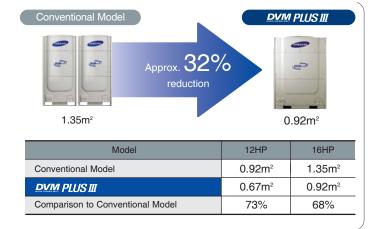
Samsung has achieved large capacity of 64HP by combining maximum 4 outdoor units with 5 different capacities. (8, 10, 12, 14 and 16HP) Many combinations of heat pump or heat recovery type support up to 64 indoor units to provide consumers a variety of choices for any installation condition.

- Compact combinations (8~64 HP) Combination with the model requiring the smallest installation space.
- High-Efficiency combinations (16~56 HP) Combination with high-efficiency model.



Small Footprint Area

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



Digital Unit Module

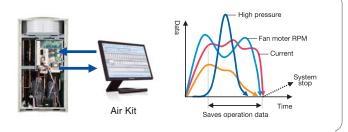
Digital unit module combination enables the system to alternate compressor operation to prolong each compressor's life cycle and improves COP with part loads.

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



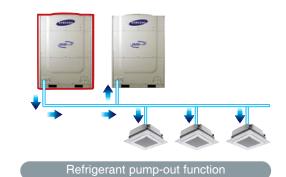
Automatic Data Backup [Black box]

In case of problems in product, the operation information of last 30 minutes is stored before system shutdown. Therefore, DVM Plus III can be diagnosed rapidly and receive quicker service.



Refrigerant Pump-down and Pump-out

DVM Plus IV provides following functions to facilitate easy and convenient replacement of product, additional installation and maintenance.



In case of outdoor unit maintenance, it is possible for refrigerant to recover into indoor units or pipes.

Free Installation

DVM Plus III provides the degree of freedom from priority of capacity when installing outdoor units in module.

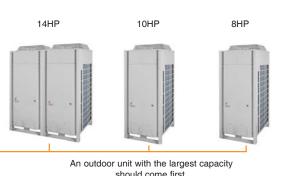


Refrigerant pump-down function

In case of moving outdoor unit, maintenance of pipes between indoor units between outdoor units and indoor units, it is possible to recover refrigerant into outdoor units.







Easy Installation & Maintenance

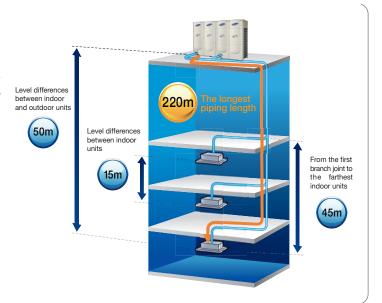
Flexible piping installation option with other many features will allow easy and convenient installation

Flexible Piping Installation

DVM Plus III Has an actual piping length up to 200m, with the maximum piping length of 45m from the first branch joint to the farthest indoor unit, thereby providing more convenience and flexibility for installation in commercial buildings.

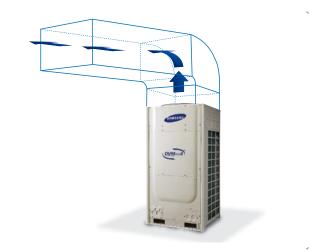
Summary

- The longest piping length : 220m (Equivalent Length)
- Total piping length: 1000m
- From the first branch joint to the farthest indoor unit : 90m (with one piping Size Up)



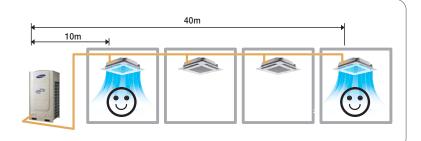
High External Static Pressure

To respond to a range of various installation environments, 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 will be provided regardless of the distance between the indoor unit and outdoor unit.



DVM System

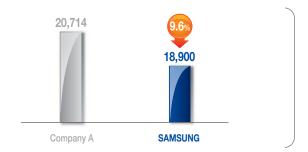
Eco-friendly

Samsung think about our environment seriously and apply eco-friendly technologies on our product to save our planet while still providing the best air solution to you.

Decreased CO₂ Emission

DVM Plus IV is a highly efficient product with advanced eco-friendly technology which has decreased carbon dioxide (CO₂) emission.

- 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

DVM Plus IV uses compressor that is optimized with eco-friendly R410A refrigerant, which has "0" ODP value, and therefore minimizes environmental pollution. Furthermore with this eco-friendly refrigerant operation efficiency and performance has also been improved.



Europe Eco-friendly RoHS Technology Certification

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



RoHS (Restriction Of Hazardous Substances)?

RoHS is the eco-friendly regulation that bans use of toxic substances such as mercury, lead,

cadmium that interrupt the recycling of electronics.

WEEE

SAMSUNG Electronics is making significant efforts to save the environment and comply with the WEEE directive by joining or establishing the recycling schemes for each country.





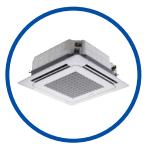
Heat Recovery System

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

Simultaneous Cooling and Heating

Single outdoor unit has ability to operate all the indoor units in both cooling and heating mode. Furthermore, it can operate in cooling and heating mode simultaneously when it is necessary to provide more freedom to operation mode.





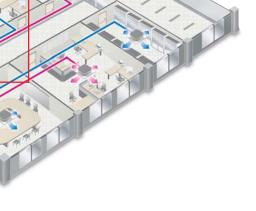
Cooling

Cooling operation for indoors where cooling load occurs all year long due to devices and lightings that generates heat



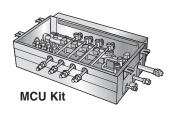
Heating

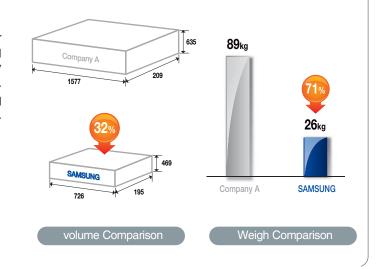
Heating operation for indoors where heating load occurs due to outdoor environment



MCU Kit

DVM Plus IV HR uses MCU kit that is 33% smaller than our competitor's MCU. MCU has internal On/Off valve to allow detail control through EEV valve control and improved sub-cooler will also support the detail control. Furthermore, decreased noise and improved performance will provide pleasantness.









Project Asteria Elit Resort

Location Manavgat / Antalya

Type Hotel







Main Features

Slim and Stable

DVI SLIV

DVM Slim is optimized system air conditioner for high-rise apartment building. It has separated mechanical area for convenient maintenance and reduced the noise by applying sirocco fan. Also, size of the footprint area has been decrease to suit perfectly for high-rise apartment buildings.



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

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 sig chassis: 500x750mm Footprint size for the big chassis: 500x880mm

Properly Discharged Without Interference of the Front

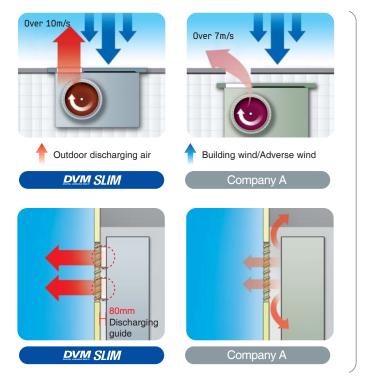
Very Fast Discharged Air to the Extent of 10m/s

When building becomes higher, building wind becomes faster due to the building wind, discharged air from the unit can be flowed back into the heat exchanger again.

DVM Slim to the extent of 10m/s prevents a discharged air being flowed back into the heat exchanger.

The 80mm Guide Slider Assembled Inside the Unit for the Discharged Air

The Guide Slider is able to lead an air from the unit to discharge without interference of the front surroundings.



Hermetically Sealed Outdoor System for Low Noise

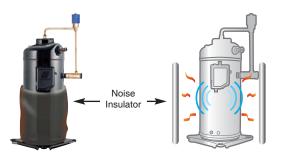
Thoroughly sealed outdoor unit and 2 sirocco fans prevent operating noise and vibration going through to living area.





Compressor Noise Reduction

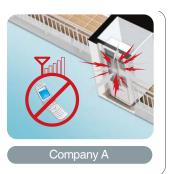
Sound insulator was used for covering the compressor to reduce the noise and prevent the noise from transferring into the indoor area.



No Electromagnetic Waves in Digital Scroll Compressor

DVM Slim does not generate electromagnetic waves because of digital scroll compressor unlike competitor's products. So it realizes voice quality on the cell phone.





Easy Installation and Repair

Separated mechanical area provides better and easier serviceability.









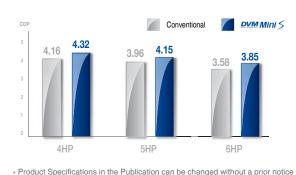
Main Features

Economical and Efficient DVM Mini

Single DVM Mini S outdoor unit can support up to 9 indoor units to provide suitable air solution to large residential and small and medium sized commercial areas. Newest compressor technology and eco-friendly refrigerant has been applied to increase reliability of the product, while outstanding energy efficiency provides economical cooling and heating solution.

Top Class Energy Efficiency

DVM Mini S has top class energy efficiency with improved COP and EER level, compare to conventional product. .



because there is always an ongoing improvement on our product.



Low Sound Level

Flexible Piping Design

such a great allowance, you can facilitate variety

of system designs.

DVM Mini S allows an extended piping length up to

150m, and maximum level difference of 50m. With

New DVM Mini S generates lower sound compare to our conventional models.



Footprint of the DVM Mini S outdoor unit has been



Small Footprint and Volume

Various Indoor Units

Wide Compatibility

units blending with any interior design.

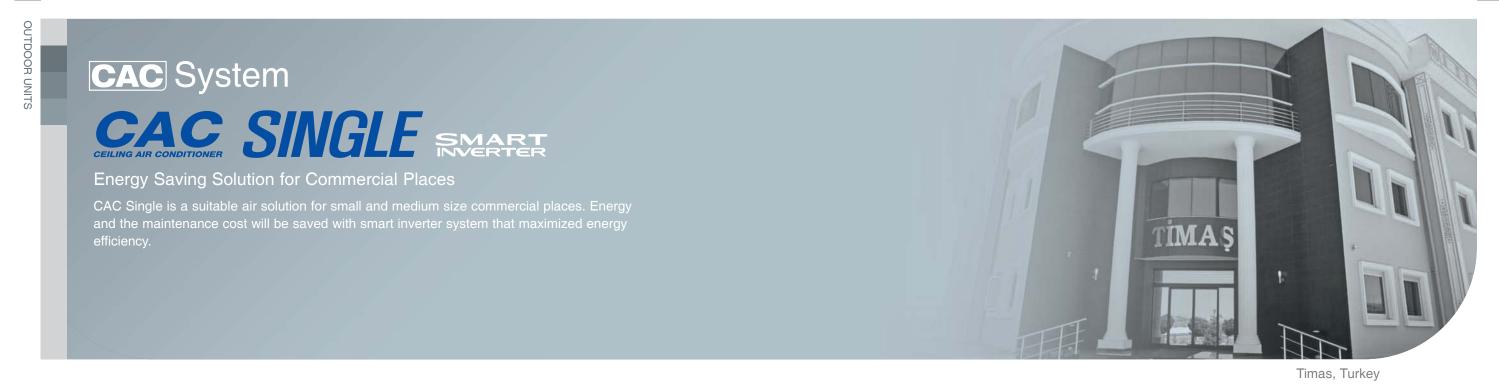
decreased by 11% and the volume has been decreased by 5%.

Mini DVM S can be combined up to 10 stylish indoor

Mini DVM S can be controlled with control systems

which is the same as DVM PLUS III and DVM PLUS IV.





Main Features

Energy Saving

CAC SINGLE

CAC Single is a smart choice save money and energy. With Samsung's advanced technology, energy waste has been minimized to improve on the efficiency while cooling and heating performance is faster than conventional product. Silent operation without any vibration will bring peace to your life.

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





CAC System

Smart Inverter

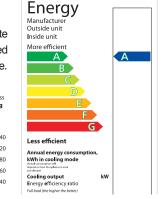
Revolutionary inverter technology maximizes energy usage and provide pleasant and powerful

New Features

All A/A Grade

All models of 4Way cassette S indoor units have received an A/A energy efficiency grade.





World's Top Class Energy Efficiency

1 Improved Compressor

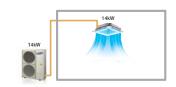
Smart Inverter outdoor unit has improved parts of the compressor for better energy efficiency and achieved 11.6 EER.

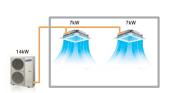
2 Propeller Fan

Large 2 blade propeller fan has been applied to outdoor units and it achieved lighter weight compare to 3 blade fan and also increased efficiency by 10%.

Simultaneous On/Off Function

Why not have two instead of one indoor unit? You can connect two 7kW 4Way Cassette S indoor units on single 14kW Smart Inverter outdoor unit for more efficient cooling and heating and you will be able to control both indoor units simultaneously 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 product. With 25% lighter product weight, it is much easier to install and single fan structure has decreased the height of the product while performance is still equal to our competitor's 2 fan structured outdoor unit.



Flexible Pipe Installation

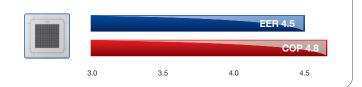
Pipe direction of the outdoor unit can be selected freely upon requirement. Internal pipe connection ports will allow 4 different available pipe directions, and once the pipe installation is done, it will look more neat and organized.



Common Features

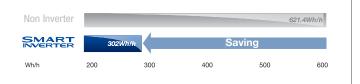
High Efficiency

The S-Inverter technology gives you powerful, speedy cooling and heating at minimum electricity consumption, so you can reduce energy waste and save money.



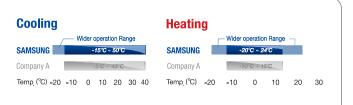
Up to 50% Energy Saving

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



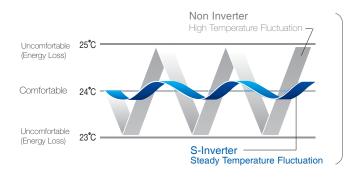
Wide Temperature Performance

No need to worry about using an external unit in severe temperatures with a Samsung air conditioner. With a wider temperature allowance, the unit can cool in the burning heat of 50°C or heat in the freezing coldness 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 finely adjusts to cope with any changes. This means less temperature fluctuation and assures you greater comfort that can be achieved in 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.



Silent Operation

Enjoy peace and quiet. The air conditioner's compressor operates at the lowest speed possible to maintain the desired temperature, so there's less motor and fan noise.





*Universal Indoor units Y Series and P Series

indoorunits can be used with CAC Single outdoor units

Main Features



2011 Free Joint Multi added universal indoor units, which can be universally connected to other Samsung outdoor units, to this year's lineup. With two new beautiful Y series and P series universal indoor units, there will be more variety and you can now connect up to 5 indoor units in one single outdoor unit.

One Outdoor Unit, Multiple Indoor Units

Single outdoor unit supports up to 5 indoor units, so it is great for large residential area.



Twin BLDC Compressor

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

Highly Efficient BLDC Motor

- Creative motor core design
- High density neodymium magnet
- Concentrated type stator

Extremely Low Vibration

Twin eccentric cams2 balance weights

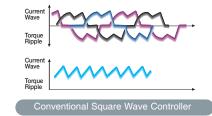
Highly Stable Moving Parts

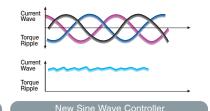
- Optimal material matching rollers and
- Highly robust bearings
- Coated vane
 Coated shaft

New

Sine Wave Controller

All the FJM models have adopted this newly developed Sine Wave Controller. No nipple in the current wave makes soft acoustic quality and reduces noise.





Sound Insulator for the Compressor

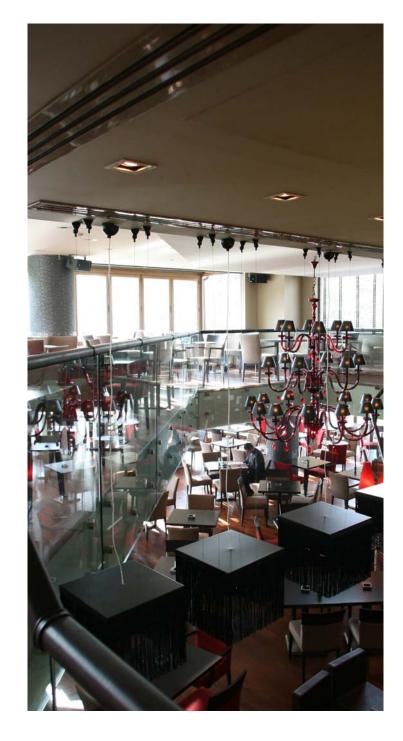
New sound insulator material covers all around the compressor for more quiet operation. Double layered sound insulator absorbs and minimizes the noise generated by the compressor.

Easy Installation

One button auto addressing solution provides easier installation for the user.

SAMSUNG SYSTEN AIR CO

Enjoy the Beauty





Cassette Type

Another Part of Your Interior

Design your interior with Samsung's cassette type indoor units. More colors and patterns will just blend in to the interior that you planned to create. Also, integration of most advanced technologies will recreate the value of your interior one step further with more than just the appearance.





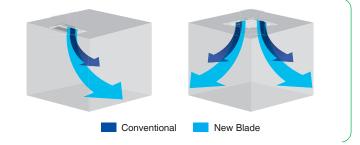
Agir Haddecilik, Turkey

Icon Description

Powerful Airflow



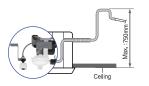
Wide blade on the indoor unit will deliver the cool or warm air further in distance and therefore provide even cooling and heating throughout the room.

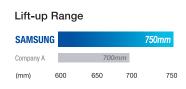


High Lift-up Drain Pump



The lift-up drain pump lifts condensed water up to 750mm, compared to the competitor's 700mm, allowing for flexible and convenient installation.

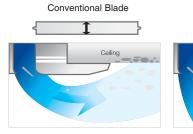


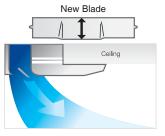


Ceiling Soiling Prevention



Newly designed panel will control the air direction to avoid having contact with the ceiling. This new design will prevent the ceiling soiling and keep your interior cleaner than ever, after a long period of operation.

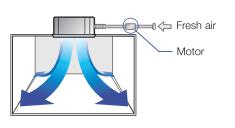




Fresh Air Intake



With optional installation of an air intake motor, fresh air can enter through the cassette unit so you have fresher air in the room.

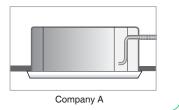


Quick Connection of Drain Pipe



Samsung's unique drain pipe prevents leaks and is easier to install with no need to use tape or adhesives.

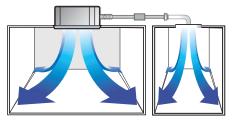




Sub Duct



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



4 Way Cassette S

Smart and Stylish

General features











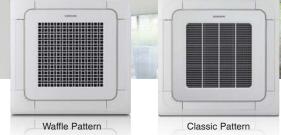
Features

New Improved Design

1 Stylish and Aesthetic Panel

New 4Way cassette S supports two panels with different pattern design. You can select the panel between Waffle and Classic pattern depending on your interior or personal preference.





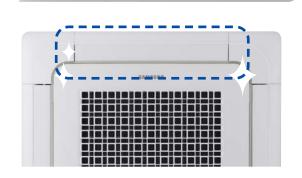


2 Simple Display

Simple display design on the round corner adds neat and clean atmosphere to your interior design.

3 Neat and Clean Design

New 4Way Cassette S has new neat and clean design. Completely hermetic air flow blade structure will keep the indoor unit clean since it prevents dust or other foreign substances from entering into the indoor unit. Also, internal parts of the indoor unit will not be seen once the air flow blade is shut so it will be much neater.



S-Plasma ion

1 S-Plasma ion-Healthy Air Provide

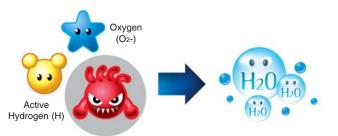
Sanitize your indoor air with Samsung's S-Plasma ion! Priory-filtered air will become healthy air through S-Plasma ion device which eliminates airborne contaminants (such as bacteria, virus etc.)and neutralize OH-radicals. This optional device can be easily installed with just simply inserting the S-Plasma ion kit into the indoor unit.

2 Operation & Algorithm

Active hydrogen (H) and oxygen ion (O2-) emitted from S-Plasma ion device react with virus and turns it into harmless H₂O.







Virus & Active Hvdrogen

Turns into Harmless H2O

3 Benefits of the S-Plasma ion

- Eliminates airborne virus & bacteria (Subtype H1N1)
- · Completely eradicates bacteria
- Eradicates allergens which causes allergies
- Neutralizes OH-radical (as known as active oxygen)

4 Free from OH-radicals

Tests have shown that Samsung's S-Plasma ion neutralizes harmful OH-radicals. Ironically, it is shown that our competitors' ionizing devices produce OH-radicals, that give bad effect on human skin somewhere along the ionizing process.



subtype A-H1N1 vieus



Complete Bacteria Eradication

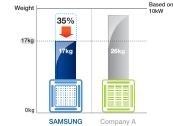




Active Oxygen

Lightest but Strong Indoor Unit

Samsung's 4Way cassette S indoor unit has applied combustible plastic material to the indoor unit body and lightened the product weight to 17kg. It is the lightest indoor unit in the industry and 35% lighter than our competitor's product weight.





Minimizing

4 Way Cassette S

Modern and Sleek

Filter Cleaning Robot

Filter cleaning robot will automatically clean the filter on a regular basis. Therefore, filter will always be kept clean and unnecessary energy waste will be minimized and provided air will be cleaner.



MDS (Motion Detect Sensor)

MDS will detect movement of the people within the area and operate when there's someone in the area. This function will save energy since it minimize unnecessary energy usage by stopping the operation when there is no one in the area.





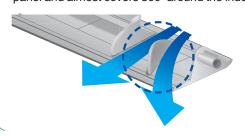
Individual Blade Control

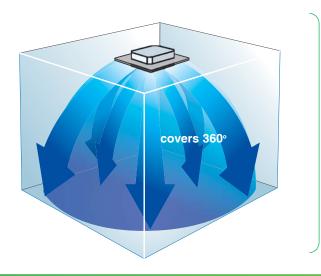
From the option key setting, opening angles of the 4 blades can be set individually in same or different angles within 30°~60° for more efficiency cooling.



Surround Air Flow

4Way outlet is enough to cool every portion of your indoor. With new and practical design of the air flow blades, It minimizes blind spot on the corner of the panel and almost covers 360° around the indoor unit.





No Overflowing Drain Water

Check valve on the drain pump prevents drained water from flowing backward into the drain pan. It will minimize the water level on the drain pan and you will never have to worry about water stagnation or overflowing drain water that could drip into your indoor.









Easy Leveling

Each corner portion of the panel is detachable, which gives easier access to adjust the height, therefore leveling and installation is much easier and quicker than before.

Easy Air Flow Blade Cleaning

4Way cassette S indoor units have detachable air flow blades. You don't have to remove the whole panel to clean the blades.

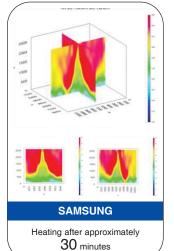
Quick Cooling and Heating

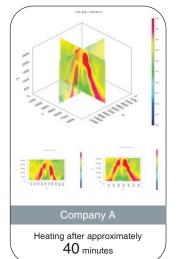
Samsung's 4Way cassette S indoor unit takes lot shorter that our competitors to reach the desire temperature set by the user.

>Time required for reaching desired temperature

Operation mode	Desired temperature	Required time
Cooling	33°C> 25°C	Approx. 35 minutes
Heating	9°C> 20°C	Approx. 33 minutes

>Temperature distribution chart







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. Therefore noise is less than conventional models.

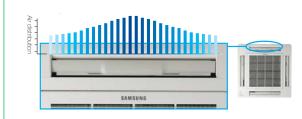
2 Uniform Distribution

The new <Turbo Fan> with wide blades provides extreme cooling and heating power from 4 separate outlets so the entire room gets cool or warm faster. Now, every nook and cranny is comfortable.

Outlet 2 Outlet 2 Outlet 4 Outlet 4 Conventional 4Way Conventional 4Way

Efficient Cooling

3-dimensional shaped blade, which has the world wide patent, is able to spread cool or warm air further and evenly to all corners of the space.



Easy Leveling

Each corner portion of the panel is detachable, which gives easier access to adjust the height, therefore leveling and installation is much easier and quicker than before.



Mini 4 Way Cassette

Ideally Efficien

General features



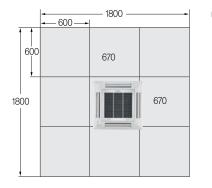




Features

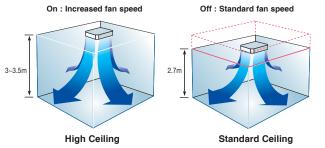
Ideal Compact Size

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



Fan Speed Adjustment

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



Slim and Quiet

General features











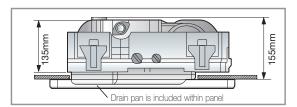
Features

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 it can be installed in a ceiling with tight space.



Ensure that there is sufficient installation space.

Allow at least 170mm for the installation.

Ceiling

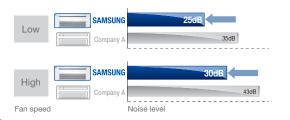
2 Lighter Indoor Unit

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



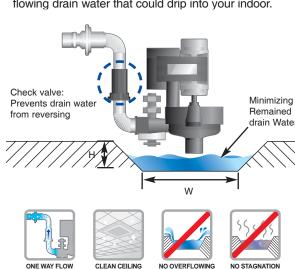
Quiet Operation

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



No Overflowing Drain Water

Check valve on the drain pump prevents drained water from flowing backward into the drain pan. It will minimize the water level on the drain pan and you will never have to worry about water stagnation or overflowing drain water that could drip into your indoor.



2Way Cassette

Compact but Powerful

General features



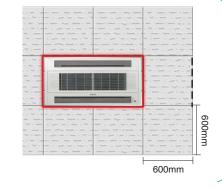




Features

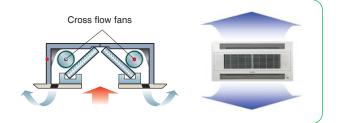
Standard Formula for Easy Installation

The dimension of the 2Way cassette air conditioner allows for easy installation into standard ceiling grids (600Wx600D), so everything just falls into place.



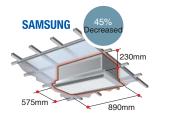
Twin Cross Flow Fan

The 2Way cassette type unit is perfect fit for long and narrow rectangular type of space. Twin Cross Flow Fan inside of 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 competitor's models, so it's even easier to incorporate into building design.







Icon Description

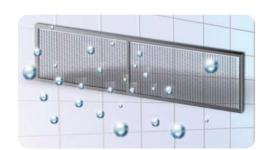
Clean Filter System

The anti-bacteria filter and the filter cleaning indicator provide you with cleaner, healthier air. You deserve to breathe fresh air everyday.

Anti-bacteria Filter



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



Easy Filter Cleaning



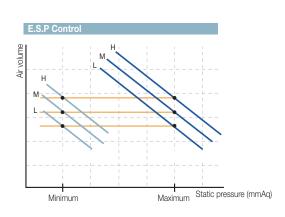
After 1,000 hours of operation the filter clean indicator will inform you that the filter should be cleaned. The filter can be easily removed from the bottom, left, or right of the unit. (1,000 hours is the default set time, which can be adjusted to 2,000 hours on the internal PCB.)



Smart Pressure Control



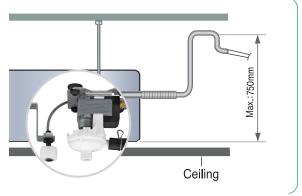
The Smart Pressure Control System adjusts fan speed according to E.S.P (External Static Pressure), so the air conditioner always give you consistent cooling and heating power regardless of the surrounding environment.



3 Star Hotel, Portugal



The lift-up drain pump lifts condensed water up to 750mm, compared to the competitor's 700mm, allowing for flexible and convenient installation.



High Lift-up Drain Pump (Optional)

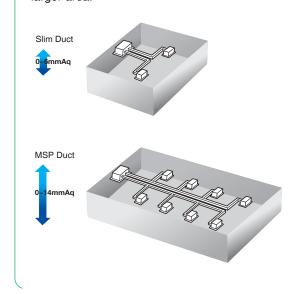


Features



Strong and Large Coverage Area

With the static pressure higher than slim duct, you can design more inlets and outlets with longer ductwork to provide more cool or warm air to the larger area.



Silent Operation with the Static Pressure Control

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

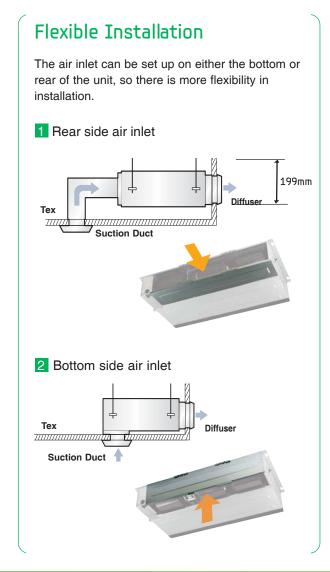
Easy to Maintain

Reduce time and maintenance costs by keeping parts easily accessible.





Features



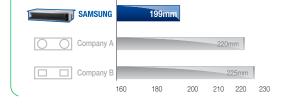
Easier Drain Pump Installation

New drain pump can be installed from the side by simply removing a right side panel. You don't have to disassemble the top cover to install, check or repair the drain pump anymore.



Slim Design

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



Easy to Maintain

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





Icon Description







Improved dust removability!

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









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

How S-Plasma ion Works





Active hydrogen / Oxygen ions

Active hydrogen and oxygen ions are generated

Combines with Harmful substances OH radical, Harmful

substances



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 Louvre air, the air flows all around the room evenly. The wider and longer blades provide advanced airflow throughout the room allowing you to experience a cooler environment in a shorter time.



Wide Twin Blade



Samsung's Wide Twin Blade can be opened up to 90 degree to provides a more effectively controlled air flow. The longer twin blade allows air to reach to every corner of the room. Samsung offers the perfect solution to control your room temperature with the upgraded Wide Twin Blade.



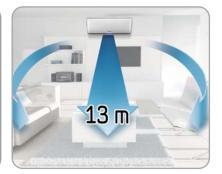
90° airflow to the floor

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



120° wide airflow

The airflow covers 120° angle for complete comfort.



Longer distance coverage

The air distributes all around the room with long-range airflow.

Smart Saver



In Smart Save mode, the air conditioner operates automatically in the least speed when the temperature in a room reaches set temperature, which saves electricity. With the Smart Saver, you can stop worrying about your electricity bill and start enjoying cool comfort.

*outdoor Temp at 30 degree	outdoor Temperature at 30 degree		Up to 3 I % Saving!		
Model	Set Temperature		Power Consumption (4hr)	Power Saving Rate (Compared to regular mode)	
	26°C	Regular Mode	1778	-	
Crystal (12K)		Smart Saver	1230	31%	
	24°C	Regular Mode	2201	-	
		Smart Saver	1930	12%	

210

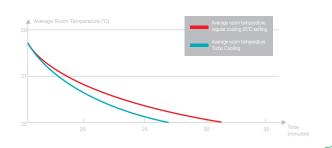
Turbo Cooling



Turbo Cooling

Samsung's new air conditioner maximized the speed of cooling and heating to quickly reach the set temperature. Instantly cool down or heat up your space with Samsung's Turbo Cooling technology.

Optimum temperature for best comfort



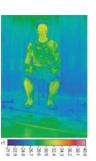
d'light cool



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. It accurately measures and adjusts the most pleasant temperature.







good'sleep



Best temperature for deep sleep

01 Falling asleep stage

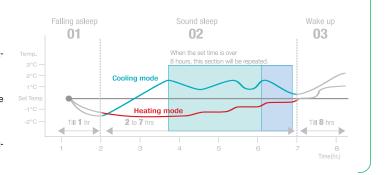
Eases you into sleep by dropping the tempera-

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)



General features















Smart Inverter

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



3D wind

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



Full HD filter

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



d'light cool

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



S-Plasma ion

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

good'sleep

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



P Series (Maldives)



General features











Smart Inverter

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



qood'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.







General features

















Catechin Filter (option)

Catechin is contained in the filter and deactivates captured bacteria and unpleasant odors.



Deodorizing Filter (option)

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



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.



Smart Inverter

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



Neo Forte / Neo Forte-E



General features









Deodorizing Filter (option)

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



Smart Inverter

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



Internal EEV (Neo Forte-E)

EEV (Electric Expansion Valve) equipped inside

- Easy installation
- Easy maintenance













General features













Smart Inverter

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



Deodorizing Filter (option)

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









General features















Smart Inverter

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



Auto Roof Shutter

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

DNA Filter

The DNA structure possesses qualities in absorbing and eliminating microscopic carcinogenic agents.



Deodorizing Filter (option)

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



Console & Ceiling Type

Small Idea, Big Difference

Console and Ceiling type indoor units are quiet unique piece of invention that small idea has made. Idea of having different number of outlets in floor type unit, or idea of using an indoor unit on both floor and ceiling, is not just an idea anymore. It has become reality to enrich our life with big differences of air conditioning they provide.





Beynova Hotel, Turkey

Icon Description

Interior Design



Now with more flexibility in placement, the air conditioner can add a stylish element to your room.



Light Weight Unit



This extremely lightweight design makes maintenance and installation easy.



Silent Mode



Indoor units operate quietly with the least possible noise.



S-Plasma ion



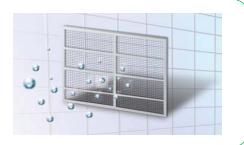
S-plasma ion improves your indoor Air Quality (IAQ) by eliminating the biological contaminants that threaten your health such as viruses, bacteria and allergy causing agents. S-Plasma ion, an advanced air purifying technology, offers you fresh, clean air you can eniov.



Anti-bacteria Filter



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



Flexible Pipe Installation



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





Features

Slim & Smart Design

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

1 Slim Design

It can't get any slimmer. This newly introduced console type air conditioner is only 199mm thick, the slimmest on the market. Its slim design easily integrates the unit into your decor.



2 Clean Panel

Stay clean with the smartly designed Clean Panel. This unique panel keeps dust from being accumulated so the unit and the room stays cleaner.



3 Black Display

Functional art, the touch screen display is elegant while it maximizes the convenience of control.

2Way Air Outlets

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



Silent Operation (23dB)

The silent, yet powerful and efficient cooling and heating system keeps things more comfortable. Silent mode is available in 4 different operating modes: High / Medium / Low / Silence.



Ceiling

General features









Features

2Way Installation

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



Under Ceiling



Floor Standing

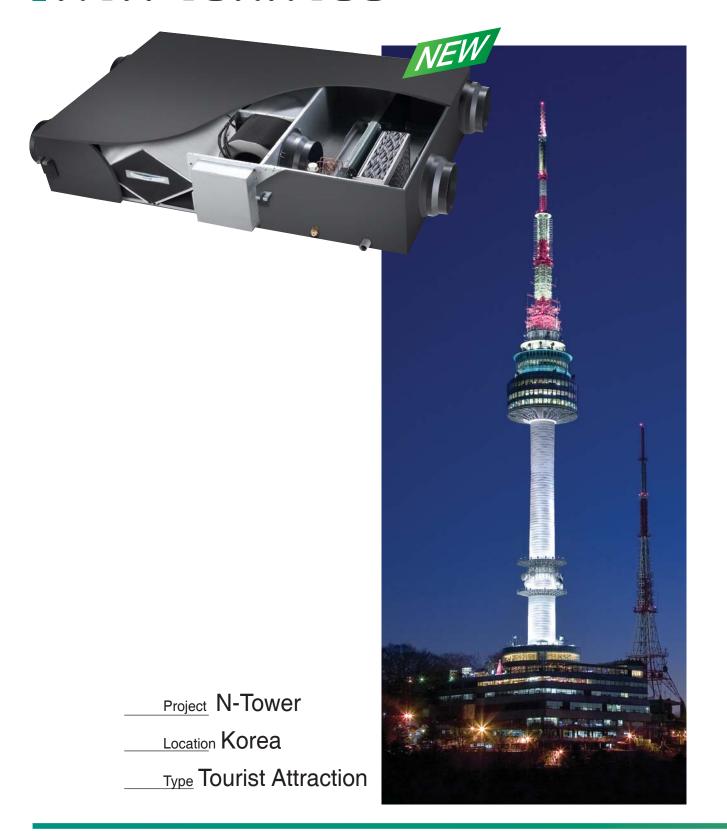
Compact but Powerful

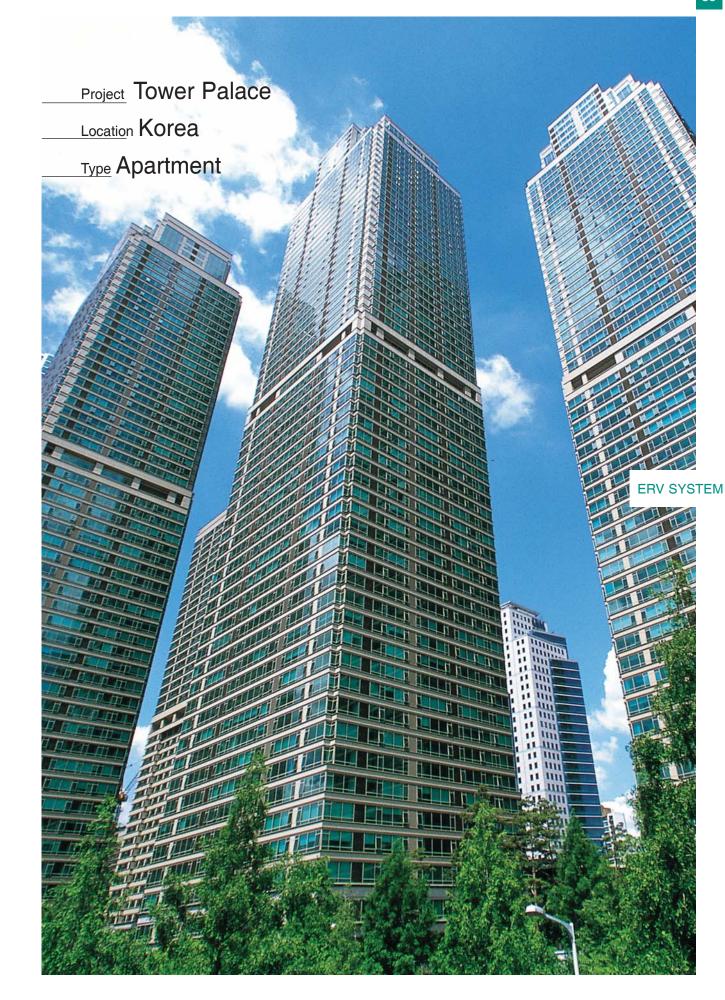
Samsung's ceiling type air conditioner boasts a slim, compact design, half the size of its competitors', with cooling power comparable to competitor's larger products.

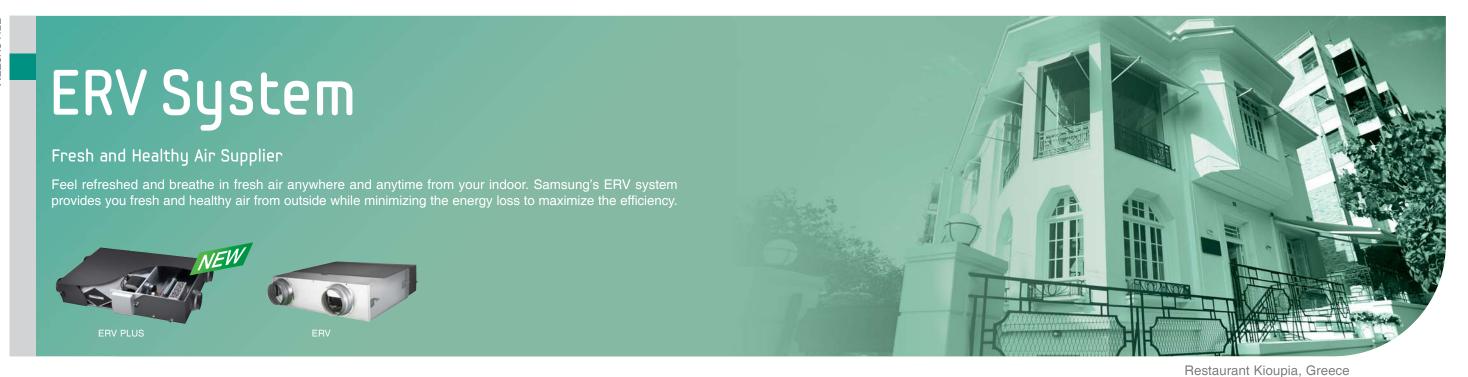




Breathe in Refreshness







Overview

Necessity of Ventilation

Indoor air quality is getting more and more attention as people gets sick by air contaminants within the air. Those indoor air contaminants are the reasons that cause sick house syndrome, asthma, headache, dizziness.



Indoor Air Contaminants

Harmful substances existing in the indoor air and the sicknesses 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 heart and lung function



Nitrogen Dioxide

Decrease lung function



Particle Contaminants

Cancer, Respiratory ailments

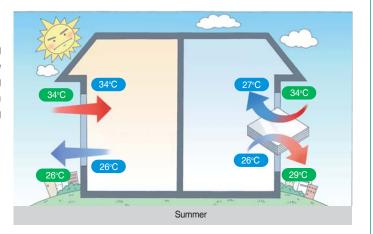


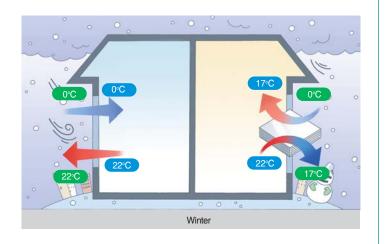
Insecticide

Ototoxic, Hepatotoxicity

Energy Recovery Ventilation

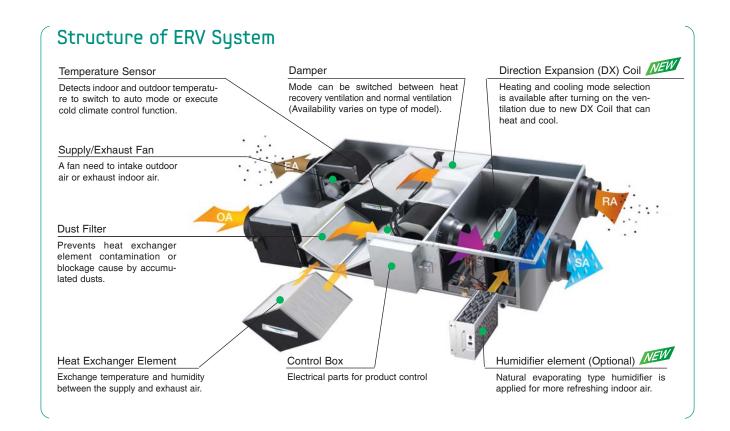
When ventilation is achieved naturally by opening a window, outdoor temperature will affect the indoor temperature and energy will be lost during natural ventilation. However, ventilating through ERV will have same ventilation effect while saving energy.





ERV / ERV Plus

ERV units have now two different lineups. Conventional models are still available and newly introduced units are equipped with more advanced technologies ready to provide cleaner air and pleasant refreshment.



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

ERV Plus is equipped with direct expansion coil to pre-condition the outdoor air entering indoor. Outdoor air will pass through the DX coil and you will get fresh air without any temperature loss.



Maintain Best Indoor Humidity Level

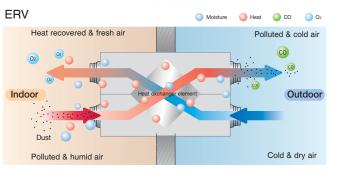
Humidifier Element (Optional)

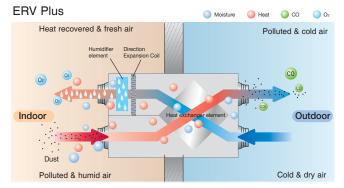
Keep the best indoor humidity level with clean humidifier kit. Samsung's humidifier kit boasts high efficiency of humidification with its large humidification area. Also it will avoid bad smell thanks to self cleaning which sprays water from the top when the set starts.



Heat Recovering Method of ERV System

- Ventilation efficiency is great with 2way ventilation type that has air inlet and outlet on both side of the unit.
- 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% (which can be different depending on models) of the energy needed to cool or heat. Therefore indoor temperature and humidity will be recovered during winter and outdoor heat and moisture will be prevented from entering indoor during summer.





Smart CO₂ and Humidity Sensors

ERV automatically operates to give fresh air into room by detecting CO₂ with the CO₂ sensor. Also, you can attach a humidity sensor which will detect the humidity of the room and control the humidifier element to adjust humidity level.



RV SYSTEN

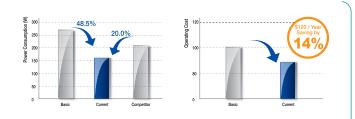
ERV / ERV Plus

ERV units have now two different lineups. Conventional models are still available and newly introduced units are equipped with more advanced technologies ready to provide cleaner air and pleasant refreshment.

Common Features

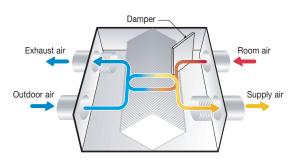
Energy Savings by High Efficient BLDC fan motor

This year's model has achieved lower power consumption, and the BLDC motor equipped to each ERV units will save energy up to 48% compared to basic models. Furthermore, you will save \$230 annually, save your energy bill by 14%.



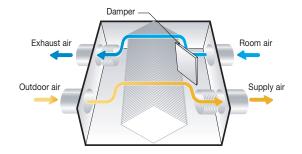
Energy Saving Operation (Auto Mode)

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



Extreme Climates (Winter & Summer)

When temperature and humidity level difference between indoor and outdoor is big, it operates as ERV.

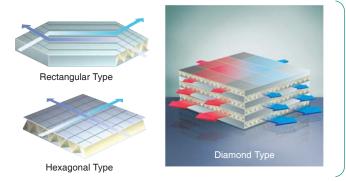


Mild Climates (Spring & Fall)

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

New Diamond Type

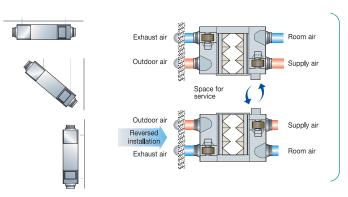
New diamond type heat exchanger element has optimized airflow design. Diamond type element is compact size but it boasts high efficiency compare to conventional rectangular and hexagonal type elements.



Flexible Installation

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

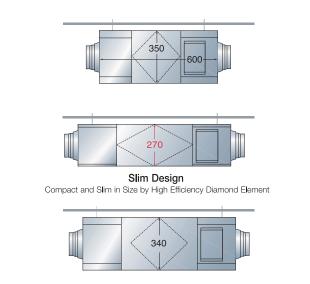
*Not applicable for ERV Plus models.



Slim design

Samsung's advanced technology has achieved slim and compact size.

With the highly efficient heat exchange element, Samsung has been able to reduce the height to 270mm. Compared to the units with rectangular type heat exchanger, Samsung's ERV units use the space efficiently with its slim design.



Silent operation

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



SAMSUNG SYSTEN AIR COND

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Manage Conveniently







INTEGRATED MANAGEMENT

CENTRALIZED CONTROL

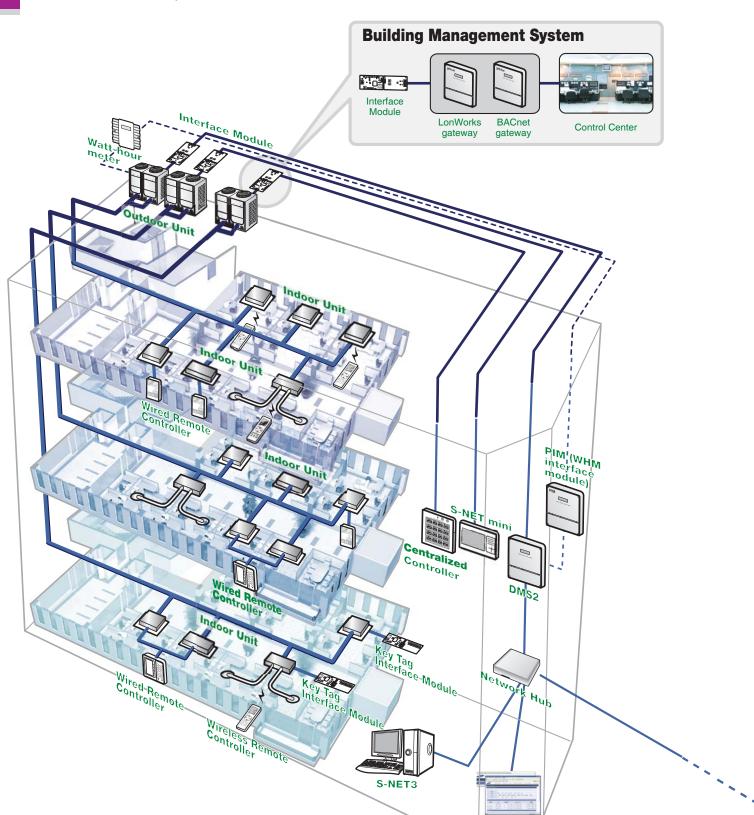
INDIVIDUAL CONTROL

BUILDING MANAGEMENT



DVM System Structure

Samsung provides efficient management solution from single product to a group of products that structurize the air conditioning system. Samsung's optimized management system raises satisfaction and reliability.















■ S-NET3

Integrated software which connects to the internet to manage system air conditioners through DMS. S-NET3 supports up to 16 different DMSs installed in different buildings which means you can control system air conditioners in 16 different places from a single computer connected to internet.

■ S-NET Mini

Upper level controller, similar to S-NET3, but this touch screen controller can be connected directly with the system air conditioners through centralized controllers or interface modules allowing up to 256 indoor units. S-NET mini also supports up to 4 DMSs to provide the same remote control function as S-NET3.

■ DMS2

DMS2 is an internet-based management device which stores and manages all the data relevant to 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

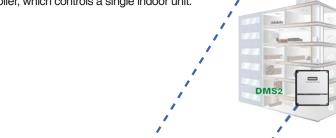
Centralized controller is a device that controls up to 16 groups (256 indoor units) of system air conditioners. It can control the system air conditioners individually or in groups and supports many other functions.

■ Interface Module

Interface module is a device, which transmits data between the outdoor units and the upper level controllers.



Individual controller, which controls a single indoor unit.





For a relatively larger place with lots of indoor and outdoor units to manage, you need a control solution, which is convenient to manage. Samsung's Integrated manage system is the perfect choice for managing large and middle-sized buildings.

S-NET3

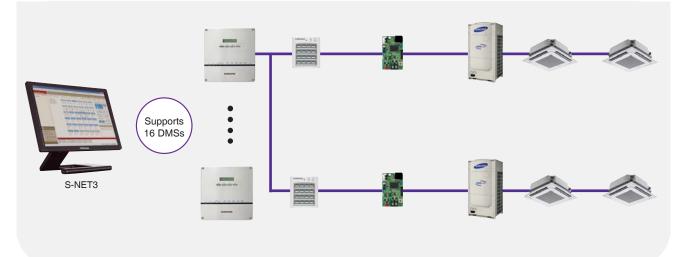
You can manage a group of buildings with S-NET3 through Data Management Servers that manage each building individually. S-NET3 provides flexible and complete control for a great variety of applications.



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 print
- Time section setting for different electricity rates
- Group setting for power distribution summation



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 print



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 a relatively larger place with lots of indoor and outdoor units to manage, you need a control solution, which is convenient to manage. Samsung's Integrated manage system is the perfect choice for managing large and middle-sized buildings.

S-NET mini supports up to 4DMSs to provide the same remote controller can be connected directly with system as S-NET3 and this touch screen controller can be connected directly with system air conditioner through centralized controller or interface modules allowing 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 S-NET mini

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

Schedule list		schedule 1 - Stop State - Report weekly				
rest Name	Apply	Spectral > Exception day> Schedule 2002. 2. 5 = 2002. 3. 7				
	-	Mon To	ue Wed	Thu	Fri	Set Sun
		Os	08	Temperature	Mode	Allow use of
		00:00			Fin	True
		09/00	. +.	-10	Auto	False
New schedule Edit	Delete					
Acoly Stop	Stop at					
Open >	Save >	_				

Cycle Monitoring

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



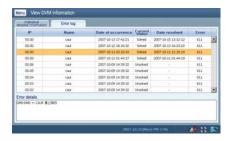
Zone Management

- 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 a relatively larger place with lots of indoor and outdoor units to manage, you need a control solution, which is convenient to manage. Samsung's Integrated manage 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 upgrade functions will automatically manage your air conditioning system.



MIM-DOOA

- 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

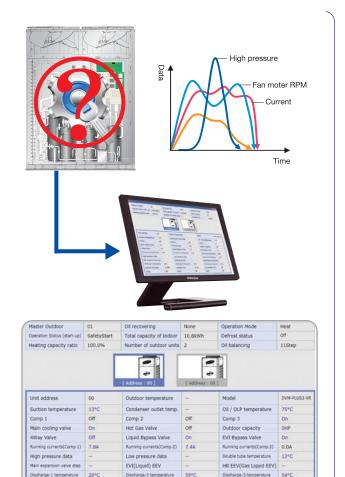
Easy Control & Monitoring

- · 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

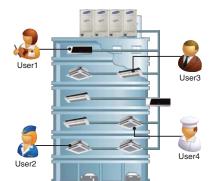
- No need on open each outdoor units
- Detailed refrigerant flow check in control room
- Reduced service lead time



Indoor unit On/Off time storage

• Operation history recording for up to 6 months





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 2 months

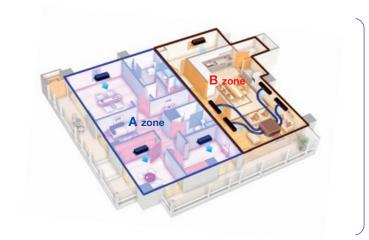
Smart Central Management

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

A zone

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

• Cooling only / Remote controller use

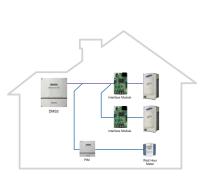


Flexible Connectivity

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

Small & medium size

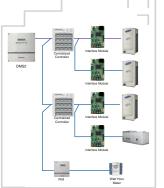
Connect interface module directly

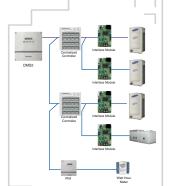


• Under 16 outdoor units

Large size

Connect centralized controllers

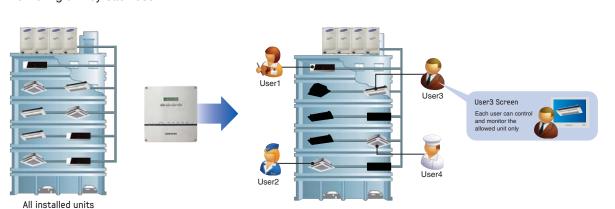




• Over 16 outdoor units

Accessible Level Management

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



Enhanced Graphical Display



Dynamic User Security Management

By ID and password, general user, manager and administrator can be registered separately. Administrators (Utility managers) have an authority to put accessible levels of DMS2 functions on users.

Functions	Admin Access all	Manager Chang	User geable
Control / Monitoring	0	0	0
Zone management	0	0	Х
Schedule	0	0	0
Power distribution	0	0	х
System configuration	0	Х	Х

Powerful Data Backup

- Important data is stored on SD memory card safely.
- 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

- Built-in web server for PC-independent management and remote access control
- Multiple upper-level control access (S-NET3, S-NET Mini, Web-client)



Useful History Management

- DMS2 records indoor unit operation and error occurrence history.
- It makes convenient to analyze air-conditioner operation and maintain units



Operation history

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



- 3. Error occurrence/clear time
- 4. Error state (solved / unsolved)



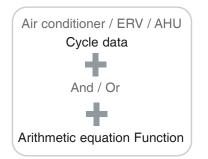
Speed-up Hardware Improvement

Improved hardware makes you 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

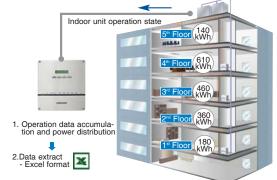
- User can edit control logic with arithmetic/ conditional operators and parameters.
- Efficient energy saving can be realized for various operation conditions.



Ex) Energy saving function, Operation adjustment depending on outdoor temperature

Power Distribution System

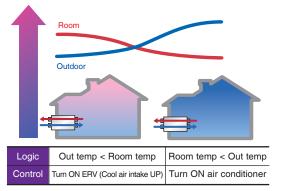
- Power distribution to up to 256 indoor units
- Data query for watt-hour, use time and use ratio
- File save in Microsoft Excel format
- 1-year worth of power distribution data storage



Emergency Contact Control

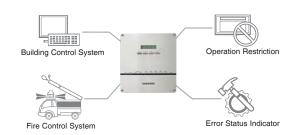
- Built-in web server for PC-independent management and remote access control
- Multiple upper-level control access (S-NET3, S-NET Mini, Web-client)











Centralized Control

Centralized control system is more than enough to control multiple groups and individual indoor units. With Samsung's centralized controller, conveniently and efficiently control the multiple or individual indoor units.

Centralized Controller

MCM-A202D

- Maximum 16 group controls (Maximum 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

To use Function Controller, it requires to be connected to MCM-A202D

02 \$24° 4.1 00.

SAMSHAG

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

- In case of controlling below 16 group, MIM-B13D has to be used. (If it is not used the group control, 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.

- In case of controlling more than 16 group, MIM-B13E has to be used.
- MIM-B13E supports the DVM, FJM, CAC and ERV.

(It doesn't support the ERV Plus)







Individual Control

There are a variety of wired and wireless controllers for convenient use of your air conditioners. With different control options, you can choose one that suits for 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 (Supported the specific indoor unit models)
- Indoor selection control (Supported the specific indoor unit models)

Wired remote controller

MWR-WE10

- ON/OFF, Operation mode, Fan speed, Airflow, Temperature setting
- Individual and group control (Maximum 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 (Maximum16indoorunits)
- Error display
- Filter replacement alarm reset
- Mode selection protection

ERV Wired Remote Controller

MWR-VH02

- Individual and group control (Maximum 16 ERVs)
- On/Off control
- Operation mode (By-Pass, Heat Exchange), fan speed
- Simple schedule control
- Error display
- Synchronous 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 3 days)
- Use with wired remote controller, or centralized controller. (MWR-TH01, MCM-A202B)











Building Management

Samsung's excellent building management system with convenient monitoring makes management much easier.

I BACnet gateway



MIM-B17

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

Control		Monitoring		
On/Off control	•Filter alarm reset	On/Off control	●Thermo Off/On	
Operation mode	•User control restriction	 Operation mode 	Power distribution	
•Temperature setting	Operation mode lock	●Set/Room temperature ●Operation mode lock		
•Fan speed/direction	•Set temperature limit	•Fan speed/direction	•Set temperature limit	
•ERV operation mode	Emergency stop	•ERV operation mode	•In/Out contact state	
●ERV fan speed	Output contact control	●ERV fan speed	Emergency stop	
		•Filter alarm	•Error code	
		•User control restriction	ı	

RS485 Ethernet S-NET3 S-NET mini Interface module

LonWorks gateway

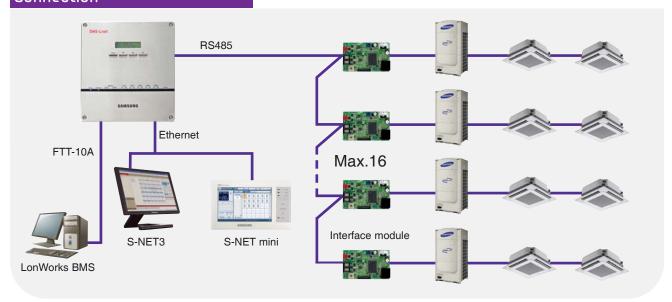


MIM-B18

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

Control		Monitoring	
On/Off control	•Filter alarm reset	On/Off control	●Thermo Off/On
Operation mode	•User control restriction	Operation mode	Power distribution
•Temperature setting	Operation mode lock	●Set/Room temperature ●Operation mode loc	
•Fan speed/direction	•Set temperature limit	●Fan speed/direction	•Set temperature limit
•ERV operation mode	Emergency stop	•ERV operation mode	●In/Out contact state
●ERV fan speed	Output contact control	●ERV fan speed	Emergency stop
		Filter alarm	•Error code
		•User control restriction	า

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 convenient monitoring makes management much easier.

Watt-hour Meter Interface Module



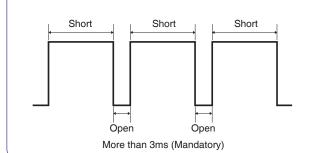
Connection

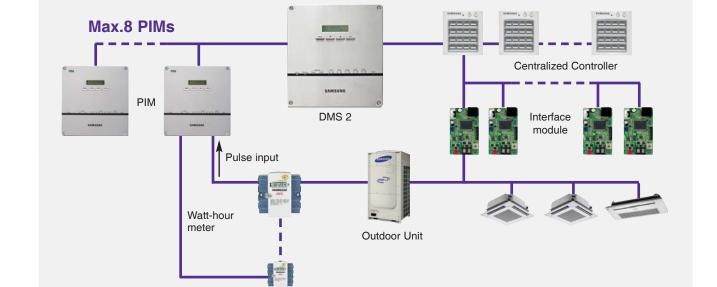
MIM-B16 PIM (Pulse Input Module)

- 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
- Automatic detection of specified watt-hour meters

Connectable Watt-hour meter with PIM

- ■Wh/Pulse range: 1~10,000 Wh/Pulse
- Pulse width range: 20~400ms
- Interval between pulses : Min. 3ms





Max.8 Watt-hour meters

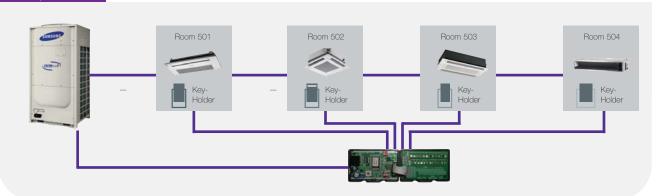
Guest Room Management

The Guest room Management System is a smart way to save energy and money. When the Key Tag is in place, the air conditioner is activated. When the Key Tag is removed, the air conditioner switches off. Now you can avoid cooling an unoccupied room and save energy.

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



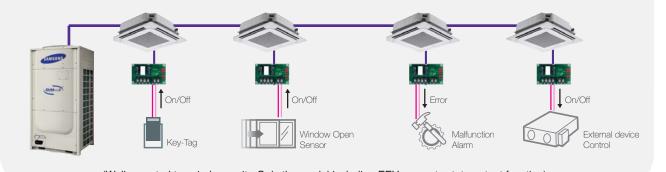
External Contact Interface Module



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



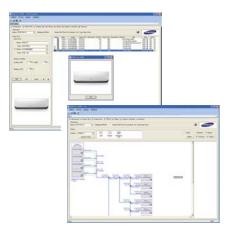
(Wall mounted type indoor unit : Only the model including EEV supports state output function)

DVM-PRO

DVM Pro will help select product, accessories and other things that requires to structurize 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

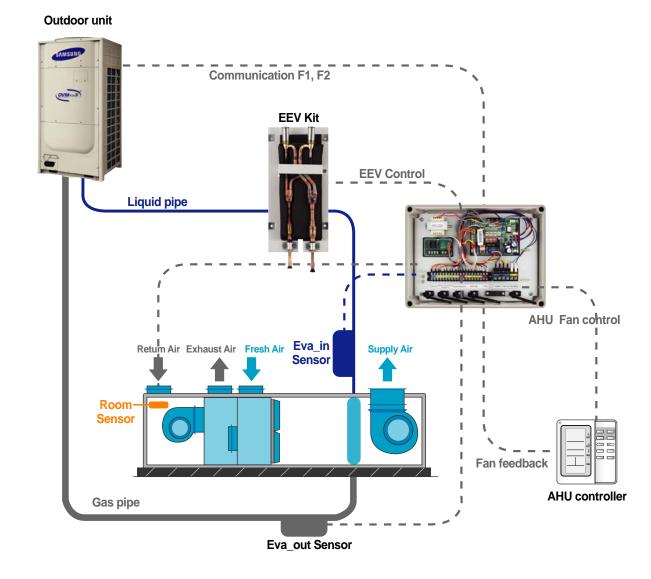


Contact to Samsung HQ or Distributors for DVM-Pro CAD!

Wide Application

Samsung Provides a kit that allows connection with AHU (Air Handling Units) on DVM Plus IV outdoor units.

AHU Kit



SAMSUNG SYSTEN AIR CO

Meet Greener Heating







ECO HEATING SYSTEM



ECO HEATING SYSTEM

EHS



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 and provide heating, hot water supply and air conditioning using only one system.



EHS System

Samsung's EHS product is a highly efficient, all-in-one heat pump system that results in savings to Initial purchase costs and the space needed for an extra outdoor unit.



Global Warming?

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



Oil is Running Out!

As the oil price is getting higher, we need renewable energy resources.



Un-Sustainable Resources

Rising oil prices have lead to the associated operating costs of heating a home to inc-



Rapid Air Heating

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



Air Cooling

During summer operation, the integrated high efficiency air conditioning system can be operated in cooling mode and provide a more comfor- standard gas boiler system. table living environment.



Cost Saving?

Samsung's EHS, with its industry leading operating efficiencies, can reduce your running costs by up to a third when compared to a

What is a heat pump?

A heat pump is an energy efficient system that uses the heat from ambient air for heating and hot water. Using a heat pump system for basic heating and hot water to your house 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 under floor heating, a heat pump requires less power input for greater power output than conventional boilers.

For every 1kWh of energy input, a heat pump can deliver up to more than 4kWw energy output. This means an energy efficiency ratio of more than 400%. In comparison high energy efficiency boiler systems can only reach an efficiency ratio of up to 95%. In other words, the boiler system will consume more energy than that it will deliver.



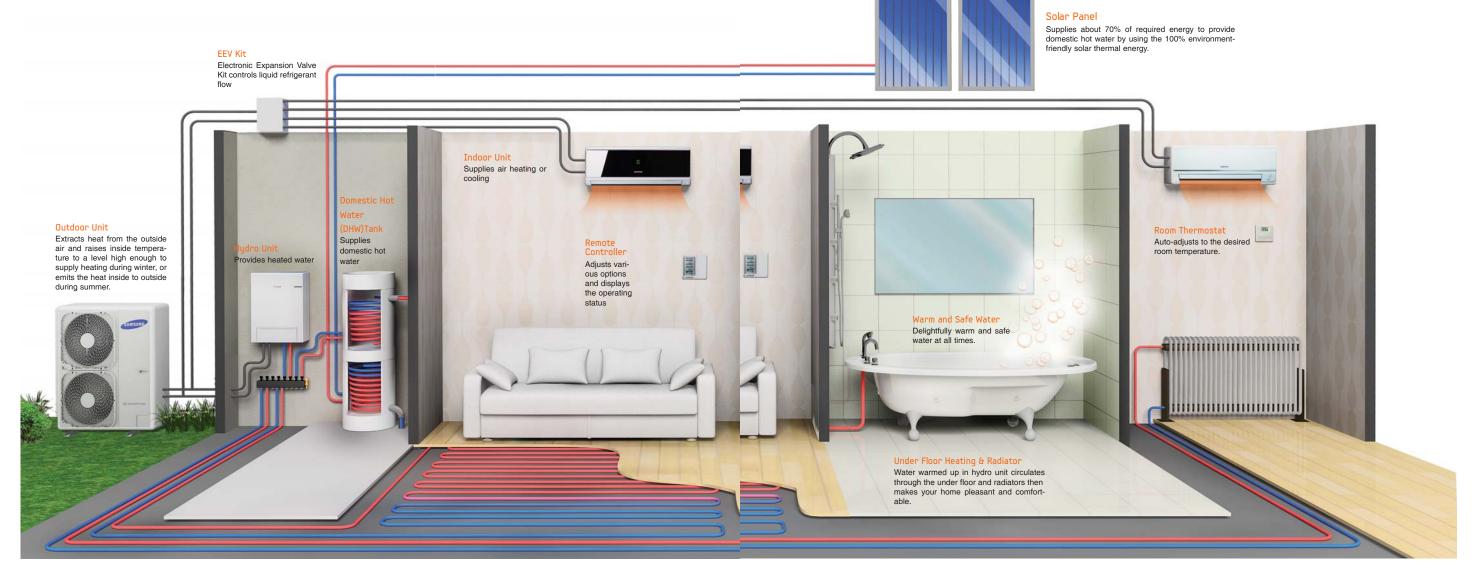
What are the benefits?

Using a heat pump system for basic heating and hot water in your house is an energy efficient and environmentally friendly solution. The advantage for the end is the energy efficiency which will lead to reduced energy bills.

EU has defined heat pump systems as renewable energy products. With this classification end users can apply for government subsidies or tax refunds when installing a heat pump system. You can contact our local installer near you to find out if you can apply for this as well.



Eco Heating System



Air-to-Water

It's the most ideal cost efficient heating system, in which outside air heat source is applied to heating home floors and water.







Under Floor Heating

Air-to-Air

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



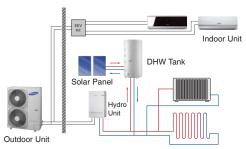
Air Heating

Air Cooling

Installation Diagram

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

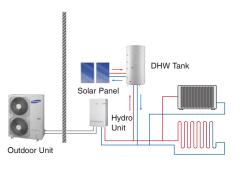
- Outdoor Unit + EEV Kit + Indoor Unit
- Outdoor Unit + Hydro Unit + Under Floor Heating
- + Radiator + DHW Tank + Solar Panel



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

2 Air-to-Water Only

- Outdoor Unit + Hydro Unit + Under Floor Heating
- + Radiator + DHW Tank + Solar Panel



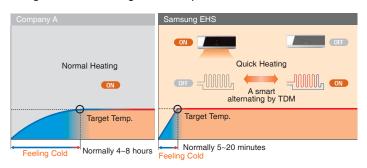


Human Friendly



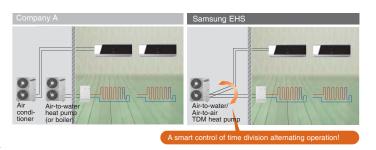
Quick Heating by TDM Technology

Floor heating is well known as the optimal heating option for indoor thermal comfort. However, it takes 4~8 hours to heat up the room after it is turned on. Samsung EHS TDM technology quickens that 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 for both functionalities resulting in lower product cost and space saving.



Typical Seasonal Usage











Flexibility

Samsung EHS can be implemented with other optional products: Domestic Hot Water Tank, Thermostat, Pump, Solar Panel or Back-Up Boiler, making it more versatile than ever.

Environment Friendly

Running Costs-Reduction of Up to 33.3%

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 as compared to a 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 saves 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

Samsung EHS is made up of an inverter compressor optimally operated according to the outdoor temperature, offering heating performance of 90% 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 woven into 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 other components (Solar Panel, Back-Up Boiler, etc) monitoring.



Outing
Outing
The system in "stand-by mode" stops all of its functions, except for one function that prevents the pipes from breaking/bursting due to weather changes. Additionally, this system can keep the house at a desired temperature even when you are out. Real-time Energy Consumption Display
5 Eco-level bar indicator shows the level of energy consumption (Solar Panel, Back-Up Boiler and Back-Up Heater of the hydro unit).





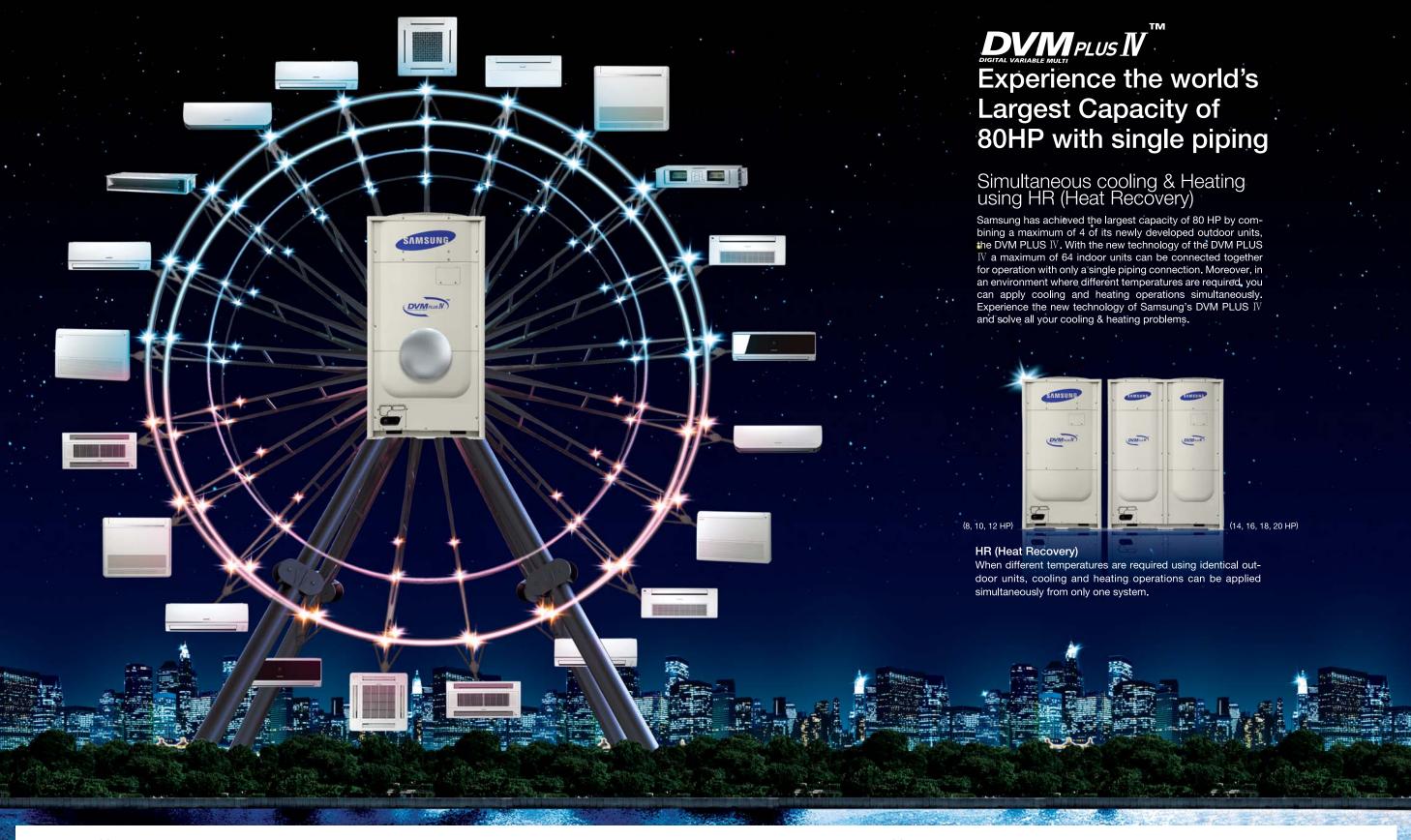
Solar Panel and Back-Up Boiler "Work in Progress" Display
The system indicates when Solar Panel and Back-Up Boiler are in the process



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.







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 Performance

By applying vapor injection technology, the heating performance has been improved by 20% at a low ambient temperature of -10°C.

Low CO2 Emission

of DVM PLUS $\ensuremath{\mathrm{IV}}$ is substantially reduced compared to competitors'.







Capacity increased to 80HP by combining 4 units (20HP per unit) making it the world's largest capacity. And decrease in transportation and installation costs for large-scale installations in high-rise buildings (calculations based on 50Hz model).

Performance improvements of up to 20% even in temperatures as low as -10 C, while at the same time achieving highly-efficient heating and cooling thanks to the high-performance compressor.

High-performance, Energy efficient



With its reduced installation footprint compared to previous models and other brands, space utilization has improved while time required for installation and delivery has been reduced.



Easy-to-Control System

More efficient and prompt system management with automatic backup system (Black Box) and DMS 2.0 technology.



Memo

Icon Guide

Samsung system air conditioners have variety of features for each product. following are the description of the icons and brief explanation of each feature.

Cassette type Icon



Wider blades provide

more even cooling power.



Newly designed panel pre-



vents ceiling contamination. brings in fresh air from

Optional air intake motor

outside.



Lift-up condensed water

any other competitor.

up to 750mm higher than nection is easy to install.





The Sub Duct makes it easy

to provide air conditioning

to a nearby smaller space

Duct Type Icon



Anti-Vieus Filter

Anti-bacteria Filter traps dust particles and suppresses proliferation of filter needs to be cleaned. any other competitor. molds and bacteria.



will let you know when the up to 750mm higher than







Adjusts fan speed to provide constant cooling and heating performance

Smart Control



Unique drain pipe con-

controller is provided.

■ Wall-mounted Type Icon



Samsung's Full High dust and allergy-causing

☆☆



good'sleep automatically adjusts temperature and humidity for your good



S-Plasma ion eliminates

the biological contaminants

in the air such as viruses.

bacteria and dust.

Smart Inverter maintains constant shutting off and provide advanced airflow



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

and 4 Way Auto Swing

all around the room for

even distribution.



Auto Roof Shutte

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



Turbo Cooling maximizes the speed of cooling and adjusts the temperature and



DNA

____ Auto Roof

seals off to prevent dirt infiltration.

Shutter



urbo

Turbo Coolina

DNA Filter

es qualities in absorbing rated in the filter, efficiently and eliminating microscopic absorbing all odors.



4 Cool

d'light Cool

This system automatically

humidity level to maintain

The DNA structure possess- Activated carbon is incorpo- Catechin is contained in



the filter and deactivates captured bacteria and unpleasant odors.

Console & Ceiling



The clean, modern design complements any decor.



dust particles and sup presses proliferation of

molds and bacteria.

Anti-bacteria Filter traps Extremely lightweight, so maintenance and installation is easy.



Automatically changes The pipe can be installed operation mode according in 6 different places for to temperature setting. more placement options.



operates silently.



Indoor and outdoor unit Default wireless remote

•••

controller is provided.