

SAMSUNG

# DVM S2 | WindFree™

Digital variable multi Compatible



Artificial Intelligence Enabled VRF System

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## About Samsung

# The leading brand in the air conditioning industry



5<sup>th</sup>

The Best  
Global Brands

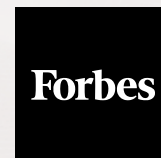
Interbrand is a global brand consultancy and publisher of the highly influential annual Best Global Brands.



3<sup>rd</sup>

The 100 Largest  
Global Market  
Value Companies

The FutureBrand Index is a global brand perception study of the 'Global Top 100 Companies by market value' according to PricewaterhouseCoopers (PwC), a global accounting consulting firm.



8<sup>th</sup>

The World's  
Most Valuable  
Brands 2020

Every year, Forbes announces its top 100 global brands based on the profits and industry status of more than 200 companies worldwide.

# We create new possibilities to fulfill the needs of people across the globe.





We are proud to say that Samsung is recognised as one of the world's leading intuitive product design companies, and one of the world's top electronics producer. Samsung system air conditioners have been designed with the same passion for innovation and quality that has helped make Samsung one of Interbrand's 2022 Best Global Brands.

As such, Samsung system air conditioners are held in high esteem around the world and have been selected for a multitude of applications, including shopping centres, airports, stadiums and hotels. And in constant pursuit of excellence, we continue to invest heavily in research and development, performance testing and quality control to deliver superior air conditioning systems.



309,630  
Employees

7  
Design Centers

74  
Countries

37  
Production Sites

216  
Global Bases

15  
Regional Offices

37  
RandD Centers

52  
Sales Offices

## Why Samsung

# We've been expanding our cutting-edge product domain.

Samsung is synonymous with pushing back boundaries, and we are revolutionizing the world of air care. Our award-winning air conditioning systems are recognized worldwide for their stunning designs, advanced performance and outstanding efficiency.

Using groundbreaking technology, we have developed an extensive range of innovative climate systems. So, we can provide the best solution to fit your needs, whether it is for your home or for a business.

Our **WindFree™** technology spreads fresh air uniformly without unpleasant cold drafts. To ensure maximum comfort throughout an entire room, the bladeless 360 Cassette features booster fan technology and a cutting-edge circular design. And Samsung's highly efficient Digital Inverter technology cools you quickly without wasting energy. You can even stay wonderfully warm when it's freezing outside, as our Flash Injection technology maintains a reliable performance even at temperatures as low as  $-25^{\circ}\text{C}$ .

However, all of this advanced technology doesn't make them hard to use. In fact, it is the complete opposite. You can control your air conditioner really easily, even when you're on the go. As well as offering standard remote controls with a bright color display and intuitive interface, you can also control the air conditioner anytime and anywhere using an App on your smartphone.

As a result, Samsung has received a host of prestigious industry awards. The 360 Cassette was selected as a finalist in the iF Product Design Award 2016 and the International Design Excellence Awards (IDEA) 2016. In addition, Samsung's Digital Inverter 8-Pole was recognized for its product excellence in the 40th Mostra Convegno Expocomfort's "Beyond Class A" initiative. And our Wallmount climate system received the "Eco-design and Sustainable Technologies" CES award in 2015.





We understand  
"comfort".

So we eliminated wind  
while still keeping you  
comfortable.

Tens of thousands of micro holes  
that disperse air gently



WindFree™ Air Conditioners  
· 1 way, 4 way and High Wall

A bladeless circular design that  
distributes air farther  
and evenly

**360 Cassette**

- Innovative Circular Design
- Omni-directional Outlet
- Bladeless Design with a Booster Fan



**The DVM S2. Built on  
revolution.**

**DVM S2**

- Artificial Intelligence Enabled.
- 34HP Large Capacity in a Single Unit
- Larger Heat Exchanger Area\*

**Compact design with  
exceptional performance**

**DVM S Eco**

- Compact Size
- Up to 14HP Large Capacity
- Flexible Installation with 4-way Piping



**Modular flexibility  
to expand on  
demand**

**DVM Chiller**

- Modular Design with a Small Footprint
- Flash Injection Technology
- Expandable to up to 320ton

We understand  
"business".

So we provide  
the **ultimate flexibility**  
to exquisitely meet  
every need.

\* Based on Samsung's measurements, comparing 33.6kW models of a DVM S2 and a conventional outdoor unit.

# Our history

## Continuous innovation

Samsung has been manufacturing air conditioners and challenging the status quo of the industry for over 40 years. Thanks to cutting-edge innovations in design and technology, we will continue to aspire to be a leader in the cooling and heating industry in the years to come.

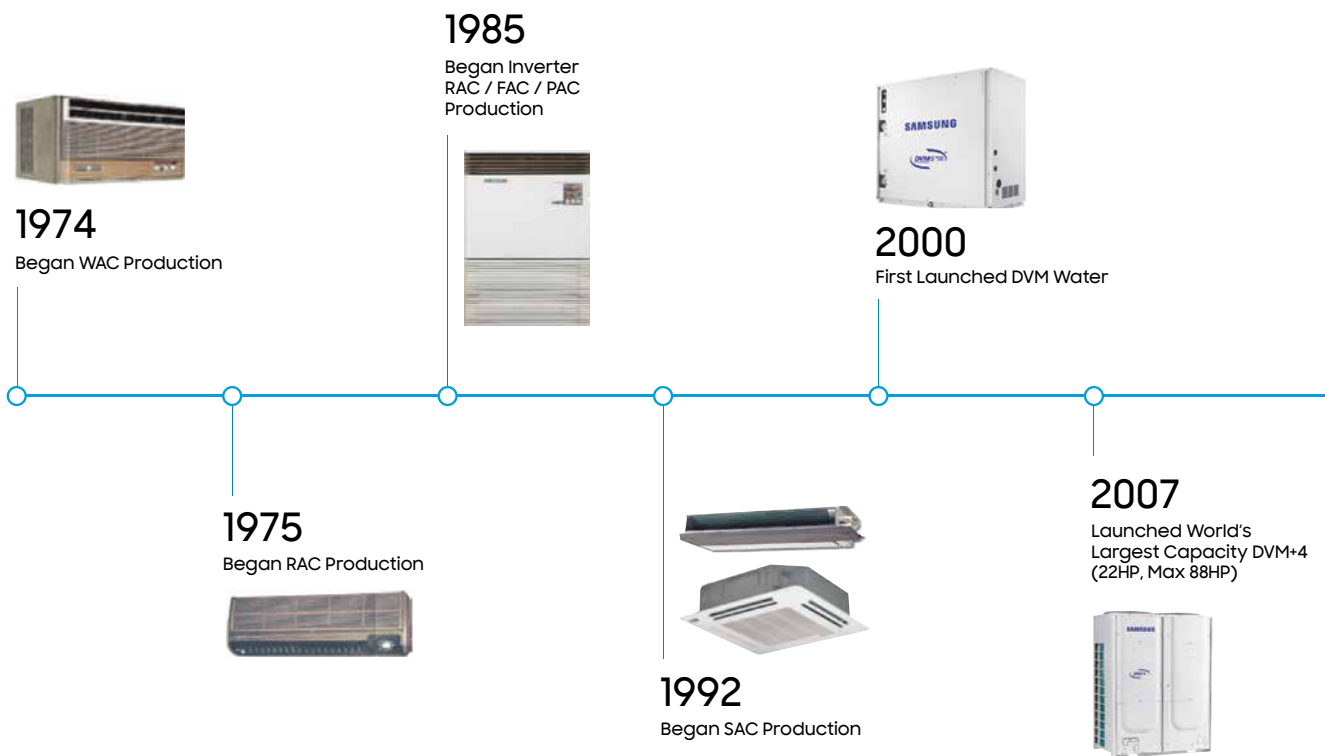


Image simulated for representational purposes only.





**2012**  
Launched Wi-Fi Control RAC  
(Jungfrau)

**2015**

Introduced World's First  
360 Cassette  
30HP DVM



**2018**  
Extended WindFree™  
With Cassette Range



**2022**  
Artificial Intelligence Enabled.  
Large capacity up to 34HP (Single ODU unit.)



**2013**  
Launched Triangle Design  
RAC (A3050)

**2017**  
Launched WindFree™



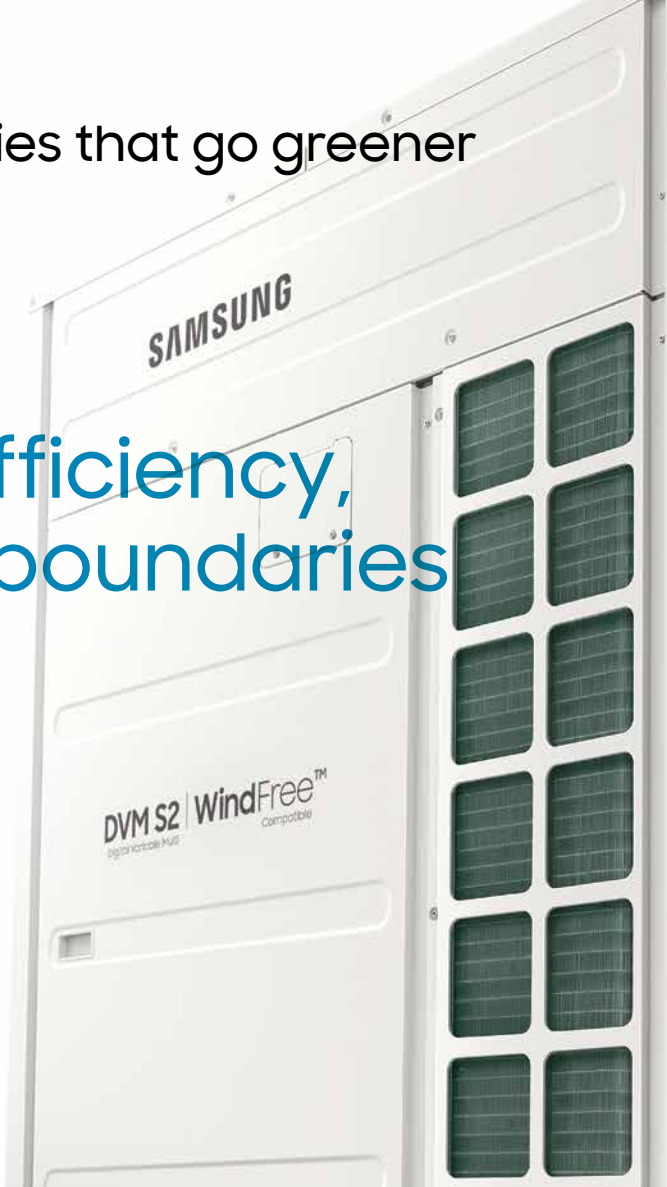
**2020**  
WindFree™ technology  
with PM 1.0 filter



Image simulated for representational purposes only.

## The pinnacle of efficiency, pushes back the boundaries

In line with Samsung's unwavering commitment to being an eco-responsible organisation, the DVM S2's radical new design incorporates a range of technologies that minimise its impact on the environment. As well as transferring heat much more efficiently, so it consumes much less energy, it also intelligently optimises its cooling performance to reduce any waste. In addition, its improved sub-cooling rate and Advanced Flash Injection significantly reduce the amount of refrigerant required, making it much more environmentally friendly and reducing harmful CO<sub>2</sub> emissions.



### Maximised efficiency

minimises waste of energy

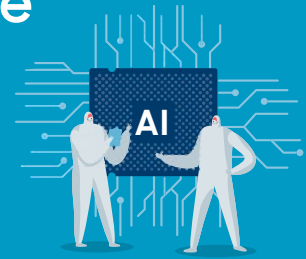


The DVM S2 has been redesigned to cut the cost of cooling with energy-efficient technologies. The enlarged Heat Exchanger has a much greater transfer area to exchange heat faster. An optimised refrigerant path also matches the air flow speed to improve the transfer of heat. An aerodynamic Multi-serration Fan generates more air flow while consuming less electricity as it minimises air turbulence. And a 7th generation insulated gate bipolar transistor (IGBT), which switches current and frequency to suit the system, reduces the loss of conducted electricity.

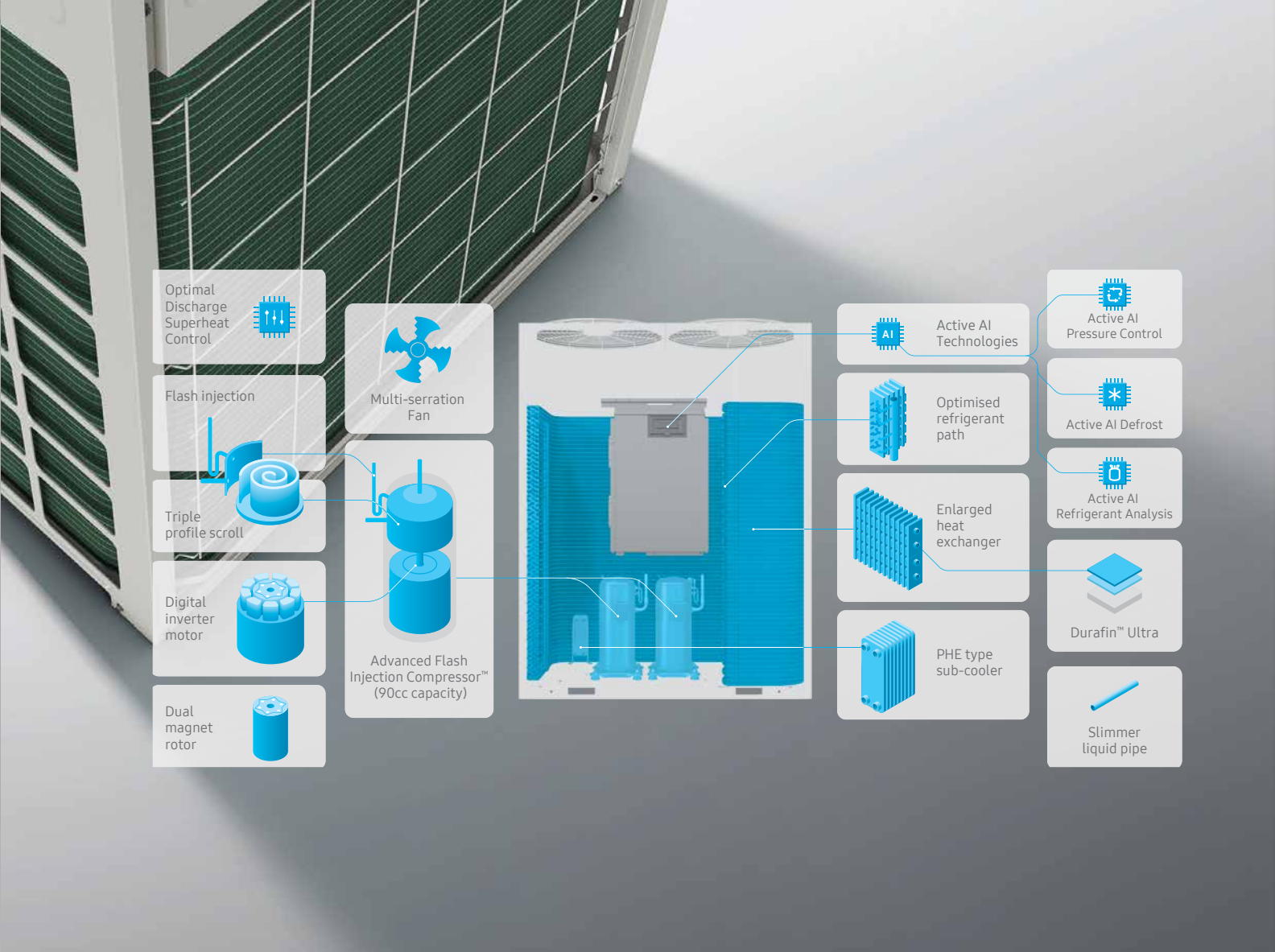
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### Artificial intelligence

controls more efficiently



The DVM S2 optimises its cooling performance automatically, based on a learning and optimising algorithm about the installation conditions and usage patterns. Active AI Pressure Control intelligently adjusts the refrigerant condensing pressure and evaporating pressure, so it cools faster and reduces energy usage. Active AI Defrost ensures it defrosts more precisely, so it increases the continuous heating time significantly. And Active AI Refrigerant Analysis proactively monitors and helps maintain the optimum level of refrigerant.



Optimal Discharge Superheat Control



Flash injection



Triple profile scroll



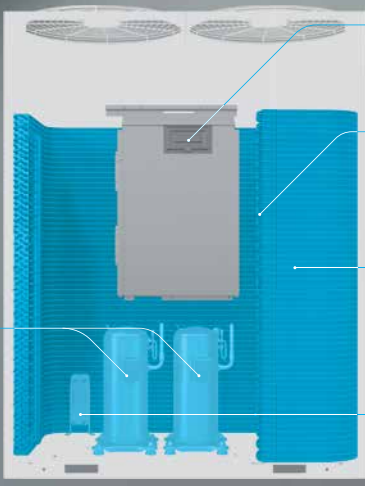
Digital inverter motor



Dual magnet rotor

Multi-serration Fan

Advanced Flash Injection Compressor™ (90cc capacity)



Active AI Technologies

Optimised refrigerant path

Enlarged heat exchanger

PHE type sub-cooler

Active AI Pressure Control

Active AI Defrost

Active AI Refrigerant Analysis

Durafin™ Ultra

Slimmer liquid pipe

## Less refrigerant

reduces environmental risks



The DVM S2 saves money and helps protect the environment with its efficient and flexible piping system. It is equipped with a high-performance sub-cooler that improves the sub-cooling rate of refrigerant. Its slimmer liquid pipe also means it requires 25% less refrigerant compared to a normal pipe, on average. So it reduces the costs of installation and maintenance and also provides added flexibility in designing the entire system. In addition, by using less refrigerant, it is much more environmentally friendly.

Image simulated for representational purposes only.

## Superior heating performance

replaces fossil fuel



The DVM S2 introduces a new era of eco-friendly performance and efficiency. It features Advanced Flash Injection technology with a new Triple Profile Wrap and Optimal Discharge Superheat (DSH) Control. The improved strength of its Flash Injection, which delivers superior heating in frozen conditions, means that the capacity is now much larger (90cc). So it is powerful enough to replace conventional heating methods that use fossil fuel. And its highly efficient Optimal DSH Control saves even more energy, which helps to reduce CO<sub>2</sub> emission.



# Rebuilt on all-new innovations. The ultimate in efficiency and reliability.



True innovation is a rare thing - so the multiple new technologies in the Samsung DVM S2 outdoor air conditioning unit make it truly unique. It has been totally redesigned to deliver outstandingly consistent comfort in a wide range of locations, as well exceptional energy efficiency. Its flexibility is equally matched by its

reliability, as it can operate effectively in diverse environmental conditions, including the most extreme temperatures. It also includes a host of new and intelligent management features that make its installation and maintenance much simpler and more cost-effective. Quite simply it redefines the art of comfort.



## Cost saving

- Enlarged heat exchanger
- 90cc chamber with triple profile scroll
- Optimised refrigerant path
- 9 release valves
- High-efficiency IGBT
- Active AI Pressure Control

## Flexibility

- Wider operating temp. range
- High elevation with long piping
- Active frequency drive 10Hz
- Optimised ref. distribution control
- Compact design
- Up to 110Pa external static pressure

## Reliability

- Dual heat sink
- Kammtail motor bracket
- Upgraded base design
- Durafin™ Ultra
- Robust frame
- Galvanized iron steel plate (GI)

## Convenience

- Slimmer liquid pipe
- Emergency operation
- On-Device Inverter Check™
- Center point indicator of weight
- Active AI Refrigerant Analysis
- Simplified cover with handle

## Comfort

- Advanced Flash Injection Compressor™
- Active AI Pressure Control
- Flash injection
- Multi-serration fan
- Optimised DSH control
- Quiet operation
- Triple profile scroll
- Diffuser type discharge plenum
- Active AI Defrost
- Kammtail motor bracket
- Rotational defrost operation
- Enlarged heat exchanger

# DVM S2 | Key features

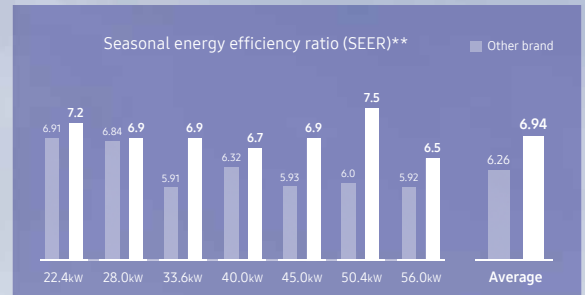
## Cost saving

### Relentless innovation for the ultimate in energy efficiency

Air conditioning systems are a major consumer of energy, and account for about 30%\* of the total energy used in a building. So, energy efficiency is usually the most important factor that consultants and designers consider when deciding which air conditioning system to purchase and install in a building.

The Samsung VRF systems already lead the industry in energy efficiency. And now the new DVM S2 outdoor unit is pushing the boundaries even further. It incorporates many new and unique technologies that deliver the next level of energy efficiency, along with a superior performance.

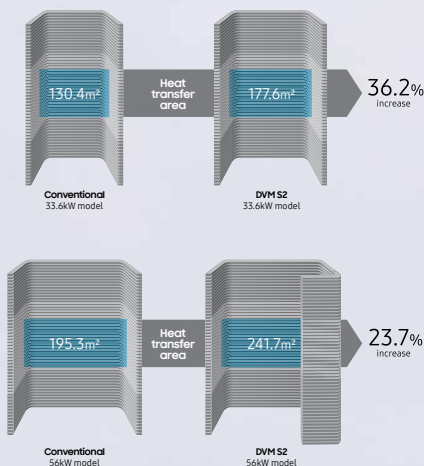
On average, the Samsung DVM S2 is proven to be around 11% more energy efficient across a range of capacities\*\*.



### Transfers more energy with an enlarged contact area

#### Enlarged heat exchanger

The Samsung DVM S2 has an enlarged heat exchanger that is capable of transferring much more heat at once. Its heat transfer area is up to 36.2% larger\*\* to quickly exchange heat. As a result, it consumes less energy to achieve the same cooling and heating performance.



\* Varies by building, location, operating patterns and various other factors.

\*\* Based on testing in accordance with the Eurovent testing rule, at the end of December 2020. Tested on 22.4~56kW models of the Samsung DVM S2 compared to the same capacities of another brand, using ducted type indoor units.

#Based on Samsung's measurements, comparing 33.6kW models of a DVM S2 and a conventional outdoor unit. Image simulated for representational purposes only.



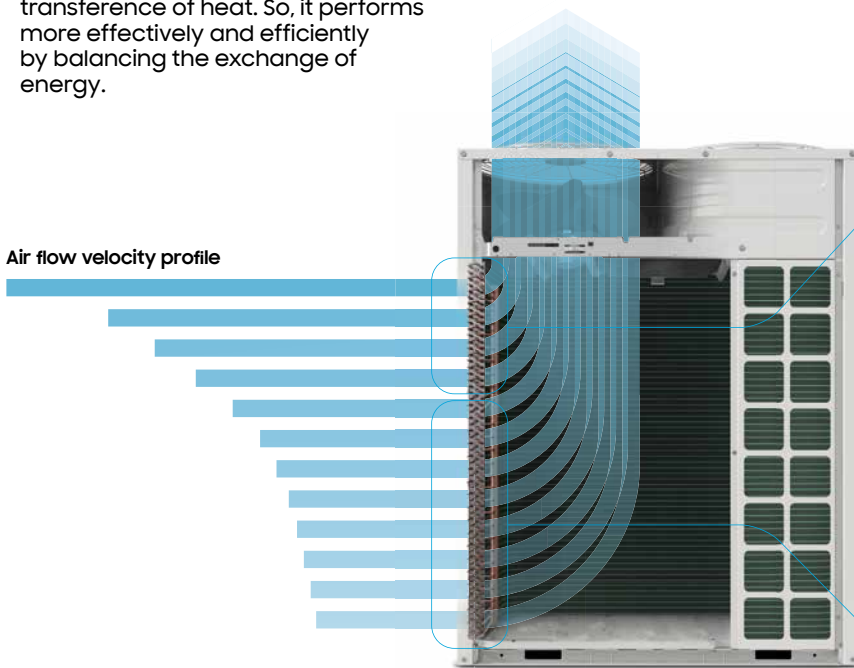
# DVM S2 | Key features

## Cost saving

### Optimised refrigerant flow matches the air flow velocity

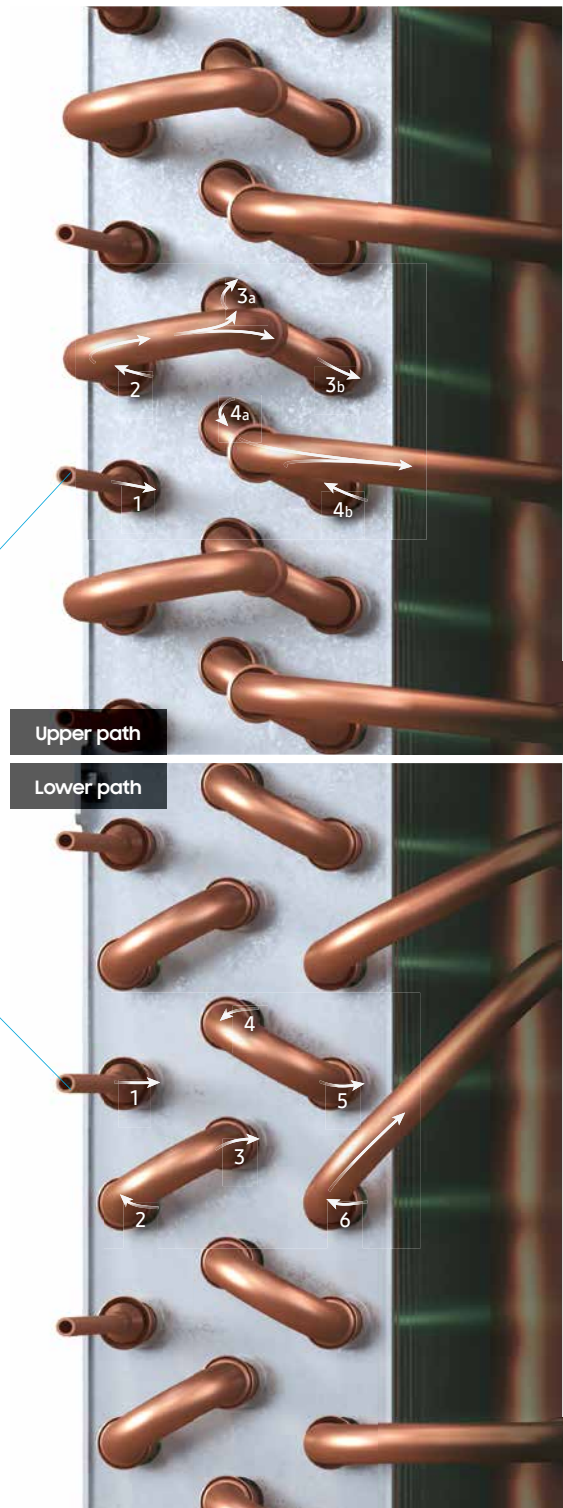
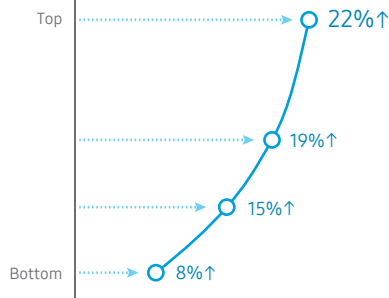
#### Optimised refrigerant path

The air flow speed inside the outdoor unit varies depending on how far it is from the top fan - the closer the faster and the farther the slower - which normally results in the uneven exchange of heat from top to bottom. The Samsung DVM S2 has an optimised refrigerant path\* that ensures that the flow of the refrigerant matches the air flow speed, which optimises the transference of heat. So, it performs more effectively and efficiently by balancing the exchange of energy.



#### Rate of improvement in pressure loss reduction\*\*

The refrigerant flow rate is adjusted by increasing the mass flow rate in order to increase the amount of heat exchanged in the upper part.



\* The shape of the refrigerant path differs by model.

\*\* Based on an internal module evaluation. Results may vary depending on the individual test or usage conditions.

Image simulated, for representational purposes only.

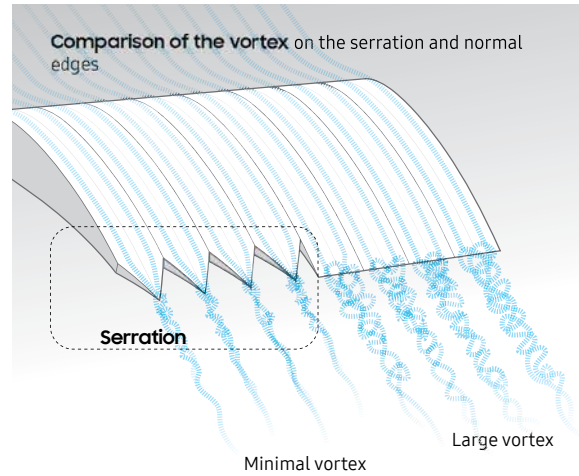
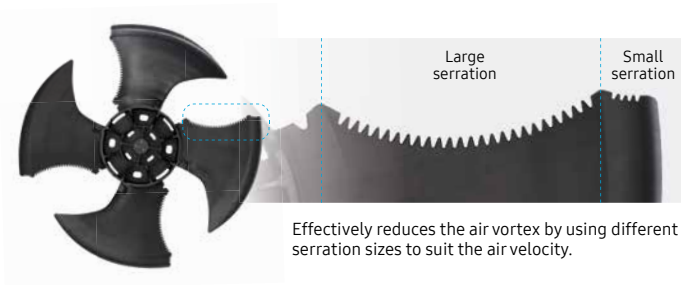
# DVM S2 | Key features

## I Cost saving

### Efficiently increases the air flow

#### Multi-serration fan\*

The DVM S2 has a brand-new, aerodynamic Multi-serration fan\* that creates more air flow while consuming less energy. Its multi-serration wing tip design, inspired by an eagle owl's wing, minimises the turbulence of the air vortex, which reduces the air resistance and ensures more stable fan movement.

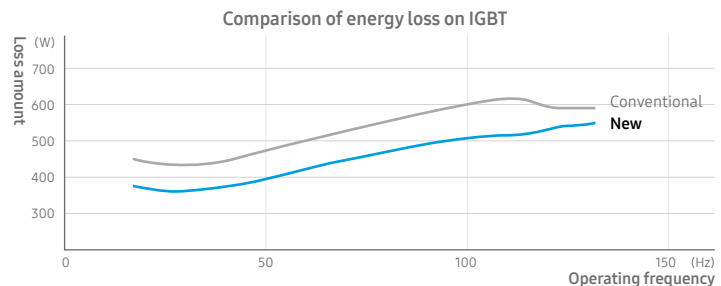


\* Only available in certain models that have one fan. The shape of the fan may vary by model and region.

### Reduces the loss of conducted electricity

#### High-efficiency IGBT (Insulated gate bipolar transistor)

An IGBT has a key role in inverter systems. It switches direct current (DC) to alternating current (AC) and maintains a frequency (Hz) that is suited to the system. So, the efficiency of an IGBT affects the efficiency of the whole air conditioning system. The Samsung DVM S2 uses the 7th generation of IGBT, which reduces the loss of conducted electricity by 20%\*, while being 36% smaller in size. As a result, the Inverter Controller's energy efficiency is improved by up to 3.6%\*, depending on the operating frequency (Hz).



\* Based on internal testing of the DVM S2 33.6kW model compared to a conventional outdoor unit, combined with 6 GD2 5.6kW indoor units. Results may vary depending on the individual test or usage conditions.

Image simulated, for representational purposes only.

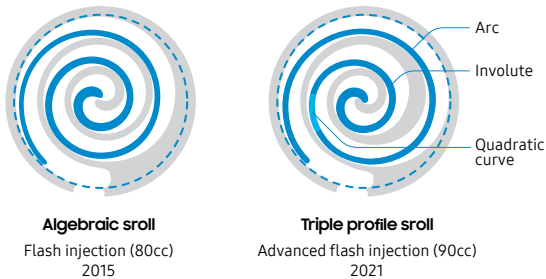
# DVM S2 | Key features

## Cost saving

### Circulates more refrigerant while using less energy

#### 90cc chamber with new triple profile scroll

The Samsung 90cc inverter scroll compressor used in the Samsung DVM S2 has the world's largest capacity and circulates up to 17% more refrigerant\*. Its new triple profile scroll combines arc, involute and quadratic curves and also has a thicker profile towards the middle to reinforce the strength of the center part. So, it creates a larger chamber and rotates reliably at high speed. By delivering a higher level of performance at a lower frequency, it consumes less electricity and improves overall energy efficiency, especially in a high frequency domain.

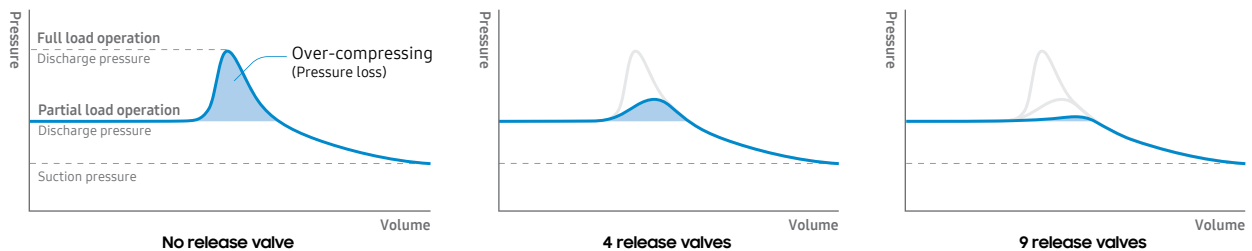
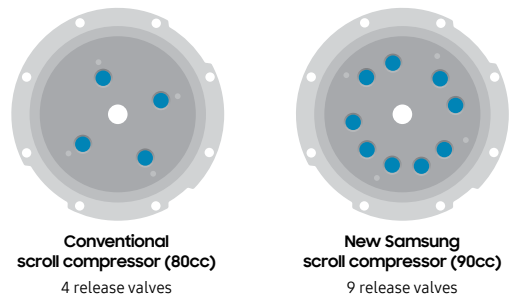


\* Samsung circulates 14,400cc/sec refrigerant (= 90cc (displacement volume) x 160rps (revolutions per second)), while Company A circulates 12,480cc/sec (= 96cc x 130rps), Company B circulates 14,080cc/sec (= 88cc x 160rps) and Company C circulates 12,320cc/sec (= 88cc x 140rps).

### Reduced losses at partial loads

#### 9 release valves

Compressors always draw in the maximum amount of refrigerant to generate the 100% pressure needed to operate at full load, as their chamber size is not variable. And, to compress more refrigerant, more electricity is required. So, it's crucial to release any excessive refrigerant pressure in order to save energy when there's only a small load that doesn't need a high discharge pressure. The new Samsung 90cc scroll compressor has 9 release valves, so it accurately and immediately releases refrigerant to prevent the over-compressing that wastes electricity.





# DVM S2 | Key features

## Cost saving

### Automatically optimises to save energy

#### Active AI pressure control\*

The optimal refrigerant condensing pressure is crucial to ensure a stable cooling and heating performance. A much higher pressure is to be maintained if the piping length is long or if there is a large difference in elevation. More than 90% of outdoor units are installed in a situation where the elevation is 30m or lower and the pipe length is 100m or shorter\*\* (Figure 1). Using active AI pressure control\*, the DVM S2 recognises both the piping length and the difference in elevation and learns the usage pattern and external temperature in real-time. It then automatically adjusts the refrigerant condensing pressure accordingly, by up to 32% (Figure 2). As a result, it

reduces the energy consumption by 15%\*\*\* when the condensing pressure is reduced by 12% (Figure 3).

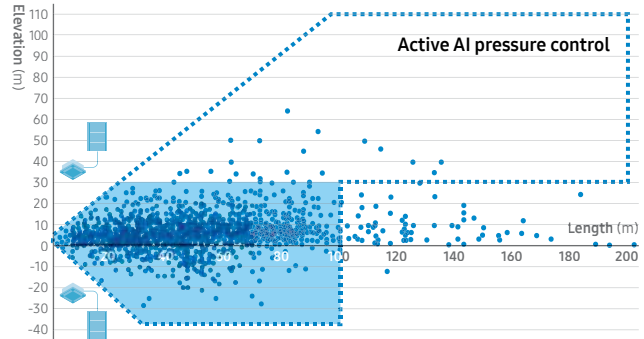


Figure 1. Installation sites by piping length and elevation\*

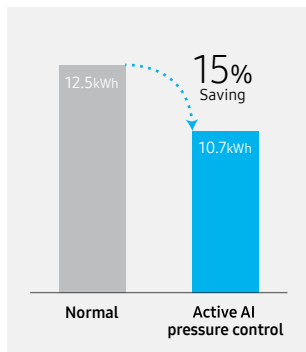


Figure 3. Cumulative energy consumption over 4 hours

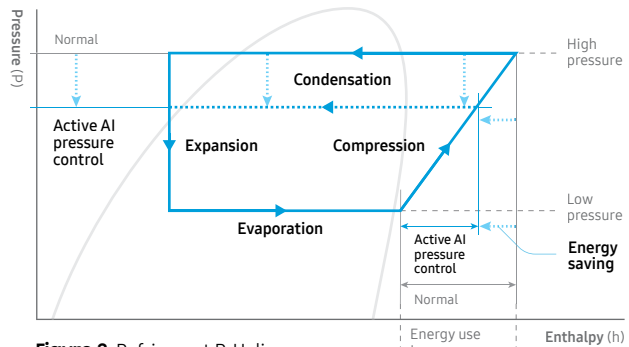
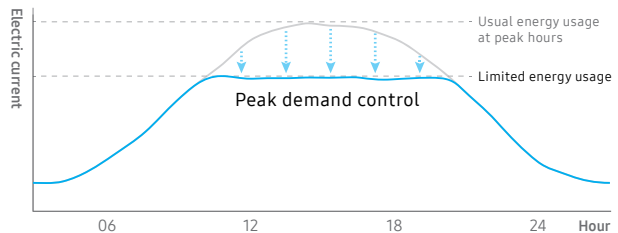


Figure 2. Refrigerant P-H diagram

### Simply limits power consumption

#### Peak demand control

To help businesses manage their power consumption and related costs better, the DVM S2 offers power-demand control for peak hours and seasons. This is especially useful when the electricity supply is insufficient or when businesses want to block excessive and wasteful energy usage.



\* Optionally available depending on the installation conditions. For detailed information, please refer to the installation manual.

\*\* Based on internal analysis.

\*\*\* Based on internal testing with an AM080AXVGGH/EU outdoor unit connected to AM083NN4DBH1 and AM145NN4DBH1 indoor units with 25m of piping, using the cooling operation in Auto mode for 4 hours, with an external temperature of 30°C and a set temperature of 22°C. Results may vary depending on the actual installation and usage conditions, such as the piping length, elevation and external temperature.

# DVM S2 | Key features

## Reliability

### Reliable performance in the toughest environments

Some environments present a real challenge to the effective operation of an air conditioning system. Extreme temperatures, persistently wet conditions and even earthquakes will not only impact the performance, but can also drastically shorten its working life.

The Samsung DVM S2 outdoor unit's robust design is capable of coping with the most challenging forces of nature. It continuously fine-tunes the flow of refrigerant using a new 90cc scroll compressor, and its unique dual heat sink that radiates heat effectively from the inverter circuit. So, it delivers an extremely reliable performance across a wide range of temperatures.

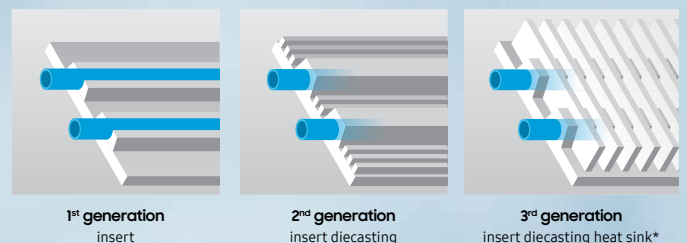
It is also built to withstand severe physical shocks, including sizeable earthquakes, and has significantly improved anti-corrosion capabilities to ensure maximum durability.



### Ensures reliable inverter control

#### Dual heat sink

The inverter circuit of VRF systems generates a lot of heat, which affects the entire system performance. The Samsung DVM S2 has a Dual heat sink that uses both air and refrigerant. Its unique Insert diecasting heat sink design minimises the thermal loss between the pipe and heat sink by increasing their contact area by 33%. By radiating heat from the inverter circuit more effectively, it helps extend the maximum operating temperature from 48°C to 53°C, and delivers a reliable performance regardless of the external conditions.



\* The shape of the heat sink may vary by model.

# DVM S2 | Key features

## Reliability

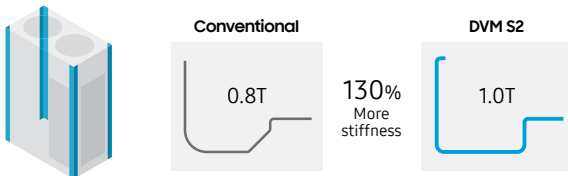
### Less damage from physical shocks and swaying

The Samsung DVM S2 is equipped with new and innovative design features that significantly enhance its durability. So, it is proven to continue working effectively, without any problems in its main unit or piping, in an earthquake of up to magnitude 9.0\*.

#### Robust frame

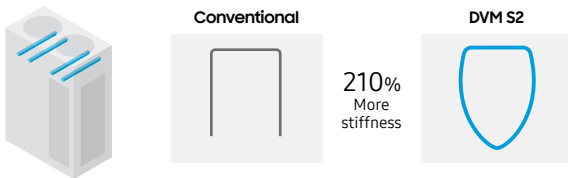
The corners of the cabinet's sides are reinforced. The thickness has been increased by 25%\*\* and its shape has also been refined, so its stiffness has increased by 130%\*\*.

As a result, the DVM S2 provides incredible durability across its entire body without bending.



#### Kammtail motor bracket

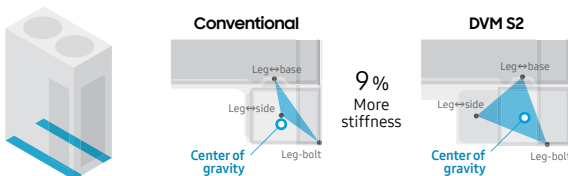
Instead of a traditional open-type squared bracket, the DVM S2 has a pipe-shaped Kammtail bracket that firmly supports the motor with 210% more stiffness\*\*.



#### Improved structure of legs

The DVM S2 has a patented support design\*\*\* to improve stability. The shape of the legs was redesigned to disperse weight effectively, and its stiffness has been increased by 9%\*\*.

So, they support the body more effectively and suppress any sway, even during an earthquake.



\* Based on a test in accordance with ICC ES AC156 : 2010 (SDS=2.5g, z/h=1), conducted by SGS Korea Co., Ltd. Result report No.: SGS-R20-1599-KR00.

\*\* Based on internal testing using Siemens NX nastran 1867 simulation.

\*\*\* Patent No.: P2020-0099857

Image simulated, for representational purposes only.



# DVM S2 | Key features

## Reliability

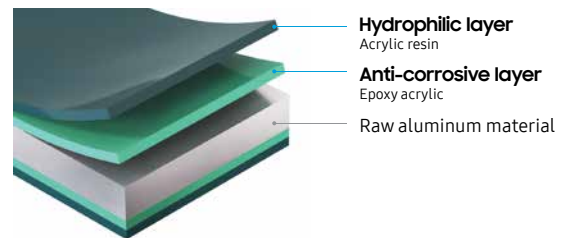
### Lasting performance with enhanced resistance to corrosion

Corrosion-resistance is a crucial factor in outdoor units, as they need to withstand a range of climate conditions. The Samsung DVM S2 features improved anti-corrosion capabilities on the heat exchanger and chassis to ensure maximum durability in harsh environments.



#### Durafin™ ultra

The Samsung DVM S2 outdoor unit's Durafin™ Ultra has an anti-corrosive layer of epoxy acrylic and a hydrophilic layer of acrylic resin that disperses water and reinforces its corrosion-resistance. Its superb quality was proven using the Salt Spray Test (SST) over a period of 2,280 hours\* with no leakage of refrigerant\*\*.



#### Galvanized iron steel plate (GI)

The Samsung DVM S2 uses galvanized iron steel plate as its external material, with a PE powder coating of up to 100µm thickness. This powerful combination is proven to improve corrosion-resistance by 43%, based on the Complex Cycle Test (CCT)\*\*\*. So, it protects the cabinet from rusting and ensures it can endure harsh conditions.



\* Based on testing by a third party lab in accordance with ASTM B117, an official test method. For more details, please contact Samsung's technical professionals.

\*\* Based on testing by a third party lab, applying the actual pressure of refrigerant for 1 minute, after a Salt Spray Test (SST) of over 2,280 hours.

\*\*\* Based on internal testing using corrosion chambers, Q-FOG and CCT-1100. The Complex Cycle Test (CCT) includes cycles of spray (for 2 hours at 35°C), dry (for 4 hours at 60°C with 30% Relative Humidity) and damp (for 2 hours at 50°C with 95% Relative Humidity) conditions. As a result, the Galvanized Iron Steel Plate (GI) formed red rust after 240 hours, which is 43% slower than general Electro-Galvanized Steel Plate (EGI) which forms red rust after 168 hours.

Image simulated, for representational purposes only.

# DVM S2 | Key features

## Comfort

### Uncompromising innovation delivers the next level of comfort

The one purpose of air conditioning is to ensure people feel comfortable. Now the Samsung DVM S2 outdoor unit is taking comfort to the next level. It features the world's largest capacity\*, combining an incredible 90cc compression chamber and a superfast 160rps (revolutions per second) motor. So, it can keep every room, in every corner of a building pleasantly cool or warm - in every season.

In addition, its Advanced Flash Injection Technology increases the flow of refrigerant in extremely cold conditions. It also intelligently manages the defrost operation, so it works more efficiently, and analyses users' behaviour to ensure it creates the optimal environment as quickly as possible.

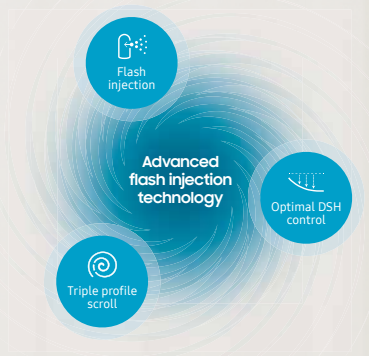
And, to minimise any disturbance, it features a radical new fan design, inspired by nature, and a noise control system for use at night.



### Better heating performance with advanced flash injection technology

#### **Advanced Flash Injection Compressor™**

The compressor is the engine that makes a major contribution to the overall performance of an air conditioning system. Samsung has been developing core technologies to reinforce the power of its global-leading compressor. The result is the Samsung Advanced Flash Injection Compressor™, which includes a host of brand-new innovations created by Samsung and provides the world's largest capacity\*. By combining flash injection technology with a strengthened triple profile wrap and optimal discharge superheat (DSH) control technology, the Samsung DVM S2 delivers a new level of comfort by maintaining pleasantly cool or warm conditions in every corner of a building all year round.



\* Samsung circulates 14,400cc/sec refrigerant (= 90cc (displacement volume) x 160rps (revolutions per second)), while Company A circulates 12,480cc/sec (= 96cc x 130rps), Company B circulates 14,080cc/sec (= 88cc x 160rps) and Company C circulates 12,320cc/sec (= 88cc x 140rps).

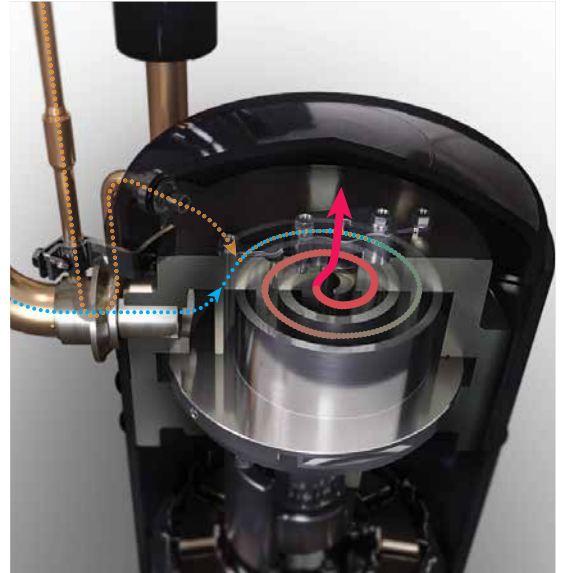
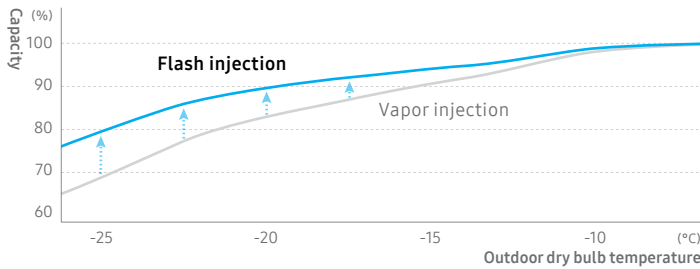
# DVM S2 | Key features

## Comfort

### Keeps on working well in freezing temperatures

#### Flash injection

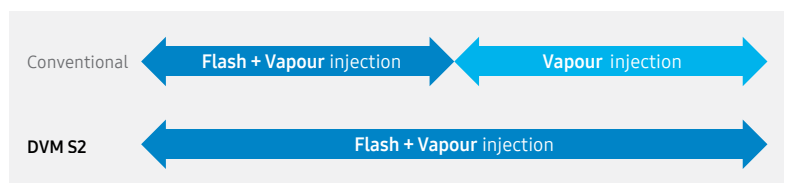
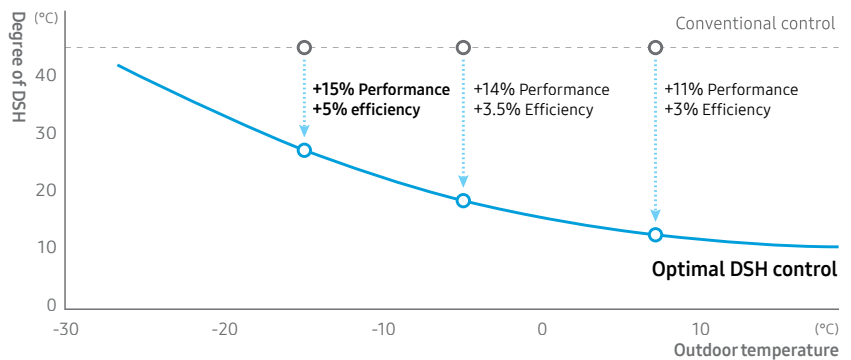
Stay comfortably warm when it's freezing outside. The performance of a general heat pump worsens in low temperatures as the refrigerant pressure decreases. The Samsung DVM S2 outdoor unit's flash injection technology increases the flow of refrigerant, so the compressor continues working reliably. It also performs well at even lower temperatures, providing non-stop comfort in the coldest conditions.



### Optimally controls the degree of discharge superheat to improve both performance and efficiency

#### Optimal Discharge Superheat (DSH) control

The heating load and external temperature are the two most influential factors on an outdoor unit's heating performance. So, the Samsung DVM S2 automatically adjusts the degree of discharge superheat to reflect any changes in them and heat more efficiently and effectively. This new method of control improves the heating performance by up to 15% and increases operational efficiency by 5% at -15°C\*.



\* Based on internal testing. Results may vary depending on environmental factors and individual use.

Image simulated, for representational purposes only.



# DVM S2 | Key features

## Comfort

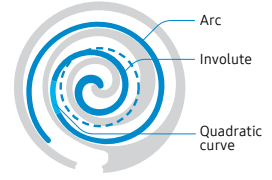
### Super durability and speed create an unrivaled capacity

#### Triple profile scroll and dual magnet rotor

In order to compress flash type refrigerant and increase the total amount of compression, the compressor needs to have much better durability and rotary power. The DVM S2 has a triple profile scroll that combines arc, involute and quadratic curves to create a much larger chamber, and the strength of the centre part is significantly reinforced with a thicker profile towards the middle.

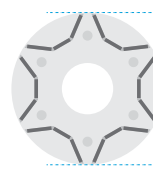


Conventional

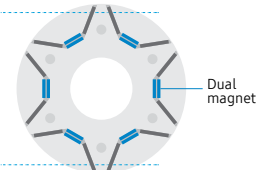


Triple profile scroll

And, its new motor also has a 11.4% enlarged rotor with many more magnets, which increases the rotary power by 10.8%\*.



Conventional



Dual magnet rotor

As a result, it has an incredible 90cc compression chamber and operates at a superfast 160rps (revolutions per second), which combine to create the world's largest capacity\*\*. So, it provides the exceptional reliability needed to keep rooms warm in severely cold weather.

\* Based on internal testing, compared to a Samsung's conventional motor.

\*\* Samsung circulates 14,400cc/sec refrigerant (= 90cc (displacement volume) x 160rps (revolutions per second)), while Company A circulates 12,480cc/sec (= 96cc x 130rps), Company B circulates 14,080cc/sec (= 88cc x 160rps) and Company C circulates 12,320cc/sec (= 88cc x 140rps).



### Proven reliability of Samsung Advanced Flash Injection Compressor™

Samsung Advanced Flash Injection Compressor™ of the DVM S2 has been certified with a reliability mark (R-Mark), organised by the Korea reliability certification center, Korean reliability society.

[No. R-KORAS-2018-012] Inverter type (Variable speed) scroll compressor



Image simulated, for representational purposes only.

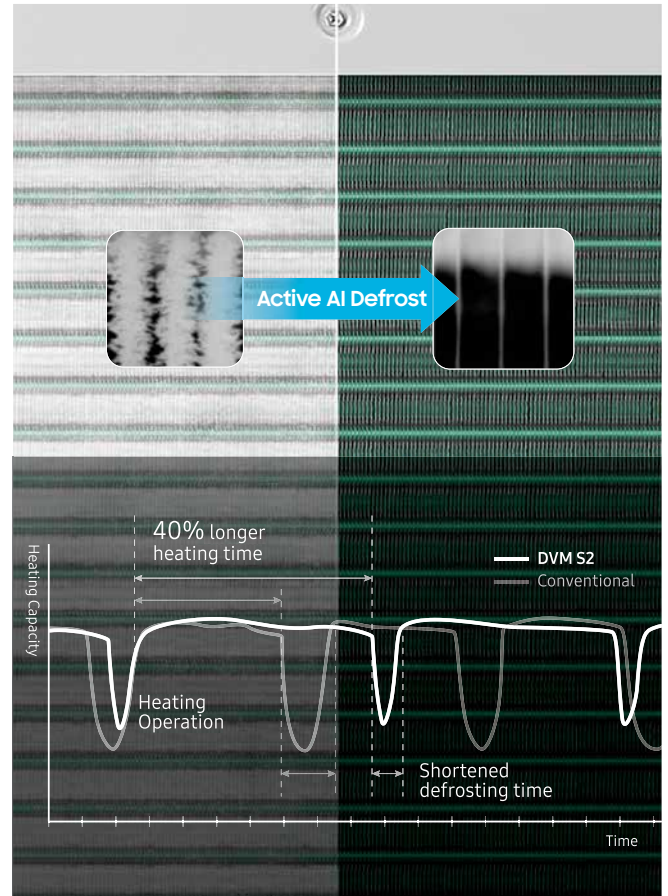
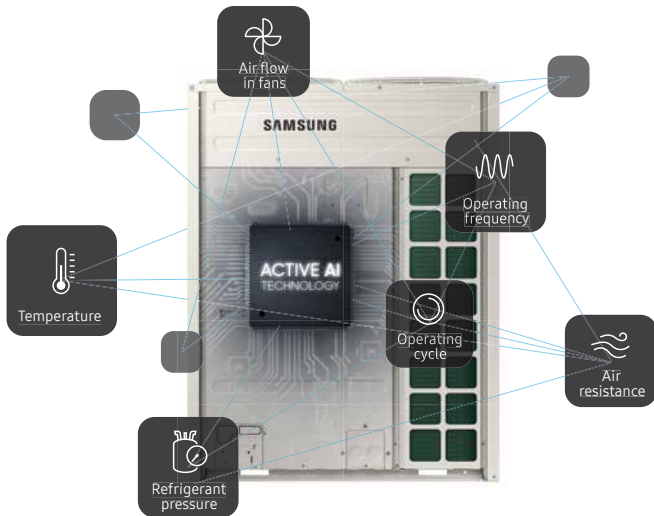
# DVM S2 | Key features

## Comfort

### Heats for longer with less defrosting

#### Active AI defrost

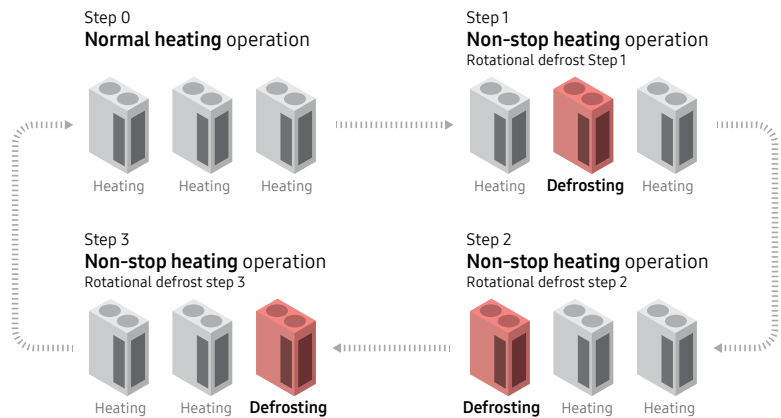
The heating operation generally causes ice to build up on outdoor units, which may interfere with the heat exchange process. To remove any ice, air conditioning systems normally pause the heating and run a defrost operation, so the indoor environment feels less comfortable. Samsung's Active AI defrost technology analyses various operating data, including the system's air resistance, operating frequency and cycle, so it defrosts more precisely. As a result, it reduces wasted energy and increases the continuous heating time by up to 40%\*.



#### Rotational defrost operation\*\*

The DVM S2 HR module's Rotational defrost operation ensures a continuous heating performance for reliable warmth and comfort.

After initially running all of a building's outdoor units in heating mode, it automatically switches each unit over to defrosting mode in strict rotation. Because the heating mode runs for a longer period of time, users can enjoy a more pleasant, warm environment.



\* Based on internal testing. Heating time at -10°C over a period of 6 hours: Samsung DVM S2 (AM240AXVAGH/EU) = 180 minutes vs. conventional outdoor unit = 110 minutes. Results may vary depending on environmental factors and individual use.

\*\* Available only on the DVM S2 HR (Heat Recovery) models.

# DVM S2 | Key features

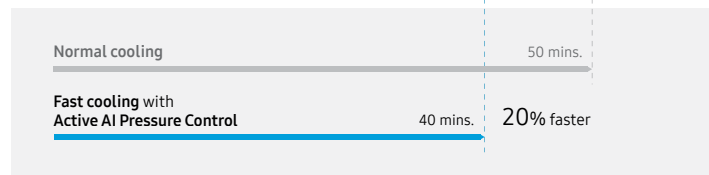
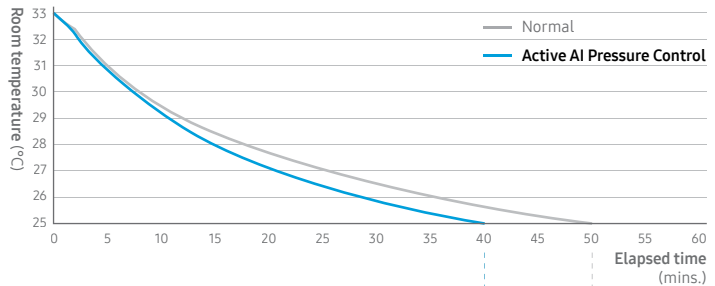
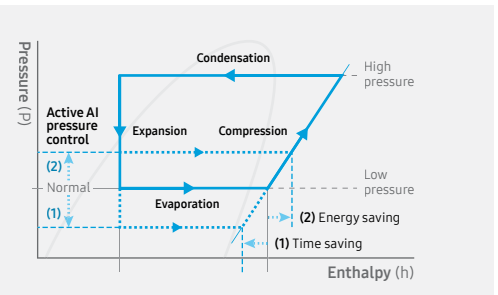
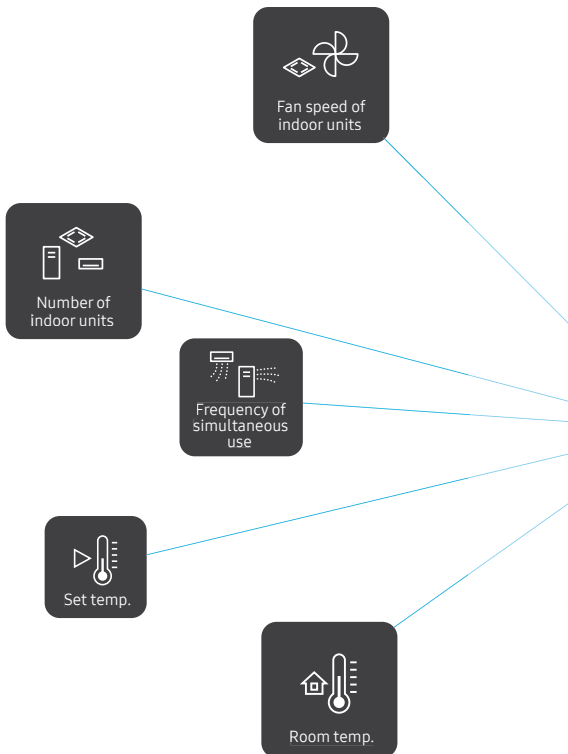
## Comfort

### Optimal cooling by learning usage patterns

#### Active AI pressure control

By learning usage patterns from recent cooling operations and the surrounding conditions, the DVM S2 proactively creates the optimal cooling environment to suit users' general requirements.

For example: (1) If a user frequently lowers the room temperature when turning on the air conditioner, the Active AI Pressure Control recognises this pattern. So, when the air conditioner is turned on again, it automatically lowers the pressure of the inflow refrigerant by up to 33% and cools up to 20% faster\*. (2) However, if there's no need for fast cooling, it saves energy by adjusting the refrigerant pressure to be higher than normal.



\* Based on internal testing of the cooling operation, with the temperature set at 22°C and using Auto mode for 4 hours, at a room temperature of 33°C and an external temperature of 35°C. The tested model was an AM080AXVGGH/EU connected to AM083NN4DBH1 and AM145NN4DBH1 indoor units with 25m of piping. The elapsed times were measured when the room temperature reached 25°C.



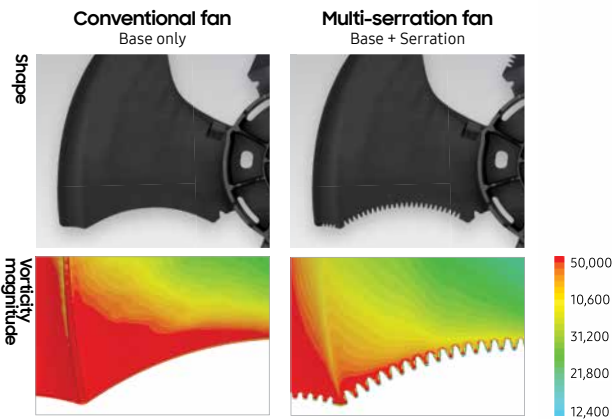
# DVM S2 | Key features

## Comfort

Reduces fan noise by minimising the air vortex

### Multi-serration fan\*

Eagle owls fly silently at night. Inspired by their wings, a new multi-serration fan\* has two types of serration on its wing tip. It has a large serration on the inner part and a small serration on the outer part, which are designed to suit the different wind speeds around them. This combination minimises the air vortex around the wing tip and significantly reduces the noise generated by the movement of the fan.



Comparison of vorticity based on the design of the edge\*\*.

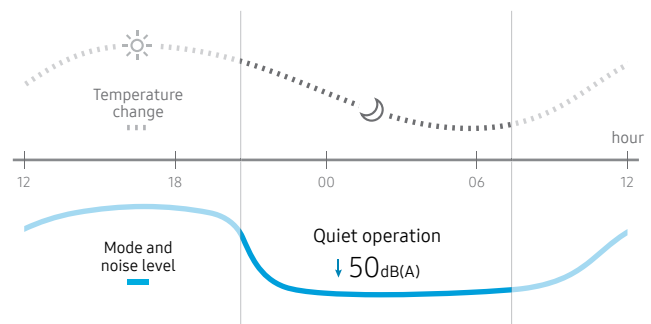
\* Only available on models of 33.6kW or less. The shape of the fan may vary by model and region.

\*\* Based on internal testing and simulation using a CAE software, Simcenter STAR-CCM+ (v.13.06).

## Works quietly and efficiently at night

### Quiet operation

A noise control system lowers the level of noise to below 50dB(A)\*, which is as quiet as a normal conversation. It has a timer and can be set to operate for up to 12 hours.



\* Based on internal testing. Results may vary depending on environmental factors and individual use.

Image simulated, for representational purposes only.

# DVM S2 | Key features

## Comfort

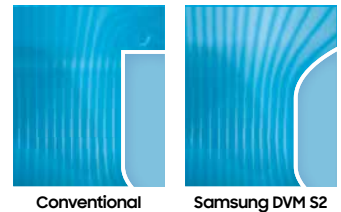
### Optimises the air flow - less friction, less noise

Along with a multi-serration fan, the Samsung DVM S2 has various new technologies that optimise the air flow inside the unit. So, the air moves smoothly and quickly with less of a vortex or turbulence that creates noise\*.



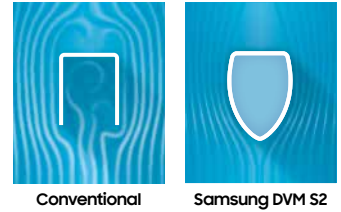
#### Diffuser type discharge plenum

The edgeless, curved design of the discharge plenum enables the fan to pull air steadily from inside and gently diffuse it outside without creating a vortex\*.



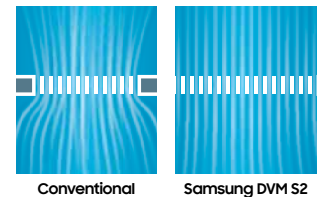
#### Kammtail motor bracket

Instead of a traditional squared bracket, it has a streamlined Kammtail bracket that minimises noise.



#### Enlarged heat exchanger

As the heat transfer area has been increased\*\*, the wind speed and friction have been reduced accordingly, while still delivering the same level of performance\*.



\* Based on internal testing and simulation using a fluid dynamics software, Ansys CFX. Results may vary depending on the actual usage conditions.

\*\* 36.2% increase in a 28kW model and 23.7% increase in a 56kW model.

Image simulated, for representational purposes only.

# DVM S2 | Key features

## I Flexibility

### More flexibility with fewer limits to meet your every need

The location of an air conditioning system can have a significant impact on its performance. So, the DVM S2 outdoor unit is designed to give you maximum flexibility, as it will operate effectively in a wide range of locations and climates.

Its compact design ensures that you can select the optimum installation location, including inside a building. In fact, its long piping, optimised refrigerant distribution and high external static pressure make it the ideal choice for use in high-rise buildings.

Even the harshest weather conditions are no problem. It can cool in heat of up to 53°C and provide warmth in freezing cold conditions of -25°C, while also optimising its performance to minimise energy use and deliver a consistently comfortable environment.

### Top-class performance in extreme conditions



#### Wider operating temperature range

No matter how extreme the temperature, the high-performance DVM S2 can handle the conditions. Operating across a wide temperature spectrum, it can cool in heat of up to 53°C and provide warmth in freezing cold conditions of -25°C to ensure a constant and comfortable environment.

When it's installed on the rooftop of a building, the actual temperature around the outdoor units may become much higher due to the effects of direct sunlight, the radiant heat of the rooftop and the discharged air of other outdoor units. So, delivery of a stable performance in hot environments, is vital.





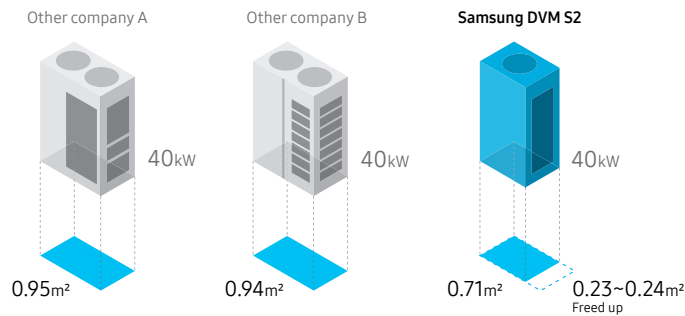
# DVM S2 | Key features

## Flexibility

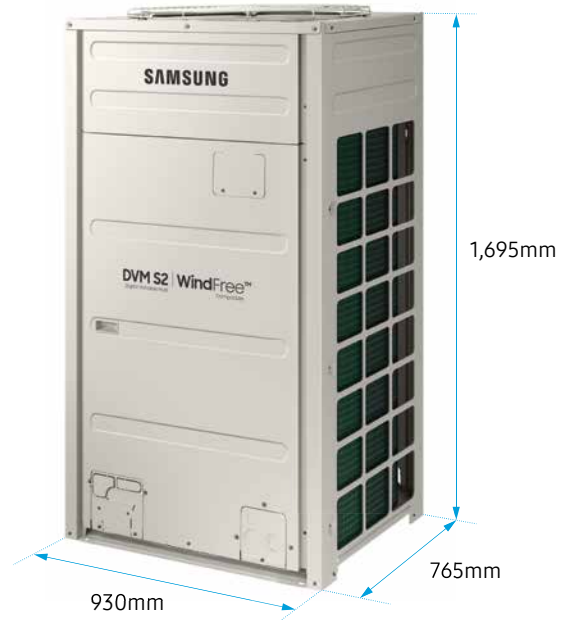
### Smaller footprint, saving valuable space and costs

#### Compact design

The Samsung DVM S2 has a small footprint, so it creates up to 33% more space\*, which can be used for other purposes, without compromising on performance. As it is possible to install outdoor units inside buildings, especially high-rise buildings, its compact size means that you can maximise the area that is available to sell or lease, which directly increases revenue.



\* Based on the AM140AXVAGH/EU, compared to the same capacity models of other companies.

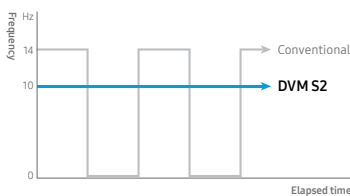


### Ideal for continuous cooling even in cold weather

#### Active frequency drive 10Hz

The need for air conditioning tends to rise not only in summer but also in spring and autumn. In particular, in rooms that require a constant temperature, like a server room, air conditioners are installed to ensure a stable cooling operation.

In cool weather, air conditioners can quickly reach the desired temperature, but then repeatedly turn themselves off and on to maintain the temperature. Not only does this consume much more electricity than continuous cooling, it also reduces the lifespan of the products and causes discomfort for any occupants due to the fluctuation in temperature.



The Active Frequency Drive of the Samsung DVM S2 enables the compressor to operate at the lowest revolution of 10Hz, which prevents the operation from frequently turning on and off, so it maintains the indoor temperature more precisely to ensure continuous comfort.

\* Only available on the DVM S2 HR (Heat recovery) models.

\*\* Optional.

Image simulated, for representational purposes only.



# DVM S2 | Key features

## I Flexibility

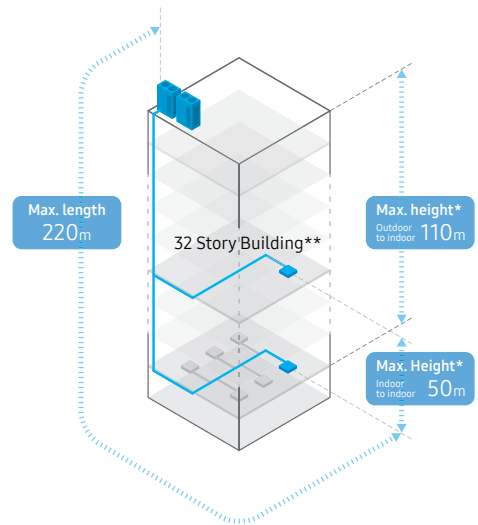
Install in the optimum location, regardless of distance and height

### High elevation with long piping

Enjoy more choices when selecting the optimum installation location. The DVM S2's long piping length provides the flexibility for the outdoor unit to be installed almost anywhere, regardless of its height or distance from the building. It has a maximum length that is equivalent to 220 metres (721 feet) between the outdoor and indoor units. It can also work efficiently and reliably at an elevation of up to 110 metres (360 feet)\*, which is the equivalent of 32 stories\*\*.

### Optimised refrigerant distribution control

The DVM S2 compensates for the long piping distance between the outdoor and indoor units by providing balanced refrigerant distribution. All the individual indoor units deliver capacity connection control and automatic refrigerant balancing to ensure a consistent performance in each unit.



\* When the piping height is over 50m, a PDM (Pressure Drop Modulation) Kit may be required depending on the conditions at the installation location.

\*\* Based on the assumption that the height of a story is 3.5m. May vary depending on the location of indoor units.

## More flexibility to install between floors in a high-rise building

### Up to 110pa external static pressure

High-rise buildings are usually designed to have outdoor units installed inside them using ductwork, because the height difference to the rooftop is too big. The DVM S2 has up to 110Pa external static pressure\*, which ensures that it can discharge air effectively through a much longer duct. So, it gives you an even greater choice when selecting an installation location inside the building.



\* May vary by model and depending on the actual condition of the ductwork and installation location. For more detailed information, please contact Samsung's technical professionals.

Image simulated, for representational purposes only.

# DVM S2 | Key features

## Convenience

### Effortlessly install and maintain, saving time, cost and worry

Installing and managing an air conditioning system can be extremely complex and time-consuming. So, Samsung's DVM S2 outdoor unit includes a range of innovative technologies that make it easier and more cost-effective to move, operate and maintain in a wide range of locations.

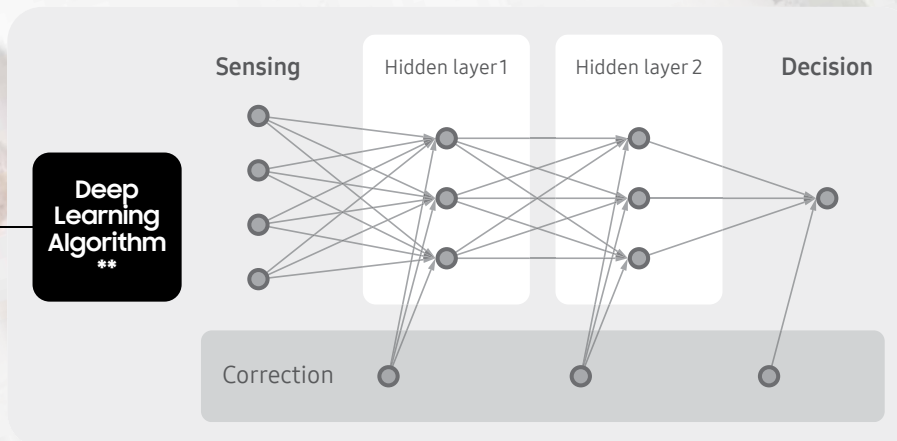
Its modular design minimises the number of parts, while its improved sub-cooling rate means it uses less refrigerant and slimmer piping. It is also easy to check errors through a small opening in the display window.

And, for complete peace of mind, it includes a range of powerful self-management and automatic recovery technologies.

### Maintains the optimal amount of refrigerant to ensure the best performance

#### Active AI refrigerant analysis

Shortage of refrigerant hinders the outdoor unit's cooling and heating performance as well as its energy efficiency. And, if refrigerant leaks out, due to any error in installation, operation or maintenance, it also impacts global warming and may even cause the system to stop working. Using Deep Learning technology\*, the Active AI refrigerant analysis of the DVM S2 collects and analyses various operational data in real time, and proactively alerts you with an error message if the amount of refrigerant is too low. So, an installer or a service engineer can maintain the optimal level of refrigerant.



\* A Machine Learning technology that uses an Artificial Neural Network (ANN) to learn like a human using various data.

\*\* Based on a research thesis, "A novel hybrid deep neural network model to predict the refrigerant charge amount of heat pumps".



# DVM S2 | Key features

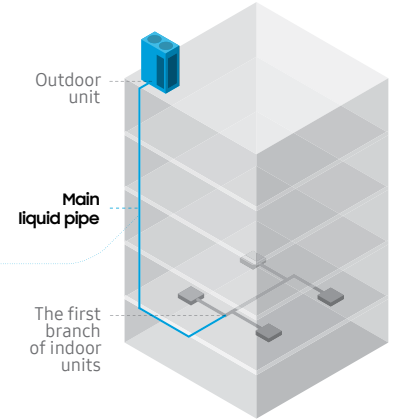
## Convenience

### Greater design flexibility and lower costs

#### Slimmer liquid pipe (optional diameter reduction)\*

The Samsung DVM S2 is equipped with a high-performance sub-cooler to improve the sub-cooling rate of refrigerant. It requires 28% less refrigerant on average\*\* as it uses a slimmer liquid pipe\*. So, it provides added flexibility in designing the entire system, while saving costs on the installation and maintenance of refrigerant and piping materials.

Pipe diameter (mm)		Refrigerant to supplement (g)		Refrigerant reduction ratio	
Normal	Slimmer	Normal	Slimmer		Average
9.52	N/A	60	N/A	-	-
12.71	<b>9.52</b>	125	<b>80</b>	<b>36%</b>	<b>28%</b>
15.88	<b>12.71</b>	180	<b>130</b>	<b>28%</b>	
19.05	<b>15.88</b>	270	<b>195</b>	<b>28%</b>	
22.22	<b>19.05</b>	350	<b>280</b>	<b>20%</b>	



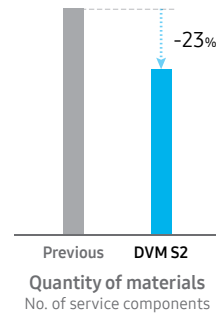
\* Optional. A slimmer pipe can be used for the main liquid pipe, between an outdoor unit and the first branch of indoor units. The diameter of the slimmer pipe will vary depending on the diameter of the pipe that is normally used, which is defined in the table above. Not available on the 22.4kW and 28kW models. It may not be available in certain installation conditions, and is not compatible with the AI functions of outdoor units. Please contact Samsung's technical professionals regarding its availability and for more detailed information.

\*\* When a slimmer pipe, instead of a normal pipe, is used for the main liquid pipe on the same capacity of air conditioning system, the amount of refrigerant to be charged can be reduced by 28% on average.

### Less parts. Less effort and cost for servicing.

#### Quality-based modular design (QMD)

The Samsung DVM S2 consists of optimised modular components, which have fewer parts. In particular, based on its Quality-based modular design (QMD), the DVM S2 is built with high-quality modules that have been preselected and preconfigured. So, it delivers both superior performance and reliability, while also significantly reducing the number of parts that need servicing.



This modular design simplifies the entire process of maintenance and service, as less time and effort is required to check and fix any issues. And, from the viewpoint of warehousing, it also saves space as there is no need to store a lot of parts.

# DVM S2 | Key features

## Convenience

Simply and quickly check errors without extra tools

### On-Device inverter check™

The DVM S2 has an Inverter PBA (Printed Board Assembly) with a one-touch button to simply check errors on the device. Without having to remove the entire front cover, it's easy to access this button through a small opening in the display window. So, it reduces the service time and effort as it eliminates the need for extra tools and simplifies the service process.

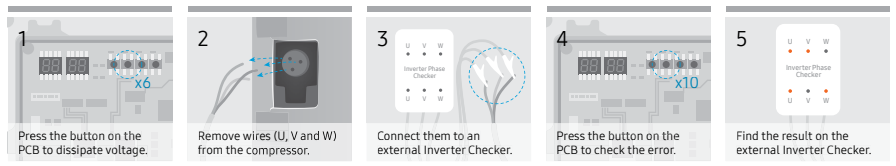


Examples of messages



- OK**  
No error on PBA.
- NG**  
Errors on PBA.
- CHECK**  
Need to check manually.

Conventional process using an external inverter checker - 5 steps



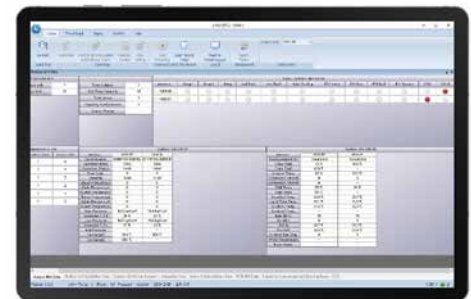
New process using on-device inverter check™ - 1 step

## Remotely monitor and solve issues

### S-converter

With the S-converter, you can access the system using a PC or laptop\* whenever and wherever you like. Its self-diagnosis function automatically monitors its performance and displays an error code if it detects anything abnormal. So, you can then check and address the issue promptly.

\* Windows operating system. A smartphone or tablet PC can also be used in certain regions.



## Simply restore data for repair and recovery



### Automatic data backup

If a malfunction occurs, the DVM S2 automatically backs up the last 30 minutes of operational data to make the repair and recovery process easier.

Image simulated, for representational purposes only.

# DVM S2 | Key features

## Convenience

Quick access and ease of service.

### Simplified cover with handle

The front cover of conventional outdoor units consists of multiple pieces, which means it can require a lot of work to open them fully. The Samsung DVM S2's front cover is a single piece, so it's simple to open and access every part inside the outdoor unit, which reduces the time and effort for servicing.



**Conventional**  
4 pieces with no handle

**DVM S2**  
1 piece with a handle



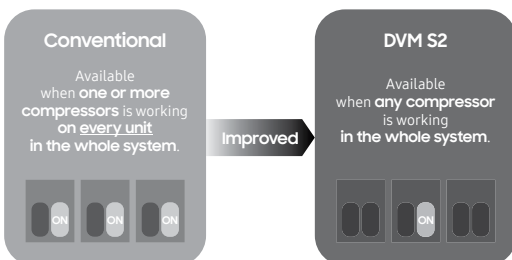
In addition, the cover has a handle that provides added safety and convenience when handling.







Image simulated, for representational purposes only.

## Keeps you comfortable, even if there's a malfunction

### Emergency operation

When the air conditioning system consists of multiple Samsung DVM S2 outdoor units, its refrigerant regulating control technology ensures that you can continue working using only one compressor in an emergency. So, if every unit except one is not working or getting serviced and any compressor on the remaining one is working properly, it will keep cooling or heating for up to 8 hours. It ensures that you can maintain a comfortable indoor environment until the whole system is functioning properly again.



Example cases of malfunction	Emergency operation	
	Conventional	DVM S2
 When there are 2 or more units in a system, and one of the two compressors on a unit is not working.	Yes	Yes
 When there are 2 or more units in a system, and one of the two compressors on each unit is not working.	Yes	Yes
 When there are 2 or more units in a system, and all of the compressors on a unit are not working.	Not available	Yes
 When there are 2 or more units in a system, and a compressor on a low capacity unit is not working.	Not available	Yes
 When there are 2 or more units in a system, and a compressor on a low capacity unit and one of the two compressors on another unit is not working.	Not available	Yes
 When there is 1 unit in a system, and one of the two compressors on it is not working.	Not available	Yes



# DVM S2 | Key features

## I Convenience

### Conveniently and safely handle with less effort

The Samsung DVM S2 has various convenient features that help installers and service providers to lift and move, and disassemble and assemble it with added safety and less effort.

#### Centre point indicator of weight

VRF outdoor units usually weigh a lot and can sometimes be over 300kg. It is obviously very difficult and dangerous to handle such heavy machines, so the Samsung DVM S2 has a removable indicator to show its centre of weight. It makes it much safer to lift and move with a crane or a forklift as it helps to prevent the unit from becoming unbalanced and tilting or toppling over.



A sticker type indicator shows the centre of weight. After moving, it can be simply removed.



Image simulated, for representational purposes only.

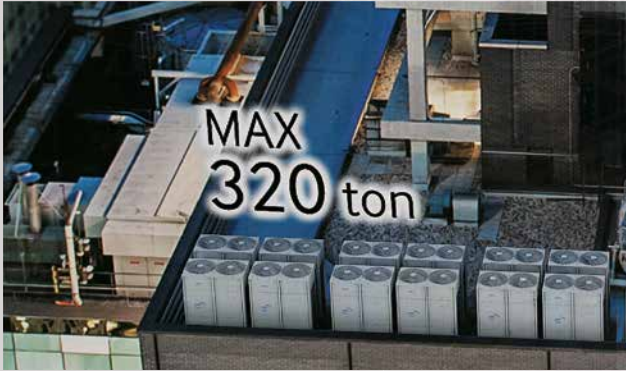


# DVM Chiller

Best of VRF and chiller

## Expand capacity on demand

A modular design provides a wide choice of configurations. You can simply and flexibly combine modules and expand capacity from 12 to 320 tonne in various ways to optimise energy, or save space, or attain a balance of both.



## Easy to move and install modular design

Its modular design and compact size reduces time, cost, and effort to transport, and install it on site. With a small footprint, it's easy to fit and combine multiple units even when there's limited space.

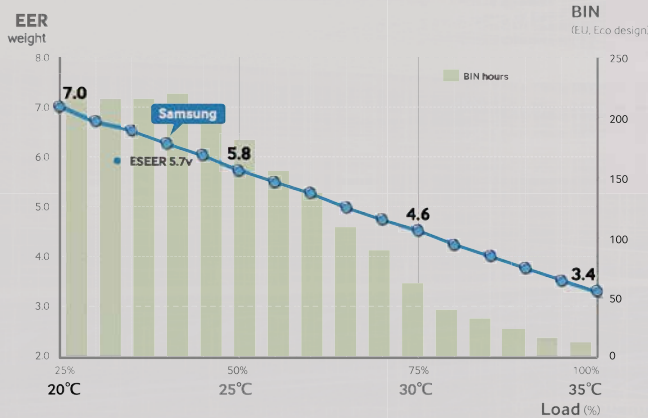


## Advanced performance and energy efficiency

Its advanced technology delivers a consistently higher performance and reduces energy wastage. It has a highly efficient BLDC inverter compressor with flash injection technology and evaporative condenser.

## Centrally control all systems

To maximise operational convenience and the value of your existing units, an integrated control system lets you centrally manage both outdoor and indoor units, such as the DVM chiller, VRF, and air side equipment.



## Works silently at night

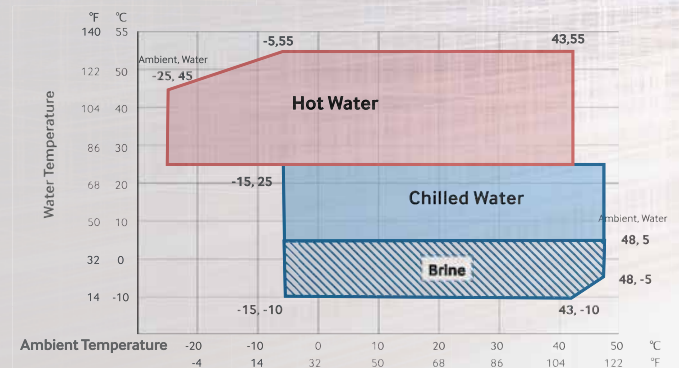
A Night Silent Mode means it operates at 3 different levels and works silently at night. It adjusts the speed of the compressors and fans, so they supply the required cooling, and a better sound performance.

## Easily increase performance and save space

Its compatibility, large capacity, and high space efficiency make it perfect for replacing chillers as it cuts down maintenance costs and frees up valuable space, while expanding overall capacity.

## Wide operating range

It can be used for office, retail, hotels, hospitals, educational institutions, and industrial processes.



-Based on internal lab test

# DVM S - Heat Recovery

## Simultaneous cooling and heating

### Heat environments effortlessly and continuously for ultimate comfort

The DVM S HR (Heat Recovery) model delivers continuous heating performance using innovative rotational defrost for reliable warmth and comfort. In addition, it supports more agile operation through simultaneous cooling and heating.

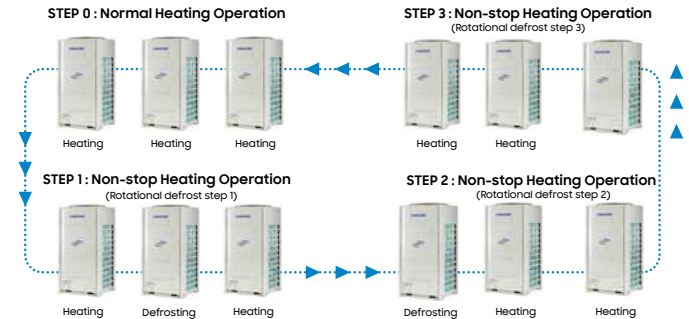
### Non-stop heating

DVM S can operate continuously in heating mode with rotational defrost operation. Because the heating mode runs for a longer period of time, users can enjoy a more pleasant environment.



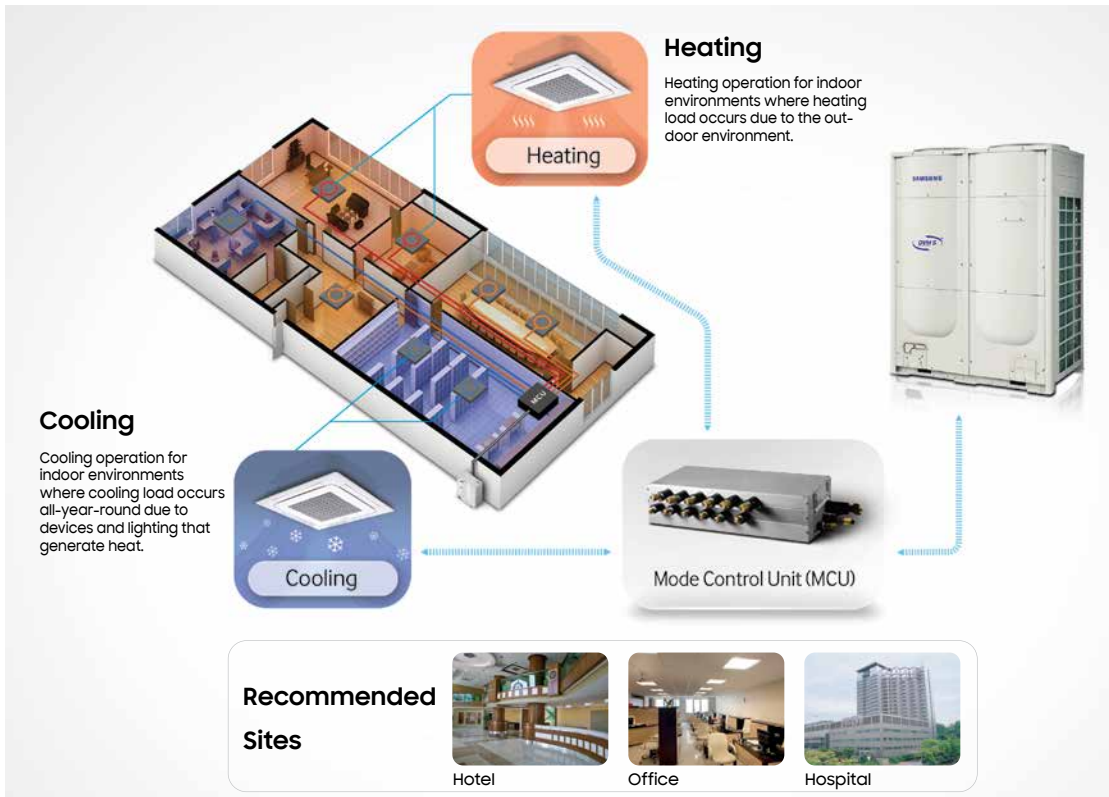
### Simultaneous cooling and heating

Single outdoor units can operate all indoor units in both cooling and heating mode. They can also simultaneously operate in cooling and heating mode when necessary, providing more operational freedom.



### Fine-tuned control

The Mode Change Unit (MCU) has an internal on/off valve that enables fine-tuned control via an electronic expansion valve (EEV) and sub-cooler. Improved performance and reduced noise create a pleasant temperature-controlled environment.





# DVM S Water

## Increased energy savings

### Temper the indoor environment with innovative technology using water source for heating and cooling

DVM S Water is a high-capacity outdoor cooling and heating system, ideal for large buildings. Unique to other DVM S models, the DVM S Water air conditioning system uses water as its heat source, which connects to a cooling tower and boiler. Using a highly efficient compressor and heat exchanger, DVM S Water provides effective and reliable performance despite changes in the surrounding environment. Its long piping and lightweight design also make it easy and economical to install almost anywhere.

Samsung DVM S Water Air Conditioner System delivers optimal comfort, efficiency, and performance with benefits such as:

**Increased energy savings:** Save on energy consumption and costs with a dual inverter system and high-performance compressors.

**Easy, flexible installation:** Ease of installation minimises effort with a lightweight design, extended piping length, and elevation support.

**Convenient management:** Monitor system performance effectively with convenient web-based data access and management from anywhere.

**Premium comfort:** Support comfortable living and working environments based on the combined strengths of various technologies.





# DVM S Water

## Increased energy savings

### Enhance the atmosphere and control costs with high-energy efficiency

Samsung DVM S Water features several smart technologies that combine to deliver world-class energy efficiency for today's economical and budget-conscious businesses. With these technologies, DVM S Water boasts up to 8 percent\* higher EER than conventional models. Plus, its coefficient of performance (COP) also surpasses the competition with an average 11 percent higher rate.

### Energy-efficient rapid heating and cooling

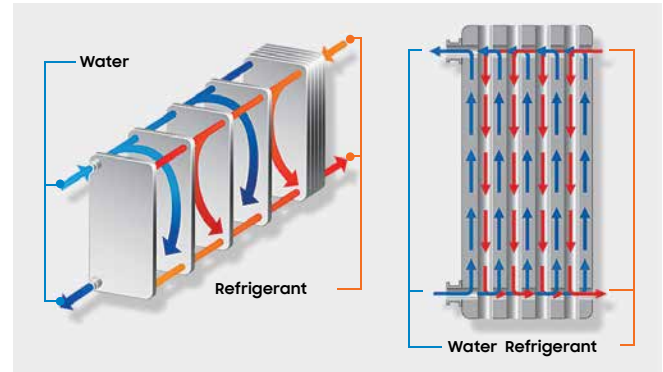
The third-generation innovative system, DDI, adopts a dual inverter compressor system. Both inverter compressors operate simultaneously, providing compressor longevity and balanced oil distribution for quick cooling and heating to save energy and the environment. Plus, the upgraded flash injection system increases refrigerant flow by up to 20 percent compared to conventional products.

### Independent cooling and heating

With the DVM S Water air conditioning system's optional Mode Control Unit (MCU), users can independently switch mode of each indoor unit. This means users can set different temperatures for various spaces at the same time, heating some rooms or areas of the building, while cooling others.

### Decreased maintenance and energy costs

DVM S Water features advanced PHE technology, which improves heat exchange between refrigerant and water, thus improving the efficiency, lowering foot print and benefiting the environment.



### Renewable energy source

Eco-friendly DVM S Water uses geothermal energy as a renewable heat source instead of a cooling tower and boiler, effectively supporting businesses' environmental and cost reduction initiatives.



\*Based on Samsung Internal Lab Analysis.



# DVM S Water

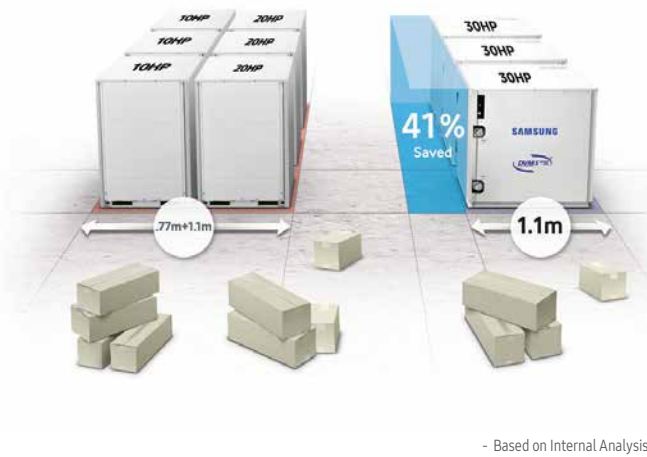
Easy, flexible installation

## Simplify installation with a cost-saving, adaptable design

The simplified yet powerful design of the DVM S Water unit eases the installation process. Non-polar communication between indoor and outdoor units promotes easier, safer wiring work.

## Economical design and setup

At 30 HP, the large-unit capacity of DVM S Water facilitates economical installation with a smaller footprint and lighter weight—an ideal solution for large buildings.



## Broad installation options

DVM S Water provides extended piping length of up to 170m and installation height of up to 50m, offering businesses more installation options. The piping distance is far between outdoor and indoor units, so individual indoor units perform capacity connection control and automatic refrigerant equalisation for more balanced performance between units.



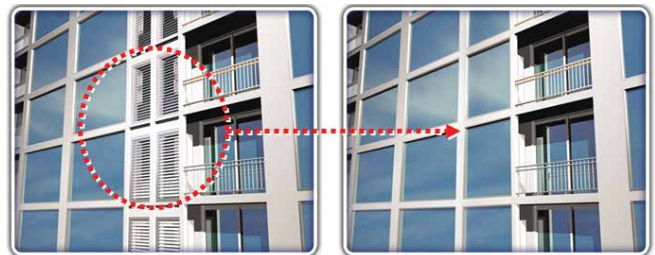
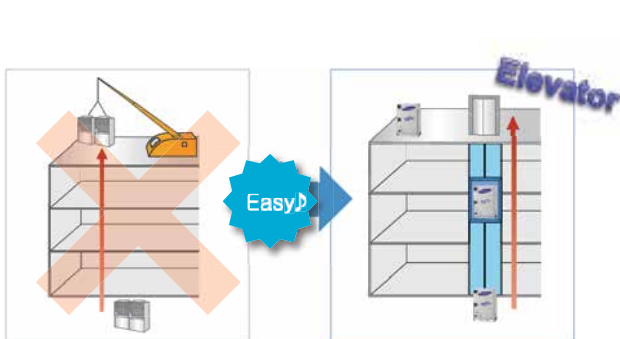
- Based on RandD Analysis

## Louver-less installation

The DVM S Water air conditioning system's louver-less installation ensures that the outside of the building remains neat and tidy. Because the system cools with water, it eliminates the need to install an unsightly louver to allow air to circulate and to remove excess heat. Its streamlined operation supports easy installation inside a building, without impacting the integrity of its architectural design.

## Easy moving

- Use elevator for moving



# DVM S Water

## Convenient management

### Discover and resolve issues from anywhere with a smart management system

DVM S Water features a smart management system for ultimate convenience. The advanced system facilitates round-the-clock system monitoring, along with self-regulating water flow control to ensure peak operation at all times.

### 24-hour performance monitoring

A smart Auto Commissioning Management (ACM) function continually monitors operational performance and proactively signals any abnormal operation, so users can quickly address potential problems. And if a malfunction occurs, the last 30 minutes of operational data are stored for automatic backup. This lowers the maintenance cost of periodic inspections and ensures that the system is always operating. DVM S Water also features an application with built-in signal contacts to support BACnet, and LonWorks - two popular building management systems (BMS).



### Ensure continuous comfort with reliable performance

Samsung DVM S Water is dedicated to supporting comfortable living and working environments based on the combined strengths of various technologies. Featuring central HVAC technology, DVM S Water delivers stable performance, unaffected by the surrounding environment. And VRF technology optimises comfort with individual zone control with on/off temperature setting, custom air flow rates, and scheduling.

### Minimal noise level

Because of its low noise level, DVM S Water won't disturb business or residential environments. Its water-cooled Plate Heat Exchanger eliminates the noise caused by an outdoor unit fan. In addition, the hermetically sealed compressor reduces any other noise produced.

### Cost-effective water flow control

DVM S Water's built-in water flow controller helps regulate the amount of water used to cool and heat the outdoor unit. It determines the optimum flow of water based on the internal temperature of the space, economising both the circulation pump's energy usage and costs. And because it's a standard option, businesses can eliminate the expense of purchasing a separate water flow control kit.





## DVM S Eco

### Experience ultimate comfort at home or work with powerful yet economical performance

The VRF-based Samsung DVM S Eco System Air Conditioner combines world-class energy efficiency and economy to deliver outstanding performance in a space-saving design. Supporting up to sixteen indoor units, DVM S Eco is a perfectly optimised cooling system for residences and small buildings. Its lightweight, small-scale build enables easy, low-cost installation, while its uniquely quiet design ensures soothing comfort and maximum efficiency. Plus, the DVM S Eco line offers a wide range of capacities to suit every need.

The Samsung DVM S Eco System Air Conditioner delivers optimal comfort, efficiency, and performance with features such as:

**High-rate energy efficiency:** Save on energy consumption and operational costs with high-performance compressor technology.

**Low noise level:** Enjoy a more peaceful home or work environment with quiet operation, thanks to a streamlined fan design.

**Various installation options:** Ease of installation minimises effort with a small footprint, and comes in a variety of size options.





# DVM S Eco

## Big capacity. Big choice.

DVM S Eco has one of the world's largest capacity and most compact side-discharge outdoor unit, which also offers a high level of energy efficiency. It's ideal for homes or businesses that need plenty of coverage, but have limited space.

## Best-in-class capacity

DVM S Eco provides more coverage, while taking up less space. It has the largest capacity in its class of 14HP, enabling you to create a small footprint VRF solution. So it's ideal for installation in places with limited space.



## Compact design for extra flexibility

DVM S Eco is the most compact air conditioner in its class, making it very easy and economical to install and operate without compromising on performance. It also leaves plenty of space that can be used for other purposes.



# DVM S Eco

## Advanced performance and energy efficiency

Its advanced technology radically improves performance and reduces energy wastage. It includes an innovative Digital Inverter Compressor, an optimised heat exchanger with corrugated fins, and highly efficient fans.



## Improved reliability in cold conditions

Featuring advanced refrigerant control technology, DVM S Eco's flash injection provides improved heating performance at  $-25^{\circ}\text{C}$ . It continues to perform even at lower temperatures, providing reliable comfort even when it's freezing.

## Install it almost anywhere

DVM S Eco provides the flexibility to be installed almost anywhere, regardless of its location or distance from the building. It has a piping length of up to 160m and can reach up to a height of 50m.



# DVM outdoor line up

## Top Discharge

### Heat Pump



8HP | 10HP | 12HP



14HP | 16HP | 18HP | 20HP  
22HP | 24HP | 26HP | 28HP



30HP | 32HP | 34HP

### Cooling only



8HP | 10HP | 12HP



14HP | 16HP | 18HP | 20HP  
22HP | 24HP | 26HP | 28HP | 30HP



32HP | 34HP

### Heat Recovery



8HP | 10HP | 12HP



14HP | 16HP | 18HP  
20HP | 22HP



24HP | 26HP  
28HP | 30HP

# Side Discharge

## Cooling only



4HP | 5HP

## Heat Pump/cooling only



6HP



8HP



10HP | 12HP | 14HP

## DVM S Water



6HP | 8HP | 10HP  
12HP | 20HP | 30HP

## DVM Chiller



12HP | 16HP | 20HP



# Specification

## DVM ECO Cooling only



4 ~ 5HP



6 ~ 14HP

- Top-class energy efficiency
- Small footprint and volume
- Flexible piping design
- Low noise level
- Reliable operation

Attribute/Model code		AM040KXMDEC/TL	AM050KXMDEC/TL
Power supply (Outdoor unit) [Φ, #, V, Hz]		1, 2, 220-240, 50/60	1, 2, 220-240, 50/60
System	Mode	Cooling only	Cooling only
Performance (Nominal) [HP]		4	5
Capacity	Cooling [KW]	12.1	14
	Cooling [Btu/h]	54,600	54,600
Power input (Nominal)	Cooling 1) [KW]	3.6	4
Current input (Nominal)	Cooling 1) [A]	17.5	19.5
Energy efficiency	EER (Nominal cooling)	3.36	3.5
Compressor	Type	Twin BLDC rotary	Twin BLDC rotary
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52
	Gas pipe (Φ, mm)	15.88	15.88
	Installation max. length [m]	70	70
	Installation max. height [m]	30	30
Field wiring	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A
	Factory charging (kg)	2	2
Sound	Sound pressure (dBA)	52	55
External dimension (Outdoor unit)	Net weight (kg)	76	76
	Shipping weight (kg)	79	79
	Net dimensions (WxHxD) (mm)	940 x 998 x 330	940 x 998 x 330
	Net dimensions (WxHxD) (cm)	94 x 99.8 x 33	94 x 99.8 x 33
	Shipping dimensions (WxHxD) (mm)	995 x 1136 x 426	995 x 1136 x 426
	Shipping dimensions (WxHxD) (cm)	99.5 x 113.6 x 42.6	99.5 x 113.6 x 42.6
Operating temp. Range	Cooling (°C)	-5.0 ~ 48.0	-5.0 ~ 48.0

### Note:

- 1) Nominal cooling capacities are based on indoor temperature : 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 2) Nominal heating capacities are based on indoor temperature : 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 3) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

AM060TXMDEC/TL	AM080MXMDGC/TL	AM100TXMDNC/TL	AM120TXMDNC/TL	AM140TXMDNC/TL
1, 2, 220-240, 50/60	3,4,380-415,50	3, 4, 380-415, 50/60	3, 4, 380-415, 50/60	3, 4, 380-415, 50/60
Cooling only	Cooling only	Cooling only	Cooling only	Cooling only
6	8	10	12	14
16	22.4	29	33.6	40
54,600	76400	99,000	1,14,600	1,36,500
4.2	6.90	7.3	8.77	10.59
20.2	18.4	11.7	13.74	16.48
3.81	3.25	3.97	3.83	3.78
Twin BLDC rotary	Twin BLDC rotary	Scroll inverter	Scroll inverter	Scroll inverter
9.52	9.52	9.52	12.7	12.7
19.05	19.05	22.22	28.58	28.58
150	100	160	160	160
50	30	50	50	50
0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
R410A	R410A	R410A	R410A	R410A
2.8	3.7	3.7	4.3	4.8
53	59	58	61	62
97	115	143	153	160
107	125	156	166	173
940 x 1,210 x 330	940 x 1,420 x 330	940 x 1,630 x 460	940 x 1,630 x 460	940 x 1,630 x 460
94 x 121 x 33	94 x 142 x 33	94 x 163 x 46	94 x 163 x 46	94 x 163 x 46
995 x 1,388 x 426	995 x 1,578 x 426	1,020 x 1,820 x 575	1,020 x 1,820 x 575	1,020 x 1,820 x 575
99.5 x 113.6 x 42.6	99.5 x 157.8 x 42.6	102 x 182 x 57.5	102 x 182 x 57.5	102 x 182 x 57.5
-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0

# Specification

## DVM ECO Heat pump



4 ~ 5HP



6 ~ 14HP

- Top-class energy efficiency
- Small footprint and volume
- Flexible piping design
- Low noise level
- Reliable operation

Attribute/Model code		AM060TXMDEH/TL
Powersupply (Outdoor unit) [Φ, #, V, Hz]		1, 2, 220-240, 50
System	Mode	Heat pump
Performance (nominal)		6
Capacity	Cooling [kW]	15.5
	Cooling [Btu/h]	52,900
	Heating [kW]	18
	Heating [Btu/h]	61,400
Power input (Nominal)	Cooling 1) [kW]	4.31
	Heating 2) [kW]	4.39
Current input (Nominal)	Cooling 1) [A]	21
	Heating 2) [A]	20.2
Energy efficiency	EER (Nominal cooling)	3.6
	COP (Nominal heating)	4.1
Compressor	Type	Twin BLDC rotary
Piping connections	Liquid pipe (Φ, mm)	9.52
	Gas pipe (Φ, mm)	19.05
	Installation max. length [m]	150 m
	Installation max. height [m]	50 m
Field wiring	Transmission cable	0.75 ~ 1.5
Refrigerant	Type	R410A
	Factory charging (kg)	3.3
Sound	Sound pressure (dBA)	55
External dimension (Outdoor unit)	Net weight(kg)	101
	Shipping weight (kg)	110
	Net dimensions (WxHxD) (mm)	940 x 1,210 x 330
	Net dimensions (WxHxD) (cm)	94 x 121 x 33
	Shipping dimensions (WxHxD) (mm)	995 x 1,388 x 426
	Shipping dimensions (WxHxD) (cm)	99.5 x 138.8 x 42.6
Operating temp. range	Cooling (°C)	-5.0 ~ 48.0
	Heating (°C)	-20.0 ~ 24.0

### Note:

- 1) Nominal cooling capacities are based on indoor temperature : 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 2) Nominal heating capacities are based on indoor temperature : 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 3) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

AM080MXMDGH/TL	AM100KXMDGH/TL	AM120KXMDGH/TL	AM140KXMDGH/TL
3,4,380-415,50	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50
Heat pump	Heat pump	Heat pump	Heat pump
8	10	12	14
22.4	28	33.5	40
76,400	95,500	114,300	136,500
22.4	31.5	37.5	45.0
76,600	1,07,500	128,000	153,500
6.9	7	8.38	10.00
5.8	6.17	7.50	9.57
11.7	11.51	13.74	16.48
9.5	10.38	12.23	15.55
3.25	4	4	4
3.86	5.1	5	4.7
Twin BLDC rotary	Scroll inverter	Scroll inverter	Scroll inverter
9.52	9.52	12.7	12.7
19.05	22.22	28.58	28.58
100	160	160	160
30	50	50	50
0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
R410A	R410A	R410	R410
3.7	3.7	4.3	4.8
59	58	59	62
115	145	155	162
125	158	168	175
940 x 1,420 x 330	940x1630x460	940x1630x460	940x1630x460
94 x 142 x 33	94 x 163 x 46	94 x 163 x 46	94 x 163 x 46
995 x 1,578 x 426	1020x1820x575	1020x1820x575	1020x1820x575
99.5 x 157.8 x 42.6	102 x 182 x 57.5	102 x 182 x 57.5	102 x 182 x 57.5
-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0
-20.0 ~ 24.0	-25 ~ 24 °C	-25 ~ 24 °C	-25 ~ 24 °C



# Specification

## DVM S2 Heat pump



- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/Model code		AM080AXVANH	AM100AXVANH/TL	AM120AXVANH/TL
Power supply (outdoor unit) [ Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Heat pump	Heat pump	Heat pump
		8	10	12
Capacity	Cooling1) [kw]	22.4	28.0	33.6
	Cooling1) [BTU/h]	76384.0	95480.0	114576.0
	Heating1) [kw]	25.2	31.5	37.8
	Heating1) [BTU/h]	85932.0	107415.0	128898.0
Power input (nominal)	Cooling1) [kw]	4.84	6.29	8.77
	Heating1) [kw]	4.8	6.3	8.9
Current input (nominal)	Cooling1) [A]	7.6	9.9	13.8
	Heating1) [A]	7.5	9.9	14.1
Energy efficiency	EER (nominal cooling)	4.63	4.45	3.83
	COP (nominal heating)	5.25	5.00	4.25
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80	110
Piping connections	Liquid pipe, [Φ, mm]	9.52	9.52	12.7
	Gas pipe [Φ, mm]	19.05	22.22	28.58
	Installation max length [m]	220	220	220
	Installation max height [m]	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A
	Factory charging [kg]	5.5	5.5	6.2
Sound	Sound pressure [db(a) 2]	56	57	61
External dimensions (outdoor unit)	Net weight [kg]	171	183	187.2
	Shipping weight [kg]	185	197	201.2
	Net dimensions (WXHXD) [mm]	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765
	Net dimensions (WXHXD) [cm]	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5
	Shipping dimensions (WXHXD) [mm]	998 x 1,887 x 829	998 x 1,887 x 829	998 x 1,887 x 829
	Shipping dimensions (WXHXD) [cm]	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9
Operating temp. range	Cooling [°C]	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [°C]	-25 ~ 24	-25 ~ 24	-25 ~ 24

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
- Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
  - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
  - Equivalent refrigerant pipe length 5m, Level differences 0m

AM140AXVANH/TL	AM160AXVANH/TL	AM180AXVANH/TL	AM200AXVANH/TL	AM220AXVANH/TL	AM240AXVANH/TL
3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump
14	16	18	20	22	24
40.0	45.0	50.4	56.0	61.6	67.2
136400.0	153450.0	171864.0	190960.0	210056.0	229152.0
45.0	50.4	56.7	63.0	69.3	75.6
153450.0	171864.0	193347.0	214830.0	236313.0	257796.0
10.68	11.5	13.94	12.18	16.2	16.8
11.08	11.58	13.5	13.55	15.06	16.61
16.8	18	21.7	19.6	26.2	26.4
16.9	18.2	21.2	21.3	23.7	26.1
3.75	3.91	3.62	4.60	3.80	4.00
4.06	4.35	4.20	4.65	4.60	4.55
Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
80	110	110	110	110	80
12.7	12.7	15.88	15.88	15.88	15.88
28.58	28.58	28.58	28.58	28.58	34.92
220	220	220	220	220	220
110	110	110	110	110	110
0.75	0.75	0.75	0.75	0.75	0.75
R410A	R410A	R410A	R410A	R410A	R410A
7	8	8	10.5	10.5	14
63	61	61	61	64	65
199.9	234	234	259.1	292.1	317
213.9	251	251	276.1	309.1	334
930 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765
93 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
998 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829
99.8 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

2) Sound pressure level is obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa

# Specification

## DVM S2 Heat pump



- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/Model code		AM260AXVANH/TL	AM280AXVANH/TL
Power supply (outdoor unit) [ Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Heat pump	Heat pump
		26	28
Capacity	Cooling1) [kw]	72.8	78.6
	Cooling1) [BTU/h]	248248.0	268026.0
	Heating1) [kw]	78.4	78.4
	Heating1) [BTU/h]	267344.0	267344.0
Power input (nominal)	Cooling1) [kw]	18.86	23.93
	Heating1) [kw]	17.19	17.61
Current input (nominal)	Cooling1) [A]	30	38
	Heating1) [A]	27	27.7
Energy efficiency	EER (nominal cooling)	3.86	3.28
	COP (nominal heating)	4.56	4.45
Compressor	Type	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80
Piping connections	Liquid pipe, [Ø, mm]	19.05	19.05
	Gas pipe [Ø, mm]	34.92	34.92
	Installation max length [m]	220	220
	Installation max height [m]	110	110
Field wiring	Transmission cable [mm]	0.75	0.75
Refrigerant	Type	R410A	R410A
	Factory charging [kg]	14	14
Sound	Sound pressure [DB(a)] 2)	65	65
External dimensions (outdoor unit)	Net weight [kg]	317	317
	Shipping weight [kg]	334	334
	Net dimensions (WXHXD) [mm]	1,295 x 1,695 x 765	1,295 x 1,695 x 765
	Net dimensions (WXHXD) [cm]	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WXHXD) [mm]	1,363 x 1,887 x 829	1,363 x 1,887 x 829
	Shipping dimensions (WXHXD) [cm]	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
Operating temp. range	Cooling [°C]	-5 ~ 53	-5 ~ 53
	Heating [°C]	-25 ~ 24	-25 ~ 24

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
- Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
  - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
  - Equivalent refrigerant pipe length 5m, Level differences 0m

<b>AM300AXVANH/TL</b>	<b>AM320AXVANH/TL</b>	<b>AM340AXVANH/TL</b>
3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
Heat pump	Heat pump	Heat pump
30	32	34
84.0	89.6	95.2
286440.0	305536.0	324632.0
94.5	95.2	95.2
322245.0	324632.0	324632.0
22.7	27.57	31.73
20.54	21.15	21.63
35.5	43.4	49.9
32.3	33.3	34
3.70	3.25	3.00
4.60	4.50	4.40
Inverter scroll	Inverter scroll	Inverter scroll
80	80	80
19.05	19.05	19.05
34.92	34.92	34.92
220	220	220
110	110	110
0.75	0.75	0.75
R410A	R410A	R410A
15.5	15.5	15.5
65	65	66
390	390	390
416.2	416.2	416.2
1,860 x 1,695 x 765	1,860 x 1,695 x 765	1,860 x 1,695 x 765
186 x 169.5 x 76.5	186 x 169.5 x 76.5	186 x 169.5 x 76.5
1,928 x 1,887 x 829	1,928 x 1,887 x 829	1,928 x 1,887 x 829
192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9
-5 ~ 53	-5 ~ 53	-5 ~ 53
-25 ~ 24	-25 ~ 24	-25 ~ 24

2) Sound pressure level is obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa



# Combination table (Heat pump)

Capacity (HP)	System model						
	Code	No of modules	8HP	10HP	12HP	14HP	16HP
8HP	AM080AXVANH/TL	1	1				
10HP	AM100AXVANH/TL	1		1			
12HP	AM120AXVANH/TL	1			1		
14HP	AM140AXVANH/TL	1				1	
16HP	AM160AXVANH/TL	1					1
18HP	AM180AXVANH/TL	1					
20HP	AM200AXVANH/TL	1					
22HP	AM220AXVANH/TL	1					
24HP	AM240AXVANH/TL	1					
26HP	AM260AXVANH/TL	1					
28HP	AM280AXVANH/TL	1					
30HP	AM300AXVANH/TL	1					
32HP	AM320AXVANH/TL	1					
34HP	AM340AXVANH/TL	1					
36HP	AM360AXVANH/TL	2		1			
38HP	AM380AXVANH/TL	2			1		
40HP	AM400AXVANH/TL	2				1	
42HP	AM420AXVANH/TL	2					
44HP	AM440AXVANH/TL	2					
46HP	AM460AXVANH/TL	2					
48HP	AM480AXVANH/TL	2					
50HP	AM500AXVANH/TL	2					
52HP	AM520AXVANH/TL	2					
54HP	AM540AXVANH/TL	2					
56HP	AM560AXVANH/TL	2					
58HP	AM580AXVANH/TL	2					
60HP	AM600AXVANH/TL	2					
62HP	AM620AXVANH/TL	2					
64HP	AM640AXVANH/TL	2					
66HP	AM660AXVANH/TL	2					
68HP	AM680AXVANH/TL	2					
70HP	AM700AXVANH/TL	3					
72HP	AM720AXVANH/TL	3					
74HP	AM740AXVANH/TL	3					
76HP	AM760AXVANH/TL	3					
78HP	AM780AXVANH/TL	3					
80HP	AM800AXVANH/TL	3					
82HP	AM820AXVANH/TL	3					
84HP	AM840AXVANH/TL	3					
86HP	AM860AXVANH/TL	3					
88HP	AM880AXVANH/TL	3					
90HP	AM900AXVANH/TL	3					
92HP	AM920AXVANH/TL	3					
94HP	AM940AXVANH/TL	3					
96HP	AM960AXVANH/TL	3					
98HP	AM980AXVANH/TL	3					

Capacity of single unit HP

18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP
1								
	1							
		1						
			1					
				1				
					1			
						1		
							1	
								1
				1				
				1				
				1				
	1	1						
		2						
		1	1					
		1		1				
			1	1				
				2				
				1	1			
		1						1
				1			1	
				1				1
					1			1
							2	
							1	1
								2
1				2				
		1	1	1				
			2	1				
			1	2				
				3				
				2	1			
				1	2			
					3			
				2				1
				1	1			1
		1						2
				1			1	1
				1				2
					1			2
							2	1

# Specification

## DVM S2 Cooling only



- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/ Model code		AM080AXVANC/TL	AM100AXVANC/TL	AM120AXVANC/TL
Power supply (Outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Cooling only	Cooling only	Cooling only
		8	10	12
Capacity	Cooling 1) [KW]	22.4	28.0	33.6
	Cooling 1) [Btu/h]	76384.0	95480.0	114576.0
	Heating 1) [KW]	NA	NA	NA
	Heating 1) [Btu/h]	NA	NA	NA
Power input (nominal)	Cooling 1) [KW]	4.84	6.29	8.77
	Heating 1) [KW]	NA	NA	NA
Current input (nominal)	Cooling 1) [A]	7.6	9.9	13.8
	Heating 1) [A]	NA	NA	NA
Energy efficiency	EER (nominal cooling)	4.63	4.45	3.83
	COP (nominal heating)	NA	NA	NA
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	110	110	80
Piping connections	Liquid pipe, [Φ, mm ]	9.52	9.52	12.7
	Gas pipe [Φ, mm ]	19.05	22.22	28.58
	Installation max length [m]	220	220	220
	Installation max length [m]	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A
	Factory charging [kg]	5.5	5.5	6.2
Sound	Sound pressure [dB(A)] 2)	55	56	60
External dimensions (outdoor unit)	Net weight [kg]	171	183	187
	Shipping weight [kg]	185	197	201
	Net dimensions (WxHxD) [mm]	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765
	Net dimensions (WxHxD) [cm]	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5
	Shipping dimensions (WxHxD) [mm ]	998 x 1,887 x 829	998 x 1,887 x 829	998 x 1,887 x 829
	Shipping dimensions (WxHxD) [cm ]	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9
Operating temp. range	Cooling [°C]	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [ °C]	NA	NA	NA

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
- Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
  - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
  - Equivalent refrigerant pipe length 5m, Level differences 0m

AM140AXVANC/TL	AM160AXVANC/TL	AM180AXVANC/TL	AM200AXVANC/TL	AM220AXVANC/TL	AM240AXVANC/TL
3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only
14	16	18	20	22	24
40.0	45.0	50.4	56.0	61.6	67.2
136400.0	153450.0	171864.0	190960.0	210056.0	229152.0
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
10.68	11.5	13.94	12.18	16.2	16.8
NA	NA	NA	NA	NA	NA
16.8	18	21.7	19.6	26.2	26.4
NA	NA	NA	NA	NA	NA
3.75	3.91	3.62	4.60	3.80	4.00
NA	NA	NA	NA	NA	NA
Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
80	110	110	110	110	80
12.7	12.7	15.88	15.88	15.88	15.88
28.58	28.58	28.58	28.58	28.58	34.92
220	220	220	220	220	220
110	110	110	110	110	110
0.75	0.75	0.75	0.75	0.75	0.75
R410A	R410A	R410A	R410A	R410A	R410A
7	8	8	10.5	10.5	11
63	59	59	61	64	65
200	234	234	259	292	317
214	251	251	276	309	334
930 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765	1,295 x 1,695 x 765
93 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
998 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829	1,363 x 1,887 x 829
99.8 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
NA	NA	NA	NA	NA	NA

2) Sound pressure level is obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa



# Specification

## DVM S2 Cooling only



- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/ Model code		AM260AXVANC/TL	AM280AXVANC/TL
Power supply (Outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Cooling only	Cooling only
		26	28
Capacity	Cooling 1) [KW]	72.8	78.6
	Cooling 1) [Btu/h]	248248.0	268026.0
	Heating 1) [KW]	NA	NA
	Heating 1) [Btu/h]	NA	NA
Power input (nominal)	Cooling 1) [KW]	18.86	23.93
	Heating 1) [KW]	NA	NA
Current input (nominal)	Cooling 1) [A]	30	38
	Heating 1) [A]	NA	NA
Energy efficiency	EER (nominal cooling)	3.86	3.28
	COP (nominal heating)	NA	NA
Compressor	Type	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80
Piping connections	Liquid pipe, [Φ, mm ]	19.05	19.05
	Gas pipe [Φ, mm ]	34.92	34.92
	Installation max length [m]	220	220
	Installation max length [m]	110	110
Field wiring	Transmission cable [mm]	0.75	0.75
Refrigerant	Type	R410A	R410A
	Factory charging [kg]	11	11
Sound	Sound pressure [dB(A)] 2)	65	65
External dimensions (outdoor unit)	Net weight [kg]	317	317
	Shipping weight [kg]	334	334
	Net dimensions (WxHxD) [mm]	1,295 x 1,695 x 765	1,295 x 1,695 x 765
	Net dimensions (WxHxD) [cm]	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WxHxD) [mm]	1,363 x 1,887 x 829	1,363 x 1,887 x 829
	Shipping dimensions (WxHxD) [cm]	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
Operating temp. range	Cooling [°C]	-5 ~ 53	-5 ~ 53
	Heating [°C]	NA	NA

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
- Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
  - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
  - Equivalent refrigerant pipe length 5m, Level differences 0m

<b>AM300AXVANC/TL</b>	<b>AM320AXVANC/TL</b>	<b>AM340AXVANC/TL</b>
3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
Cooling only	Cooling only	Cooling only
30	32	34
84.0	89.6	95.2
286440.0	305536.0	324632.0
NA	NA	NA
NA	NA	NA
26.84	27.57	31.73
NA	NA	NA
42.1	43.4	49.9
NA	NA	NA
3.13	3.25	3.00
NA	NA	NA
Inverter scroll	Inverter scroll	Inverter scroll
80	80	80
19.05	19.05	19.05
34.92	34.92	34.92
220	220	220
110	110	110
0.75	0.75	0.75
R410A	R410A	R410A
11	12.5	12.5
65	65	66
317	390	390
334	416	416
1,295 x 1,695 x 765	1,860 x 1,695 x 765	1,860 x 1,695 x 765
129.5 x 169.5 x 76.5	186 x 169.5 x 76.5	186 x 169.5 x 76.5
1,363 x 1,887 x 829	1,928 x 1,887 x 829	1,928 x 1,887 x 829
136.3 x 188.7 x 82.9	192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9
-5 ~ 53	-5 ~ 53	-5 ~ 53
NA	NA	NA

2) Sound pressure level is obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa

# Combination table (Cooling only)

Capacity (HP)	System model		8HP	10HP	12HP	14HP	16HP
	Code	No. of modules					
8HP	AM080AXVANC/TL	1	1				
10HP	AM100AXVANC/TL	1		1			
12HP	AM120AXVANC/TL	1			1		
14HP	AM140AXVANC/TL	1				1	
16HP	AM160AXVANC/TL	1					1
18HP	AM180AXVANC/TL	1					
20HP	AM200AXVANC/TL	1					
22HP	AM220AXVANC/TL	1					
24HP	AM240AXVANC/TL	1					
26HP	AM260AXVANC/TL	1					
28HP	AM280AXVANC/TL	1					
30HP	AM300AXVANC/TL	1					
32HP	AM320AXVANC/TL	1					
34HP	AM340AXVANC/TL	1					
36HP	AM360AXVANC/TL	2				1	
38HP	AM380AXVANC/TL	2			1		
40HP	AM400AXVANC/TL	2					
42HP	AM420AXVANC/TL	2					
44HP	AM440AXVANC/TL	2					
46HP	AM460AXVANC/TL	2					
48HP	AM480AXVANC/TL	2					
50HP	AM500AXVANC/TL	2					
52HP	AM520AXVANC/TL	2					
54HP	AM540AXVANC/TL	2					
56HP	AM560AXVANC/TL	2					
58HP	AM580AXVANC/TL	2					
60HP	AM600AXVANC/TL	2					
62HP	AM620AXVANC/TL	2					
64HP	AM640AXVANC/TL	2					
66HP	AM660AXVANC/TL	2					
68HP	AM680AXVANC/TL	2					
70HP	AM700AXVANC/TL	3					
72HP	AM720AXVANC/TL	3					
74HP	AM740AXVANC/TL	3					
76HP	AM760AXVANC/TL	3					
78HP	AM780AXVANC/TL	3					
80HP	AM800AXVANC/TL	3					
82HP	AM820AXVANC/TL	3					
84HP	AM840AXVANC/TL	3					
86HP	AM860AXVANC/TL	3					
88HP	AM880AXVANC/TL	3					
90HP	AM900AXVANC/TL	3					
92HP	AM920AXVANC/TL	3					
94HP	AM940AXVANC/TL	3					
96HP	AM960AXVANC/TL	3					
98HP	AM980AXVANC/TL	3					

Capacity of single unit HP

18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP
1								
	1							
		1						
			1					
				1				
					1			
						1		
							1	
								1
		1						
				1				
	2							
	1	1						
		2						
		1	1					
		1		1				
			1	1				
		1				1		
			1			1		
				1		1		
					1	1		
						2		
						1	1	
							2	
							1	1
								2
		2		1				
		1	1	1				
		2				1		
		1	1			1		
		1		1		1		
			1	1		1		
		1				2		
			1			2		
				1		2		
					1	2		
						3		
						2	1	
						2		1
						1	1	1
						1		2



# Specification

## DVM heat recovery



- DSI (Dual Smart Inverter) system
- High efficiency
- Smart management
- Flexible installation
- Comfortable and reliable operation

Attribute/Model code		AM080FXVAGR	AM100FXVAGR	AM120FXVAGR	AM140FXVAGR
Power supply (Outdoor unit) [Φ, #, V, Hz]					
System	Mode				
Performance (Nominal) [HP]		8	10	12	14
Capacity	Cooling [KW]	22.4	28	33.6	40
	Cooling [Btu/h]	76,400	95,500	114,600	136,500
	Heating [KW]	25.2	31.5	37.8	45
	Heating [Btu/h]	86,000	107,500	129,000	153,500
Power input (Nominal)	Cooling 1) [KW]	5.0	6.8	8.4	8.9
	Heating 2) [KW]	5.1	6.7	8.7	9.5
Current input (Nominal)	Cooling 1) [A]	8	10.9	13.5	14.3
	Heating 2) [A]	8.2	10.7	14	15.2
Energy efficiency	EER (Nominal cooling)	4.48	4.12	4	4.49
	COP (Nominal heating)	4.94	4.7	4.34	4.74
Compressor	Type				
Fan	External static pressure (Min / Std / Max) [Pa]				
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	12.70	12.70
	Gas pipe (Φ, mm)	19.05	22.22	28.58	28.58
	Installation max. length [m]	200(220)	200(220)	200(220)	200(220)
	Installation max. height [m]	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)
Field wiring	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R-410A	R-410A	R-410A	R-410A
	Factory charging (kg)	5.50	5.20	5.50	7.70
Sound	Sound pressure (dBA)	57	58	62	61
External dimension (Outdoor unit)	Net weight (kg)	189.5	189.5	189.5	239.0
	Shipping weight (kg)	205.5	205.5	205.5	258.0
	Net dimensions (WxHxD) (mm)	880 x 1695 x 765	880 x 1695 x 765	880 x 1695 x 765	1295 x 1695 x 765
	Net dimensions (WxHxD) (cm)	880 x 169.5 x 76.5	880 x 169.5 x 76.5	880 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WxHxD) (mm)	948 x 1887 x 832	948 x 1887 x 832	948 x 1887 x 832	1363 x 1887 x 832
	Shipping dimensions (WxHxD) (cm)	94.8 x 188.7 x 83.2	94.8 x 188.7 x 83.2	94.8 x 188.7 x 83.2	136.3 x 188.7 x 83.2
Operating temp. range	Cooling (°C)	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating (°C)	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

### Note:

1) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m  
 2) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

AM160FXVAGR	AM180FXVAGR	AM200FXVAGR	AM220FXVAGR	AM240MXVGNR	AM260MXVGNR	AM280MXVGNR	AM300MXVANR
3,4,380-415,50							
Heat recovery							
16	18	20	22	24	26	28	30
45	50.4	56	61.6	67.2	72.8	78.6	84
153,500	172,000	191,100	210,200	229,300	248,400	268,200	286,600
50.4	56.7	63	69.3	75.6	81.9	88.2	94.5
170,600	193,500	215,000	236,500	258,000	279,500	301,000	322,500
11.0	12.88	15.19	17.35	18.61	20.92	24.49	22.7
11.5	11.9	13.9	16.7	13.2	15.17	15.53	20.59
17.6	20.7	24.4	27.8	29.8	33.6	39.3	36.4
18.4	19.1	22.3	26.8	21.2	24.3	24.9	33
4.09	3.91	3.69	3.55	3.6	3.5	3.2	3.7
4.38	4.76	4.53	4.15	5.1	4.8	4.7	4.6
Scroll inverter							
78.45 Pa				-			
12.70	15.88	15.88	15.88	15.88	19.05	19.05	19.05
28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92
200(220)	200(220)	200(220)	200(220)	200(220)	200(220)	200(220)	200(220)
110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)	50(110)/40(110)	50(110)/40(110)	50(110)/40(110)	50(110)/40(110)
0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	-	-	-	-
R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
7.40	8.70	8.40	8.40	14.00	14.00	14.00	14.00
63	64	65	67	69	69	69	69
282.0	304.0	304.0	304.0	350.0	358.0	358.0	358.0
301.0	323.0	323.0	323.0	372.0	380.0	380.0	380.0
1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765	1295x1795x765	1295x1795x765	1295x1795x765	1295x1795x765
129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 179.5 x 76.5	129.5 x 179.5 x 76.5	129.5 x 179.5 x 76.5	129.5 x 179.5 x 76.5
1363 x 1887 x 832	1363 x 1887 x 832	1363 x 1887 x 832	1363 x 1887 x 832	1363x1987x832	1363x1987x832	1363x1987x832	1363x1987x832
136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3x198.7x83.2	136.3x198.7x83.2
-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

# Specification

## DVM chiller



- High Efficiency
- Smaller footprint
- Wide operating range
- Integrated control
- Provides Cold / Hot Water

Type			Without pump	Without pump	Without pump	With pump	With pump	With pump	
Model name			AG042KSVANH/EU	AG056KSVANH/EU	AG070KSVANH/EU	AG042KSVGNH/EU	AG056KSVGNH/EU	AG070KSVGNH/EU	
Power supply			Φ, V, Hz	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50	
Mode			-	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	
Performance	Hp		15	20	25	15	20	25	
	Ton		12	16	18.5	12	16	18.5	
	Capacity (Nominal)	Cooling	kW	42.0	56.0	65.0	42.0	56.0	65
		Heating	kW	42.0	56.0	69.5	42.0	56.0	69.5
Power	Power input (Nominal)	Cooling	kW	12.35	18.67	26.00	13.59	20.14	28.26
		Heating	kW	11.83	17.50	24.39	12.77	18.48	25.84
	Current input (Nominal)	Cooling	A	19.6	29.6	41.2	24.2	34.2	45.8
		Heating	A	18.8	27.8	38.7	23.4	32.4	43.3
	Current	Mca	A	32.0	46.0	58.0	39	53	65
		Mfa	A	40.0	60.0	75.0	50	60	75
Cop	Nominal cooling	W/W	3.40	3.00	2.50	3.09	2.78	2.30	
	Nominal heating	W/W	3.55	3.20	2.85	3.29	3.03	2.69	
	Eseer (Pump input is included Based On En 14511)	W/W	5.7	5.4	5	4.75	4.5	4.10	
Compressor	Type	-	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	
	Type	-	Brazing plate	Brazing plate	Brazing plate	Brazing plate	Brazing plate	Brazing plate	
Water side heat exchanger	Water flow rate (Cooling/Heating)		Lpm	120 / 120	160 / 160	186 / 200	120 / 120	160 / 160	186 / 200
	Pressure drop (Set. Norminal)		Kpa	60	100	120	60	100	120
	Max operating pressure		Mpa	1.0	1.0	1.0	1	1	1
	Connection type		-	Flange	Flange	Flange	Flange	Flange	Flange
	Pipe connection (Inlet/Outlet)		Φ, Mm	40	40	50	40	40	50
	Q'ty		Ea	2	2	2	2	2	2
Pump	Type	-	-	-	-	End-Suction	End-Suction	End-Suction	
	Input X N	Kw	-	-	-	1.68	1.68	1.68	
	Output X N	W	-	-	-	1.45	1.45	1.45	
	Normal water flow rate		Lpm	-	-	-	120 / 120	160 / 160	186 / 200
			L/S	-	-	-	2.0 / 2.0	2.7 / 2.7	3.1 / 3.3
	External static Pressure(Set)	Max.	Maq	-	-	-	22.4 / 22.4	15.3 / 15.3	10.2 / 10.2
		Kpa	-	-	-	220 / 220	150 / 150	131 / 100	
Refrigerant	Type	-	R410A	R410A	R410A	R410A	R410A	R410A	
Sound	Sound pressure	Cooling	60	62	63	60	62	63	
		Heating	57	59	64	57	59	64	
	Sound power		80	83	85	80	84	88	
External dimension	Net weight		Kg	446	446	465	472	472	493
	Shipping weight		Kg	468	468	487	494	494	515
	Net dimensions (Wxhxd)		Mm	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)
	Shipping dimensions (Wxhxd)		Mm	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)
Operating water temp. range	Cooling	°C	5 ~ 25	5 ~ 25	5 ~ 25	5 ~ 25	5 ~ 25	5 ~ 25	
	Cooling (If using brine)	°C	-10~25	-10~25	-10~25	-10~25	-10~25	-10~25	
	Heating	°C	25 ~ 55	25 ~ 55	25 ~ 55	25 ~ 55	25 ~ 55	25 ~ 55	
Operating water flow range	Water flow rate	Lpm	60 ~ 240	80 ~ 320	93 ~ 400	60 ~ 240	80 ~ 320	93 ~ 400	
	Minimum water storage in the system	L	294	392	490	294	392	490	
Operating amb. temp. range	Cooling	°C	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	
	Heating	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	

### Note:

- 1) Specification comply with EN14511.
- 2) Nominal cooling capacities are based on; Chilled water inlet / outlet temperature : 12 / 7 °C, outdoor temperature : 35 °C DB, 24 °C WB.
- 3) Nominal heating capacities are based on; Heating water inlet / outlet temperature : 40 / 45 °C, outdoor temperature : 7 °C DB, 6 °C WB.
- 4) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

# Specification

## DVM water



- High efficiency
- Reliable operation
- Small footprint
- Minimum noise level
- Heat Recovery System (3 pipe)

Model name			AM080FXWANR/EU	AM100FXWANR/EU	AM120FXWANR/EU	AM200FXWANR/EU	AM300KXWANR/EU	
Power supply		Φ, V, Hz	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50	
Mode		-	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	
Performance	HP	HP	8.00	10.00	12.00	20	30	
	Capacity (Nominal)	Cooling	kW	22.40	28.00	33.60	56.00	84
			Btu/h	76,400	95,500	114,600	191,100	286,600
		Heating	kW	25.20	31.50	37.80	63.00	94.5
Btu/h			86,000	107,500	129,000	215,000	322,400	
Power	Power input (Nominal)	Cooling	kW	3.84	5.05	6.46	10.77	16.80
		Heating	kW	4.12	5.25	6.51	10.86	16.88
	Current input (Nominal)	Cooling	A	6.20	8.10	10.30	17.30	26.4
		Heating		6.60	8.40	10.40	17.40	26.5
	MCA		16.30	20.00	25.00	39.80	48	
MFA	A	20.00	20.00	30.00	40.00	63		
COP	Cooling	kW	5.83	5.54	5.2	5.3	5.0	
	Heating	kW	6.12	6.0	5.81	5.8	5.6	
Compressor	Type	-	SSC Scroll x1	SSC Scroll x1	SSC Scroll x1	SSC Scroll x 2	Inverter Scroll	
Condenser	Type	-	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Plate Heat Exchanger)	
	Lost head	kPa	22	30	43	54	50	
	Water flow rate	LPM	80.0	96.0	114.0	190.0	285	
	Max. pressure	Mpa	1.96	1.96	1.96	1.96	1.96	
Piping connections	Liquid pipe	Φ, mm	9.52	9.52	12.70	15.88	19.05	
	Gas pipe	Φ, mm	19.05	22.22	28.58	28.58	34.92	
	Discharge gas pipe	Φ, mm	15.88	19.05	19.05	28.58	28.58	
	Installation limitation	Max. Length	m	170(190)	170	170	170	170(190)
Max. Height		m	50.0(40.0)	50.0	50.0	50.0	50.0	
Field wiring	Power source wire	mm <sup>2</sup>	2.5	2.5	4	4	.75	
	Transmission cable	mm <sup>2</sup>	0.75 ~ 1.25	0.75 ~ 1.25	0.75 ~ 1.25	0.75 ~ 1.25		
Refrigerant	Type	-	R410A	R410A	R410A	R410A	R410A	
Sound	Sound pressure	dB(A)	48.0	48.0	50.0	51.0	56	
	Sound power		70.0	70.0	70.0	73.0		
External dimension	Net weight	kg	160.0	160.0	160.0	240.0	282	
	Shipping weight	kg	167.0	167.0	167.0	250.0	292	
	Net dimensions (WxHxD)	mm	(770 x 1,000 x 545)	(770 x 1,000 x 545)	(770 x 1,000 x 545)	(1,100 x 1,000 x 545)	(1,100 x 1,000 x 545)	
	Shipping dimensions (WxHxD)	mm	(840 x 1,200 x 620)	(840 x 1,200 x 620)	(840 x 1,200 x 620)	(1,170 x 1,200 x 620)	(1,170 x 1,200 x 620)	
Operating temp. range	Cooling	°C	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	
	Heating	°C	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	

### Note:

- Nominal cooling capacities are based on;
  - Indoor temperature : 27°C DB, 19°C WB, Inlet water temperature : 30°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m
- Nominal heating capacities are based on;
  - Indoor temperature : 20°C DB, 15°C WB, Inlet water temperature : 20°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m
- Sound power level is an absolute value that a sound source generates.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound values are obtained in an anechoic room.
  - Sound values of multi combination are theoretical values based on sound results of individual installed units.
- Nominal heating capacities are based on Eurovent test conditions:
  - Indoor temperature : 20°C DB, 15°C WB, Inlet water temperature : 10°C, Outlet water temperature : 7°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m



# Indoor line up

## Powerful and gentle cooling

Cassette 360



4Way  
WindFree™



1Way  
WindFree™



Product images shown are for representational purpose only, actual product may vary.



**Slim Duct**



**Hi-Wall  
WindFree™**



# Samsung Air Conditioner

## 360 Cassette

Circular design

Design and control - Fits in beautifully, use intuitively

Combining an elegantly modern look with a powerful performance and effortless control, the Samsung 360 Cassette indoor unit can provide exceptional comfort and style in many locations.

A circular design that fits in everywhere

Innovative circular design

The 360 Cassette has an innovative circular design that enables it to match a multitude of interior designs, so it fits in perfectly everywhere. Its minimalist and elegant styling can help to create a sophisticated and distinctive look in many different sites. And its circular shape stands out beautifully when it's installed in an exposed ceiling, which is the most trendy of modern architectural designs.



Easy to use and see the air flow

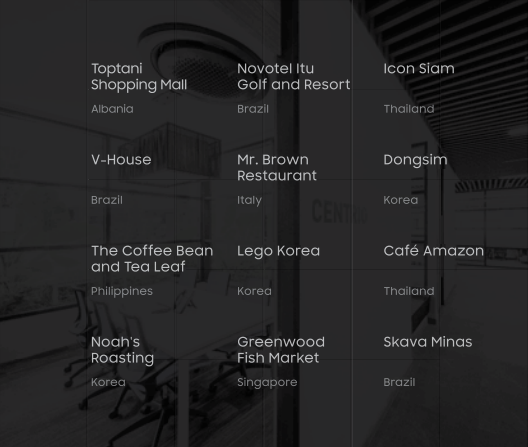
Circular LED display + Wireless remote controller

Using the 360 Cassette is a real pleasure as you can intuitively control its performance and see where the air is going. The Circular LED Display on the air conditioner also shows the actual direction that the air is flowing - vertically and horizontally. So with just one glance you can quickly tell where the air is going. And, its Wireless remote controller\* features a Jog shuttle (wheel controller) and a dedicated button that provide an easy and fun way to adjust the strength of the air flow.

\*Optional.

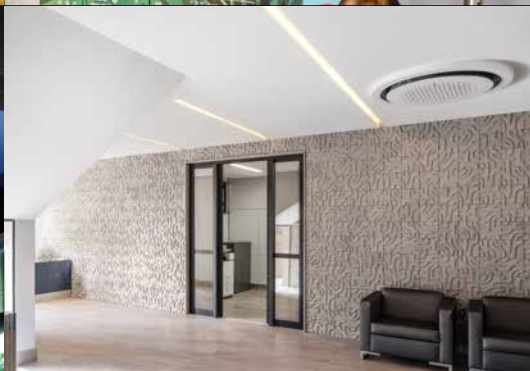






# A perfect circle ensures perfect harmony with your own style

The pleasing aesthetic of the 360 Cassette's circular design is the perfect way to enhance your interior surroundings. It also directs air uniformly in all directions, ensuring a fresh, natural and pleasant breeze that completely eliminates cold drafts. This unique combination of its visually stunning, yet extremely practical design led to the 360 Cassette winning the prestigious iF Award (International Forum Design Award) 2016.





# 360 Cassette

## Bladeless discharge

### Comfortably cool, not cold

A bladeless design softly disperses cool air across the room, making you comfortably cool without feeling a cold draft\*\*. With no blades to block the airflow, it also expels up to 25 percent more air\* and spreads it farther.



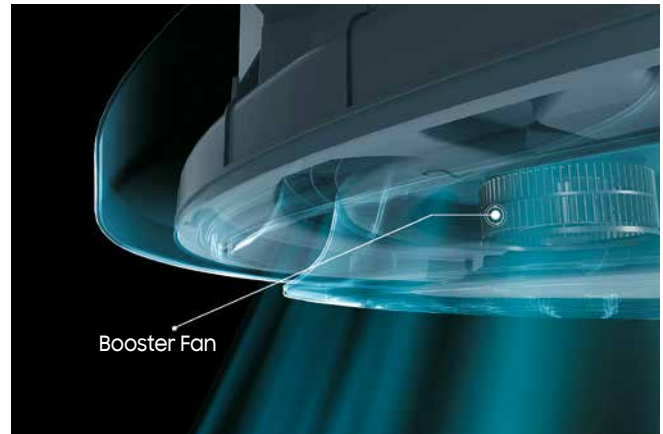
Within a 5m radius, no cold draft between 0~1.5m in height (with 14.0 kW).

\*Samsung testing compared to a general 4Way cassette type air conditioner.

\*\*Within a 9.3m radius the temperature difference is less than 0.6°C.

### Spreads more air in more ways

An innovative booster fan enables cool air to be expelled at much lower angles. It creates a low pressure area around the outlet, so that cool air comes out parallel to the ceiling and disperses across a wider area.



### Circular design to perfectly fit anywhere

Its innovative circular design can match a multitude of interior designs, so it perfectly fits in anywhere. Its minimalist modern styling creates a sophisticated look and its circular shape stands out beautifully.



### Simple and intuitive all-round control

Intuitively control its performance and see where the air is going. The Wireless Remote Controller's\* Jog shuttle and button offer a fun way to adjust the airflow and a circular LED display shows its direction.

\*Optional.





# 360 Cassette

## Bladeless discharge

### Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung 360 Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

## An air conditioner and an air purifier rolled into just one unit

### Purification System (Optional)\*

The Samsung 360 Cassette offers an optional Purifying Panel that keeps the indoor air fresh and clean. It consists of 2 types of filter – a Pre-Filter and a PM1.0 Filter. This 2-step filtration system ensures that you can breathe in pure, fresh air all day long. And its Air Purity Level Display clearly shows the pollution level.



#### PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3µm in size, a positive charge, so it becomes strongly attached to the ground plates.

PM1.0 Ultrafine particles		PM2.5 Fine particles		PM10 Coarse particles	
Virus	0.005 - 0.3µm	Powder	0.1 - 30µm	Red blood cells	5 - 10µm
Bacteria	0.3 - 60µm	Printer toner	0.5 - 15µm	Car emissions	1 - 150µm
Cigarette smoke	0.001 - 4µm	Atmospheric	0.001 - 40µm	Pollen	6 - 100µm
		House dust	0.05 - 100µm	Hair	5 - 200µm
		Cobweb width	2 - 3µm	Human hair	40 - 300µm
				Sand	62 - 500µm
				Fog	70 - 350µm
				Glass wool	1000µm



#### Pre-Filter

Blocks large particles, such as household dust, fibers, etc.



#### Korea Air Cleaning Association

The filtration system of Samsung 360 Cassette has been certified by Korea Air Cleaning Association, based on testing using the standard KACA-CAC-2011.

\*This function is optional. The number and shape of filters may vary by model.

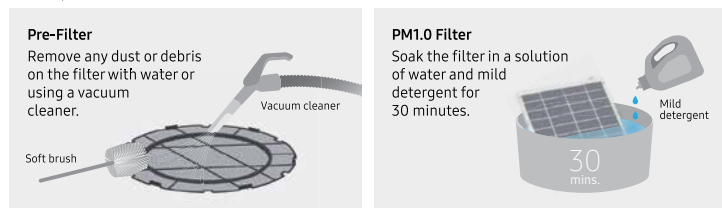


## Keep using for longer with a simple wash

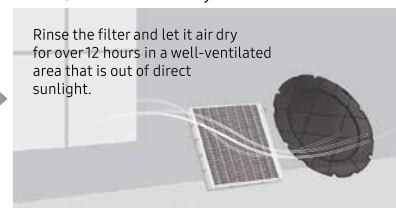
### Washable Filters

The semi-permanent PM1.0 Filter and Pre-Filter are washable and reusable. It means you can continue enjoying clean, fresh air, while also saving on maintenance costs as you don't need to buy new filters.

#### STEP 01/ Wash



#### STEP 02/ Rinse and Air Dry

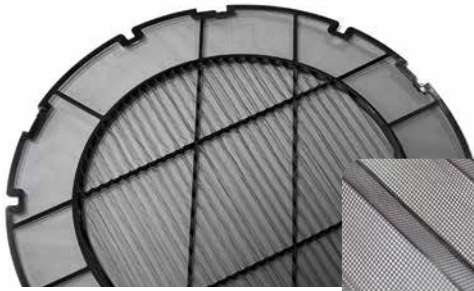


# 360 Cassette

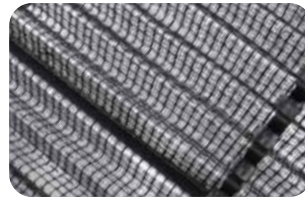
Bladeless discharge

Keeps your air hygienic by capturing dust, airborne contaminants and allergens

## Pre-Filter



Samsung 360 Cassette



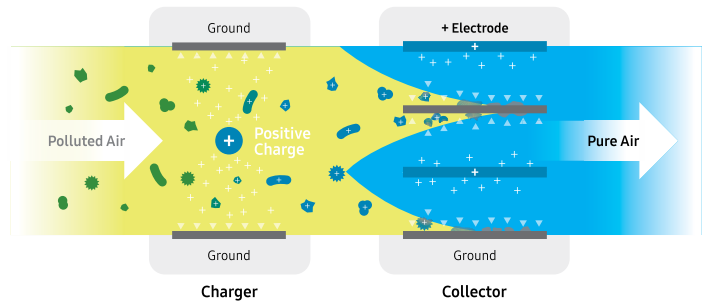
Other brands

The Samsung 360 Cassette has a superior filter mesh with 0.5mm holes, which is 20% denser than a vinyl chloride type filter. And it has a ridged surface that significantly increases the contact area. So it effectively captures not only dust particles but also airborne contaminants and even certain allergens.

## Proven capability to sterilize bacteria

### PM1.0 Filter

The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3µm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. Its effectiveness in sterilizing bacteria has been verified by Intertek\*.



\*Based on the Intertek test report. (No.: RT20E-50010-R)

\*Test bacteria: Escherichia coli, Staphylococcus aureus.

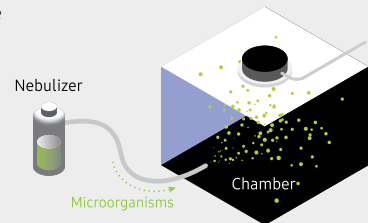
**Intertek**  
Total Quality. Assured.

Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.

**“The PM 1.0 filter of Samsung Electronics can sterilize more than 99% of the microorganisms that are collected on the filter.”**

### Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



### Conclusion

More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.



# WindFree™ 4Way



Covers 10\* Mtr. Dia

## Faster and wider cooling with long wind

### Big Blade and Slanted Outlet Design

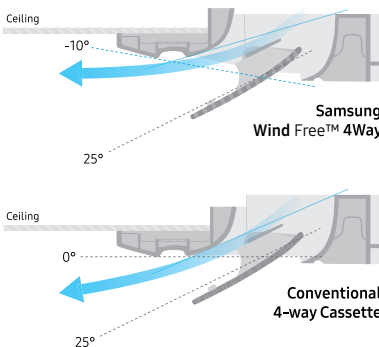
4-way cassette air conditioners are generally installed in much larger spaces, such as commercial sites and offices. So the coverage of their air conditioning is one of the important factors in ensuring the comfort and productivity of everyone in the room.

As a result, the Samsung **Wind Free™** 4Way Cassette is designed to deliver not only the ultimate comfort in **Wind Free™** mode but also a superior cooling performance with its Normal cooling mode. It has an 84mm big blade that is 31% larger than normal\*, which helps prevent air from dispersing, so it sends much

more air directly to the chosen spots. And the outlet is designed with a slant that opens blades at an angle of between  $-10^\circ$  and  $25^\circ$  relative to the ceiling. This creates an almost horizontal air flow that can be sent further along the ceiling. So it can deliver cool air over a long distance, reaching up to 5m, which means it will quickly cover a 10m wide space without leaving dead zones.



84mm  
Big Blade



\*Based on internal standard testing conditions in individual results may vary. Image simulated for representational purposes only.

\*Based on the **Wind Free™** 4Way Cassette, compared to a conventional 4-way cassette air conditioner which has a 64mm blade. The **Wind Free™** 4Way 600x600 has a 66mm blade.

# WindFree™ 4Way

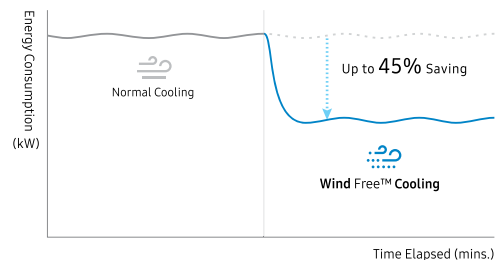
## ■ Cost Saving – Maintain comfort with minimum cost

The Samsung Wind Free™ 4Way Casstte creates the ultimately comfortable environment and keeps it for longer with minimal energy. The highly energy-efficient Wind Free™ Cooling is also proven as it effectively maintains cool air over 8 hours.

## Reduces energy use by 45%\*, while still keeping you comfortable\*\*

### Low Energy Consumption

Save money every day by optimizing your power usage with the 4Way Cassette's highly energy-efficient Wind Free™ Cooling. When operating in Wind Free™ mode, the outdoor unit consumes only minimal power – using up to 45% less electricity compared to the Normal cooling mode\*. But it still keeps the room comfortably cool\*\*, so you feel like you've entered a cave on a hot summer's day.



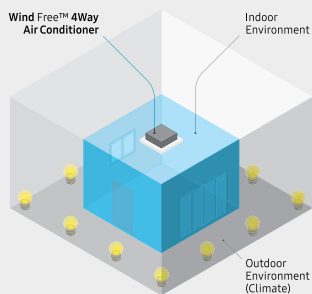
\*Only applicable on the Wind Free™ models. Based on internal testing of the AC140RN4DKG/EU working at 14.0kW. Operating conditions: Outdoor 35°C DB / 24°C WB, Indoor 27°C DB / 19°C WB. Results may vary depending on environmental factors and individual use.

\*\*Based on internal testing on a Wind Free™ 4Way 14.0kW model (AC140RN4DKG/EU) in a Test Lab, following the experimentation method described below.

### HOW TO TEST

## Proven to keep you cool indoors with Wind Free™ Cooling

In order to stringently test the air conditioning systems in various climate conditions, Samsung runs a Test Lab that has a house inside it and can create and maintain simulated outdoor conditions. With the indoor and outdoor temperatures both being 35°C, a Wind Free™ air conditioner installed in the house began cooling using the Normal mode. After reaching the set temperature of 25°C, it changed mode to Wind Free™ and maintained a stable indoor temperature (25°C±0.5°C) for over 8 hours.

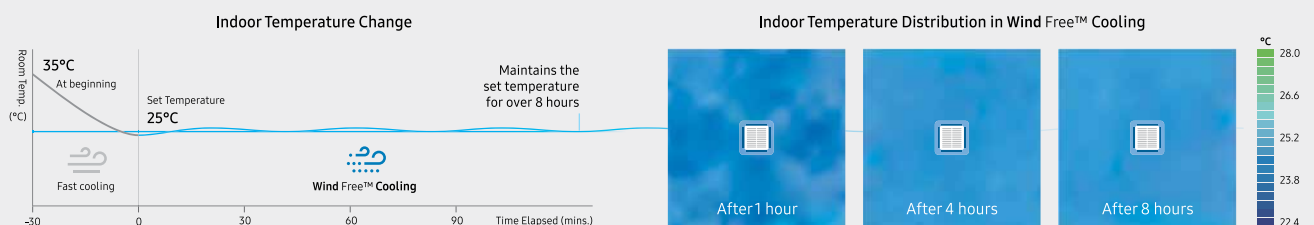


### Test Condition

- Temperature: Outdoor 35°C (Sustained), Indoor 35°C (At beginning)
- Indoor Area: 40m<sup>2</sup>
- Product: Wind Free™ 4Way 7.1kW model
- Measurement: Temperature distribution and consumed energy using Normal cooling and then Wind Free™ Cooling

### Test Result

- Using fast cooling, the room temperature reached the set temperature after 30 minutes.
- Mode changed to Wind Free™, which maintained the indoor temperature (25°C±0.5°C) while the outdoor temperature remained constant.





# WindFree™ 4Way

## Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung Wind Free™ 4Way Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

## An air conditioner and an air purifier rolled into one unit

### Purification System (Optional)\*

The Samsung WindFree™ 4Way Cassette not only has a general panel but can also include an optional Purifying Panel that keeps the indoor air fresh and clean. It consists of 2 types of filter – a Pre-Filter and a PM1.0 Filter, and this 2-step filtration system ensures that you can breathe in pure, fresh air all day long.



#### PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3µm in size, a negative charge, so it becomes strongly attached to the ground plates.

PM1.0 Ultrafine particles		PM2.5 Fine particles		PM10 Coarse particles	
Virus	0.005 - 0.3µm	Powder	0.1 - 30µm	Red blood cells	5 - 10µm
Bacteria	0.3 - 60µm	Printer toner	0.5 - 15µm	Cair emissions	1 - 150µm
Cigarette smoke	0.001 - 4µm	Atmospheric	0.001 - 40µm	Pollen	6 - 100µm
		House dust	0.05 - 100µm	Hair	5 - 200µm
		Cobweb width	2 - 3µm	Human hair	40 - 300µm
				Sand	62 - 500µm
				Fog	70 - 350µm
				Glass wool	1000µm



#### Pre-Filter

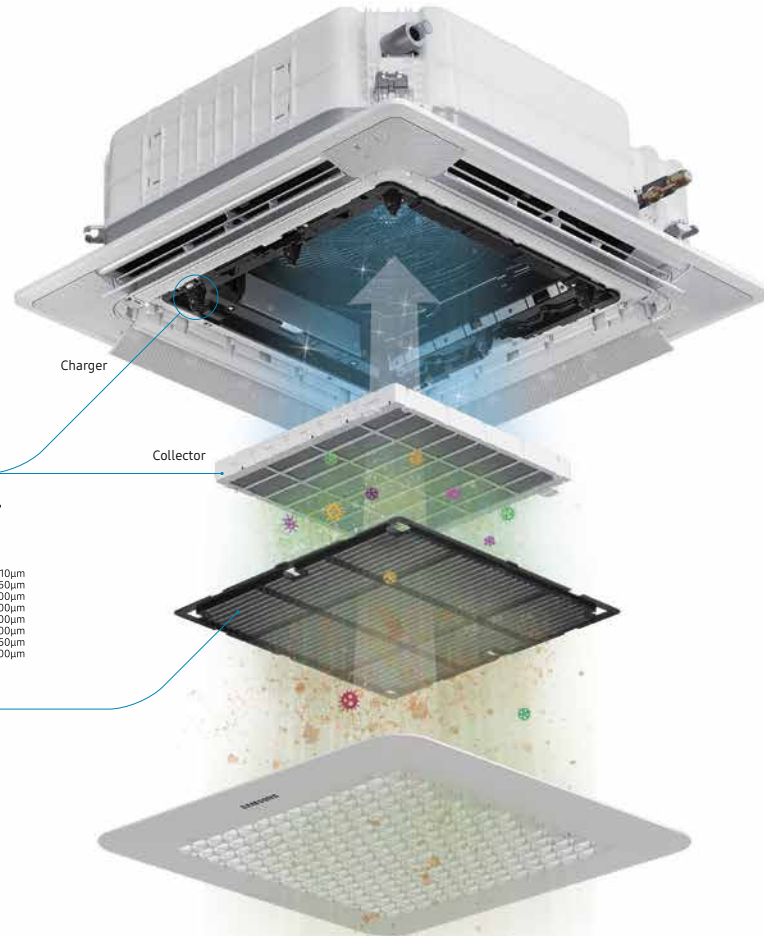
Blocks large particles, such as household dust, fibers, etc.



#### Korea Air Cleaning Association

The filtration system of the Wind Free™ 4Way Cassette has been certified by the Korea Air Cleaning Association. Based on testing using the standard KACA-CAC-2011.

\*This function is optional. The number and shape of filters may vary by model.



## Keep using for longer with a simple wash

### Washable Filters

The semi-permanent PM1.0 Filter and Pre-Filter are washable and reusable. It means you can continue enjoying clean, fresh air, while also saving on maintenance costs as you don't need to buy new filters.

#### STEP 01/ Wash

**Pre-Filter**  
Remove any dust or debris on the filter with water or using a vacuum cleaner.

Soft brush  
Vacuum cleaner

**PM1.0 Filter**  
Soak the filter in a solution of water and mild detergent for 30 minutes.

Mild detergent  
30 mins.

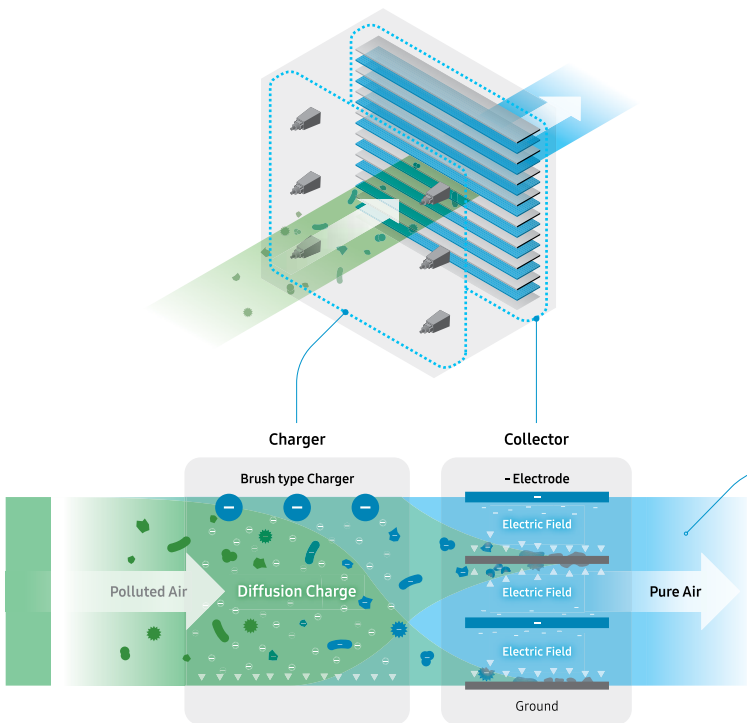
#### STEP 02/ Rinse and Air Dry

Rinse the filter and let it air dry for over 12 hours in a well-ventilated area that is out of direct sunlight.

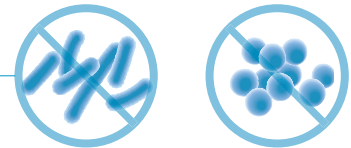
# WindFree™ 4Way

## Proven capability to sterilize bacteria as well as capturing ultrafine dust

### PM1.0 Filter



The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3µm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. It has two main parts that charge and collect dust and bacteria. The brush discharger generates negative ions. And these give the dust particles and bacteria a negative charge, so they become strongly attached to the ground electrode due to the electrostatic force of the collector. Its effectiveness in sterilizing bacteria has been verified by Intertek\*.



Escherichia coli

Staphylococcus aureus

\* Based on the Intertek test report. (No.: RT20E-S0025)  
\* Test bacteria: Escherichia coli, Staphylococcus aureus.



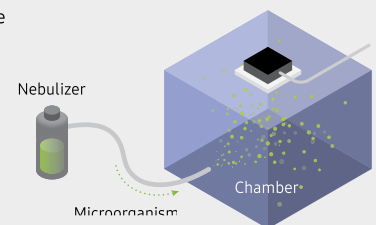
Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.



**"The PM 1.0 filter of Samsung Electronics can sterilize more than 99% of the microorganisms that are collected on the filter."**

#### Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



#### Conclusion

More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.

# WindFree™ 4Way

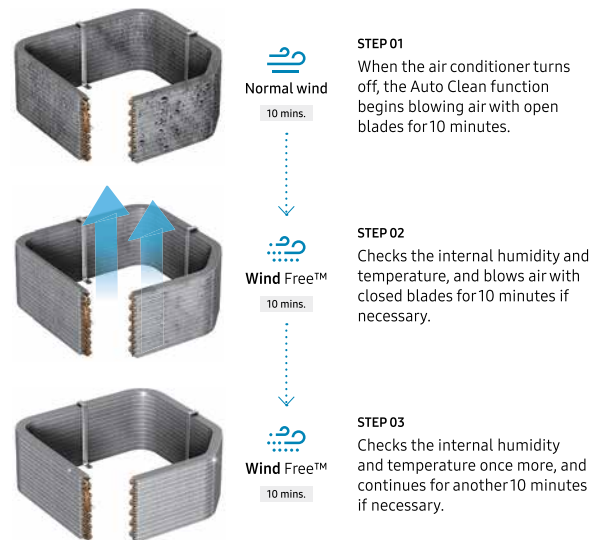
## Hygiene

### Stays clean & hygienic with less moisture

#### Auto Clean

When an air conditioner is turned off after working in cooling mode the difference in internal and external temperatures can lead to moisture condensing on the heat exchanger, enabling mold to grow that causes odors. To prevent this, the Samsung Wind Free™ 4Way Cassette has a humidity sensor and features an Auto Clean function\*. After it's been working, it automatically dries the heat exchanger using a 3-step process, sensing the temperature and humidity inside the air conditioner. It removes moisture by blowing air for between 10 to 30 minutes, which prevents the build-up of bacteria and odors.

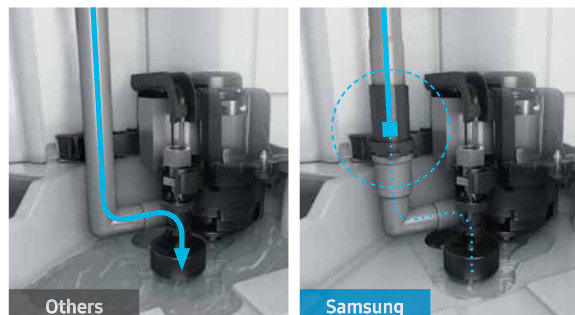
\* Only available in Wind Free™ models that have a humidity sensor.



### No backflow, no fungi growing inside

#### Drain Pump with Check Valve

A built-in Drain Pump gives you much more flexibility in the installation of drainage. It also has a Check Valve as standard, which prevents condensed water from flowing back and dripping into indoor spaces. So you don't need to worry about water stagnation or the overflow of drain water. And, as less water collects in the Drain Board, it stays clean and there is less risk of bacteria and fungi growing.



Others  
When turned off, water in the pipe flows backward to the drain board, which may cause bacteria and fungi.

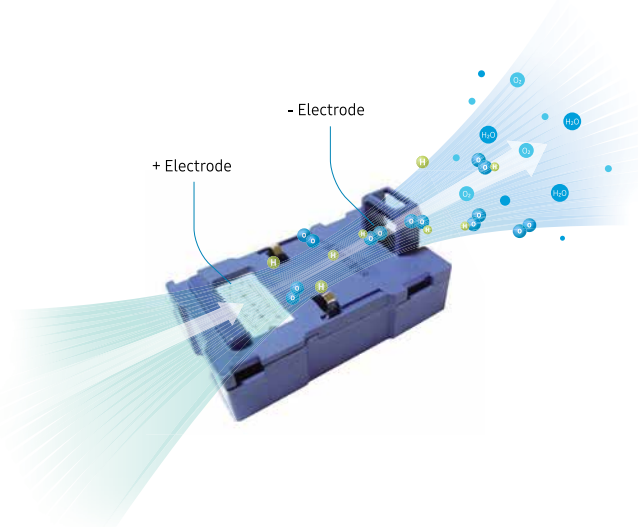
Samsung  
When turned off, a Check Valve prevents water from flowing back, so the drain board quickly gets dry and stays clean.

Image simulated for representational purposes only.

### Reduces certain harmful bacteria

#### Ionizer Kit (Optional)

With an optional Ionizer Kit, the Samsung Wind Free™ 4Way Cassette can sanitize indoor air by generating active hydrogen and oxygen ions that help to reduce airborne microorganisms. The process of reducing the harmful substances is completely harmless to the human body and the environment.

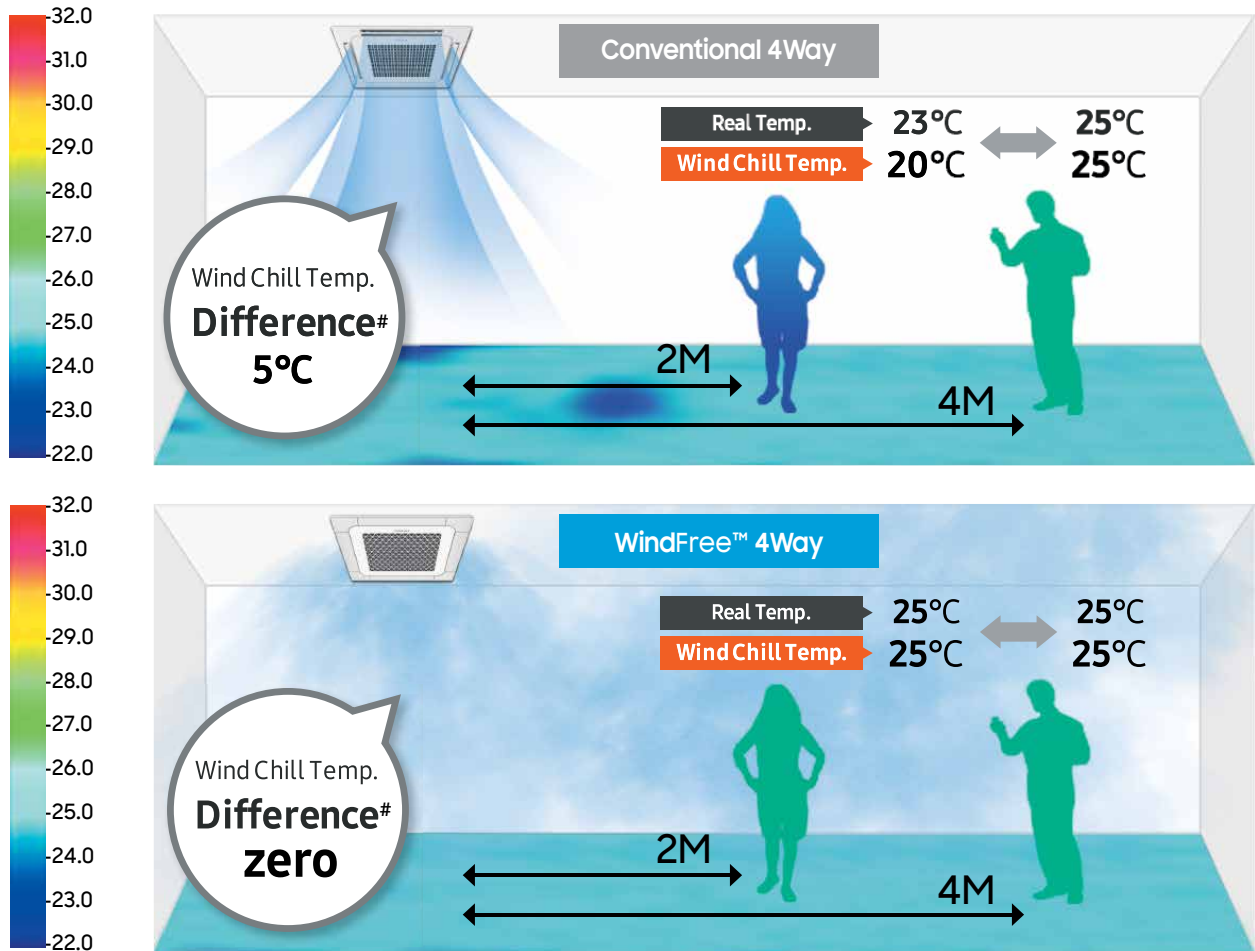


# WindFree™ 4Way Cassette S

## Robust operation

### Even cooling in all areas

WindFree™ Cooling keeps the temperature even inside the room.



### WindFree™ cooling.

#### Gets cool fast, stays cool without direct wind

The WindFree™ Air Conditioner pushes air out through 15,700 micro holes in the panel, producing a dispersed and gentle flow of air, actually defined as "still air". The key here is all of those holes create a still, cooled air flow that infiltrates the room steadily.

\* Still Air Condition: According to ASHRAE, if velocity of wind is lower than 0.15m/s, people can not detect wind. They define that condition as "Still Air".

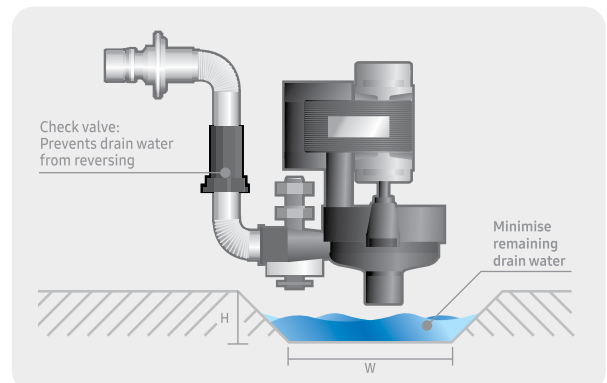
### Streamline management with a flexible design

The Samsung 4Way Cassette S is uniquely designed for easy management. Featuring an advanced check valve, and detachable panel and airflow blades, this unit offers quick, simple setup and maintenance for the ultimate convenience, comfort, and performance.

\*Temperature difference based on internal research.

### Drip-free operation

The check valve on the drain pump prevents drained water from flowing backwards into the drain pan. This minimises the drain pan's water level, eliminating the worry and hassle of water stagnation or overflowing drain water dripping.





# WindFree™ 4Way Cassette S

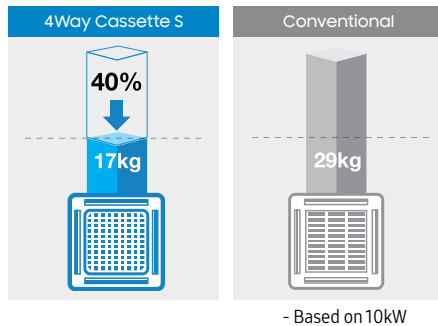
Low maintenance

## Available panels in 4Way Cassette S



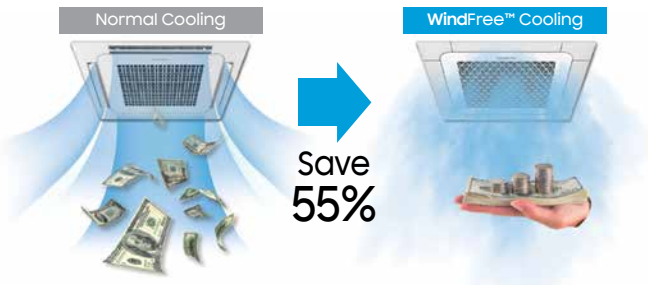
## Lightweight build

The Samsung 4Way Cassette S indoor unit is now lighter in weight at 17kg. It is one of the lightest indoor units in the industry, about 40 percent lighter than conventional products.



## Energy saving with WindFree™ Cooling

Under the same condition, WindFree™ Cooling Mode can save energy use by 55% compared to conventional cooling.



## Achieve peak performance with optimal airflow and superior control

Integrating the most advanced technologies, Samsung 4Way Cassette S delivers easy, efficient comfort with specialised blade control, adjustable operation and powerful airflow. An optional Ioniser extends the unit's efficiency with air sanitation technology for a healthier atmosphere.

## Individual blade control

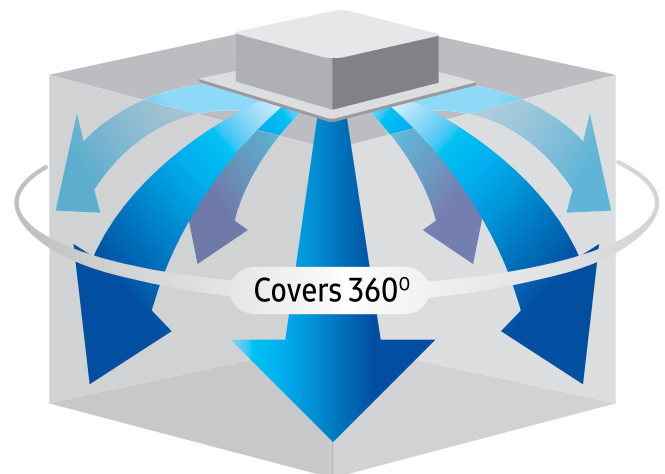
Samsung 4Way Cassette S features a remote controller that enables users to manipulate the angles of the fan blades for more efficient cooling. With the remote controller, users can individually set the opening angles of the four blades at the same angle or different angles within a 32° - 65° range to create just the right atmosphere.



※ Test Condition  
- Test model: WindFree™ 4Way14.0 kW  
- Temperature: OD 35°C DB / 24°C WB, ID 27°C DB / 19°C WB

## Full-surround airflow

The 4Way outlet can cool every corner of the room. The new and practical design of the blades minimise blind spots at the corners of the panel, and can cover nearly a full 360° around the indoor unit.



# WindFree™ 4Way Cassette S (600 x 600)

Tasteful design, compact and lightweight build

## Add chic flair to your interior design with a stylish yet powerful AC system

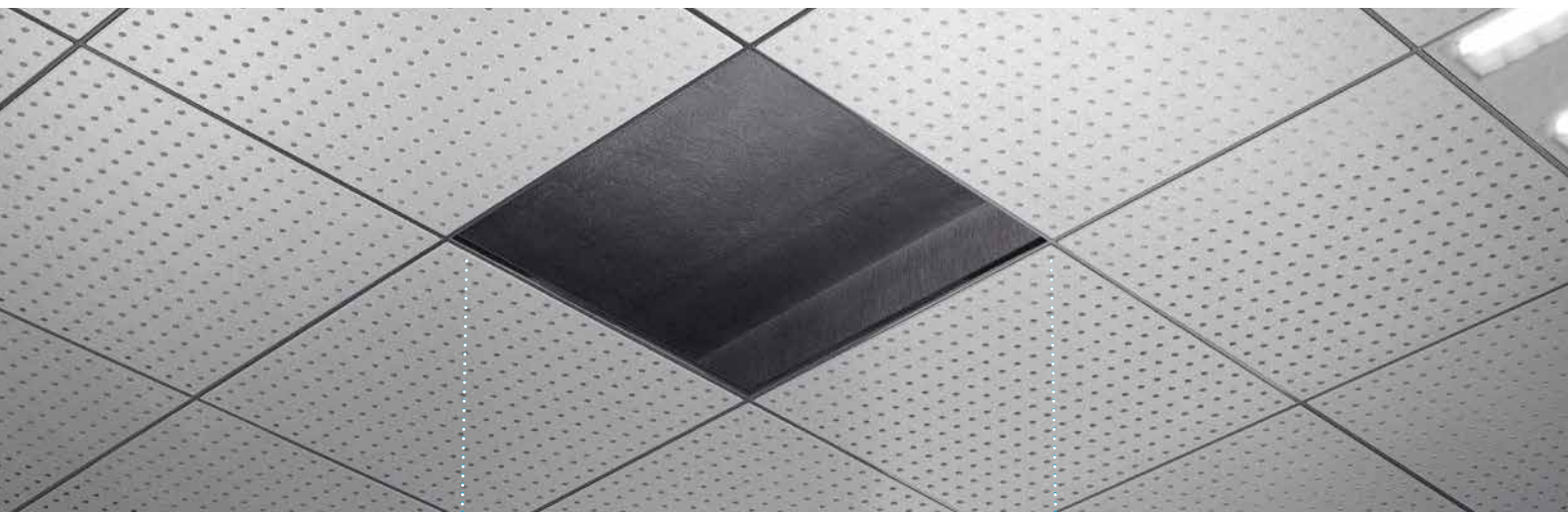
Samsung's advanced 4Way Cassette S (600 x 600) builds on the aesthetic appeal and performance of the standard 4Way Cassette S with an enhanced design. The 4Way Cassette S (600 x 600) comes in a variety of patterns to complement any interior. The stylish cassette unit visually harmonises with the indoor space, while the efficient cooling and heating performance makes it a dependable and practical air conditioning solution.

The 4Way Cassette S (600 x 600) indoor air conditioning system provides high-performance heating and cooling with features such as:

**Tasteful design and compact, lightweight build:** Creates a polished ambiance with a compact design and attractive panel patterns.

**Enhanced comfort control:** Optimise comfort and save energy with optional motion detection.

**Low maintenance and powerful airflow:** Easy installation and maintenance, and maximises airflow with an efficient design and robust performance.



Main Unit Dimensions (W x D mm)  
575 x 575

Main Unit Weight (kg)  
11.5

# WindFree™ 4Way Cassette S (600 x 600)

Tasteful design, compact and lightweight build



## WindFree™ Cooling also comes with 4Way Cassette (600 x 600)

Stylish design, effective Smart Inverter compressor and a plethora of innovative features make Samsung 4Way Cassette (600x600) great for residential and light commercial applications with limited roof space.

## Ultra-compact size

Samsung's 4Way Cassette S (600 x 600) Air Conditioner can be installed on a single standard ceiling tile (600W x 600D) which helps minimise the installation time and effort.

## Light, robust design

The Samsung 4Way Cassette S (600 x 600) indoor unit weighs only 11kg. It is the lightest indoor unit in the industry, about 35 percent lighter than our conventional products.

## Available panels in 4Way Cassette S (600 x 600)

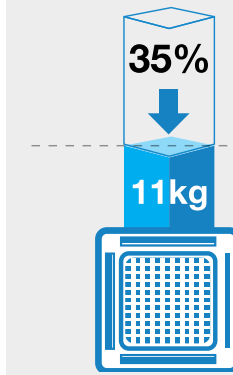


## Customisable airflow

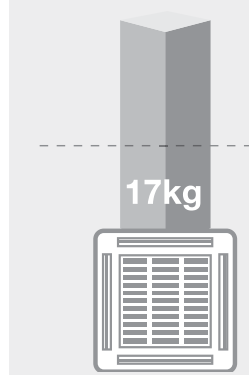
Samsung 4Way Cassette enables users to manipulate the angles of the fan blades for more efficient cooling through a remote controller.



## 4Way Cassette S (Interior)



## Conventional



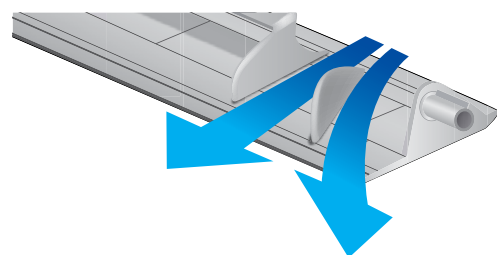
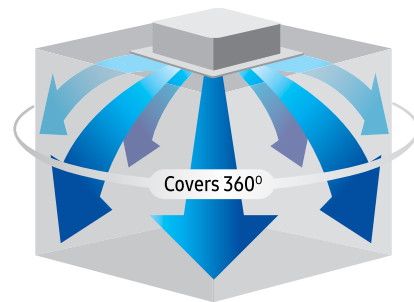
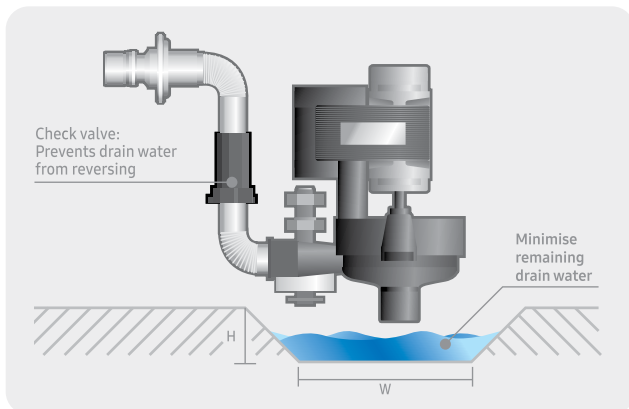
- Based on 3.5kW

## Full surround air flow

The 4Way outlet can cool every corner of the room. The new and practical design of the blades minimise blind spots at the corners of the panel, and can cover nearly a full 360° around the indoor unit.

## Drip-free operation

Check valve on the drain pump prevents drained water from flowing backward into the drain pan. This minimises the drain pan's water level, eliminating the worry and hassle of water stagnation or overflowing drain water dripping into the interior.



# WindFree™ 4Way Cassette S (600 x 600)

## Enhanced comfort control

### Create a flawless atmosphere with innovative motion-controlled operation

The optional Motion Detection Sensor (MDS) for 4Way Cassette S (600 x 600) creates the ideal environment with added comfort control and energy savings by providing just the right amount of airflow when needed.

### Smart on/off function

Energy-saving MDS detects when individuals are absent from the area and automatically stops the air conditioning operation. It also automatically sets operation patterns to create the perfect atmosphere and maximise energy efficiency.



### Ideal airflow distribution

The innovative MDS prevents the indoor unit from distributing airflow directly to individuals to reduced discomfort. It also reduces the difference of thermal sensation in the body by detecting the temperature around the floor.



### Individual blade control

Samsung 4Way Cassette S features a remote controller that enables users to manipulate the angles of the fan blades for more efficient cooling. With the remote controller, users can individually set the opening angles of the four blades at the same angle or different angles within a 32° - 65° range to create just the right atmosphere.



# WindFree™ 4Way Cassette S (600 x 600)

Enhanced comfort control

## Optimal airflow for high ceilings

You can get optimum fan speed for high ceilings through the remote control, without having to adjust the DIP switch on the PCB. The fan speed adjustment function evenly distributes cool air throughout spaces with ceilings of up to 3.6m. And the high ceiling mode delivers even more powerful airflow throughout the interior space, expanding the airflow coverage area for height up to 4.6m.



## Cleaner, healthier air

Users can sanitise indoor air with the optional Loniser\* for a cleaner work or living atmosphere. The easy-to-install Loniser generates active hydrogen and oxygen ions to eliminate airborne contaminants, completely eradicate airborne bacteria and allergens, and even neutralise OH (hydroxyl) radicals.



\*Loniser device generates active hydrogen and oxygen ions which eliminate biological contaminants and active oxygen (OH- radical) in the air by turning them into harmless H<sub>2</sub>O.

# WindFree™ 1Way Cassette

## Comfort and energy saving - Cools comfortably and uses less energy

The Samsung 1Way Cassette air conditioner delivers a unique level of comfort by cooling optimally, without the unpleasant feeling of cold air on your skin, while minimizing noise and energy use.

## Stay comfortably cool without feeling cold

### WindFree™ Cooling\*

Stay feeling comfortable cool with **WindFree™** Cooling. It cools effectively without the unpleasant sensation of cold wind being blown directly onto your skin. Cool air is gently dispersed across the room through 10,000 micro air holes, which creates a "Still Air" environment\*\* with a very low air speed of 0.15m/s. There are no drafts to disturb you and you don't feel too hot or too cold. So if your children kick off the blanket at night you don't have to worry about them feeling cold in the room.



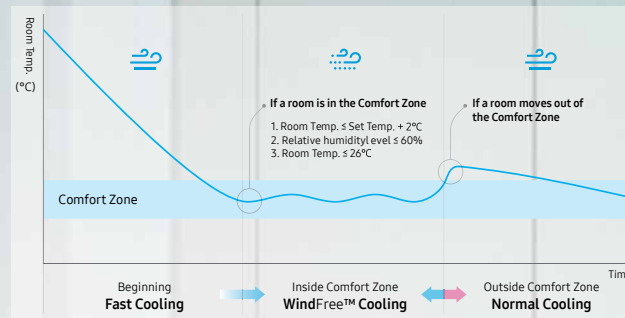
**10,000**  
Micro Air Holes

\*Available only on the **WindFree™** models.

\*\*ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as when the velocity of air is below 0.15m/s, so people cannot feel any cold drafts.

## Enjoy a more intelligent way of working Smart comfort operation\*

Experience an intelligent way of creating the ideal room conditions. The 1Way Cassette continually monitors both the temperature and relative humidity and analyzes the room conditions. It then automatically switches between operating modes to keep everyone feeling really comfortable without the need for any manual control.



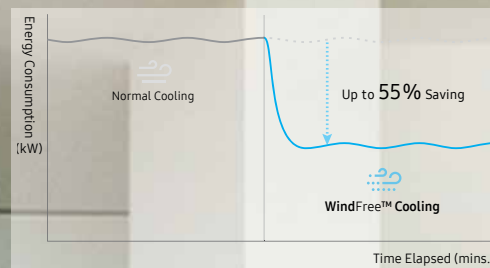
\*Available only on the **WindFree™** models.



## Reduces energy use by 55%\*\* to save money

### WindFree™ Cooling\* (Energy saving)

Save money every day by optimizing power usage with the 1Way Cassette's highly energy-efficient **WindFree™** cooling. When operating in **WindFree™** mode, the outdoor unit consumes only minimal power - using up to 55% less electricity compared to the normal mode\*\*. But it still provides sufficient cool air to maintain the desired temperature. So you can stay comfortably cool without worrying about your electricity bills.



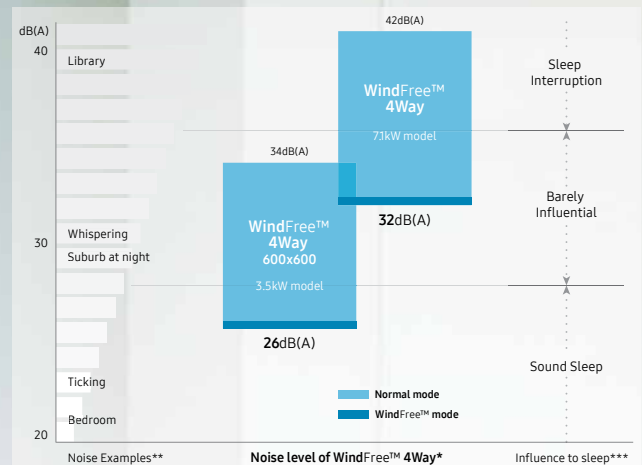
\*Available only on the **WindFree™** models.

\*\*Based on internal testing: Outdoor unit AM050FXMDEH running simultaneously with Indoor units AM056NN1DEH, AM036NN1DEH, AM022NN1DEH. Temperature conditions: Outdoor 35°C DB / 24°C WB, Indoor 27°C DB / 19°C WB. Results may vary depending on environmental factors and individual use.

## Enjoy a quiet night without disturbance

### Quiet operation

The Samsung 1Way Cassette air conditioner drastically reduces the amount of noise created by the air being dispersed. At its lowest level it only generates 24dB(A) of sound\*, which is almost as quiet as a whisper. It means you won't be disturbed by unpleasant noise when you're going to sleep - or doing anything else. So it's ideal for places where you sleep, relax, concentrate or are sensitive to noise, such as the bedroom, study or baby's room.



\*Based on internal testing of a 3.6kW model when set to **WindFree™** mode. Results may vary depending on environmental factors and individual use.

# WindFree™ 1Way Cassette

## Performance - Cools farther, from corner to corner

The Samsung 1Way Cassette air conditioner is designed to cool a large area - quickly and efficiently. Its big blade sends air over a much longer and wider area, while Auto Swing distributes air in every direction.

## A big blade sends cool wind a long way

### Long wind

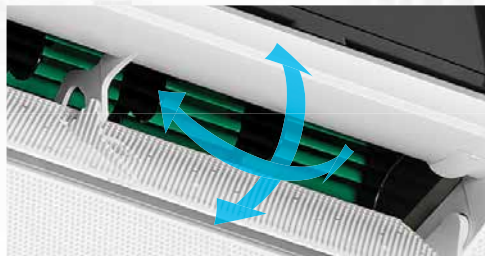
Cool your room quickly from corner to corner. The 1Way Cassette has a 100mm big blade that can deliver cool air over a long distance, reaching up to 8 meters\*. It also has a wider operating angle, as the blade can move between 40 to 80 degrees. So it can cool a whole room rapidly and evenly by dispersing cool air farther and into every corner, without leaving any "dead zones".

\*Based on internal testing on a 7.1kW model. Horizontal wind range: sitting height = 0.6m, wind speed = 0.3m/s. Results may vary depending on environmental factors and individual use.

## Heats or cools evenly in every corner

### Auto swing\*

Create a comfortable environment with an even temperature in every corner of a room. Conventional 1-way systems are normally installed in the ceiling and it's difficult to manually adjust the wind direction from left to right. The 1Way Cassette's Auto Swing function\* automatically expels cool air in every direction. As well as the auto up-down swing function it also has an auto left-right swing function, so air is evenly distributed across the room.



\*Only available on certain models.



### Installation - Fits into a small ceiling space

It can be difficult to find space for an air conditioner, especially without impacting the interior. The Samsung 1Way Cassette has a slim and elegant design that will fit seamlessly into many locations.

### Compact and elegant for extra flexibility

#### Slim design

The 1Way Cassette's extremely slim design has a height of only 135mm and can fit into a small ceiling space of just 155mm. So it provides a suitable and effective solution for cooling and heating a wide range of locations where space is limited. In addition, its elegant and compact design means it blends discretely into interiors of all types and styles.



# WindFree™ 1Way

## Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung WindFree™ 1Way Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

## An air conditioner and an air purifier rolled into one unit

### Purification System (Optional)\*

The Samsung WindFree™ 1Way Cassette not only has a general panel but can also include an optional Purifying Panel that keeps the indoor air fresh and clean. The Purifying Panel consists of 3 types of filter – a Pre-Filter, Deodorization Filter and a PM1.0 Filter. This 3-step filtration system ensures that you can breathe in pure, fresh air all day long.



#### PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3µm in size, a positive charge, so it becomes strongly attached to the ground plates.

PM1.0 1µm	PM2.5 2.5µm	PM10 10µm
Ultrafine particles	Fine particles	Coarse particles
Virus 0.005 - 0.3µm	Powder 0.1 - 30µm	Red blood cells 5 - 10µm
Bacteria 0.3 - 60µm	Printer toner 0.5 - 15µm	Car emissions 1 - 150µm
Cigarette smoke 0.001 - 4µm	Atmospheric 0.001 - 40µm	Pollen 6 - 100µm
	House dust 0.05 - 100µm	Hair 5 - 200µm
	Cobweb width 2 - 3µm	Human hair 40 - 300µm
		Sand 62 - 500µm
		Fog 70 - 350µm
		Glass wool 1000µm



#### Deodorization Filter

Captures unpleasant odors.



#### Pre-Filter

Blocks large particles, such as household dust, fibers, etc.



#### Korea Air Cleaning Association

The filtration system of the WindFree™ 1Way has been certified by Korea Air Cleaning Association. Based on testing using the standard KACA-CAC-2011.

\*This function is optional. The number and shape of filters may vary by model.

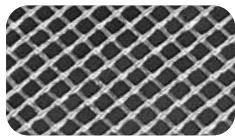
# WindFree™ 1Way

## 20% denser to capture more

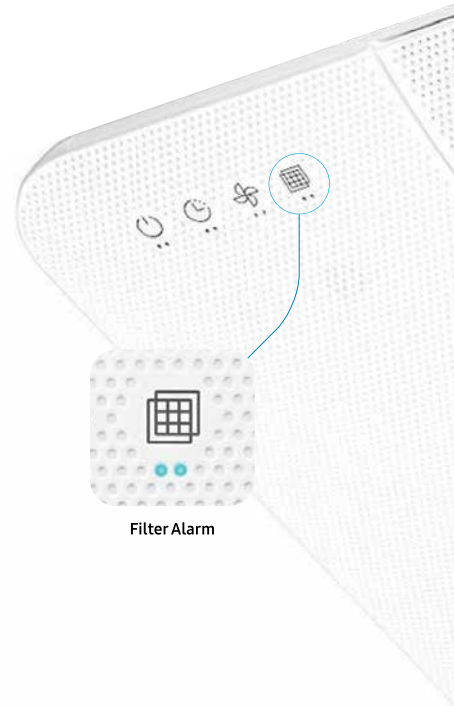
### Pre-Filter

The Pre-Filter of the WindFree™ 1Way Cassette is 50 mesh (about 0.5 mm), which is 20% denser than general vinyl chloride filters. So it can capture much finer dust particles, ensuring less dust in the indoor space and better air quality. The cleaning alarm indicator on the decoration panel lights up to inform you when it's time to clean the filter, and you can easily remove it by opening the return grille.

**Vinyl Chloride Mesh Filter**  
Commonly used in general ducted air conditioners



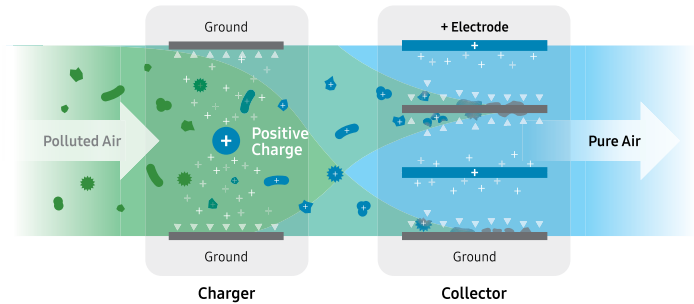
**Samsung's 50 Mesh Filter**  
Used in Samsung WindFree™ 1Way air conditioners



## Proven capability to sterilize bacteria as well as capturing ultrafine dust

### PM1.0 Filter

The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3µm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. Its effectiveness in sterilizing bacteria has been verified by Intertek\*.



\*Based on the Intertek test report. (No.: RT20E-S0010-R)  
\*Test bacteria: Escherichia coli, Staphylococcus aureus.



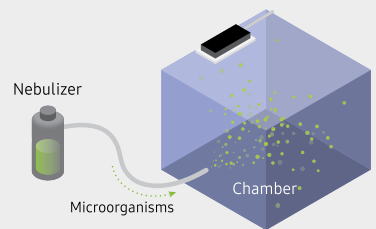
Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.



**"The PM 1.0 filter of Samsung Electronics can sterilize more than 99% of the microorganisms that are collected on the filter."**

#### Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



#### Conclusion

More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.



# 2Way Cassette

## Comfort - Delivers consistent comfort over a long area

Even though it has a compact design, the Samsung 2Way Cassette is still very powerful. And its 2-way air flow spreads air evenly over a greater distance, so it is ideal for cooling or heating long and narrow spaces.



## Cools and heats long or narrow areas evenly

### Compact design with 2-way Air Flow

Make good use of valuable space with the compact 2Way Cassette. It is ideal for cooling or heating long and narrow areas, such as rectangular offices or hallways and corridors in hotels, schools and hospitals. Its 2-way air flow distributes air evenly over a long distance without any temperature deviation.

## Cools even farther and in every direction

### Auto surround swing

The 2Way Cassette features an innovative Twin Cross Flow Fan and an optimized air flow path, which enable air to be blown out over a long distance. Its Auto Surround Swing system then automatically distributes the air in every direction, ensuring that it is evenly distributed across the whole room. So you can enjoy a comfortable environment with an even temperature in every corner.



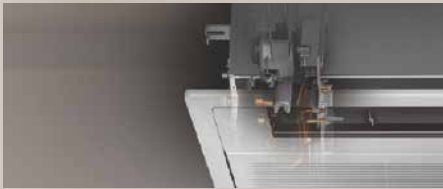




## Comfort from corner to corner

### 2 Motors and 2 Fans

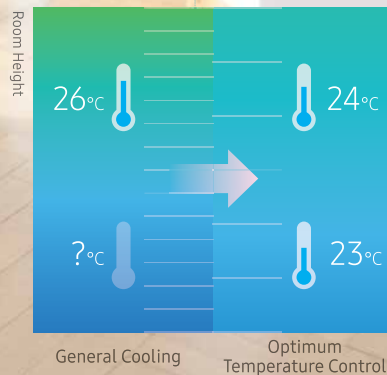
Enjoy comfortable conditions wherever you are with the desired temperature in every corner of your room. The 2Way Cassette has two motors and two fans that can spread cool or warm air evenly throughout a large room, even if it is long and wide. They optimize the distribution and volume of air from two outlets, which ensures that a space quickly reaches the desired temperature - and stays that way.



## Provides optimal comfort vertically

### Optimum temperature control

Ensure a balanced and comfortable climate by ensuring a consistent vertical temperature across an entire room. The 2Way Cassette has an Optimum Temperature Control feature. It detects the temperature at the top and bottom of the area and then minimizes the difference and maintains the optimal temperature at every height in the room. Simply use the temperature sensor of the indoor unit and the wired remote control\* to set up the indoor temperature detection conditions.



\* Wired remote control model: MWR-WE13N, MWR-WG00JN.

# 2Way Cassette

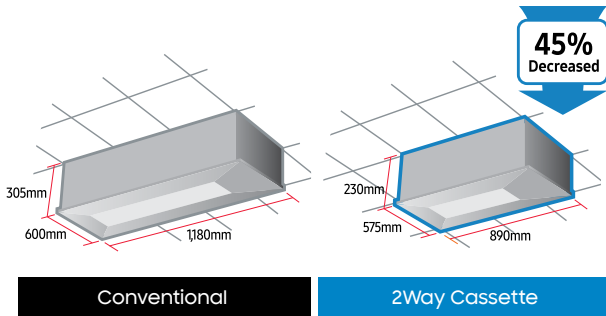
Easy, flexible installation

## Reduce the hassle of installation with compact size and adaptable design

The modestly sized Samsung 2Way Cassette supports quick, simple setup for the ultimate convenience, comfort and performance.

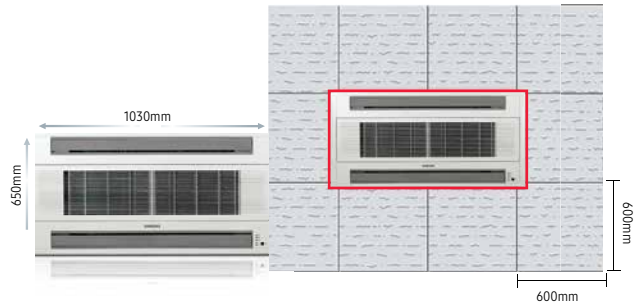
## Small size, big performance

The 2Way Cassette indoor unit is now up to 45 percent smaller than conventional models, making it even easier to incorporate into the building design.



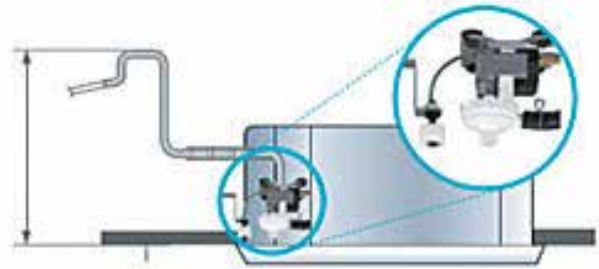
## Standardised fit for easy installation

The 2Way Cassette unit dimensions allow for easy installation into standard ceiling grids (600W x 600D) for a tailored fit that blends unnoticeably into the interior framework.



## Simple, smart drainage structure

With 750mm of discharge head, users can install the drain themselves, saving them time and money.



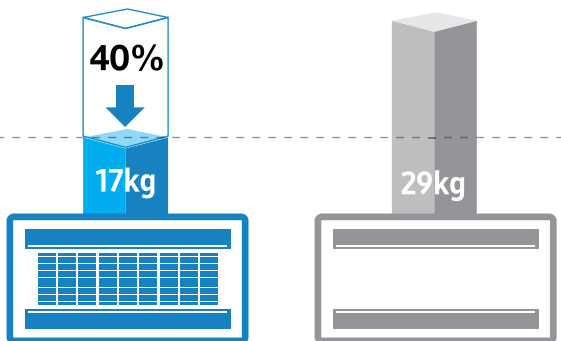
## Ultra-light weight

The slim and compact size reduces the setup space needed for easy installation and management.



## Advanced drain hose

Samsung's 2Way Cassette System Air Conditioner uses an advanced drain hose, which is recognised in Europe for its easy installation and leak prevention.



Included Panel Weight 5.6kW



# Ducted type

## Efficient operation

### Overview

Samsung Ducted type air conditioning units are a smart solution for low-maintenance, consistent cooling and heating performance in any environment. Their compact, slim frame blends seamlessly into ceilings, enhancing the beauty of the interior space and offering users more flexible installation options.

### Various ducted air solutions

Offering a comprehensive lineup, Samsung Ducted type air conditioning units offer just the right solution for every need:

**Duct S:** This solution features 3way service, automatic air volume, light weight and high EER.

**Slim Duct:** This solution is a low static pressure model, which is optimised for places such as hotels and residences.

**Middle Static Pressure (MSP):** This model is specifically designed to enhance interior design for large spaces such as offices, stores, or residences.

**High Static Pressure (HSP):** This model is optimised for large spaces or places.

### Smart pressure control

Samsung Ducted Type units feature a smart pressure control system. This system adjusts the fan speed based on the external static pressure (ESP), delivering consistent cooling and heating power, regardless of the surrounding environment.

### Convenient installation

The optional lift-up drain pump lifts condensed water up to 750mm, compared to a limit of 700mm on conventional models, for flexible and convenient installation.

### Easy filter cleaning

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



# Slim Duct

Ultra-light, adaptable design

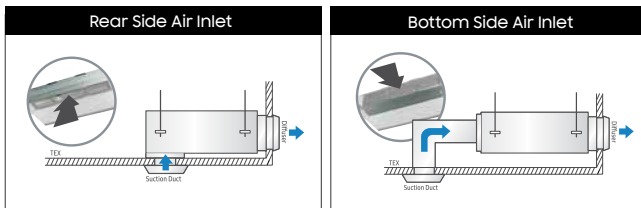


## Temper any environment with industry-best lightweight design and optimised airflow

The new Samsung Slim Duct visually blends into the ceiling while providing powerful cool and warm airflow. It's also easy to install and maintain in any interior regardless of the surrounding environment with its compact size and weight—the lightest in the industry.

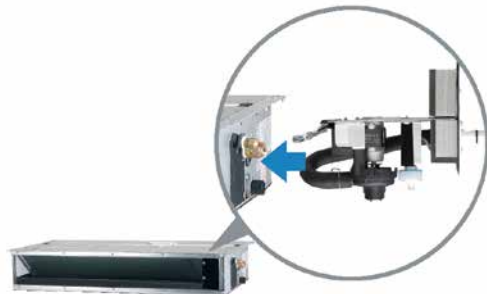
## Flexible setup

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



## Simple drain pump installation

The new drain pump in the Slim Duct unit can be installed from the side by simply removing the right side panel. Users no longer need to disassemble the top cover to install, check or repair the drain pump for maximum convenience.\*

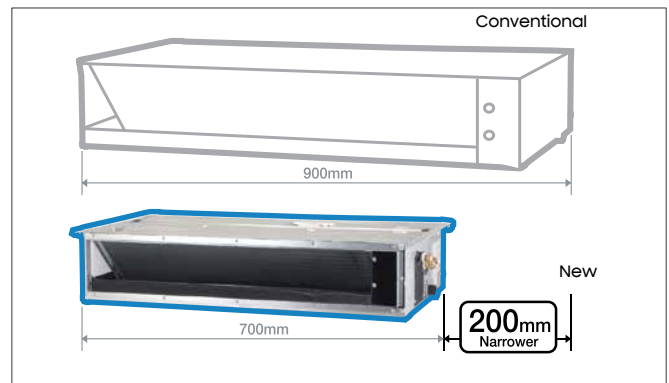


## Various installation options

Slim Duct S adopts an ultra-compact, slim size with its thin width, which is 200mm narrower than conventional products. This slender build enables flexible installation and maintenance in various environments.

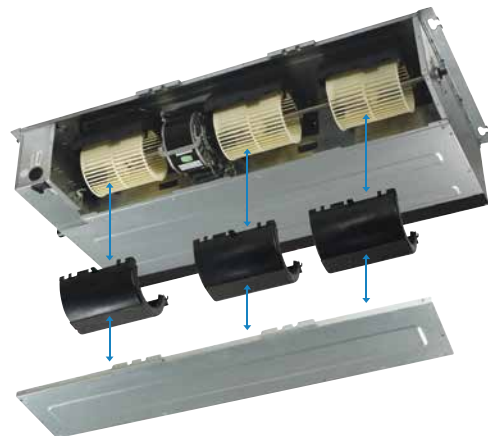
## World's lightest weight

The efficient Slim Duct S is the lightest duct air conditioning unit on the market. At a weight that's 15 percent lighter than conventional units, Slim Duct S offers the best in convenient installation and maintenance.



## Easy access, easy maintenance

Slim Duct features a flexible design that enables users to easily access its parts to maintain the unit.



\*Inbuilt drain pump option also available.



# MSP Duct

Silent, strong performance

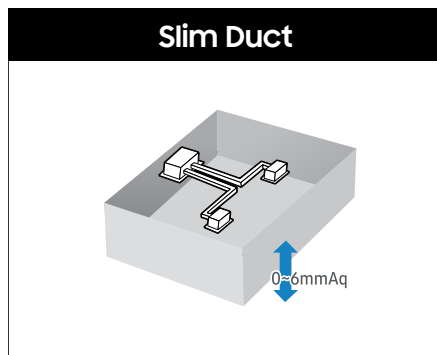
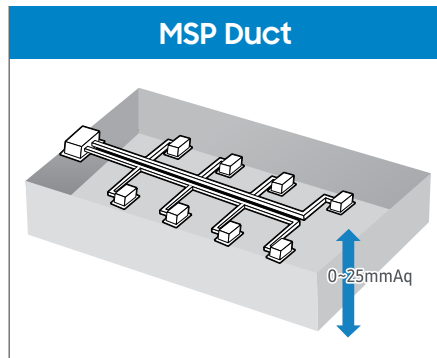
**Deliver increased airflow to broader areas with quiet, powerful cooling and heating**



Concealed behind the ceiling, Samsung MSP Duct provides powerful yet silent operation with external static pressure control. Its exceptional static pressure enables a broad coverage area and provides stable, efficient performance in larger spaces.

## Extensive coverage

MSP Duct offers greater static pressure than most slim ducts. This higher pressure level enables users to design more inlets and outlets with longer ductwork to provide even more airflow to larger areas.



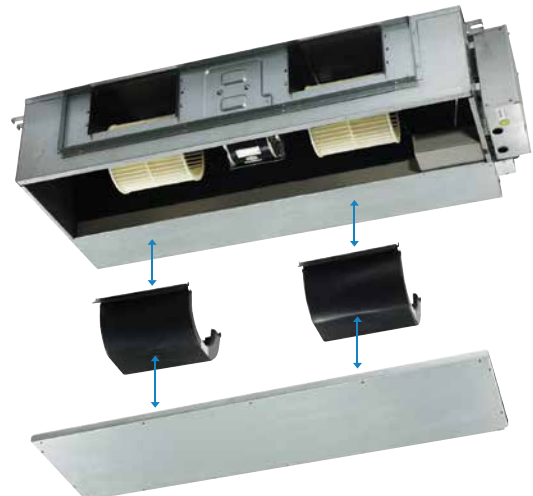
**Silent operation with the static pressure control**

The external static pressure control makes it easy to customise the ductwork to ensure efficiency and silent operation.



**Easy upkeep and installation**

The MSP Duct unit features quickly accessible parts so users can maintain the unit with ease. And its compact size and narrow width of 900mm enable flexible installation and management for added user convenience.



# Wall Mounted WindFree™ Premium plus

## Comfort - Intelligently optimised comfort for your life

The Samsung WindFree™ air conditioner keeps you comfortably cool with WindFree™ Cooling that is intelligently optimised to suit your needs. And it can quickly cool large spaces from corner to corner.

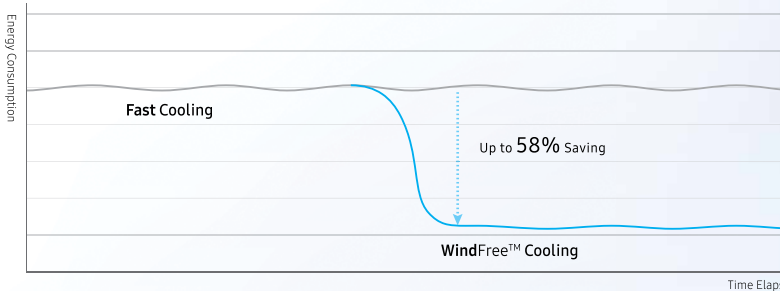
## Stay cool without feeling cold

### WindFree™ Cooling

Stay feeling comfortable cool with WindFree™ Cooling. It cools gently and quietly without the unpleasant feeling of cold wind on your skin, as it disperses air through 23,000 micro air holes. It creates a "Still Air" environment\* with a very low air speed and much less noise\*\*. Its advanced air flow structure also means it cools a wider and larger area more evenly. And it consumes 58% less energy than normal cooling mode\*\*\* so you can stay comfortably cool without worrying about electricity bills.



**23,000**  
Micro Air Holes



\*ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as air currents at speeds below 0.15m/s which lacks the presence of cold drafts.

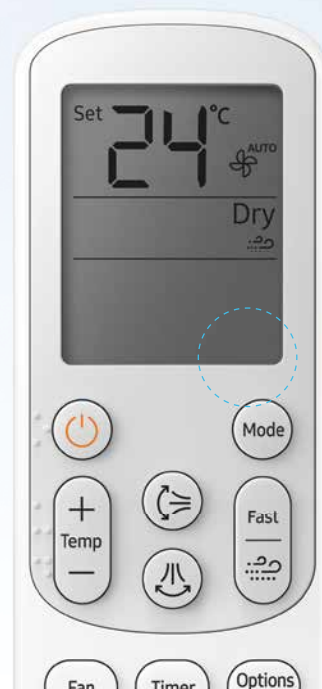
\*\*Tested on the AM036TNVDKH/EU model. WindFree™ Cooling mode only generates 26dB(A) of noise.

\*\*\*Tested on AM080JXVHEH/ET, AM015TNVDKH/EU, AM036TNVDKH/EU, AM045TNVDKH/EU and AM082TNVDKH/EU models, based on the power consumption of normal mode vs. WindFree™ Cooling mode.

## Stay dry in humid weather

### WindFree™ Dry mode

Even when the ambient humidity is high, you can keep the room air comfortably dry with the WindFree™ Dry mode. When you select this mode on your remote controller, its Humidity Sensor monitors the room humidity and effectively dehumidifies it without creating any noise or a chilly wind. So you will feel comfortable, but won't notice that it's working.





## Cools you down faster

### Fast cooling

Cool rooms quickly from corner to corner, so you're always comfortable whenever you want and wherever you are. Digital Inverter Boost technology dramatically shortens the time it takes for the compressor to reach maximum power when it starts operating, so it cools the air 43% faster\*. Its advanced design also has a 15% larger fan, 18% wider inlet and a 31% wider blade. So cool air is dispersed farther and wider into every corner of a room, reaching up to 15 meters\*\*.



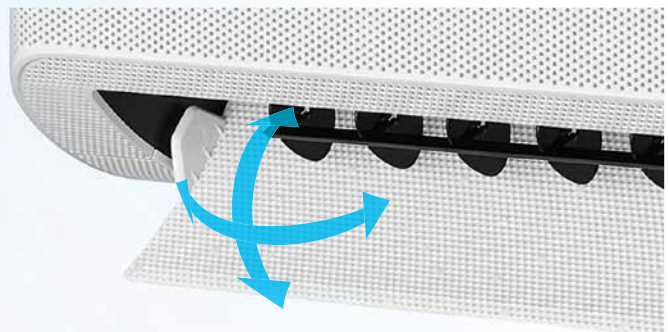
\* Tested on the AR12TXCAWKEU model compared with the Samsung conventional model AQ12EASER.

\*\* Tested on the AR24TXFCWAKNEU model.

## Distribute air to wherever you want

### 4-way swing\*

Create a comfortable environment with an even temperature in every corner of a room. The WindFree™ air conditioner features a 4-way Swing function that lets you remotely control the air direction, so it goes towards a specific location, or automatically expels air in every direction. As well as the auto up-down swing function it also has an auto left-right swing function, so air is evenly distributed across the room.



\*Optionally available on certain models.

# Hydro Unit

## DVM Hydro

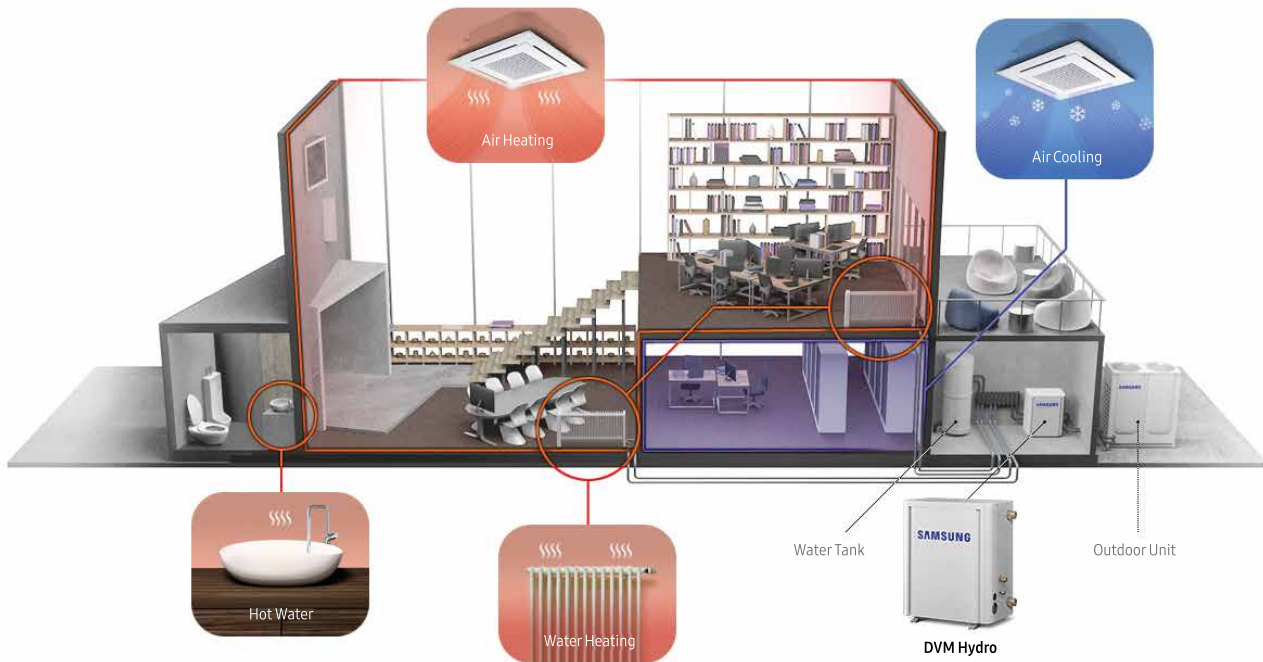
### Performance - All you need for ultimate comfort

The Samsung DVM Hydro unit provides a single solution for cooling, heating and hot water that is both extremely efficient and easy to manage.

### Altogether easier and more efficient

#### An integrated solution in one system

The DVM Hydro system is compatible with all DVM S Outdoor units and can be added to create a single, integrated solution for cooling, heating and hot water that's simple to manage. So it ensures much greater efficiency to suit a variety of demands - generating substantial energy and cost savings all year round with its high-efficiency Heat Pump technology.



### Choose your hot favorite

#### 2 Types - with a choice of water temperatures

The DVM Hydro is available in a choice of two types to suit your hot water needs. The DVM Hydro HE provides water at a mid temperature of 50°C, while the DVM Hydro HT's advanced, double compression technology generates much hotter water at 80°C. So, whatever your demands, there's the perfect solution to satisfy the requirements of various sites.





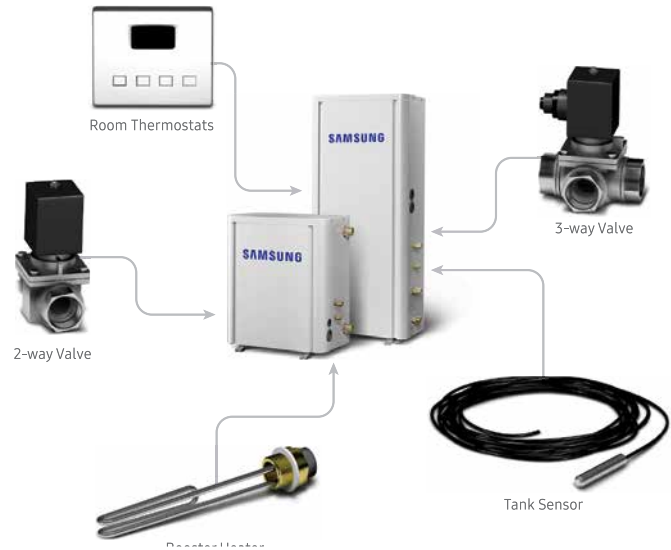
## Installation and Control - Easily connect and control everything

The Samsung DVM Hydro unit is designed to be at the heart of your home or business. It is easy to install and connect to a range of other devices, and can also be independently or centrally controlled.

### Simple plug and go installation

#### Simple and easy connection for external control

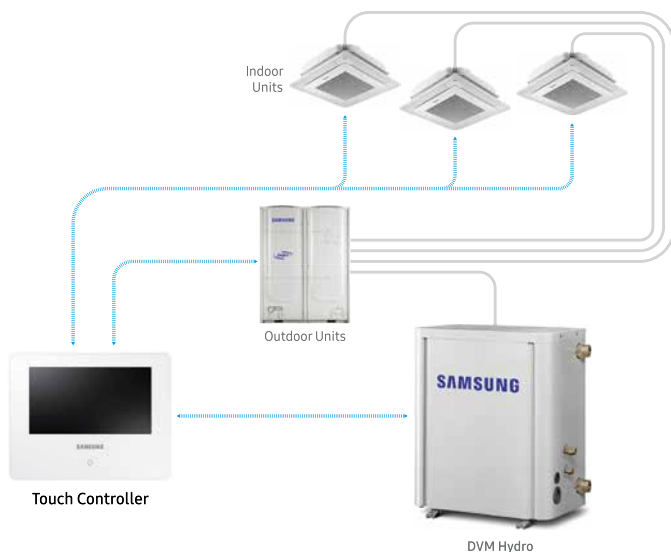
The DVM Hydro is very quick and easy to install and use for many different purposes. It includes a range of connections for various external input and output devices, such as Tank Sensors, Booster Heaters, 2- and 3-way Valves, and Room Thermostats.



## Easy to control - independently or centrally

### Integrated control system

The DVM Hydro can be independently or centrally operated along with a variety of Samsung DVM systems. For standalone use on individual sites it has its own control system or, using the Samsung DVM S Controller, it can be integrated with various DVM systems eg. for water and air, and managed centrally.



# HSP Duct

Robust, high-pressure control

## Control the atmosphere effortlessly with robust, adaptable performance

With the capacity to handle high external static pressure up to 25 mmAq, the powerful Samsung HSP Duct provides an expansive coverage area with outstanding cooling and heating performance. HSP Duct is an ideal fit for spaces with high ceilings and can be flexibly installed to suit various environments.

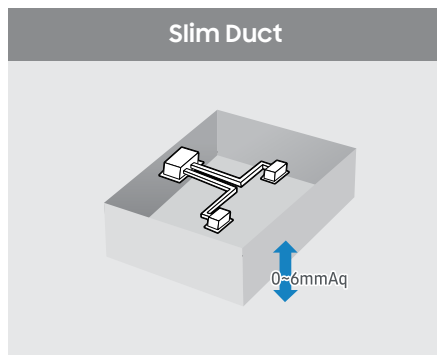
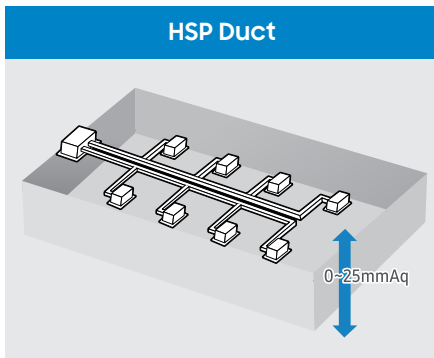


## Split fan and coil

Products that are difficult to install are often challenging to use as well. Considering users' product experience from start to finish, Samsung separated the Duct S (AC6000) into two parts, coil and fan, for easier installation and management. When users experience difficulty handling the product due to space limitations or weight, they can install the parts separately and then put them back together as one unit.

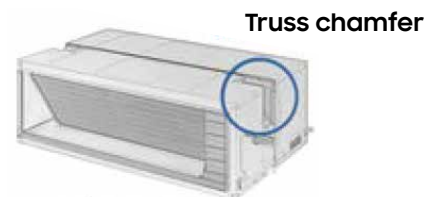
## Silent operation

The external static pressure control makes it easy to customise the ductwork to ensure efficiency and silent operation.



## Truss chamfer (optional)

Samsung believes that products should improve users' quality of life, not to impose more limitations. By making a small change to the product, users now can install the Duct S (AC6000) right next to the roof's edge, freeing up rooftop space for other purposes.



# Ceiling Type

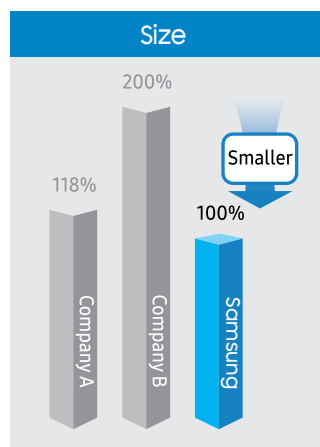
Slim yet functional design

## Distribute refreshing airflow where needed with a compact, flexible design

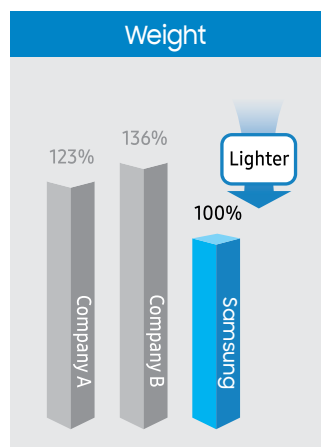
Samsung's Ceiling Type indoor unit has two way installation options for the ceiling and floor, enabling more efficient use of available space. Users can enjoy crisp, powerful air throughout their entire space from the compact unit in the ceiling or floor.

## Small package, big performance

The Samsung Ceiling Type air conditioner boasts a slim, compact design—half the size of conventional products—with cooling power comparable to larger units.



- Based on internal research



7.1kW Model

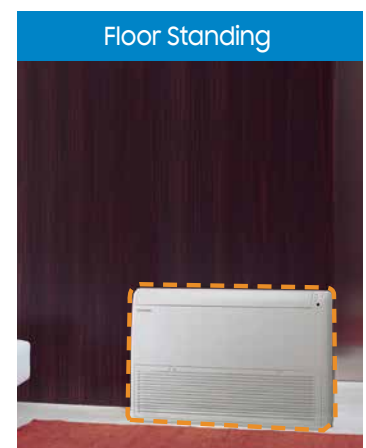
## Choice of installation options

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



## Comfortable airflow control

The purpose of air conditioners is to provide a pleasant indoor environment for users. To better serve this purpose, Samsung 4Way Cassette S provides a Comfort Airflow Control function that prevents cold drafts. When the room temperature reaches 23°C during cooling mode, the indoor unit reduces the amount of discharged air. By doing so, people in the room avoid the discomfort of direct contact with cold airflow.



# Floor Standing Type

## Powerful cooling

### Better choice for simple installation

Solve all problems of installation with DVM floor standing unit. With long and wide distance airflow, floor standing unit is suitable for multiple applications including restaurant, church, classroom, and aisle, DVM floor standing indoor units provides powerful cooling.

### Key Features

#### Powerful cooling – Long and wide distance airflow

**Powerful Cooling**

Horizontal & Vertical Blade

Mirage for 14.0kW

#### Easy control thanks to touch display panel

- You need not find remote controller anymore

- It lets you control the temperature and air flow more easily

18m

Super for 28.0kW

- Wide & Auto Blade
- Anti-bacterial Heat Exchanger
- Anti-bacterial Full HD Filter

### Product concept

#### Floor Standing Type can correspond to various installation

- Church or Mosque
- General Restaurant
- Class Room
- Aisle



# ERV / ERV Plus

## Superior energy savings

### Enjoy high-efficiency ventilation for a more refreshing atmosphere

Indoor air quality is gaining more attention as more people are getting affected from airborne contaminants. Indoor air contamination is often the cause behind building-related syndromes, such as asthma, headaches and dizziness.

The Samsung ERV (Energy Recovery Ventilation) system air conditioner provides fresh, healthy air from outside while minimising energy loss for maximum efficiency. Its intelligent structure incorporates features specifically designed for flawless ventilation and efficient operation.

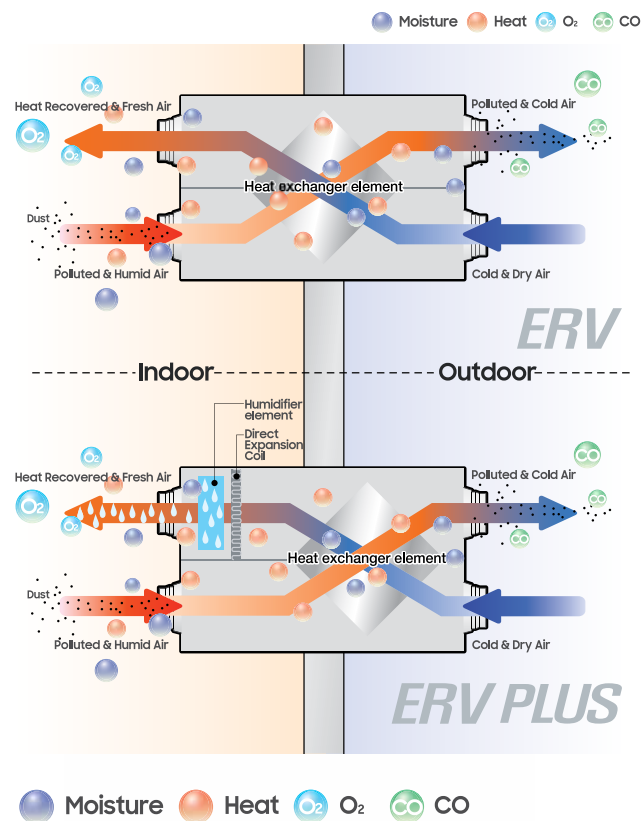
The Samsung ERV and ERV Plus air conditioner systems deliver optimal efficiency, quality and performance with features such as:

**Superior energy savings:** Lower energy consumption and costs with a direct expansion (DX) coil and advanced heat exchange.

**Enhanced performance:** Enjoy fresher air, quieter operation and humidity control for a more pleasant environment.

**Optimised design:** Easy installation offers more efficient airflow with a slim, compact design.

### Heat recovering method of ERV system



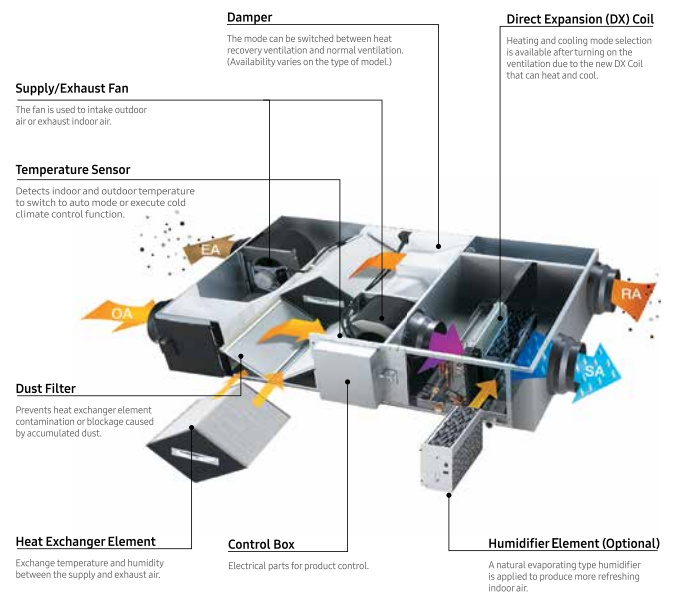
### Drive energy savings with unparalleled heat exchange and automated temperature control

Samsung ERV and ERV Plus deliver exceptional cooling and heating all year round by employing the following heat recovery method:

A two way ventilation design with air inlets and outlets on both sides of the units provide superior ventilation efficiency.

The remaining surface of the heat exchange area transfers heat energy while preventing the discharged contaminants from re-entering.

The system recovers up to 70 percent of the energy needed to cool or heat the environment. The efficient heat recovery maintains the indoor temperature and humidity during the winter, and prevents outdoor heat and moisture from entering indoors during the summer.

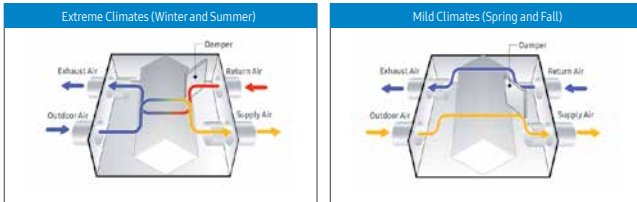


# ERV / ERV Plus

## Superior energy savings

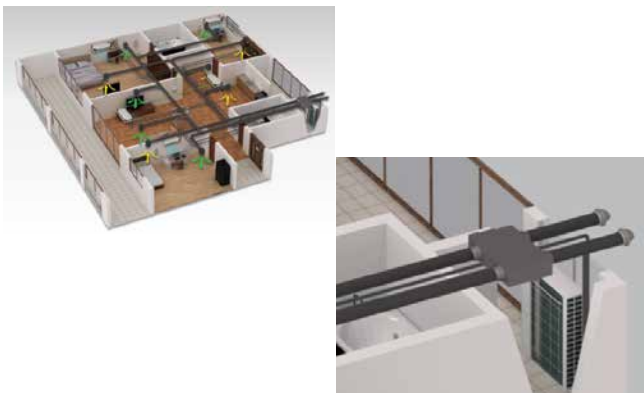
### Auto mode

ERV and ERV Plus automatically changes operation mode, depending on the temperature difference between the indoor and outdoor environment, to conserve energy.



### Energy saving mode

Samsung ERV systems, coupled with an air conditioner, provide world-class energy-saving solutions to intelligently reduce air conditioner operating hours. Decreased air conditioner operation lessens the cooling and heating load while maintaining optimal performance.

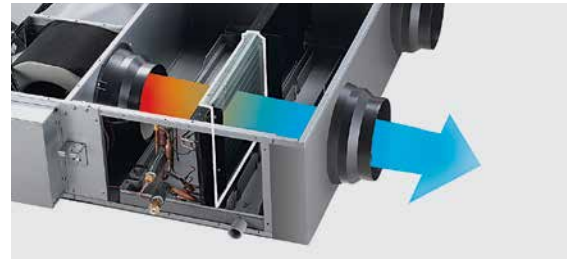


### Enhance the indoor environment with ultimate freshness and distraction-free operation

With Samsung ERV and ERV Plus systems, users can enjoy high-performance comfort throughout their environment with crisp air quality and low noise levels.

### Fresh air without temperature loss

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



### Ideal humidity levels

Users can maintain a perfect indoor humidity level with an optional humidifier element. The Samsung humidifier kit delivers high-efficiency moisture balancing with its large humidification area. Plus, the ERV self-cleaning function, which sprays water from the top of the device when the system starts, prevents offensive odors caused by dust, and other particle accumulation.



### Smart CO2 detection

ERV provides fresh in-room airflow by detecting CO2 with the optional CO2 sensor. Users can also attach a humidity stat (procured locally), which detects the moisture of the room and automatically adjusts its humidity level.

### Peaceful performance

Samsung ERV units feature Quiet Mode for more discreet operation compared to ordinary ventilators.



# ERV / ERV Plus

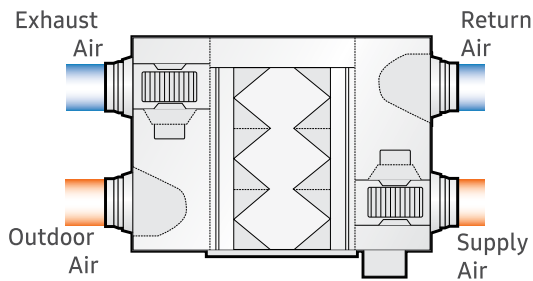
## Optimized design

### Simplify installation and expand airflow with an efficiency-boosting design

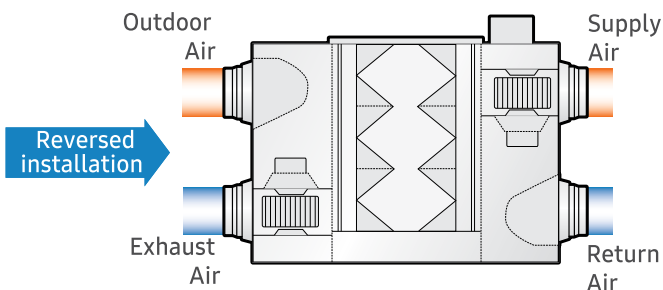
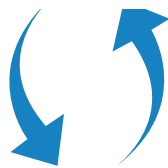
Samsung ERV and ERV Plus offers a smart, efficient design that enables users to deliver fresher air wherever needed with more installation options.

### Flexible setup

The ERV system can be installed vertically or horizontally. This installation flexibility saves time on maintenance when installing more than one unit. Users can reduce the number of service holes by installing ERV with the control box facing a single service hole (applicable to ERV only).

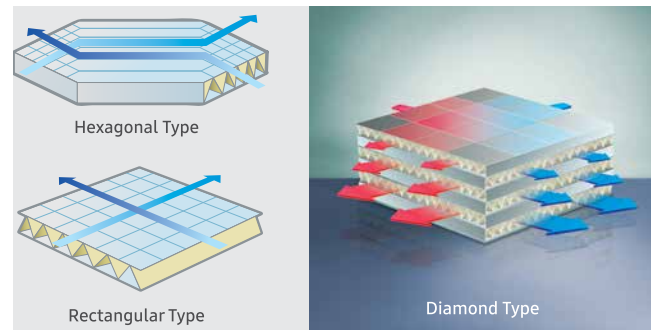


Space for service



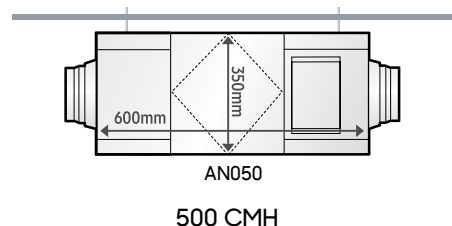
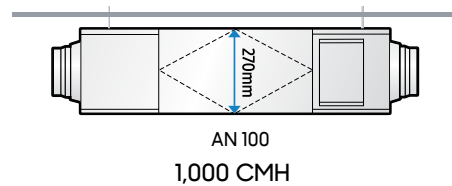
### Perfect design for maximum airflow

The new diamond type heat exchanger features an optimised airflow design. This element is compact in size, but offers higher efficiency than conventional rectangular and hexagonal type heat exchangers.









### Slim build

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









# Indoor unit line up

Products		360 Cassette	WindFree™ 1Way Cassette <small>Also available in non-WindFree™</small>	WindFree™ 4Way Cassette <small>Also available in non-WindFree™</small>	WindFree™ Mini 4Way Cassette <small>Also available in non-WindFree™</small>	2Way Cassette	Premium Plus WindFree™ <small>Also available in non WindFree™</small>
Capacity							
TR	kW						
0.6	2.2		●		●		●
0.7	2.6		●				
0.8	2.8		●		●		●
0.83	3.0		●				
1.0	3.6		●		●		●
1.2	4.2		●				
1.3	4.5			●			●
1.6	5.6	●	●	●	●	●	●
1.7	6.0	●		●	●		
2.0	7.1	● ●	●	● ●		●	●
2.3	8.2						●
2.6	9.0	●		● ●			
2.8	10.0	●		●			
3.2	11.2	●		●			
3.6	12.8	●		●			
4.0	14.0	●		●			
4.6	16.0						
4.8	17.0			●			
5.0	18.0						
6.4	22.4						
8.0	28.0						
	16.0						
	25.0						
	31.5						
	50.4						

● Available in chilled water FCU (Fan Coil Unit)    ● Available in DX Coil



MSP Duct	HSP Duct	Slim Duct	Floor Standing	Ceiling	DVM Hydro
					
		●			
		●			
		●			
		●			
●		●			
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# Specification

## Indoor units



### 360 Cassette

- Perfect even cooling
- Cold-draft free
- Bladeless discharge
- Stylish design

Attribute/Model code		AM056KN4DEH/TL	AM071KN4DEH/TL
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1
	Cooling [Btu/h]	19,100	24,200
	Heating [kW]	6.3	8
	Heating [Btu/h]	21,500	27,300
Power input (Nominal)	Cooling 1) [kW]	30	34
	Heating 2) [kW]	30	34
Current input (Nominal)	Cooling 1) Amp	0.21	0.25
	Heating 2) Amp	0.21	0.25
Fan	Air flow rate (High / Mid / Low) [CFM]	565/512/476	635/565/494
	External static pressure std. (Min - Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52
	Gas pipe (Φ, mm)	12.7	15.9
	Drain pipe (Φ, mm)	VP25(OD32/ID25)	VP25(OD32/ID25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	34/32/29	36/33/30
External dimension (Indoor unit)	Net weight (kg)	21	21
	Shipping weight (kg)	25	25
	Net dimensions (WxHxD) (mm)	947 x 281 x 947	947 x 281 x 947
	Net dimensions (WxHxD) (cm)	94.7 x 28.1 x 94.7	94.7 x 28.1 x 94.7
	Shipping dimensions (WxHxD) (mm)	990 x 330 x 990	990 x 330 x 990
	Shipping dimensions (WxHxD) (cm)	99 x 33 x 99	99 x 33 x 99
Panel	Net dimensions (WxHxD) (mm)	1000 x 66 x 1000	1000 x 66 x 1000
	Net dimensions (WxHxD) (cm)	100 x 6.6 x 100	100 x 6.6 x 100
	Shipping dimensions (WxHxD) (mm)	1093 x 85 x 1083	1093 x 85 x 1083
	Shipping dimensions (WxHxD) (cm)	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3
Additional accessories	Drain pump		
	Air filter		

#### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

5) Round cassette dimension is Φ1050mm (105cm).

#### Optional accessories

Individual  
Controllers



AR-KH031



MWR-WEI3N

AM090KN4DEH/TL	AM112KN4DEH/TL	AM128KN4DEH/TL	AM140KN4DEH/TL
1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
9	11.2	12.8	14
30,700	38,200	43,700	47,800
10	12.5	13.8	16
34,100	42,700	47,100	54,600
55	53	77	91
55	53	77	91
0.42	0.41	0.62	0.75
0.42	0.41	0.62	0.75
776/653/565	900/741/618	1041/847/670	1112/935/741
NA	NA	NA	NA
9.52	9.52	9.52	9.52
15.9	15.9	15.9	15.9
VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)
1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
R410A	R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
40/36/32	40/36/32	42/38/33	44/40/35
21	24	24	24
25	29	29	29
947 x 281 x 947	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
94.7 x 28.1 x 94.7	94.7 x 36.5 x 94.7	94.7 x 36.5 x 94.7	94.7 x 36.5 x 94.7
990 x 330 x 990	990 x 414 x 990	990 x 414 x 990	990 x 414 x 990
99 x 33 x 99	99 x 41.4 x 99	99 x 41.4 x 99	99 x 41.4 x 99
1000 x 66 x 1000	1000 x 66 x 1000	1000 x 66 x 1000	1000 x 66 x 1000
100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100
1093 x 85 x 1083	1093 x 85 x 1083	1093 x 85 x 1083	1093 x 85 x 1083
109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3
Built-in			
Available			

Panel  
Options



PC4NUNMAN



PC4NBNMAN



PC4NUDMAN



PC4NBDMAN



PC6EUCMAN  
(Purification)



PC6EUXMAN  
(Auto Elevation)

# Specification

## Indoor units



### 4Way Cassette S

- Loniser (Optional)
- Surround flow
- Individual blade control
- Fan speed adjustment for high ceiling

Attribute/Model code		AM045NN4DEH/TL	AM056NN4DEH/TL	AM071NN4DEH/TL
Features	Type			
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	4.5	5.6	7.1
	Cooling [Btu/h]	15,400	19,100	24,200
	Heating [kW]	5	6.3	8
	Heating [Btu/h]	17,100	21,500	27,300
Power input (Nominal)	Cooling 1) [kW]	32	32	45
	Heating 2) [kW]	32	32	45
Current input (Nominal)	Cooling 1) Amp	0.22	0.22	0.31
	Heating 2) Amp	0.22	0.22	0.31
Fan	Air flow rate (High / Mid / Low) [CFM]	512/476/441	529/494/459	600/547/512
	External static pressure std.(Min ~ Max) [mmAq]	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	9.52
	Gas pipe (Φ, mm)	12.7	12.7	15.88
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	33/32/30	33/32/30	35/34/33
External dimension (Indoor unit)	Net weight (kg)	15	15	15
	Shipping weight (kg)	18.5	18.5	18.5
	Net dimensions (WxHxD) (mm)	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840
	Net dimensions (WxHxD) (cm)	84 x 20.4 x 84	84 x 20.4 x 84	84 x 20.4 x 84
	Shipping dimensions (WxHxD) (mm)	898 x 275 x 898	898 x 275 x 898	898 x 275 x 898
	Shipping dimensions (WxHxD) (cm)	89.8 x 27.5 x 89.8	89.8 x 27.5 x 89.8	89.8 x 27.5 x 89.8
Panel	Net dimensions (WxHxD) (mm)	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950
	Net dimensions (WxHxD) (cm)	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95
	Shipping dimensions (WxHxD) (mm)	1010 x 117 x 1000	1010 x 117 x 1000	1010 x 117 x 1000
	Shipping dimensions (WxHxD) (cm)	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100
Additional accessories	Drain pump			
	Air filter			

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories



Individual  
Controllers

MWR-WEI3N

AR-EH03I

MWR-SH00N



AM090NN4DEH/TL	AM112NN4DEH/TL	AM128NN4DEH/TL	AM140NN4DEH/TL	AM170TN4DKH/EA
1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50/60
9	11.2	12.8	14	17.0
30,700	38,200	43,700	47,800	58120
10	12.5	13.8	16	19.0
34,100	42,700	47,100	54,600	64957
62	78	73	89	98.0
62	78	73	89	98.0
0.43	0.55	0.51	0.62	0.83
0.43	0.55	0.51	0.62	0.83
688/635/582	918/847/776	988/918/812	1059/988/918	1200/1024/918
NA	NA	NA	NA	NA
9.52	9.52	9.52	9.52	9.52
15.88	15.88	15.88	15.88	19.05
VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.5
R410A	R410A	R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
39/36/33	40/38/35	42/40/35	44/41/35	45/ 43 / 40
15	16.5	18.5	18.5	25.0
18.5	20	22.5	22.5	28.9
840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840	840 x 372 x 840
84 x 20.4 x 84	84 x 24.6 x 84	84 x 28.8 x 84	84 x 28.8 x 84	84 x 37.2 x 84
898 x 275 x 898	898 x 316 x 898	898 x 357 x 898	898 x 357 x 898	898 x 440 x 898
89.8 x 27.5 x 89.8	89.8 x 31.6 x 89.8	89.8 x 35.7 x 89.8	89.8 x 35.7 x 89.8	89.8 x 44 x 89.8
950 x 64 x 950	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950
95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95
1010 x 117 x 1000	1010 x 117 x 1000	1010 x 117 x 1000	1010 x 117 x 1000	1010 x 117 x 1000
101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100
Built-in				
Available				

Panel Options



**PC4NUCEAN**  
(Purification)



**PC4NUFMAN**  
(WindFree™)



**PC4NUSKAN**  
(Classic)



**PC4NBSKAN**  
(Black)

# Specification

## Indoor units



### Mini 4Way Cassette S

- Compact and light unit
- Loniser (Optional)
- Motion Detect Sensor (Optional)
- No overflowing drain water

Attribute/Model code		AM022FNNDH/EU	AM028NNNDH/TL
Features	Type		
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	2.2	2.8
	Cooling [Btu/h]	7,500	9,600
	Heating [kW]	2.5	3.2
	Heating [Btu/h]	8,500	10,900
Power input (Nominal)	Cooling 1) [kW]	18	18
	Heating 2) [kW]	18	18
Current input (Nominal)	Cooling 1) Amp	0.17	0.17
	Heating 2) Amp	0.17	0.17
Fan	Air flow rate (High / Mid / Low) [CFM]	317/271/229	353/300/264
	External static pressure std.(Min ~ Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35
	Gas pipe (Φ, mm)	12.7	12.7
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	32/29/25	33/30/26
External dimension (Indoor unit)	Net weight (kg)	12	12
	Shipping weight (kg)	14	14
	Net dimensions (WxHxD) (mm)	575 x 250 x 575	575 x 250 x 575
	Net dimensions (WxHxD) (cm)	57.5 x 25 x 57.5	57.5 x 25 x 57.5
	Shipping dimensions (WxHxD) (mm)	623 x 298 x 653	623 x 298 x 653
	Shipping dimensions (WxHxD) (cm)	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3
Panel	Net dimensions (WxHxD) (mm)	670 x 45 x 670	620 x 57 x 620
	Net dimensions (WxHxD) (cm)	67 x 4.5 x 67	62 x 5.7 x 62
	Shipping dimensions (WxHxD) (mm)	714 x 106 x 724	670 x 120 x 655
	Shipping dimensions (WxHxD) (cm)	71.4 x 10.6 x 72.4	67 x 12 x 65.5
Additional accessories	Drain pump		
	Air filter		

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories



AM036NNNDEH/TL	AM045NNNDEH/TL	AM056NNNDEH/TL
1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
3.6	4.5	5.6
12,300	15,400	19,100
4	5	6.3
13,600	17,100	21,500
20	23	28
20	23	28
0.19	0.22	0.27
0.19	0.22	0.27
370/317/264	406/360/317	459/388/335
NA	NA	NA
6.35	6.35	6.35
12.7	12.7	12.7
VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
34/30/26	36/34/32	39 /36 /33
12	12	12
14	14	14
575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
57.5 x 25 x 57.5	57.5 x 25 x 57.5	57.5 x 25 x 57.5
623 x 298 x 653	623 x 298 x 653	623 x 298 x 653
62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3
620 x 57 x 620	620 x 57 x 620	620 x 57 x 620
62 x 5.7 x 62	62 x 5.7 x 62	62 x 5.7 x 62
670 x 120 x 655	670 x 120 x 655	670 x 120 x 655
67 x 12 x 65.5	67 x 12 x 65.5	67 x 12 x 65.5
Built-in		
Available		

Panel  
Options



**PC4SUFMAN**  
(WindFree™)



**PC4SUSMFN**  
(Classic)

# Specification

## Indoor units

### Slim 1Way Cassette



- Slim and compact design
- Quiet operation
- No overflowing drain water
- Stylish design

Attribute/Model code		AM022NN1DEH2TL	AM028NN1DEH2TL	AM036NN1DEH2TL	AM056NN1DEH/TL	AM071NN1DEH/TL
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50/60	1,2,220-240,50
Capacity	Cooling [kW]	2.2	2.8	3.6	5.6	7.1
	Cooling [Btu/h]	7,500	9,600	12,300	19,100	24,200
	Heating [kW]	2.5	3.2	4	6.3	8
	Heating [Btu/h]	8,500	10,900	13,600	21,500	27,300
Power input (Nominal)	Cooling 1) [kW]	40	45	50	55	0.08
	Heating 2) [kW]	40	45	50	55	0.08
Current input (Nominal)	Cooling 1) Amp	0.2	0.23	0.25	0.28	0.4
	Heating 2) Amp	0.2	0.23	0.25	0.28	0.4
Fan	Air flow rate (High / Mid / Low) [CFM]	211/176/141	247/211/176	282/247/211	529/459/388	600/547/494
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	6.35	6.35	9.52
	Gas pipe (Φ, mm)	12.7	12.7	12.7	12.7	15.88
	Drain pipe (Φ,mm)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	29 / 26 / 24	32 / 28 / 24	37 / 33 / 30	41 / 38 / 35	42 / 39 / 36
External dimension (Indoor unit)	Net weight (kg)	10	10	10	13.5	13.5
	Shipping weight (kg)	12.8	12.8	12.8	17.3	17.3
	Net dimensions (WxHxD) (mm)	970 x 135 x 410	970 x 135 x 410	970 x 135 x 410	1200 x 138 x 450	1200 x 138 x 450
	Net dimensions (WxHxD) (cm)	97 x 13.5 x 40	97 x 13.5 x 40	97 x 13.5 x 40	120 x 13.8 x 45	120 x 13.8 x 45
	Shipping dimensions (WxHxD) (mm)	1173 x 231 x 487	1173 x 231 x 487	1173 x 231 x 487	1435 x 224 x 525	1435 x 224 x 525
	Shipping dimensions (WxHxD) (cm)	117.3 x 23.1 x 48.7	117.3 x 23.1 x 48.7	117.3 x 23.1 x 48.7	143.5 x 22.4 x 52.5	143.5 x 22.4 x 52.5
Panel	Net dimensions (WxHxD) (mm)	1198 x 35 x 500	1198 x 35 x 500	1198 x 35 x 500	1410 x 35 x 500	1410 x 35 x 500
	Net dimensions (WxHxD) (cm)	119.8 x 3.5 x 50	119.8 x 3.5 x 50	119.8 x 3.5 x 50	141 x 3.5 x 50	141 x 3.5 x 50
	Shipping dimensions (WxHxD) (mm)	1262 x 124 x 568	1262 x 124 x 568	1262 x 124 x 568	1473 x 124 x 568	1473 x 124 x 568
	Shipping dimensions (WxHxD) (cm)	126.2 x 12.4 x 56.8	126.2 x 12.4 x 56.8	126.2 x 12.4 x 56.8	147.3 x 12.4 x 56.8	147.3 x 12.4 x 56.8
	Additional accessories	Drain pump	Built-in			
	Air filter	Available				

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories





# Specification

## Indoor units



### 2Way Cassette

- Standard formula for easy installation
- Twin cross flow fan
- Small size, big performance
- Ultra light weight

Attribute/Model code		AM056CN2DKH/EA	AM071CN2D82/EA
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1
	Cooling [Btu/h]	19,100	24,200
	Heating [kW]	6.3	8
	Heating [Btu/h]	21,500	27,300
Power input (Nominal)	Cooling 1) [kW]	70	75
	Heating 2) [kW]	70	75
Current input (Nominal)	Cooling 1) Amp	0.38	0.4
	Heating 2) Amp	0.38	0.4
Fan	Air flow rate (High / Mid / Low) [CFM]	526/469/434	564/511/451
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52
	Gas pipe (Φ, mm)	12.7	15.88
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	38 / 37 / 35	41 / 39 / 37
External dimension (Indoor unit)	Net weight (kg)	21	22
	Shipping weight (kg)	25	26
	Net dimensions (WxHxD) (mm)	890 x 230 x 575	890 x 230 x 575
	Net dimensions (WxHxD) (cm)	89 x 23 x 57.5	89 x 23 x 57.5
	Shipping dimensions (WxHxD) (mm)	1077 x 299 x 642	1077 x 299 x 642
	Shipping dimensions (WxHxD) (cm)	107.7 x 29.9 x 64.2	107.7 x 29.9 x 64.2
Panel	Net dimensions (WxHxD) (mm)	1030 x 25 x 650	1030 x 25 x 650
	Net dimensions (WxHxD) (cm)	103 x 2.5 x 65	103 x 2.5 x 65
	Shipping dimensions (WxHxD) (mm)	1103 x 151 x 727	1103 x 151 x 727
	Shipping dimensions (WxHxD) (cm)	110.3 x 15.1 x 72.7	110.3 x 15.1 x 72.7
Additional accessories	Drain pump		Built-in
	Air filter		Available

### Note:

Specifications may be subject to change without prior notice for product improvement.

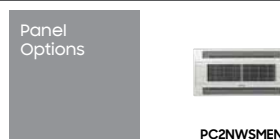
1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories



# Specification

## Indoor units



### Slim Duct

- Flexible installation
- Easier drain pump installation
- Slim design
- Easy to maintain

Attribute/Model code		AM022KNLDEH/TL	AM028KNLDEH/TL
Features	Type		
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220~240V,50	1,2,220~240V,50
Capacity	Cooling [kW]	2.2	2.8
	Cooling [Btu/h]	7,500	9,600
	Heating [kW]	2.5	3.2
	Heating [Btu/h]	8,500	10,900
Power input (Nominal)	Cooling 1) [kW]	30	34
	Heating 2) [kW]	30	36
Current input (Nominal)	Cooling 1) Amp	0.25	0.28
	Heating 2) Amp	0.25	0.3
Fan	Air flow rate (High / Mid / Low) [CFM]	211/173/134	248/181/153
	External static pressure std. (Min ~ Max) [mmAq]	1(0~3)	1(0~3)
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35
	Gas pipe (Φ, mm)	12.7	12.7
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	2.5	2.5
	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	22 /23 /26	24 /26 /28
External dimension (Indoor unit)	Net weight (kg)	15.3	15.3
	Shipping weight (kg)	18.2	18.2
	Net dimensions (WxHxD) (mm)	700 x 199 x 440	700 x 199 x 440
	Net dimensions (WxHxD) (cm)	70 x 19.9 x 44	70 x 19.9 x 44
	Shipping dimensions (WxHxD) (mm)	949 x 280 x 544	949 x 280 x 544
	Shipping dimensions (WxHxD) (cm)	94.9 x 28 x 54.4	94.9 x 28 x 54.4
Additional accessories	Drain pump		
	Air filter		

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories



AM036KNLDEH/TL	AM045KNLDEH/TL	AM056KNLDEH/TL	AM071KNLDEH/TL
1,2,220-240V,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
3.6	4.5	5.6	7.1
12,300	15,400	19,100	24,200
4	5	6.3	8
13,600	17,100	21,500	27,300
40	90	95	120
42	90	95	120
0.33	0.52	0.53	0.6
0.35	0.52	0.53	0.6
289/229/173	388/339/293	423/370/317	582/529/476
1(0~3)	2(0~4)	2(0~4)	2(0~4)
6.35	6.35	6.35	9.52
12.7	12.7	12.7	15.88
VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
0.75 ~ 1.5	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
R410A	R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
25 /28 /31	35 /31 /26	36 /34 /31	38 /36 /33
15.7	24.5	24.5	30.5
18.6	29	29	35.5
700 x 199 x 440	900 x 199 x 600	900 x 199 x 600	1100 x 199 x 600
70 x 19.9 x 44	90 x 19.9 x 60	90 x 19.9 x 60v	110 x 19.9 x 60
949 x 280 x 544	1150 x 280 x 710	1150 x 280 x 710	1350 x 280 x 710
94.9 x 28 x 54.4	115 x 28 x 71	115 x 28 x 71	135 x 28 x 71
	Built-in		
	Available		

# Specification

## Indoor units



### MSP Duct

- Narrow width
- Strong and large coverage area
- Silent operation with the static pressure control
- Easy to maintain

Attribute/Model code		AM056KNMDEH/TL	AM071KNMDEH/TL	AM090KNMDEH/TL
Power supply (Indoor unit) [Φ, #, V, Hz]		1,220-240,50	1,220-240,50	1,220-240,50
Capacity	Cooling [kW]	5.6	7.1	9
	Cooling [Btu/h]	19,100	24,200	30,700
	Heating [kW]	6.3	8	10
	Heating [Btu/h]	21,500	27,300	34,100
Power input (Nominal)	Cooling 1) [kW]	130	190	240
	Heating 2) [kW]	130	190	240
Current input (Nominal)	Cooling 1) Amp	1.1	1.25	1.3
	Heating 2) Amp	1.1	1.25	1.3
Fan	Air flow rate (High / Mid / Low) [CFM]	512/459/406	653/600/547	688/635/582
	External static pressure std. (Min ~ Max) [mmAq]	4(0~8)	4(0~8)	6(4~8)
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52	9.52
	Gas pipe (Φ, mm)	12.7	15.88	15.88
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	35 / 33 / 31	39 / 35 / 31	40 / 37 / 34
External dimension (Indoor unit)	Net weight (kg)	28.5	28.5	32.5
	Shipping weight (kg)	33	33	37.5
	Net dimensions (WxHxD) (mm)	900 x 260 x 480	900 x 260 x 480	1150 x 260 x 480
	Net dimensions (WxHxD) (cm)	90 x 26 x 48	90 x 26 x 48	115 x 26 x 48
	Shipping dimensions (WxHxD) (mm)	1170 x 340 x 595	1170 x 340 x 595	1420 x 340 x 595
	Shipping dimensions (WxHxD) (cm)	117 x 34 x 59.5	117 x 34 x 59.5	142 x 34 x 59.5
Additional accessories	Drain pump			
	Air filter			

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories





AM112KNMDEH/TL	AM128KNMDEH/TL	AM140KNMDEH/TL	AM160KNMDEH/EU
1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
11.2	12.8	14	16
38,200	43,700	47,800	54,630
12.5	13.8	16	18
42,700	47,100	54,600	61,425
260	370	410	485
260	370	410	485
1.17	1.67	1.86	2.24
1.17	1.67	1.86	2.24
953/882/812	1130/1059/988	1306/1200/1094	1518/1341/1077
8(4~12)	8(4~14)	8(4~14)	8(4~14)
9.52	9.52	9.52	9.52
15.88	15.88	15.88	15.88
VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
R410A	R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
41 /40 /38	41 /40 /38	42 /39 /36	43 /40 /36
36	48.5	48.5	50
41	57	57	57
1150 x 260 x 480	1200 x 360 x 650	1200 x 360 x 650	1200 x 360 x 650
115 x 26 x 48	120 x 36 x 65	120 x 36 x 65	120 x 36 x 65
1420 x 340 x 595	1480 x 420 x 790	1480 x 420 x 790	1456 x 434 x 778
142 x 34 x 59.5	148 x 42 x 79	148 x 42 x 79	145.6 x 43.4 x 77.8
Built-in			MDP-M075SGU2D
Available			

# Specification

## Indoor units



### HSP Duct

- High external static pressure
- Strong and large coverage area
- Silent operation with the static pressure control
- Easy to maintain

Attribute/Model code		AM180JNHFKH/EU	AM224JNHFKH/EU	AM280FNHDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	18	22.4	28
	Cooling [Btu/h]	61,400	76,400	95,500
	Heating [kW]	20	25	31.5
	Heating [Btu/h]	68,240	85,300	107,500
Power input (Nominal)	Cooling 10) [kW]	0.34	0.53	0.79
	Heating 2) [kW]	0.34	0.53	0.79
Current input (Nominal)	Cooling 1) Amp	1.9	2.9	5.9
	Heating 2) Amp	1.9	2.9	5.9
Fan	Air flow rate (High / Mid / Low) [CFM]	2048/1765/1518	2542/2154/1765	2542/2295/2048
	External static pressure std. (Min - Max) [mmAq]	7.34(5~20)	7.34(5~20)	15(5~28)
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	9.52
	Gas pipe (Φ, mm)	19.05	19.05	22.22
	Drain pipe (Φ,mm)	VP25 (OD25,ID 20)	VP25 (OD25,ID 20)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	43 /39 /35	44 /40 /36	48 /46 /43
External dimension (Indoor unit)	Net weight (kg)	82.5	82.5	89
	Shipping weight (kg)	92	92	99
	Net dimensions (WxHxD) (mm)	1350 x 450 x 910	1350 x 450 x 910	1240 x 470 x 1040
	Net dimensions (WxHxD) (cm)	135 x 45 x 91	135 x 45 x 91	124 x 47 x 104
	Shipping dimensions (WxHxD) (mm)	1612 x 519 x 984	1612 x 519 x 984	1507 x 558 x 1155
	Shipping dimensions (WxHxD) (cm)	161.2 x 51.9 x 98.4	161.2 x 51.9 x 98.4	150.7 x 55.8 x 115.5
Additional accessories	Drain pump	MDP-G075SP	MDP-G075SP	MDP-N047SNC1D
	Air filter	Not available		

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories





## Ceiling

- 2Way installation
- Compact but powerful
- Stay-clean panel
- Sophisticated control

Attribute/Model code		AM056FNCDEH/EU	AM071FNCDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1
	Cooling [Btu/h]	19,100	24,200
	Heating [kW]	6.3	8
	Heating [Btu/h]	21,500	27,300
Power input (Nominal)	Cooling 1) [kW]	0.072	0.08
	Heating 2) [kW]	0.072	0.077
Current input (Nominal)	Cooling 1) Amp	0.33	0.35
	Heating 2) Amp	0.28	0.29
Fan	Air flow rate (High / Mid / Low) [CFM]	494/459/423	635/582/529
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52
	Gas pipe (Φ, mm)	12.7	15.88
	Drain pipe (Φ,mm)	ID 18 HOSE	ID 18 HOSE
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	40 / 37 / 34	44 / 42 / 40
External dimension (Indoor unit)	Net weight (kg)	21	21
	Shipping weight (kg)	25.5	25.5
	Net dimensions (WxHxD) (mm)	1000 x 650 x 200	1000 x 650 x 200
	Net dimensions (WxHxD) (cm)	100 x 65 x 20	100 x 65 x 20
	Shipping dimensions (WxHxD) (mm)	1080 x 730 x 300	1080 x 730 x 300
	Shipping dimensions (WxHxD) (cm)	108 x 73 x 30	108 x 73 x 30
Additional accessories	Drain pump	NA	NA
	Air filter	Available	Available

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories

Individual  
Controllers



MWR-WE13N



AR-EH03I



MWR-SH00N

EEV  
KIT



MEV-E32SA

# Specification

## Indoor units



### Premium wall mounted

- Clean-cut front panel
- Silver accent line
- Bottom opening front panel
- Improved dust-filtration

Type			AM022TNQDKH/TL, AM022TNVDKH/TL*	AM028TNQDKH/TL, AM028TNVDKH/TL*	AM036TNQDKH/TL, AM036TNVDKH/TL*	
Power supply		Φ, #, V, Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	
Mode		-	HP/HR	HP/HR	HP/HR	
Performance	Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6
		Heating	kW	2.5	3.2	4.0
Power	Power input (Nominal)	Cooling	kW	24.0	30.0	37.0
		Heating		24.0	30.0	37.0
	Current input (Nominal)	Cooling	A	0.16	0.20	0.25
		Heating		0.16	0.20	0.25
Fan	Air flow rate	H/M/L (UL)	CMM	7.5/6.0/4.5	8.5/7.7/6.9	10.3/9.3/8.3
	Type			Crossflow Fan	Crossflow Fan	Crossflow Fan
Fan motor	Motor	Output x n	W	27 x 1	27 x 1	27 x 1
Piping connections	Liquid pipe		Φ,mm	6.35	6.35	6.35
	Gas pipe		Φ,mm	12.7	12.7	12.7
	Drain pipe		Φ,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Refrigerant	Type		-	R410A	R410A	R410A
	Control method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure(TDB)	High / Mid / Low / Wind free	dB(A)	34/32/30/27	34/33/32/26	40/36/34/26
Dimensions	Net weight		kg	9.0	9.5	9.5
	Shipping weight		kg	10.0	10.5	10.5
	Net dimensions (W×H×D)		mm	820x299x215	820x299x215	820x299x215
	Shipping dimensions (W×H×D)		mm	880x290x375	880x290x375	880x290x375

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. \*WindFree™ Models Thus, actual noise level may be different depending on the installation conditions.

5) Cordless controllers comes in indoor unit box.

### Optional accessories

Individual  
Controllers



MWR-WE13N



<b>AM045TNQDKH/TL, AM045TNVDKH/TL*</b>	<b>AM056TNQDKH/TL, AM056TNVDKH/TL*</b>	<b>AM071TNQDKH/TL, AM071TNVDKH/TL*</b>	<b>AM082TNQDKH/TL, AM082TNVDKH/TL*</b>
1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz
HP/HR	HP/HR	HP/HR	HP/HR
4.5	5.6	6.8	8.2
5.0	6.3	7.0	8.5
40.0	52.0	60.0	65.0
40.0	52.0	60.0	65.0
0.27	0.35	0.40	0.43
0.27	0.35	0.40	0.43
15.5/13.0/10.5	16.0/14.0/12.0	17.5/15.35/13.2	18.0/15.9/13.8
Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
27 x 1	27 x 1	27 x 1	27 x 1
6.35	6.35	9.52	9.52
12.7	12.7	15.88	15.88
ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
R410A	R410A	R410A	R410A
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
37/34/33/29	40/37/34/29	43/40/37/29	46/45/43/30
12.0	12.0	12.0	13.0
13.5	13.5	13.5	14.5
1055x299x215	1055x299x215	1055x299x215	1055x299x215
1115x290x375	1115x290x375	1115x290x375	1115x290x375

# Specification

## Indoor units



### Hydro unit (HE/HT )

- Integrated solution
- Water temperature choice
- Easy and simple connection
- Integrated control

Attribute/Model code		AM160FNBFE/ EU
Model Name	Indoor unit	
Power supply (Indoor unit) [Φ, #, V, Hz]		
Capacity	Cooling [KW]	NA
	Cooling [Btu/h]	NA
	Heating [KW]	16
	Heating [Btu/h]	54,600
Power input (Nominal)	Cooling [KW]	-
	Heating [KW]	3.1
Current input (Nominal)	Cooling 1)	-
	Heating 2)	14.3 A
Energy efficiency	Energy grade of space heater (55 °C / 35 °C)	A+ / A+
	Energy grade of package of space heater	A+
Condenser	Type	PHE
	Pipe size (Φ, inch)	PT1 (25A)™
	Water flow rate (LPM)	23
	Water flow rate [m <sup>3</sup> /h]	1.38
Piping connections	Liquid pipe (Φ, mm)	9.52
	Gas pipe (Φ, mm)	15.88
Field wiring	Power source wire	4
	Transmission cable	0.75 ~ 1.5
Refrigerant	Type	R410A
	Control method	EEV
	Factory charging (kg)	2.15
	Factory charging (tCO <sub>2</sub> e)	3.07 tCO <sub>2</sub> e
Sound	Sound pressure (High / Mid / Low) [dB(A)]	42
External dimension (Indoor unit)	Net weight (kg)	104
	Shipping weight (kg)	107
	Net dimensions (WxHxD) (mm)	518 x 1,210 x 330
	Net dimensions (WxHxD) (cm)	51.8 x 121 x 33
	Shipping dimensions (WxHxD) (mm)	652 x 1,289 x 426
	Shipping dimensions (WxHxD) (cm)	65.2 x 128.9 x 42.6
Operating temp. range	Cooling (°C)	NA
	Heating (°C)	-20 ~ 35

#### Note:

Specifications may be subject to change without prior notice for product improvement.

- 1) Nominal cooling capacities are based on:
- Water temperature: 23°C inlet, 18°C outlet
  - Indoor temperature: 27°C DB, 19°C WB
  - Outdoor temperature: 35°C DB, 24°C WB

- 2) Nominal heating capacities are based on:
- Water temperature: 30°C inlet, 35°C outlet
  - Indoor temperature: 20°C DB
  - Outdoor temperature: 7°C DB, 6°C WB

3) Sound pressure was acquired in an anechoic room. Thus, actual noise level may be different depending on the installation conditions.

AM160FNBDEH/EU	AM250FNBFEH/EU	AM320FNBDEH/EU	AM500FNBDEH/EU
1, 2, 220-240, 50			
14	NA	28	44.8
47,800	NA	95,600	152,900
16	25	31.5	50.4
54,600	85,300	107,500	172,000
0.01	-	0.01	0.01
0.01	5	0.01	0.01
0.05 A	-	0.05 A	0.05 A
0.05 A	23.1 A	0.05 A	0.05 A
NA / A++	A+ / A+	NA / A+	NA / A+
A++	A+	A+	A+
PHE	PHE	PHE	PHE
PT1 (25A)"	PT1 (25A)""	PT1 (25A)"	PT1-1/4 (32A)"
48	36	92	150
2.88	2.16	5.52	9
9.52	9.52	9.52	12.7
15.88	15.88	22.2	28.58
2.5	4	2.5	2.5
0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
R410A	R410A	R410A	R410A
EEV	EEV	EEV	EEV
NA	2.15	NA	NA
NA	3.07 tCO2e	NA	NA
27	42	28	31
29	104	33	40
31	107	35	42
518 x 627 x 330	518 x 1,210 x 330	518 x 627 x 330	518 x 627 x 330
51.8 x 62.7 x 33	51.8 x 121 x 33	51.8 x 62.7 x 33	51.8 x 62.7 x 33
652 x 700 x 426	652 x 1,289 x 426	652 x 700 x 426	652 x 700 x 426
65.2 x 70 x 42.6	65.2 x 128.9 x 42.6	65.2 x 70 x 42.6	65.2 x 70 x 42.6
-5.0 ~ 48.0	NA	-5.0 ~ 48.0	-5.0 ~ 48.0
-20 ~ 35	-20 ~ 35	-20 ~ 35	-20 ~ 35

# Specification

## Indoor units



### Floor standing

- Powerful and clean cooling
- 4Way auto-swing
- Full touch panel control
- Auto shutter

Attribute/Model code		AM140RNPDKH/EU	AM280RNPDKH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50/60	1,2,220-240,50/60
Capacity	Cooling [kW]	14	28
	Cooling [Btu/h]	47,800	95,500
	Heating [kW]	16	31.5
	Heating [Btu/h]	54,600	107,500
Power input (Nominal)	Cooling 1) [kW]	0.19	0.995
	Heating 2) [kW]	0.19	0.995
Current input (Nominal)	Cooling 1) Amp	0.9	4.73
	Heating 2) Amp	0.9	4.73
Fan	Air flow rate (High / Mid / Low) [CFM]	1236/1077/971	2471/2118/1765
	External static pressure std. (Min - Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52
	Gas pipe (Φ, mm)	15.88	22.22
	Drain pipe (Φ, mm)	ID 18 HOSE	ID 18 HOSE
Field wiring	Power source wire	2.5	2.5
	Transmission cable	VCTF 0.75 - 1.5	VCTF 0.75 - 1.5
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure [dB(A)]	70	74
External dimension (Indoor unit)	Net weight (kg)	48	115
	Shipping weight (kg)	55	130
	Net dimensions (WxHxD) (mm)	610 x 1850 x 400	1100 x 1800 x 485
	Net dimensions (WxHxD) (cm)	61 x 185 x 40	110 x 180 x 48.5
	Shipping dimensions (WxHxD) (mm)	705 x 1963 x 493	1177 x 1950 x 563
	Shipping dimensions (WxHxD) (cm)	70.5 x 196.3 x 49.3	117.7 x 195 x 56.3
	Air filter	Available	

### Note:

Specifications may be subject to change without prior notice for product improvement.

1) Mode: HP, Heat Pump

2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m

4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

### Optional accessories

Individual  
Controllers



AR-EH03I

# Specification

## Indoor units



### ERV Plus and ERV

- Slim design
- Direct expansion (DX) coil
- New diamond type element

Attribute/Model code		AM050FNKDEH/EU	AM100FNKDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	
System	Mode	HP/HR	HP/HR
Capacity	Cooling [kW]	5.1	10.5
	Cooling [Btu/h]	17,400 Btu/h	35,800 Btu/h
	Heating [kW]	6.5	13.2
	Heating [Btu/h]	22,200	45,000
Power input (Nominal)	Cooling [kW]	0.22	0.51
	Heating [kW]	0.22	0.51
Current input (Nominal)	Cooling 1) [A]	1.7	3.7
	Heating 2) [A]	1.7	3.7
	Air flow rate (High/Mid/Low)[L/S]	138.83/138.83/100.00	277.83/277.83/191.67
	External static pressure (Min / Std / Max) [mmAq]	8.70/10.20/16.32	7.60/9.20/15.30
	External static pressure (Min / Std / Max) [Pa]	85.32/100.03/160.04	74.53/90.22/150.04
	Air flow rate (High / Mid / Low) [m3/h]	500/500/360	1000/1000/690
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35
	Gas pipe (Φ, mm)	12.7	12.7
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	36/32/28 dBA	36/33/31 dBA
	Sound power	67	67
External dimension (Indoor unit)	Net weight (kg)	61	90
	Shipping weight (kg)	75.2	107.5
	Net dimensions (WxHxD) (mm)	1553 x 270 x 1000	1763 x 340 x 1135
	Net dimensions (WxHxD) (cm)	155.3 x 27 x 100	176.3 x 34 x 113.5
	Shipping dimensions (WxHxD) (mm)	1847 x 349 x 1300	2027 x 428 x 1424
	Shipping dimensions (WxHxD) (cm)	184.7 x 34.9 x 130	202.7 x 42.8 x 142.4

Attribute/Model code		AN050JSKLN/EU	AN100JSKLN/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50/60	
Temperature exchange rate	Cooling	70.00%	70.00%
	Heating	74.00%	74.00%
Enthalpy exchange rate	Heating	50.00%	50.00%
	Cooling	70.00%	70.00%
Power input (Nominal) [kW]		175	450
Current input (Nominal) [A]		1.1	2.9
Fan	Air flow rate (High / Mid / Low) [CMH]	500 / 500 / 360	1000 / 1000 / 690
	External static pressure (Min / Std / Max) [Pa]	85 / 100 / 165	75 / 90 / 155
External dimension (Indoor unit)	Net weight (kg)	42.5	67
	Net dimensions (WxHxD) (mm)	1012 x 270 x 1000 mm	1220 x 340 x 1135 mm

### Note:

- 1) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 2) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 3) Humidifying capacity is based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
- 4) Sound pressure

### Optional accessories



MWR-VH12N



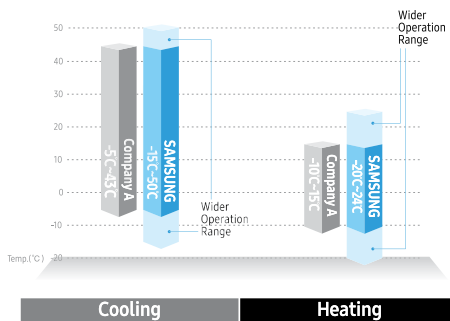
# CAC Outdoor



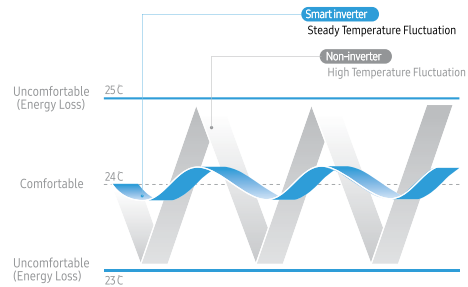
## Energy saving

CAC is a smart choice for saving both money and energy. This economical outdoor unit employs advanced technologies to minimise waste and improve efficiency. By adopting the smart inverter technology, CAC not only offers silent operation, but also provides outstanding cooling and heating performance that is faster than conventional products.

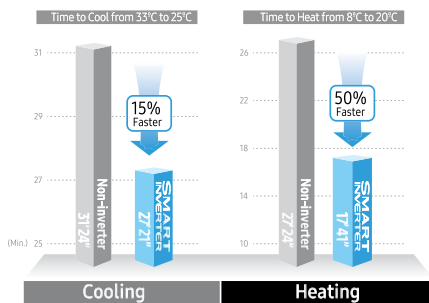
## Wide temperature performance



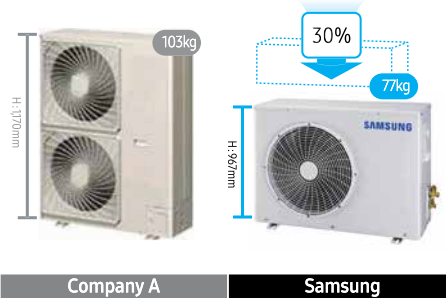
## Comfortable temperature



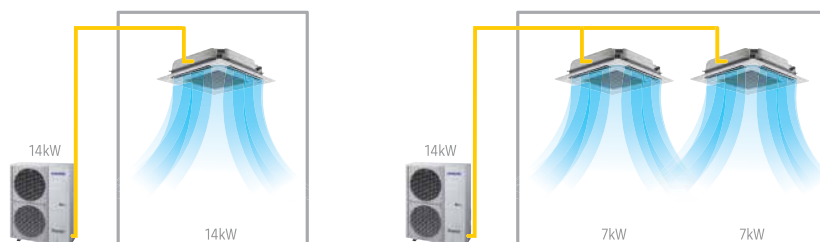
## Fast cooling and heating



## Smaller and lighter



## Simultaneous On/Off function



# CAC Indoor

## 360 Cassette

Cold draft free  
Perfect, even cooling  
Circular to perfectly fit in everywhere  
Fast cooling



## WindFree™ Slim 1Way Cassette

Slim and compact design  
Refined elegance and comfort to enhance any décor  
Visually appealing panel  
Light indoor unit

## 4Way Cassette

Individual blade control  
Optimal airflow for high ceilings  
Aesthetic panel and display



# Specification

## CAC



Model		AC100KN4DEH/TL	AC140KN4DEH/TL
	Type	360 Cassette	360 Cassette
Model name	Indoor unit	AC100KN4DEH/TL	AC140KN4DEH/TL
	Outdoor unit	AC100KXADGH/TL	AC140KXADGH/TL
System	Mode	Heat pump	Heat pump
Capacity	Cooling [kW]	3.50 / 10.00 / 12.00	3.50 / 13.60 / 15.50
	Heating [kW]	3.50 / 11.20 / 15.50	3.50 / 16.00 / 18.00
Power input (Nominal)	Cooling [kW]	0.80 / 2.63 / 3.80	0.80 / 4.37 / 5.70
	Heating [kW]	0.70 / 2.76 / 4.50	0.70 / 4.65 / 7.90
Energy efficiency	EER (Nominal cooling)	3.8	3.11
	BEE Star rating	4 Star	3 Star
	COP (Nominal heating)	4.06	3.44
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52
	Liquid pipe (Φ, inch)	3/8"	3/8"
	Gas pipe (Φ, mm)	15.88	15.88
	Gas pipe (Φ, inch)	5/8"	5/8"
	Installation max. length [m]	75	75
	Installation max. height [m]	30	30
Refrigerant	Type	R-410A	R-410A
	Control method	EEV	EEV
	Factory charging (kg)	3	3.5
Power supply (Indoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz
Drain	Drain pipe (Φ,mm)	VP25 (OD32/ID25)	VP25 (OD32/ID25)
Airflow rate	(High / Mid / Low) [CMM]	30/24/20	33/28/23
Sound	Sound pressure (High / Mid / Low) [dB(A)]	43/37/32	44/40/36
External dimension (Indoor unit)	Net weight (kg)	26	26
	Shipping weight (kg)	30.5	30.5
	Net dimensions (WxHxD) (mm)	947x365x947	947x365x947
	Shipping dimensions (WxHxD) (mm)	990x414x990	990x414x990
	Net dimensions (WxHxD) (cm)	94.7x36.5x94.7	94.7x36.5x94.7
	Shipping dimensions (WxHxD) (cm)	99x41.4x99	99x41.4x99
Panel size	Panel model	PC4NUNMAN	PC4NUNMAN
	Panel net weight (kg)	3.6	3.6
	Shipping weight (kg)	6	6
	Net dimensions (WxHxD) (mm)	1000x666x1000	1000x666x1000
	Shipping dimensions (WxHxD) (mm)	1093x85x1083	1093x85x1083
	Net dimensions (WxHxD) (cm)	100x6.6x100	100x6.6x100
Shipping dimensions (WxHxD) (cm)	109.3x8.5x108.3	109.3x8.5x108.3	
Power supply (Outdoor unit) [Φ, #, V, Hz]		3Φ, 4, 380-415V, 50Hz	3Φ, 4, 380-415V, 50Hz
Compressor	Type	Twin BLDC Rotary	Twin BLDC Rotary
External dimension (Outdoor unit)	Net weight (kg)	90	92
	Shipping weight (kg)	99	101
	Net dimensions (WxHxD) (mm)	940x1,210x330	940x1,210x330
	Shipping dimensions (WxHxD) (mm)	995x1,388x426	995x1,388x426
	Net dimensions (WxHxD) (cm)	94x1,21x33	94x1,21x33
	Shipping dimensions (WxHxD) (cm)	99.5x1,38.8x42.6	99.5x1,38.8x42.6
Operating temp. range	Cooling (°C)	-15~52 °C	-15~52 °C
	Heating (°C)	-20~24 °C	-20~24 °C

### Optional accessories

Panel Options



PC4NUNMAN



PC4NBNMAN



PC4NUDMAN



PC4NBDMAN



PC6EUCMAN  
(Purification)



PC6EUXMAN  
(Auto Elevation)



AC036NN1PKC/TL	AC052NN1PKC/TL	AC071NN1PKC/TL
1Way Cassette	1Way Cassette	1Way Cassette
AC036NN1PKC/TL	AC052NN1PKC/TL	AC071NN1PKC/TL
AC036NX1DKC/TL	AC052NX1DKC/TL	AC071NX1DKC/TL
Cooling only	Cooling only	Cooling only
1.2/3.6/4.8	1.5/5.2/6.0	1.8/6.5/7.8
NA	NA	NA
0.28/1.36/2.30	0.30/1.69/2.10	0.40/2.46/3.60
NA	NA	NA
3.5	3.8	3.5
2 Star	3 Star	2 Star
NA	NA	NA
6.35	6.35	6.35
1/4"	1/4"	1/4"
12.7	12.7	15.88
1/2"	1/2"	5/8"
30	30	30
15	15	15
R-410A	R-410A	R-410A
EEV	EEV	EEV
1.05	1.3	2
1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz
VP25 (OD32/ID25)	VP25 (OD32/ID25)	VP25 (OD32/ID25)
9.2 / 8.3 / 7.8	14 / 13 / 12	15 / 14 / 12.5
34/32/30/28	41/38/35/29	46/42/38/30
9.2	13.4	13.4
11.5	16.5	16.5
970 x 135 x 410	1200 x 138 x 450	1200 x 138 x 450
1173 x 231 x 487	1435 x 224 x 525	1435 x 224 x 525
97 x 13.5 x 41	120 x 13.8 x 45	120 x 13.8 x 45
117.3 x 23.1 x 48.7	143.5 x 22.4 x 52.5	143.5 x 22.4 x 52.5
PC1NWFMAN	PC1BWFMAN	PC1BWFMAN
4.3	5	5
6.3	7	7
1198 x 35 x 500	1410 x 35 x 500	1410 x 35 x 500
1262 x 122 x 566	1474 x 122 x 566	1474 x 122 x 566
119.8 x 3.5 x 50	141 x 3.5 x 50	141 x 3.5 x 50
126.2 x 12.2 x 56.6	147.4 x 12.2 x 56.6	147.4 x 12.2 x 56.6
1Φ, 2, 220-240V, 50Hz	1Φ, 2, 220-240V, 50Hz	1Φ, 2, 220-240V, 50Hz
Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
33.5	40.5	52.8
36	43.5	56.3
790x548x285	880x638x310	880x798x310
938x640x375	1023x730x413	1023x881x413
79x5.48x2.85	88x63.8x31	88x63.8x31
93.8x64x37.5	102.3x73x41.3	102.3x73x41.3
-5~52 °C	-5~52 °C	-5~52 °C
NA	NA	NA

#### Optional accessories

Panel Options



**PC1NWC MAN**  
(Purification)  
for Small chassis



**PC1BWC MAN**  
(Purification)  
for Big chassis



**PC1NUS MAN /  
PC1BWE AN**  
(Classic)



**PC1NUP MAN /  
PC1BWE AN**  
(Z-Slide)



**PC1NWS MAN /  
PC1BWS MAN**  
(Fluidic)

# Specification

## CAC



Model code		AC071NN4DKC/TL
Type		4Way Cassette
Model name	Indoor unit	AC071NN4DKC/TL
	Outdoor unit	AC071NXADKC/TL
System	Mode	Cooling only
Capacity	Cooling [kW] (Min, Med, Max)	1.7/6.8/8.0
	Heating [kW] (Min, Med, Max)	NA
Power input (Nominal)	Cooling [kW] (Min, Med, Max)	0.30/1.96/2.80
	Heating [kW] (Min, Med, Max)	NA
Energy efficiency	EER (Nominal cooling)	4.5
	BEE Star rating	4 Star
	COP (Nominal heating)	NA
Piping connections	Liquid pipe (Φ, mm)	6.35
	Liquid pipe (Φ, inch)	1/4"
	Gas pipe (Φ, mm)	15.88
	Gas pipe (Φ, inch)	5/8"
	Installation max. length [m]	50
	Installation max. height [m]	30
Refrigerant	Type	R-410A
	Control method	EEV
	Factory charging (kg)	2
Power supply (Indoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V/50Hz
Drain	Drain pipe (Φ,mm)	VP25(OD32/ID25)
Airflow rate	(High / Mid / Low) [CMM]	25 / 22 / 18
Sound	Sound pressure (High / Mid / Low) [dB(A)]	40/37/34
External dimension (Indoor unit)	Net weight (kg)	18
	Shipping weight (kg)	21.5
	Net dimensions (WxHxD) (mm)	840 x 288 x 840
	Shipping dimensions (WxHxD) (mm)	898 x 357 x 898
	Net dimensions (WxHxD) (cm)	84 x 28.8 x 84
	Shipping dimensions (WxHxD) (cm)	89.8 x 35.7 x 89.8
Panel size	Panel model	PC4NUFMAN
	Panel net weight (kg)	6.3
	Shipping weight (kg)	8.7
	Net dimensions (WxHxD) (mm)	950 x 48 x 950
	Shipping dimensions (WxHxD) (mm)	1010 x 117 x 1000
	Net dimensions (WxHxD) (cm)	95 x 4.8 x 95
Shipping dimensions (WxHxD) (cm)	101 x 11.7 x 100	
Power supply (Outdoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V, 50Hz
Compressor	Type	Twin BLDC Rotary
External dimension (Outdoor unit)	Net weight (kg)	48.5
	Shipping weight (kg)	52
	Net dimensions (WxHxD) (mm)	880x798x310
	Shipping dimensions (WxHxD) (mm)	1023x881x413
	Net dimensions (WxHxD) (cm)	88x79.8x31
	Shipping dimensions (WxHxD) (cm)	102.3x88.1x41.3
Operating temp. range	Cooling (°C)	-15~52 °C
	Heating (°C)	NA

### Optional accessories

#### Individual Controllers



MWR-WE13N



AR-EH03I



MWR-SH00N





AC100NN4DKC/TL	AC140NN4DKC/TL
4Way Cassette	4Way Cassette
AC100NN4DKC/TL	AC140NN4DKC/TL
AC100NXADKC/TL	AC140NXADNC/TL
Cooling only	Cooling only
3.0/10.6/12.0	3.5/13.6/15.5
NA	NA
0.60/3.79/4.70	0.8/4.86/7.90
NA	NA
2.8	2.8
2 Star	3 Star
NA	NA
9.52	9.52
3/8"	3/8"
15.88	15.88
5/8"	5/8"
50	75
30	30
R-410A	R-410A
EEV	EEV
2.4	2.9
1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz
VP25(OD32/ID25)	VP25(OD32/ID25)
31.0/25.0/19.0	33.5/27.0/22.0
44/39/33	45/41/37
18	20
21.5	23.5
840 x 288 x 840	840 x 288 x 840
898 x 357 x 898	898 x 357 x 898
84 x 28.8 x 84	84 x 28.8 x 84
89.8 x 35.7 x 89.8	89.8 x 35.7 x 89.8
PC4NUFMAN	PC4NUFMAN
6.3	6.3
8.7	8.7
950 x 45 x 950	950 x 45 x 950
1010 x 117 x 1000	1010 x 117 x 1000
95 x 4.5 x 95	95 x 4.5 x 95
101 x 11.7 x 100	101 x 11.7 x 100
1Φ, 2, 220-240V, 50Hz	3Φ, 4, 380-415V, 50Hz
Twin BLDC Rotary	Twin BLDC Rotary
71	86.5
76	96.5
940 x 998 x 330	940 x 1210 x 330
995 x 1096 x 426	995 x 1388 x 426
94 x 99.8 x 33	94 x 121 x 33
99.5 x 109.6 x 42.6	99.5 x 138.8 x 42.6
-15 ~ 52 °C	-15 ~ 52 °C
NA	NA

Panel Options



**PC4NUCEAN**  
(Purification)



**PC4NUFMAN**  
(WindFree™)



**PC4NUSKAN**  
(Classic)



**PC4NBSKAN**  
(Black)

# Control system structure

## Overview

Samsung Control System offers convenient, centralised control of individual indoor units or entire groups of multiple units. Using a variety of controls, users can centrally manage and control multiple functions for the units.

## Integrated management

Samsung's Integrated Management System provides the easiest way to manage a large number of air conditioning units at once. This integrated system helps users control, monitor, manage and maintain every little detail of their air conditioning needs.

Supporting convenient and optimised management, Samsung's Integrated Management System is an ideal solution for managing large and middle-sized buildings with many indoor and outdoor units.

## Building management

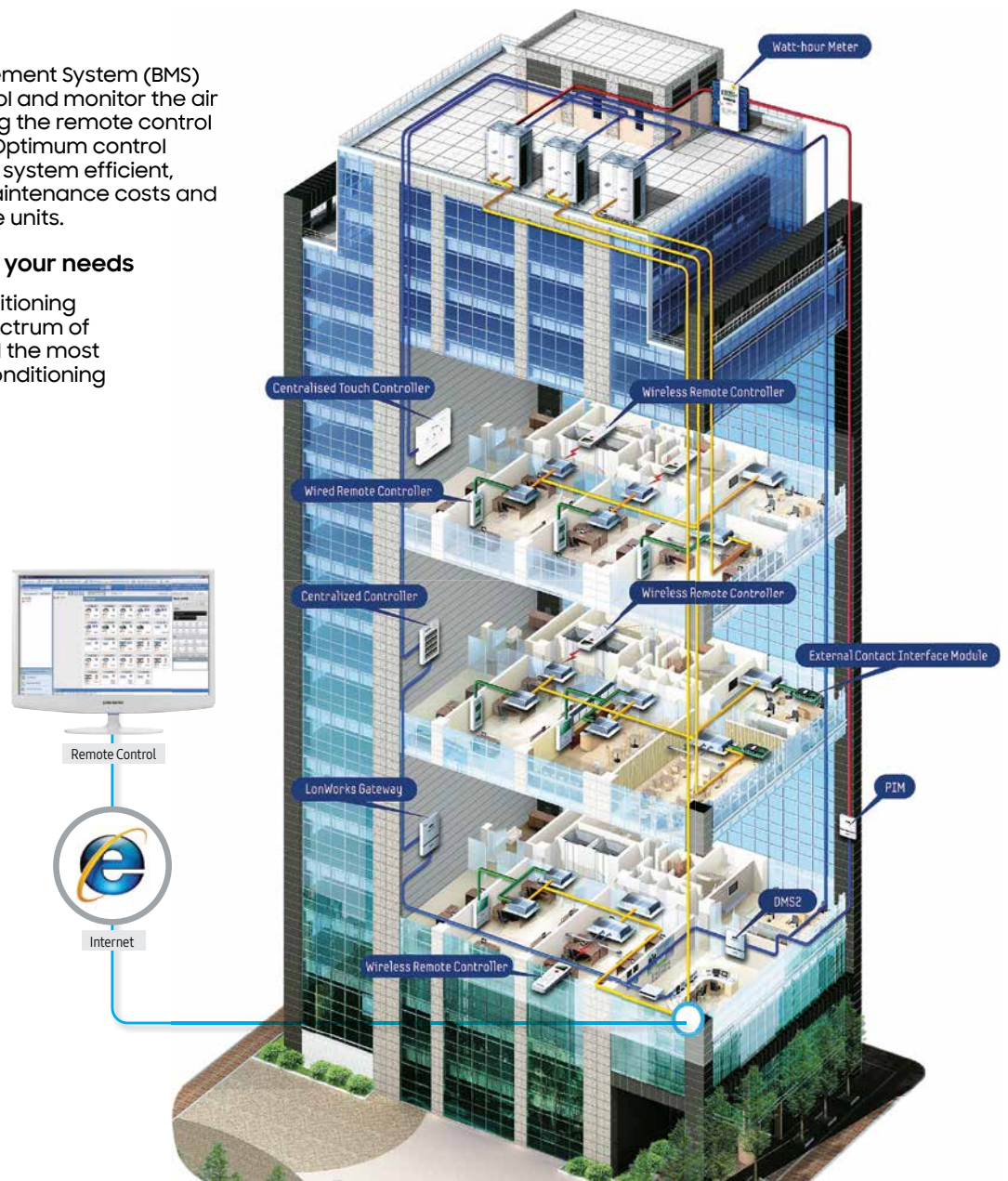
Samsung Building Management System (BMS) makes it possible to control and monitor the air conditioning network using the remote control and monitoring function. Optimum control keeps the air conditioning system efficient, saves energy, reduces maintenance costs and extends the lifespan of the units.

## Applications tailored to your needs

Samsung System Air Conditioning products include a full spectrum of offerings so users can find the most convenient, efficient air conditioning system to suit their needs.

## System controller

Samsung Control System offers various control options for indoor units. Users can control multiple units individually or simultaneously in groups to optimise convenience.



# Control system

Products designed for easy, holistic control

## Manage system air conditioners seamlessly with devices designed for convenience

The comprehensive suite of Samsung Control Systems include the following software, devices, controllers and modules.

### S-NET 3

This integrated software connects to the Ethernet to control the system air conditioners through Data Management Servers (DMS) from a single computer.



### DMS 2.5

DMS 2.5 is an explorer-based management device that stores and manages all the data relevant to the system air conditioner.



## On/Off controller

The On/Off controller controls the system air conditioners individually or in groups.



## Centralised touch controller

The touch centralised controller is the optimised management solution for the mid-sized site.



## Wired R/C and wireless R/C

These individual remote controllers are used to conveniently control single indoor units.



# S-NET 3

Integrated, complete control

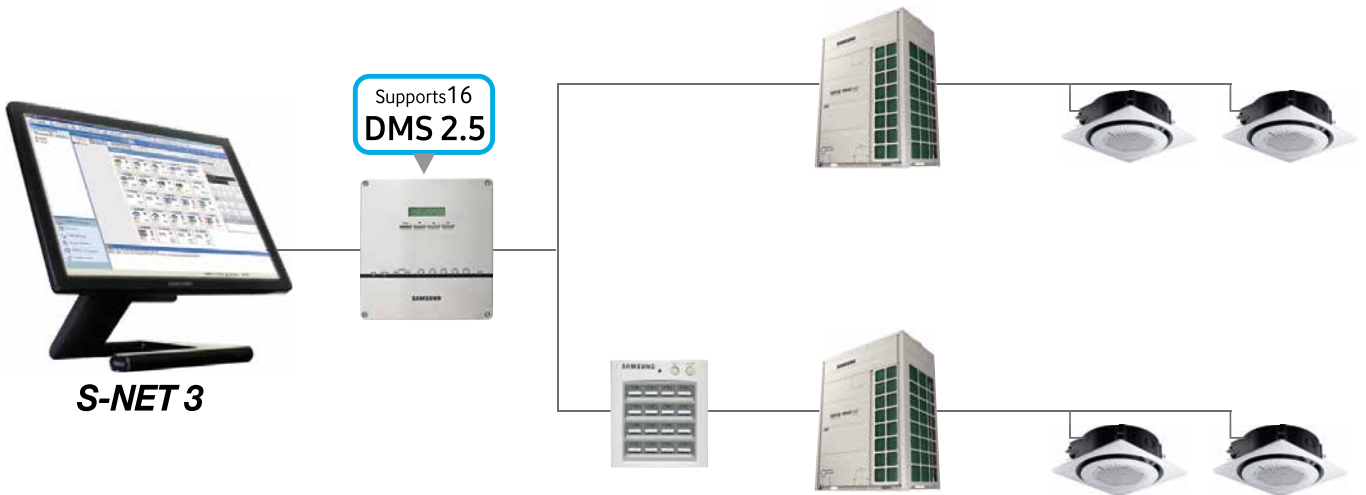
## Control multiple buildings with ease through centralised data management

S-NET 3 manages a group of buildings through data management servers (DMS 2) that individually manage each building. This Ethernet-based management system supports flexible, complete control of a wide variety of applications, providing users:

- Fully integrated PC management software
- Up to 16 DMS 2.5 connections through the Ethernet
- Centralised management of up to 4,096 indoor units
- Schedule and zone control
- Error and operation history management
- Power distribution management and analysis



## S-NET 3 system configuration





# S-NET 3

## Integrated, complete control

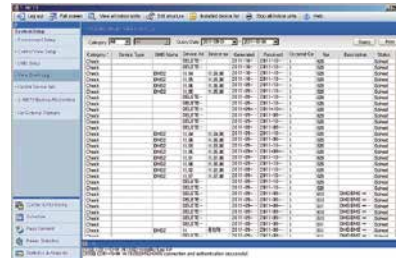
### Control and monitoring

Users can control and monitor up to 4,096 indoor units, including ERV, ERV PLUS, and AHU. Wireless and wired remote control restrictions provide greater oversight of operations. A temperature limit setting, operation mode lock and multiple/full indoor unit selection extend the range of control. Plus, an icon-based indoor unit display mode enables easy, more intuitive usability.



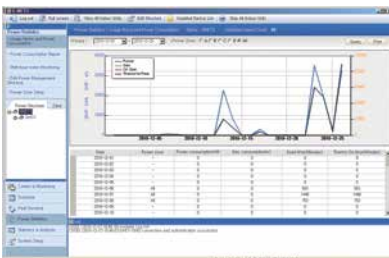
### History management

S-NET 3 offers error and event history management, as well as report generation and printing, so users can readily identify and resolve issues. The indoor unit also supports operation history management.



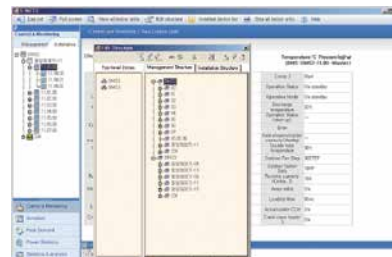
### Power distribution management

Users can ensure optimal power usage with a data query for power distribution and operation times. Administrators can then generate and print power distribution reports for a complete survey of operations. For more specific output, S-NET 3 includes time section settings for different electricity rates and a group setting for the power distribution summary.



### Zone management

With S-NET 3, users can customise the management structure regardless of the installation structure. They can also create and edit control zones and manage the tree structure for the control zones.



### Cycle monitoring

S-NET 3 enables users to monitor outdoor / indoor unit cycle data. (The monitoring function is supported only on specific outdoor unit models.)



### Schedule control

S-NET 3 provides easy-to-read graphical schedule settings, enabling administrators to schedule operation weekly or daily or exclude dates with the exception date setting.





# DMS 2.5

## Smarter functionality for maximum control

### Streamline management with smart, automated control

#### MIM-D01AN

The improved Samsung DMS (Data Management Server) 2.5 is now smarter. It can manage a variety of different air conditioning units, and the newly upgraded functions can automatically manage the air conditioning system for users. Key features include:

Built-in web server for PC-independent management and remote access control

Multiple upper-level control access (S-NET 3, Web-client)

Central management of up to 256 indoor units including ERV, ERV PLUS, AHU, DVM CHILLER and FCU Kit

User editable control logic

Accessible level management

Dynamic security management

Operation and error history management

Weekly / daily schedule control

### Monitoring of air conditioner operation

DMS 2.5 eliminates the need to open each outdoor unit to monitor operation. Detailed refrigerant flow check in the control room and reduced service lead time help keep the units up and running.

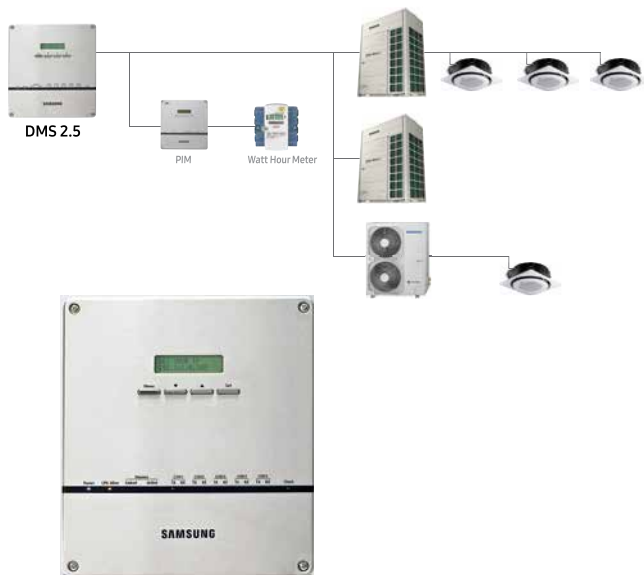


### Easy control and monitoring

Users can control and monitor up to 256 indoor units, including ERV, ERV PLUS, AHU, DVM CHILLER and FCU Kit, via the Internet. Control functions include on/off operation mode, fan speed and temperature settings.



### DMS configuration



Power distribution function

Current time management even during power failure (for 24 hours)

Data storage in non-volatile memory and SD memory Emergency stop function with simple contract interface

### Operation history management

DMS 2.5 features operation history for indoor units, which records data for up to 6 months. The operation history stores the following parameters:

Indoor unit address and name

On/Off time (year, month, day, hour, minute)

Operation mode (cool, heat, auto, fan dry, stop)

Set/Room temperature

Device type	Occurrence time	Control Unit	Control type	Controlled device
DVM	2018.02.15 18:57:29	DMS Web	Upper controller control	00.02.01, 00.02.00, 00.00...
DVM	2018.02.15 18:57:29	DMS Web	Upper controller control	00.01.01, 00.01.00

Control device(DVM): 00.01.01(00.01.01), 00.01.00(00.01.00)  
Control device type : DVM  
Power : On

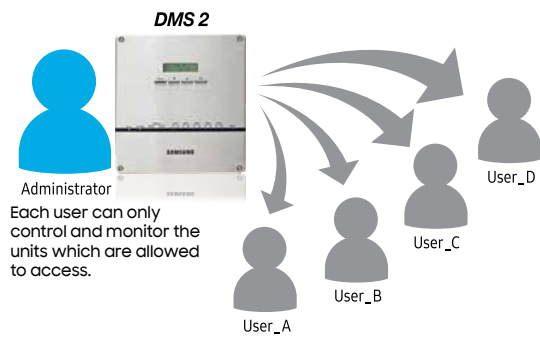
SD Storage Period - Up to 6 months

# DMS 2.5

## Smarter functionality for maximum control

### Accessible level management

DMS 2.5 enables administrators to specify the scope of unit control and monitoring by each user.



### Control for unoccupied room

DMS 2.5 offers useful function for accommodations. Using this function, the manager can keep the room temperature when guest goes out for a while. And manager can pre-cool or pre-heat the room temperature before guest enters the room.



### Dynamic security management

General users, managers and administrators can be registered separately by ID and password. Administrators (utility managers) have the authority to set access levels for DMS 2.5 functions on users.

Functions	Admin	Manager	User
	Access All	Changeable	
Control/Monitoring	0	0	0
Zone Management	0	0	X
Schedule	0	0	0
Power Distribution	0	0	X
System Configuration	0	X	X

### Enhanced graphical display

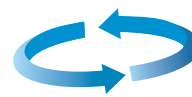
DMS 2.5 simplifies the task of monitoring system operations with its vibrant, intuitive graphical display. Icon-based, color-coded unit control makes it easy to recognise indoor unit status, while a handy, stylish controller makes management even more convenient.



### Powerful data backup

Critical data is safely stored on the DMS 2.5 SD memory card, including:

- Indoor/outdoor unit name
- Power distribution data
- Operation history
- DMS power on/off history
- System configuration



Data backup

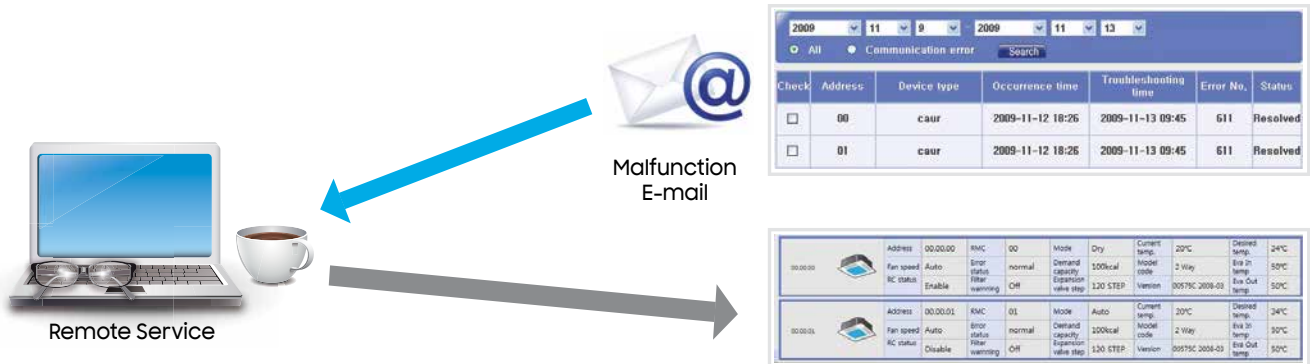


# DMS 2.5

## Responsive, efficient service

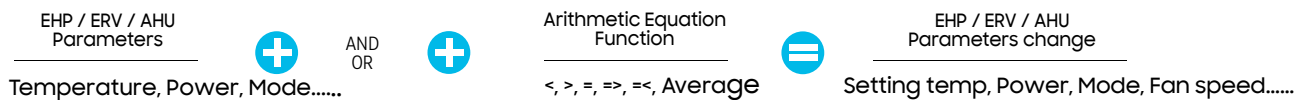
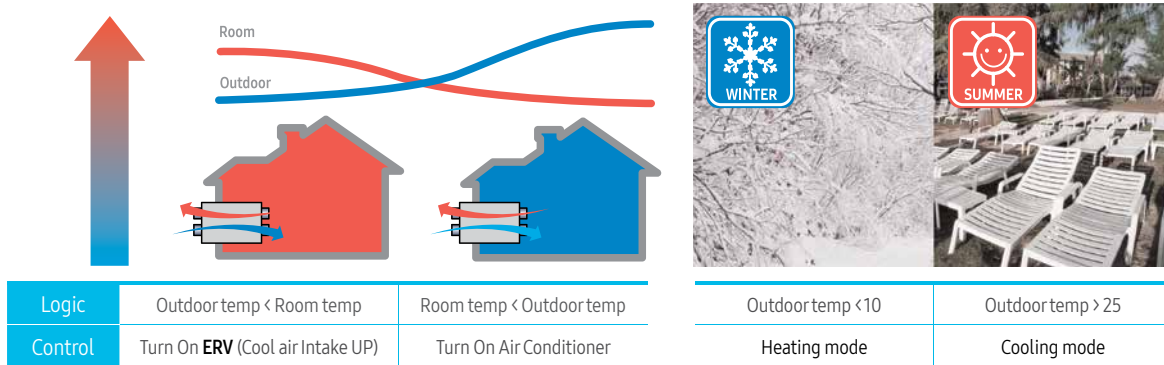
### Rapid, easy service response

DMS 2.5 provides easy remote control and monitoring through the Internet. Users can receive an email notification to a private Internet account in the event of a malfunction.



### User editable control logic

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



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

# DMS 2.5

## Extended, zone management

### Useful history management

DMS 2.5 records indoor unit operation and error occurrence history. Recorded history makes it convenient to analyse air conditioner operation and perform unit maintenance.



#### Operation History

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

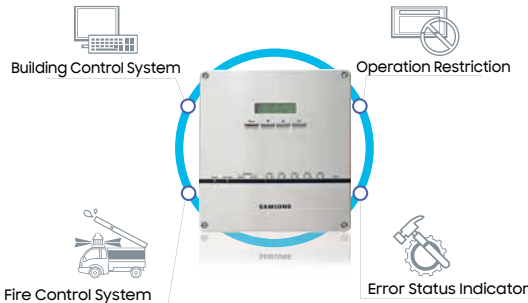


#### Error History

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

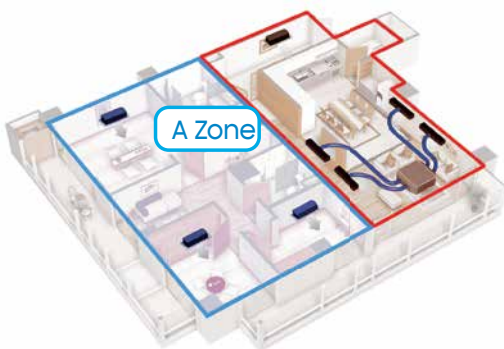
### Extended contact interface

General users, managers and administrators can be registered separately by ID and password. Administrators (utility managers) have the authority to set access levels for DMS 2.5 functions by user.



### Smart central management

DMS 2.5, the Control and Monitoring Zone edition offers smart and centralised zone management. Wireless and wired remote control restrictions provide greater oversight of operations. A temperature limit setting and operation mode restriction extend the range of control.



### Power distribution system

DMS 2.5 enables power distribution to a maximum of 256 indoor units and provides a data query for watt-hour, usage time and usage ratio. One year of power distribution data is saved in storage; these files are saved in Microsoft® Excel format. DMS 2.5 also provides current actual power consumption monitoring.



### Watt-hour meter interface module

The watt-hour meter interface module can be exclusively used for DMS 2.5 power distribution, displaying power consumption for each watt-hour meter. It connects with up to eight watt-hour meters and features a pulse interface for each meter.



# Centralised control

## Compatibility interface modules

### Optimise communications with interface modules

#### MIM-N01

MIM-N01 is the communication interface module between the outdoor units and the upper level controller, which has a different communication type. Users connect one interface module to one outdoor unit. For individual control, MIM-N01 supports a maximum of 48 indoor units; for group control, it supports a maximum of 16 groups.

#### MIM-N10

MIM-N10 is the communication interface module between ERV and controller. For individual control, MIM-N10 supports maximum 16ERVs, for group control, it supports a maximum of 16 groups.



### Operation mode selection switch

#### MCM-C200

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



### Touch controller

- Centralised control + function + schedule
- 17.78cm (7") wide display
- Screen touch control
- Easy zone setting and control
- Multi-language

### Centralised controller

#### MCM-A202DN

- Maximum of 16 group controls (Maximum of 128 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





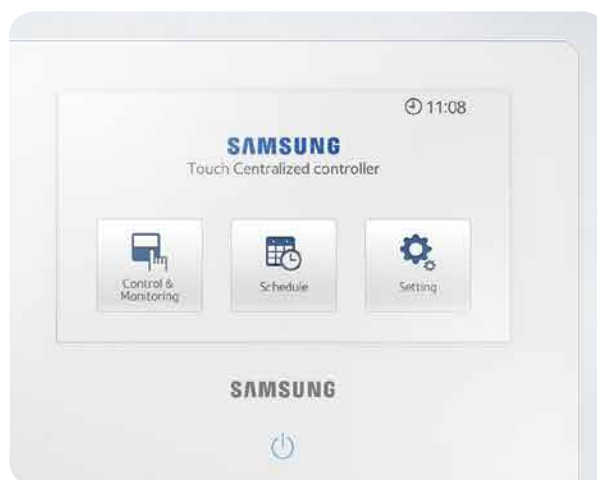
# New touch controller

## Comprehensive and solid

This touch screen controller can be directly connected to the system air conditioner through the centralised controller or interface modules, allowing for the control of up to 128 indoor units.

### MCM-A300N

- Flexible compatibility options (DMS 2.5, centralised controller, interface module)
- Central management of up to 128 indoor units including ERV, ERV PLUS and AHU
- Detailed cycling information monitoring
- Schedule function (Weekly, Daily)
- USB keyboard support
- Error display
- 17.78cm (7") wide LCD display
- Temperature limit setting
- Touch screen
- Zone control
- Child lock setting
- Operation mode lock
- External contact control



#### Control and monitoring

- Easy to check each device status using colour and icon
- Turning over pages with flicking or simple touch (No scroll bar)
- Big sized indication for using easily

#### Smart central management

- Temperature setting limitation

#### Zone management for multiple units

- Maximum 12 zone management
- Simply controls zone with one button
- Unique zone description icon makes it easy to recognise each zone

#### Schedule control

- Maximum 10 operation schedule settings
- Possible to make various operation schedules
- Weekly, daily, exception day setting

- Simple schedule setting User Interface
- Easy to execute and stop the schedule

#### External devices interlock

- Simple operation control interlocking with external contact (2 Digital input)
- Provides 3 types of operation pattern
- Indoor unit operation on/off status output (1 Digital output)

# Individual control

## Simple and convenient individual control

The individual control system has a variety of wired and wireless controllers that enable you to easily control your air conditioners. Users can choose the one that best suits their air conditioning environment.



# Individual control

## Simple, convenient operation

### Wireless remote controller

#### AR-EH03I

This wireless remote controller provides several control functions, such as on/off, operation mode, fan speed, airflow and temperature setting. With a wide display and soft touch buttons, users can easily and comfortably manage system air conditioners with additional control capabilities such as:

- WindFree™ mode using AR-EH03I
- Filter replacement alarm reset
- Simple schedule control
- Individual blade control (supports specific indoor unit models)
- Multi-channel wireless remote control (maximum of four channels)

#### AR-KH03I

- The wireless remote controller's jog shuttle and button offer a fun way to adjust the airflow.
- Fast and intuitive navigation
- Easy use with consistent function array
- Improved legibility (150% better than traditional controller)
- Dedicated comfort cooling button

### Wired remote controller

#### MWR-WE13N

The MWR-WE13N wired, unified controller supports models - AC, ERV, ERV Plus, AHU and FCU Kit. It features broad control functions, including on/off operation, mode fan speed, airflow, temperature setting and Sleep and Silent mode. Users can enhance system oversight with features such as child lock, automatic stop mode, different permission levels and wireless remote control restriction. On a clear, bright LCD-backlit screen, users can also monitor issues with the error display and apply summer-time operation, supported by a built-in room temperature sensor. Operators can easily and comfortably manage system air conditioners with additional control capabilities such as:

- Individual and group control (maximum to 16 indoor units)
- Filter replacement alarm reset
- Weekly schedule setting (A/C, CRV, A/C+ERV)

- Exception date setting
- Individual blade control (supported to specific indoor unit models)
- MWR-WW00N (for DVM Hydro)

### Wireless signal receiver

#### MRK-A10N

- It offers simple on/off control and improves system monitoring with features such as operation and error indication and a filter replacement sign.

### Simplified wired remote controller

#### MWR-SH10N / MWR-SH00N

- This simplified wired remote controller provides several control capabilities, such as on/off, operation mode, fan speed, airflow, temperature setting and filter replacement alarm reset. Users can exercise individual and group control for a maximum of 16 indoor units. An error display improves issue resolution, while mode selection protection guards the settings from tampering.

### ERV wired remote controller

#### MWR-VH12N

- The ERV wired remote controller features synchronised operation with indoor units, enabling individual and group control of a maximum of 16 ERVs. Additional control functions include on/off control, operation mode (bypass, heat exchange), fan speed and simple schedule control. Plus, an error display improves issue resolution.

### External room sensor

#### MRW-TA

- This external room sensor can sense the exact user environment temperature. It has a wire length of 12 m.

# Building management system

## Streamline operations and costs with integrated management

Samsung Building Management System (BMS) provides various control functions for integrated management of varied system equipment and air conditioners. As a result, BMS facilitates an efficient and economical operating environment.



LonWorks gateway

BACnet gateway

# Building management system

## BACnet gateway

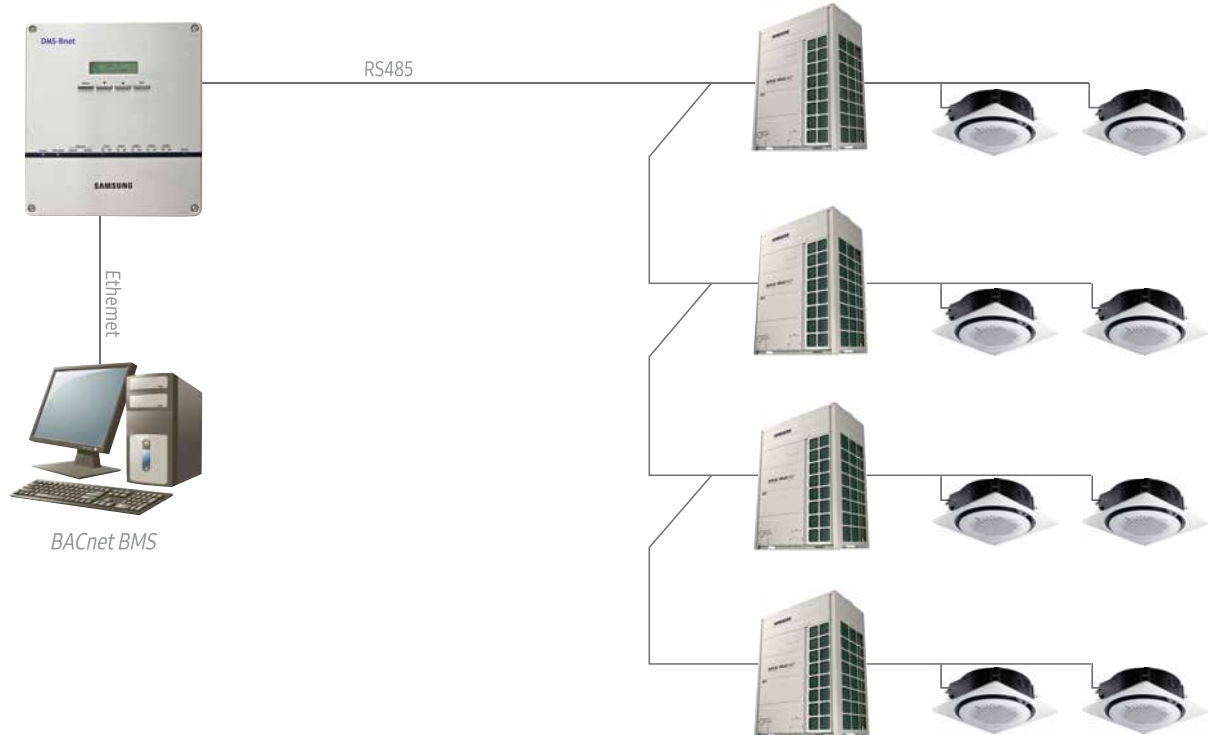
### BACnet gateway MIM-B17N

BACnet Gateway is an interface for connection to BACnet management system, providing users with a more convenient way to manage their air conditioning system. It can control a maximum of 256 indoor units.

Control		Monitoring	
· On/Off control	· Filter alarm reset	· On/Off control	· Thermo On/Off
· 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	



### Connection





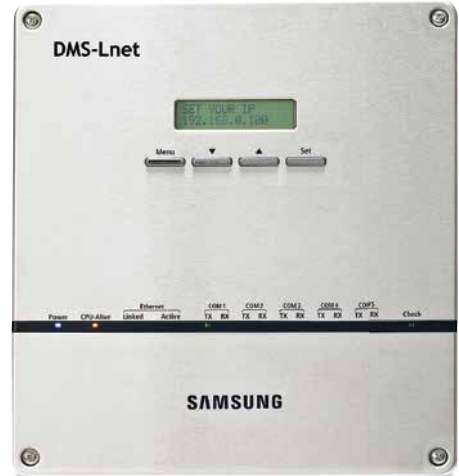
# Building management system

## LonWorks gateway

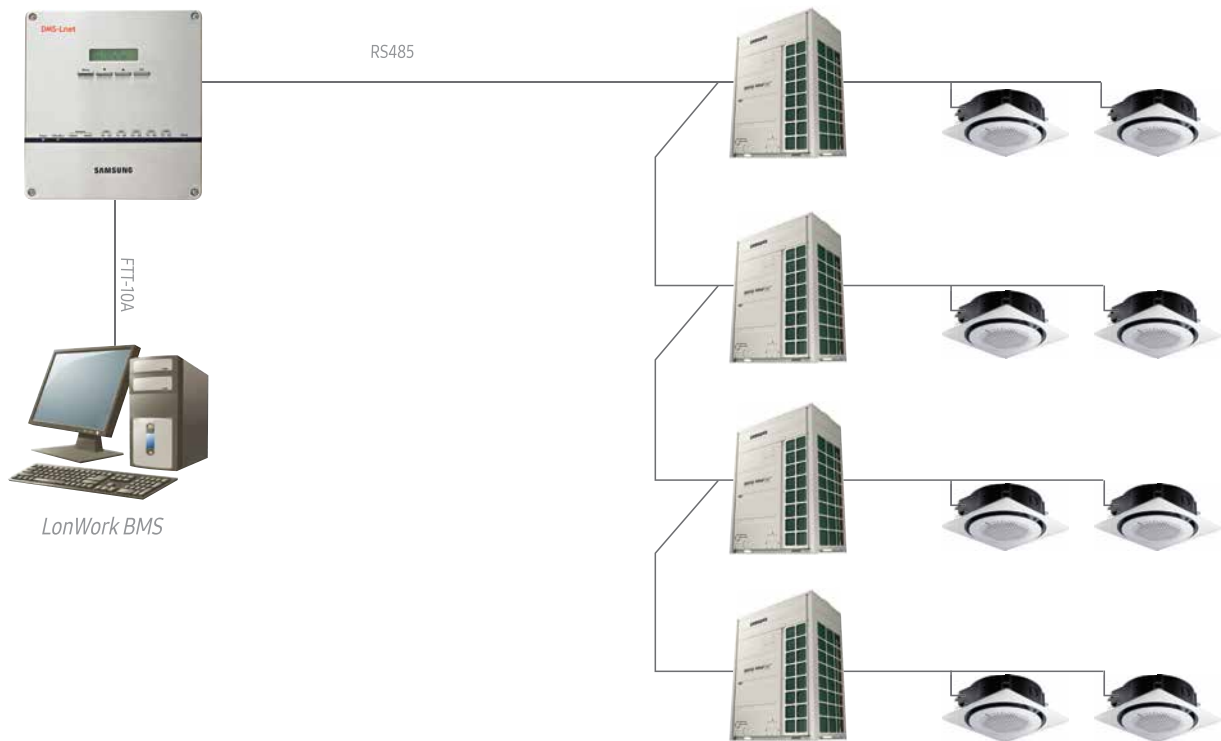
### LonWorks gateway MIM-B18N

LonWorks gateway is an interface for Lon-Connection to LonWorks management system, providing users with a more convenient way to manage their air conditioning system. It can control a maximum of 128 indoor units.

Control		Monitoring	
· On/Off control	· Filter alarm reset	· On/Off control	· Thermo On/Off
· 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	



### Connection



# Multi Wi-Fi kit

## Mobile solution for System AC

Smart plug for easy mobile control and monitoring\*

### Mobile solution

Controlling all indoors remotely



**Installing Multi Wi-Fi Kit**  
Up to 16 indoors with NASA communication  
**MIM-H04N**

### Key features of App

Simple DMS function is

- Scheduling**  
based on seven-days
- Grouping**  
for turning on/off instantaneously
- Energy monitoring**  
daily, weekly and monthly
- Energy monitoring is available only to products that update functionality



### Mobile solution

Control all indoors anywhere, anytime

**In the office**



Turn it off now, I forgot to when leaving home

**On the bed**



No need to look for the remote controller

**On the way**

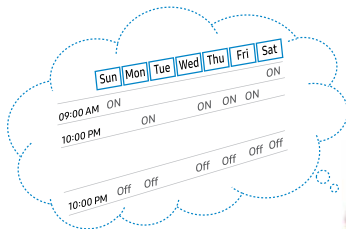


Turn it on now, cool home before I get there

- 1way
- 4way
- Ducted
- Ceiling
- 360 Cassette

### Feature of App - Scheduling

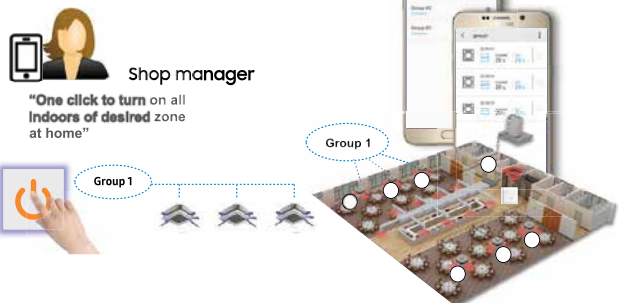
Easy setting for 7-day weekly schedule



**Shop manager**  
"easy-to-use timer for cooling"

### Feature of App - Grouping

Enable to group indoors to turn on/off at the same time



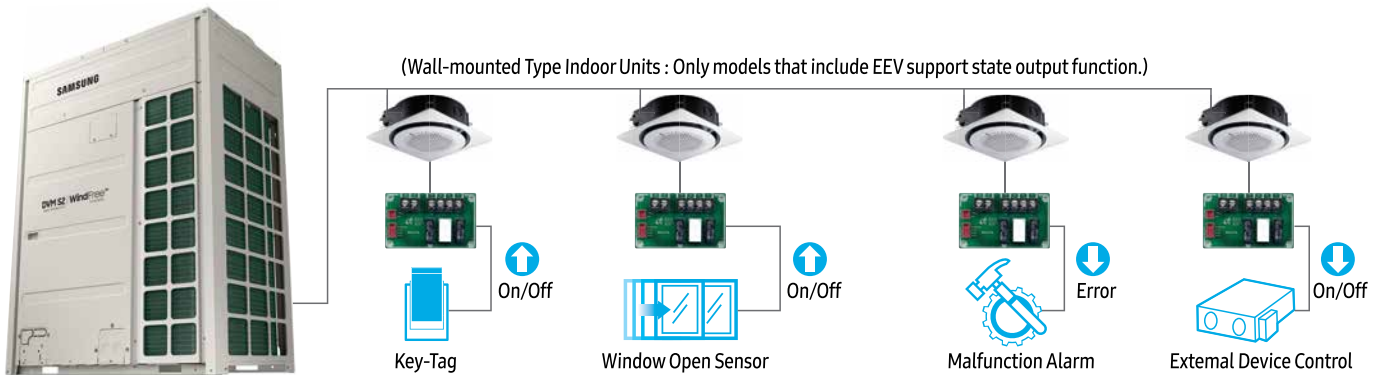
\*Requires a working Wi-Fi connection and compatible mobile handset. Image simulated for representational purposes only.

# Guestroom management module

## Avoid unnecessary energy usage and cooling costs

Samsung Guestroom Management System saves users the energy and money wasted on cooling an unoccupied room. The air conditioner is activated when the Key-Tag is in place and turns off when the Key-Tag is removed.

An external contact interface module provides direct indoor unit control via an external contact signal, as well as window-synchronised indoor unit control. The emergency control function features simple contact input. Plus the module generates indoor unit operation/error state output through relay contacts.

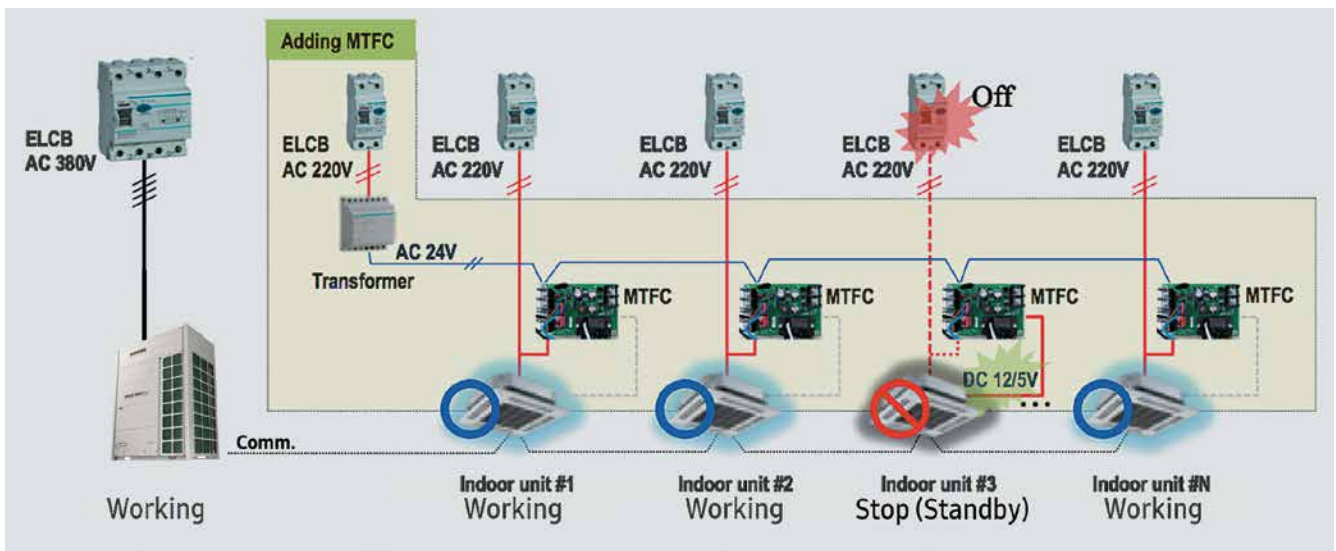


## Multi tenant function Controller (MCM-C210)

### MTFC solution

Even if some of the indoor units are switched off, MTFC detects it and supplies DC power to the indoor unit.

Also, the indoor unit stays standby mode closing EEV and blocking control signal until being switched on.



As a result, the other indoor units will be working well.

# AHU kit

## Optimise performance and energy savings with seamless AHU connectivity

Samsung AHU Kit allows DVM S outdoor units to connect to air handling units (AHUs), which results in energy savings and improved performance and efficiency.

### Features includes:

Variable capacity

2.5/5/7.5/10 HP Kit

Simple BMS application

0-10 V

Discharge air temperature control

Setting range: Cooling 8° - 18°  
Heating: 30° - 43°

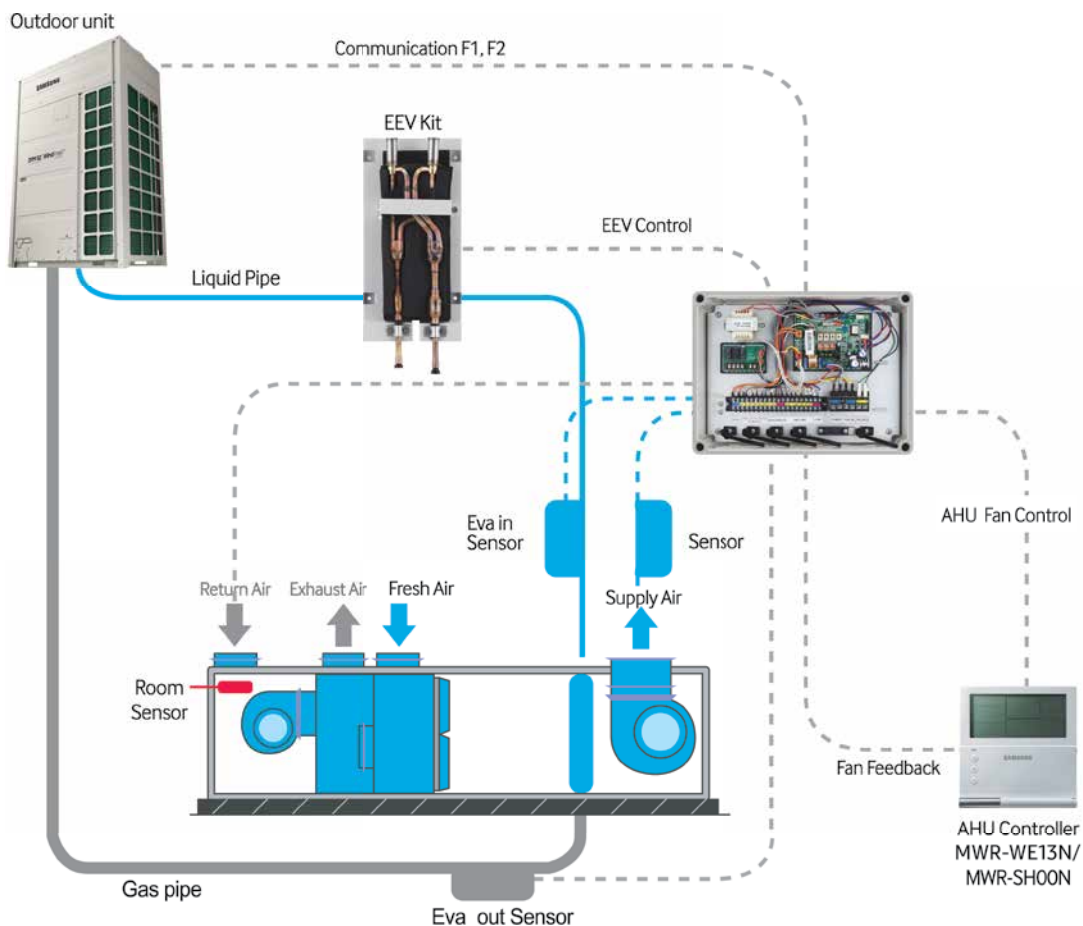
### EEV and AHU controller - MXD-A64K100E (10HP), MCM-D201N (upto 40HP)

MXD-K025AN

MXD-K050AN

MXD-K075AN

MXD-K100AN



# Now DVM Pro 2.0

Samsung DVM Pro 2.0 is an advanced design automation program that helps you design your air conditioning system more easily and precisely. You can simply select the most suitable equipment from the entire range of Samsung air conditioner products and design the system with its user-friendly interface, which significantly improves usability. And, it helps to ensure that the system's design complies with Samsung's engineering guidelines. The ability to export reports, pipe and wire diagrams, additional refrigerant values and other information make Samsung DVM Pro 2.0 a powerful tool for you as an engineer, designer or installer.



## 1. Register

Go to the Samsung DVM Pro website\*. Simply complete the registration process and a confirmation email with access details will be sent to you.



## 2. Access

Using a temporary password, sign in to the website. If you want, you can then change the password.



## 3. Download

Download the DVM Pro 2 installation file, view the user manuals, and start the design of your project.

## Sales Mode

All design processes, including product selection, piping wiring and system checks, are seamlessly integrated to provide a streamlined user experience, so you can respond to client requests rapidly. And, it includes an intuitive interface and range of convenient features to simplify and speed -up the whole design process.

### Product Selection

Simply find and quickly select any Samsung air conditioners with product thumbnails and "favorites" functions.

### Reports

Supports various report formats to suit any of your needs. You can also selectively print by item, such as a floor or system.

### Concurrent design for wiring & controls

The wiring and controls of the indoor and outdoor units can be designed on one screen. With fewer steps, designs can be completed quickly.

### Design based on rooms & floors

A visualized structure, based on floors and rooms, lets you intuitively view the installation location and working load.

## Designer Mode

A dedicated CAD program, developed by Samsung, lets you design system without the need for any expensive commercial CAD programs. It is also optimized with specialized features to design air conditioning systems.

### Piping design

Refrigerant piping and drainpipes can be drawn automatically, using the correct material and size to suit the installation guidelines perfectly.

### Reports

As well as a basic report, it provides integrated drawing data, including the equipment, power supply, and communication wiring diagrams.

### Modular Design

Let's you design the system in modules, which can be easily duplicated without wasting time and effort on repetitive tasks. So you can quickly complete a whole system.

### Compatible with AutoCAD

It is compatible with commercial CAD programs, including AutoCAD, for added convenience. Exported design and drawing data can be easily handled and modified separately.



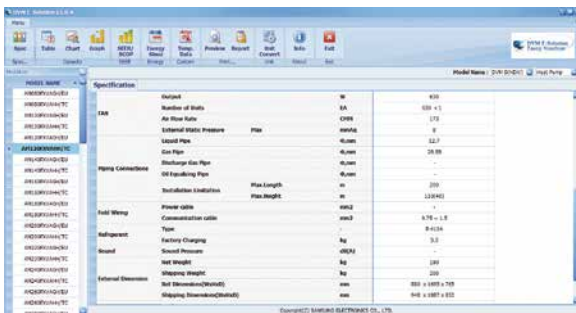
# Energy simulation software



## DVM E-solution

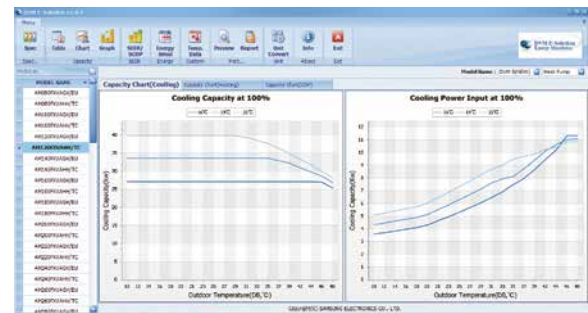
DVM E-solution is used to perform energy load and usage simulation based on different equipment selection and operating conditions, by taking into consideration the initial and operating costs. Simulation reports available in various file formats make supporting technical data easily accessible.

## Product specification



Engineers can search products with detailed specification at their desktops.

## Capacity chart



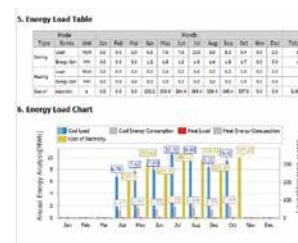
Designers can find capacity chart instantly at their desktops.

## SEER, SCOP and energy simulation



Engineers can optimise their design to achieve the best energy efficiency by carrying out energy simulation of DVM S with annual temperature data. The DVM S' SEER / SCOP at various temperatures and the weight factors can be simulated too.

## Automatic report



A comprehensive report that includes specifications, SEER, SCOP and energy simulation results can be generated automatically.

# Business with Samsung | Engineering

## Always optimising your air conditioning systems

### CAE (Computer Aided Engineering)

Samsung provides professional CAE support, with various analysis and evaluation services in the building design and information modeling phases. Using the workstations and super computers of the Samsung Advanced Institute of Technology, multiple projects can be simulated simultaneously. It ensures that the building has an optimised air conditioning system that works effectively and efficiently and provides a comfortable indoor environment.

### How to request



#### 1. Prepare

Prepare drawing data in advance that shows the installation conditions:

- An installation location and the layout of outdoor units
- A machine room and its louvre structure, if the outdoor units are installed in the machine room
- The building exterior and the layout of surrounding buildings
- The layout of indoor units



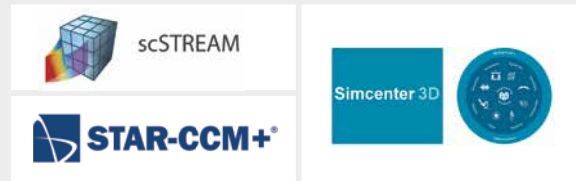
#### 2. Request

Contact a Samsung technical expert in your area. And, request engineering support in providing prepared drawing data



## Samsung CAE support includes:

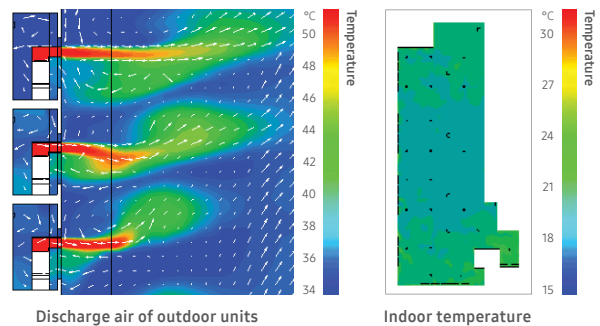
- Outdoor unit machine room temperature simulation
- Indoor unit room temperature simulation
- Air flow distribution simulation
- Specialised simulation of theatre, residential, airport and machinery room noise.



Various engineering softwares for Samsung CAE support

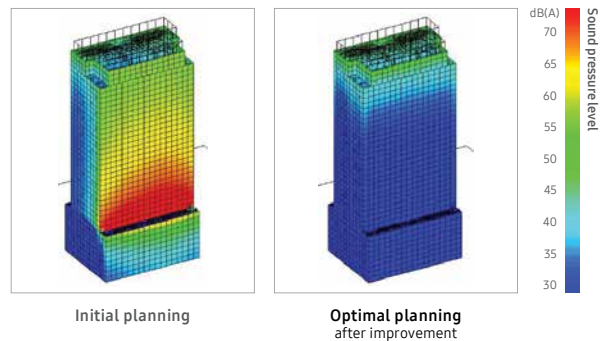
## CFD (Computational Fluid Dynamic)

The installation location and surrounding conditions significantly impact the performance of an air conditioning system. In particular, these days the structure of buildings has become more complex and often includes a machine room to hide outdoor units, so they are not visible on the outside. As a result, it is much more important to determine in advance if the preferred location will have any impact on the performance of the system. Samsung supports CFD simulation and analysis to assess the performance of the Samsung air conditioning system before deciding on its installation location, and also provides a guidance report if it is necessary to change it.



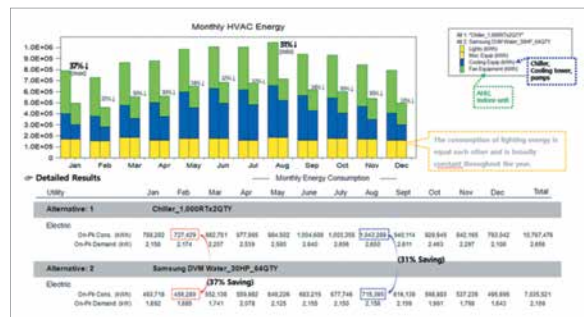
## Noise analysis

To ensure a more comfortable indoor environment, noise mitigation is now an important factor. So, it's essential to anticipate possible noises during the building planning stage – before they really happen. Samsung provides noise effect evaluation, based on the location of indoor and outdoor units, by modeling the actual building design and data about the air conditioning system. After the evaluation, Samsung will suggest the best choice of installation location, and also provide a guidance report if necessary.



## Energy simulation

In general buildings, the HVAC (Heating, Ventilating and Air Conditioning) products usually consume around 30% of the total energy used in the building. Samsung helps conduct energy simulations to analyse the economical efficiency of the installed HVAC systems by evaluating the operation cost of each product category. This enables developers and consultants to propose the optimal HVAC solution to their clients.



# R-Pro

Safeguard your air-conditioner from corrosive environment

## What is anti-corrosion spray?

- Protect or delay corrosion by spraying on the corrosive part or surface
- Spray on rusty surface of material to protect against salt damage and other corrosive media
- Adaptable for all kind of metal and no heavy metal (Pb, Hg, Cd) and carcinogen included
- Quick-drying (1-2min) and forming a protective film which is 15 (microns) thick, colourless, odourless (Soft coating)
- Long-lasting protection and no chemical reaction with salt water and rain water



Anti-Corrosion Spray 10EA

## The effect of R-Pro spray

When the equipment put into the corrosive environment, the lifetime of equipment will be reduced. The coating by anti-corrosion spray halts corrosion by blocking chemical reaction.

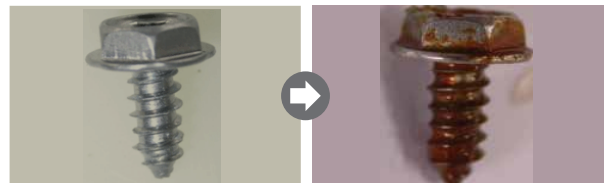
- Anti-corrosion of Cu, AL Pipe and brazing parts
- Increase corrosion resistance of chassis, edge of outdoor unit and non-coated part
- Increase corrosion resistance of screw and head of screw

## Screw with anti-corrosion coating



- Test 500H
- Material: Carbon Steel
- Surface treatment: Zn-Ni + Anti-corrosion coating

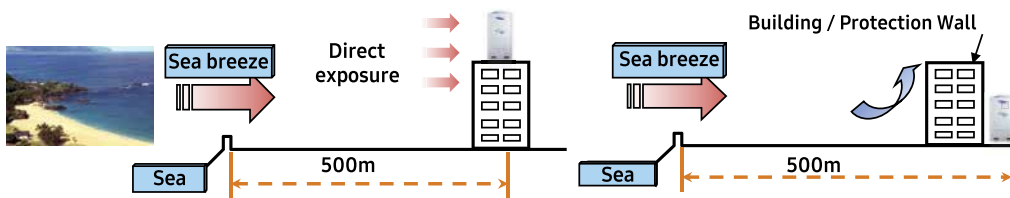
## Screw without anti-corrosion coating



- Test 500H
- Material: Stainless Steel 410
- Surface treatment: Zn-Ni

## Near seashore

Damage from sea breeze—due to the influence of sea breeze, corrosion is accelerated.



## Industrial/Corrosive-gas generating area

- Industrial atmosphere pollution by sulfur compounds (SO<sub>2</sub>, NO<sub>x</sub> and etc.)
- Cattle sheds, pigsties and waste water disposal plant, extract fan of toilet (hydrogen sulfide, ammonia and etc.)



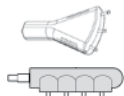




# Accessories

Classification	Image	Model	Application
		DVM S, single (New communication protocol)	
Drain pump		MDP-E075SEE3D	Slim Duct (2.0 – 14.0 kW)
		MDP-M075SGU1D	M.S.P Duct (9.0/11.2 kW)
		MDP-M075SGU2D	M.S.P Duct (12.8/14.0 kW) H.S.P Duct (14.0/16.0 kW)
		MDP-M075SGU3v D	M.S.P Duct (5.6/7.1 kW)
		MDP-N047SNC0D	O.A.P Duct (14.0 kW)
		MDP-N047SNC1D	H.S.P Duct (22.4/28.0 kW) Fresh Air Intake Duct (22.4/28.0 kW)
	MDP-G075SP	Duct S (External type)	
	MDP-G075SQ	Duct S (Internal type)	
PDM kits (High elevation kits)		MXD-A38K2A	8-12 HP
		MXD-A12K2A	14-16 HP
		MXD-A58K2A	18-22 HP
AHU kits		MXD-K025AN	7.0 – 8.75 kW AHU
		MXD-K050AN	14.0 – 17.5 kW AHU
		MXD-K075AN	21.0 – 26.25 kW AHU
		MXD-K100AN	28.0 – 35.0 kW AHU
		MXD-A64K100E	AHU EEV Kit (10HP)
	MCM-D201N	Control Kit (PBA, 10HP-40HP)	
360 Cassette AC panel		PC4NUDMAN	NASA, Square
		PC4NBDMAN	NASA, Square - Black
		PC4NUNMAN	NASA, Circle (Exposed installation)
		PC4NBNMAN	NASA, Circle (Exposed installation) - Black
		PC6EUCMAN (Purification)	
		PC6EUXMAN (Auto elevation)	
4Way Cassette front panel		PC4SUFMAN	4Way Cassette S - (600x600) - WindFree™
		PC4NUSKAN	4Way Cassette S - Waffle
		PC4NBSKAN	4Way Cassette S - Black
4Way Cassette (600 x 600) front panel		PC4NUFMAN	4Way Cassette S - WindFree™
		PC4SUSMBN	4Way Cassette S (600x600) - Black
		PC4SUSMFN	4Way Cassette S (600x600) -Classic
1Way Cassette front panel		PC1NWSMAN/PC1BWSMAN	1Way Cassette (New air fluid design) (2.2-3.6kW) Slim 1Way Cassette (5.6-7.1kW)
		PC1NUSMAN/PC1BWSEAN	Slim 1Way Cassette (2.2-3.6kW) 1Way Cassette (Classic) (5.6-7.1kW)
		PC1NWCAN (Purification) Small chassis	
		PC1BWCAN (Purification) Big chassis	
		PC1NUPMAN/PC1BWPEAN	Slim 1Way Cassette Z-Sliding (2.2-3.6kW) Slim 1Way Cassette Z-Sliding (5.6-7.1kW)



# Accessories

Classification	Image	Model	Description	Application
2Way Cassette front panel		PC2NUSMEN	-	2Way Cassette
Motion detect sensor		MCR-SMA	MCR-SMA	4Way Cassette S (600x600)
Y - Joint		MXJ-YA1509N/M	15.0kW and below	DVM S/DVM S2
		MXJ-YA2512N/M	Over15.0 – 40.6kW and below	
		MXJ-YA2812N/M	Over 40.6 – 46.4 kW and below	
		MXJ-YA2815N/M	Over 46.4 – 69.6 kW and below	
		MXJ-YA3419N/M	Over 69.6 – 98.6 kW and below	
		MXJ-YA4119N/M	Over 98.6 – 139.2 kW and below	
Y-joint (High pressure gas) for HR module		MXJ-YA1500M	23.2 kW and below	DVM S HR
		MXJ-YA2500M	Over 23.2 – 69.6 kW and below	
		MXJ-YA3100M	Over 69.6 – 139.2 kW and below	
		MXJ-YA3800M	Over139.2 kW	
Outdoor Joint (Outdoor connection)		MXJ-TA3819M MXJ-TA3419M	Below 48 HP	DVM S/DVM S2
		MXJ-TA4422M MXJ-TA4122M	Over 48 HP	
Outdoor Joint (High pressure gas) for HR module		MXJ-TA3100M	Below 48 HP	DVM S HR
		MXJ-TA3800M	Over 48 HP	
DPM Y-joint		MXJ-2D2509K	2-indoor unit connection	CAC Inverter (4way, 4way 600 x 600)
		MXJ-3D2509K	3-indoor unit connection	
		MXJ-4D2509K	4-indoor unit connection	
Header joint		MXJ-HA3819N	Over 69.7 kW	DVM S/DVM S2
		MXJ-HA3115M	Below 69.6 kW	
		MXJ-HA2512N	Below 46.4 kW	
MCU kits		MCU-S6NEK2N	Up to 48 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 61.6 KW	DVM S HR/DVM S2
		MCU-S4NEK3N	Up to 32 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 61.6 KW	
		MCU-S2NEK2N	Up to 16 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 32 KW	
		MCU-S1NEK1N	Up to 8 units - Below 16 kW: Port 1EA - Max capacity: 16 KW	
Anti-Corrosion spray		MOK-220SA	R-Pro	



## Branch offices

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Mumbai	022-66772000
Bengaluru	080-66595124
Chennai	044-30308282
Cochin	0484 - 4477123
Indore	0731-402 8282
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