

## 2017 SAMSUNG AIR CONDITIONER







## ADVANCED COOLING FOR A BETTER LIFE

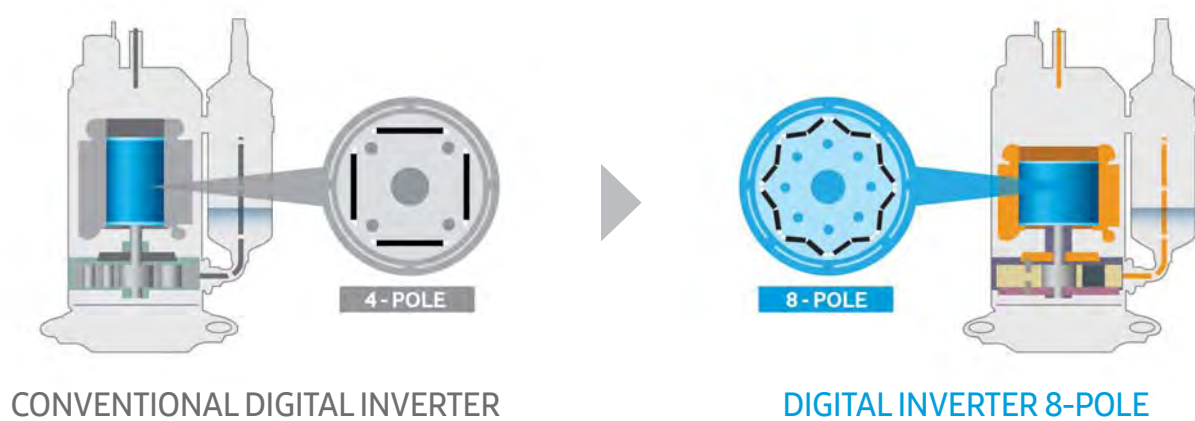
Samsung air conditioners enrich your life. Their innovative cooling technology not only cools you down faster, but also saves energy. In addition, the advanced filter system makes your environment more comfortable. Discover a new way of life that is cool, fresh and even convenient with Samsung air conditioners.







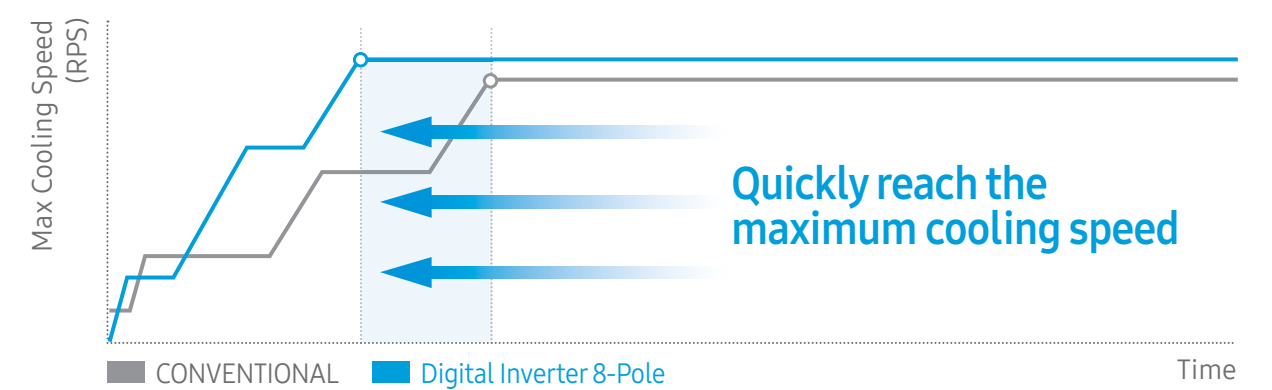
## The World's First Digital Inverter 8-Pole



The newly introduced **8-pole inverter** is the **core technology** of Samsung's advanced Digital Inverter Technology. It utilizes the world's first 8-pole motor instead of a 4-pole motor in the compressor of an outdoor unit, so there is **less torque fluctuation**. This ensures a more effective and efficient operation with **less vibration and also reduces energy consumption**.

\* Based on internal testing of compressor motors of Samsung air conditioner and leading air conditioners in the global market as at October 2015.

## POWERboost Technology™ with Digital Inverter 8-Pole



**POWERboost Technology™ with Digital Inverter 8-Pole dramatically shortens the time** that it takes for a compressor to reach the maximum Hz when it starts operating\*. So you can enjoy coolness even faster!

\* Tested on model AR12KSWDHWK compared with Samsung conventional model AR12FSSSBWK.



# NEW ERA OF REFRIGERANT GAS – R32

Refrigerants are an essential part of air conditioning. So it is very important to choose refrigerant that has a low environmental impact. Samsung has added a new type of refrigerant to residential air conditioners to protect the ozone layer and reduce global warming.

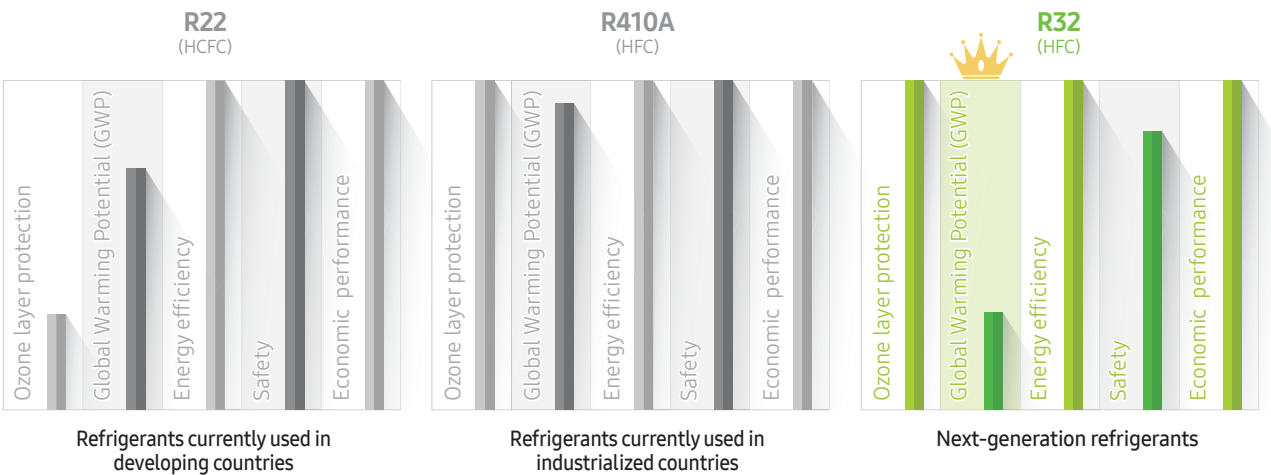


## Hello R32 Refrigerant

Samsung is presenting a new era of air conditioners with R32 refrigerant, which is environmentally friendly. R32 has a lower Global Warming Potential (GWP) of 675 compared to R410A with 2,088 and it also has an Ozone Depletion Potential (ODP) of zero, so it helps conserve the ozone layer, and can also be easily reused. Samsung’s air conditioner with eco friendly R32 refrigerant offers a new way of living to protect our Earth.

## Lower environment impact of R32

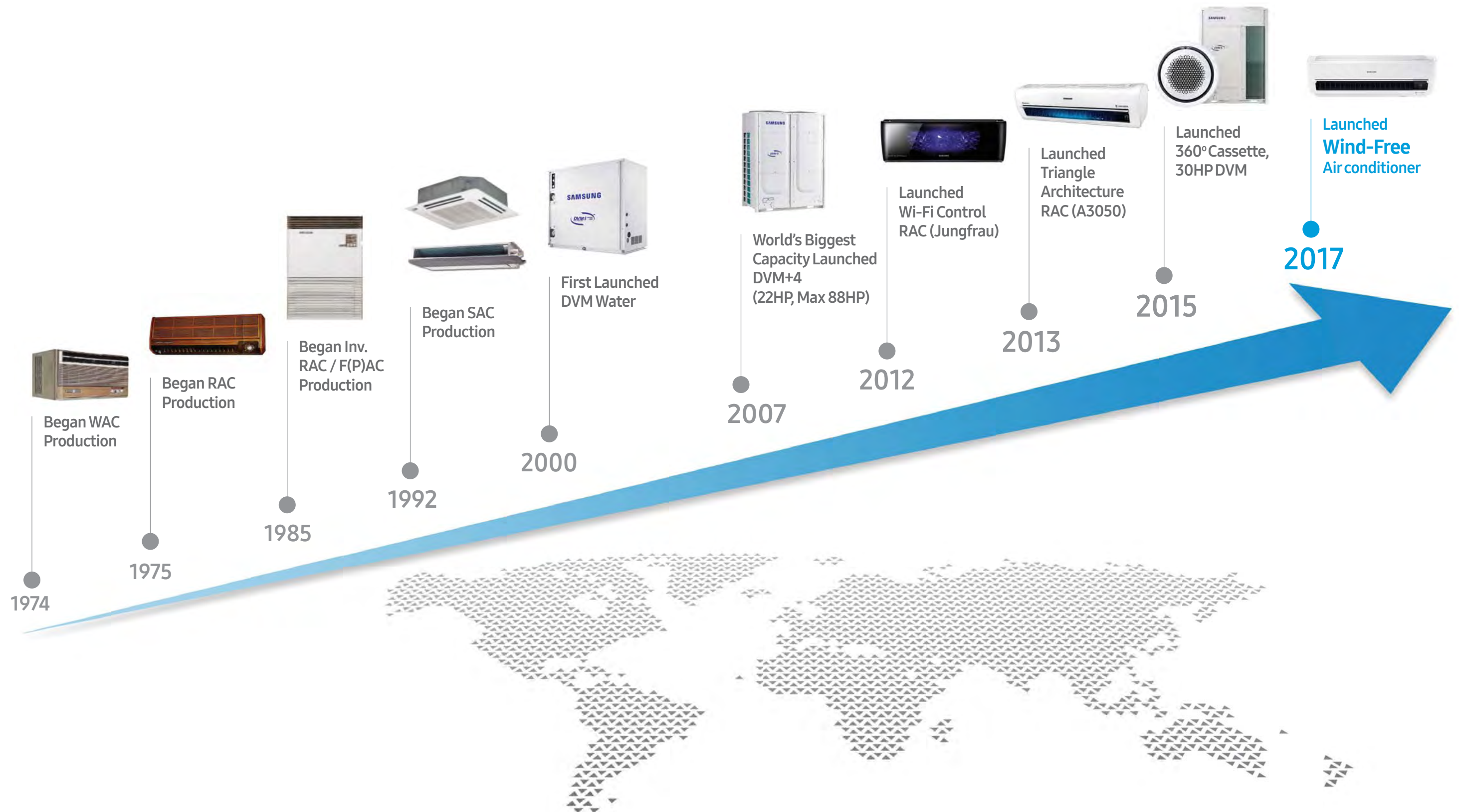
- 1 Zero Ozone Depletion Potential (ODP)
- 2 Non-toxic
- 3 Low Global Warming Potential (GWP) of 675 – just 32% of R410A refrigerant
- 4 Easy to recycle





# SAMSUNG AIR CONDITIONER HISTORY

For over 40 years, Samsung has been manufacturing air conditioners and continuously providing innovative technologies.



# SAMSUNG AIR CONDITIONERS HAVE RECEIVED WORLDWIDE RECOGNITION

Samsung air conditioners are recognized as world-leading products, having won various global awards with their stunning design and advanced performance.



## CES Innovation Awards 2015

The CES Award is given to products submitted to CES based on product design and technological innovation. The award is jointly evaluated by the US industrial design association and USA CEA(Consumer Electronics Association). The Samsung air conditioner A3050 (AR5500) received the award in the category of "Eco-design and Sustainable Technologies" during the 2015 CES.



## Efficiency & Innovation 2016

Organized by Fiera Milano International, 40<sup>th</sup> Mostra Convegno Expocomfort/Expobagno 2016 aimed to reward the best product that shows a high level of energy efficiency and innovation, providing a complete overview of the sector along the lines of "Efficiency & Innovation Path". And the Samsung Digital Inverter 8-Pole have been recognized in MCE's "Beyond Class A" initiative for product excellence.



## iF Product Design Awards 2016

As one of the world's oldest and most prestigious design competitions, the iF product design award has stood for qualitatively outstanding design awards for over 50 years. And the Samsung air conditioner, with its design innovations, was selected as a finalist in 2016. Samsung air conditioner continues to receive worldwide recognition and awards, proving the high quality of its functions and beauty.



## International Design Excellence Awards 2016

Started in 1980 by The Industrial Designers Society of America (IDSA), the International Design Excellence Awards (IDEA) fosters business and public understanding about the impact of design excellence on the quality of life and the economy. The IDEA program is considered the preeminent design competition with entries from over 39 countries. The Samsung air conditioner advanced to the finals in 2016.



Samsung is dedicated to creating innovations.  
Now it is time for you to discover the latest technologies  
and improvements in our advanced new products.



## Key reasons to buy Samsung Air Conditioners

1. Wind-Free Cooling
  2. Superior Cooling Performance
  3. Energy Efficiency
  4. Air Purification
  5. Smart Functions
  6. Durability
  7. Heating
  8. Additional Features
- Appendix. Tips for Installers

## Line-up



WIND-FREE COOLING, STAY COMFORTABLY COOL

## "What are people concerned with when using an air conditioner?"

### 1. Feel uncomfortable from direct cold air flow



When using an air conditioner while sleeping, I often wake up because I feel too cold from direct air flow. But when I turn it off, it's too hot to sleep.



When I turn on the air conditioner, after a while it's too cold because of direct air flow. So I always prepare cardigan or blanket to avoid catching a cold.

### 2. Worry about high electricity bills



When the weather is hot, I want to use the air conditioner all day long to keep a comfortable temperature. But I have to turn it off frequently because the electricity bill is too expensive.



**So, Samsung introduced Wind-Free Cooling Technology to make your life better**



# 1. WIND-FREE COOLING



## What is the Wind-Free Cooling technology?

Wind-Free Cooling\* effectively maintains a comfortable level of coolness without the unpleasant feeling of cold wind. Cool air is gently dispersed through 21,000 micro air holes, so you don't feel too hot or cold.



Firstly, the Wind-Free air conditioner cools the room with its Normal Cooling mode. When it reaches the desired temperature, you can change the mode to Wind-Free Cooling.



With Wind-Free Cooling, cool air is gently dispersed across the room through 21,000 micro air holes. It creates a 'still air' environment with a very low air speed of just 0.15m/s and no temperature fluctuation – so there are no annoying drafts and you don't feel too cold, just really comfortable.

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

## Stay comfortably cool

### Keep comfortable without changing settings

The Samsung Wind-Free air conditioner's 2-Step Cooling mode cools the air fast in Fast Cool mode, then automatically changes to Wind-Free Cooling mode to maintain the temperature. So you stay comfortably, without cold spots, and don't need to change settings.



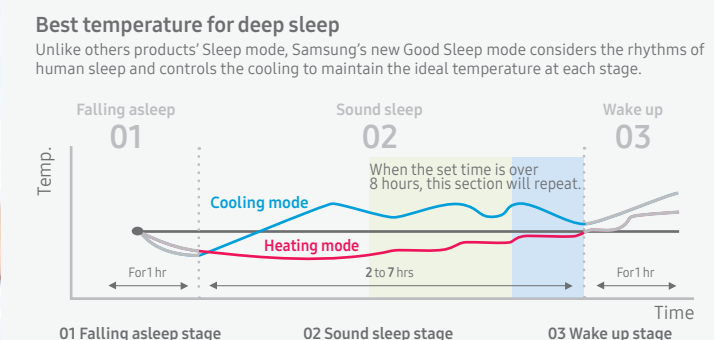
When it's turned on, the Samsung air conditioner begins cooling every corner much faster using its Fast Cooling mode. It works at the maximum Hz, while the ultra turbo setting powerfully spreads the air across a wide area by swinging its blades.



When it reaches the target temperature it automatically changes the mode to Wind-Free Cooling, which maintains the desired conditions by gently dispersing cool air. So it keeps you comfortable without feeling cold.

### Enjoy a good night's sleep without feeling cold

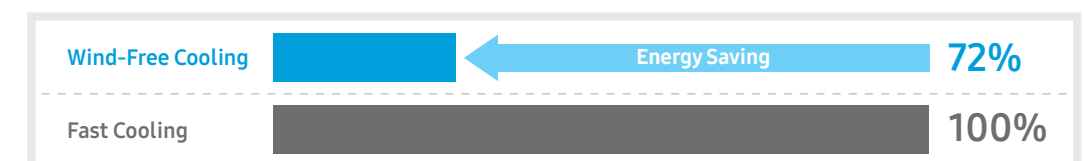
New Good Sleep mode creates the ideal climate in your bedroom for a good night's sleep – without an unpleasantly cold air flow. Its temperature control with Wind-Free Cooling keeps you feeling comfortable during the falling asleep stage, sound sleep stage and wake up stage. So you can fall asleep fast, sleep deeply and comfortably, and wake up feeling fully refreshed.



\* Tested on HP-A180VC.

## Energy saving

The Wind-Free Cooling mode consumes 72% less energy\* than Fast Cooling mode. With Wind-Free Cooling, the compressor operates at its minimum HZ to maintain the desired temperature, and the fan motor of the indoor also rotates at the minimum RPM. So, you can stay comfortably cool without worrying about electricity bills.



\* Tested on AR07MS170HA, based on the accumulated power consumption of Fast Cooling mode vs. Wind-Free Cooling mode. When compared to Normal Cooling mode, Wind-Free Cooling mode consumes 55% less energy.

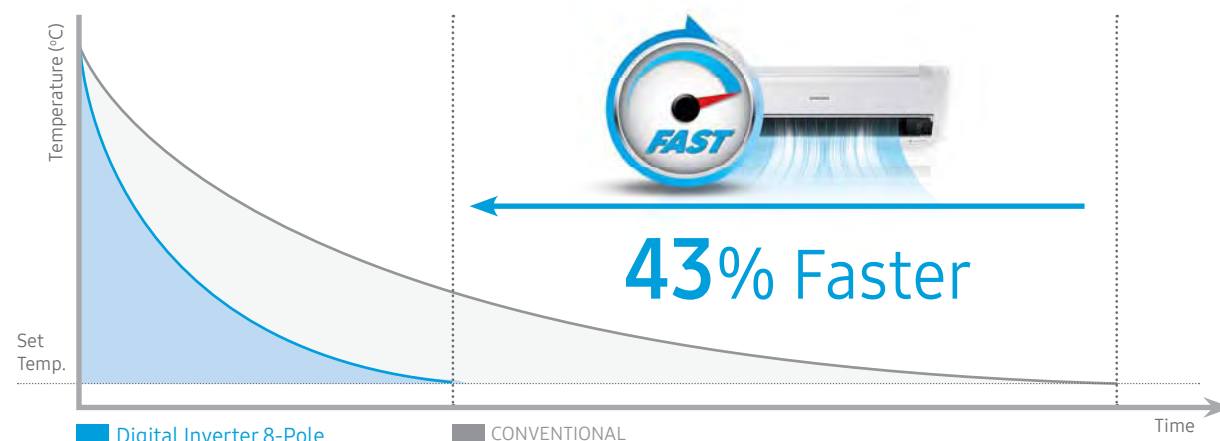


## 2. SUPERIOR COOLING PERFORMANCE



### Cools you down even faster

Fast cooling is the ultimate benefit of the Samsung air conditioners, and this is clearly the most important strength across the range of models. The cooling speed is significantly enhanced through the use of the world's first Digital Inverter 8-Pole technology.



\* Tested on AR12KSWDHWK, compared with Samsung Conventional model AR12EASER.

### Triangle Architecture for powerful cooling performance



The Samsung air conditioner has been designed from the ground up to be outstandingly efficient. Its unique triangle architecture has a **wider Inlet**, so **more air can be drawn in**. The improved width and angle of its outlet, extra v-blades and a bigger fan also ensure that **air is cooled and expelled faster, farther and wider\***. So refreshingly cool air reaches every corner of your room.

\* Tested on model AR09KSWDHWK compared with Samsung conventional model AQV09TWS.

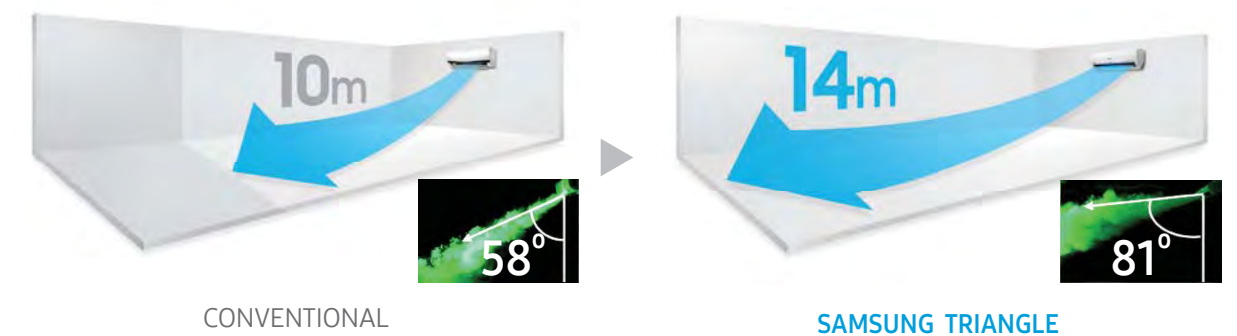


### Cools farther and wider



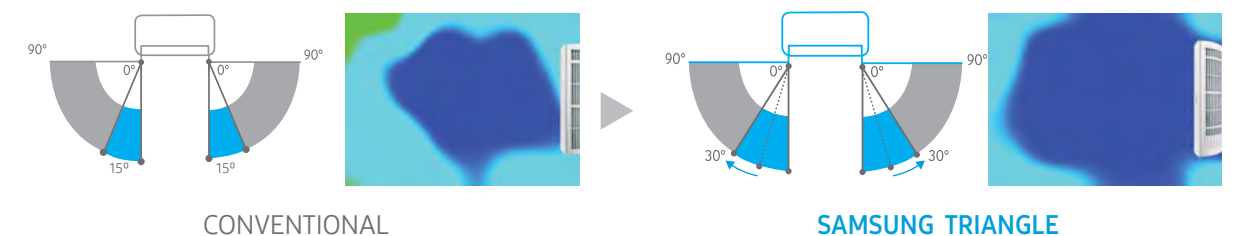
The outlet angle is different compared to conventional models, enabling a long air flow of 14 meters.

\* Tested on AR09KSWDHWK compared with Samsung conventional model AQV09TWS.



The improved width and angle of its outlet also ensure that air is expelled wider, minimizing blind spots.

\* Tested on AR09KSWDHWK model. Compared with Samsung conventional model AQV09TWS.





## 2. SUPERIOR COOLING PERFORMANCE

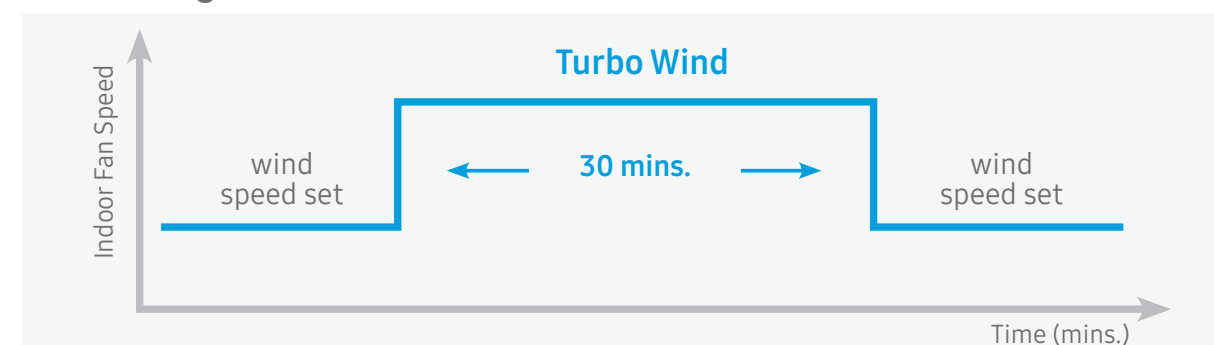


### Fast cool



With Fast Cooling mode, it **cools the room much faster** by running the compressor at the maximum level with the fastest fan speed for 30 minutes. So it provides **immediate relief** from the sweltering heat outside.

### Fast Cooling Mode



\* Tested on AR09KSWDHWK.



The room is cooling slowly which makes you uncomfortable.

### REGULAR COOLING MODE

\* Tested on AR18KCFHGWK.



Instant cooling brings comfort faster.

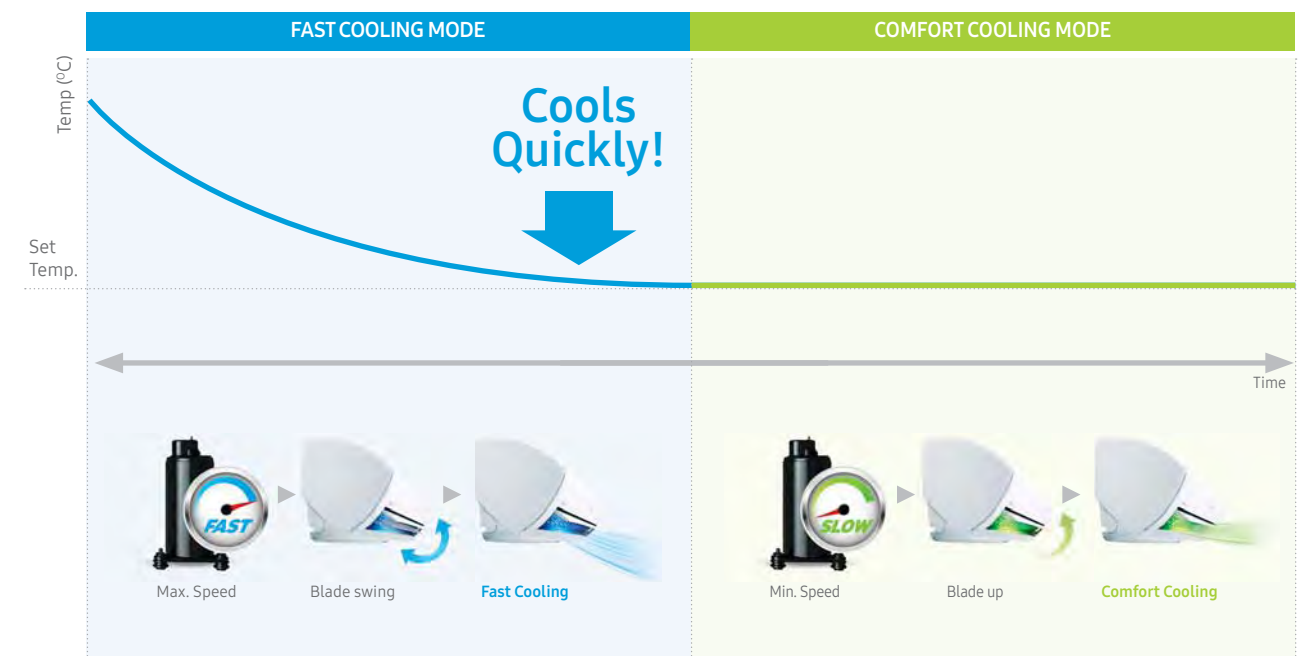
### FAST COOLING MODE

### Keeps you comfortable without feeling cold



Samsung air conditioner's 2-Step Cooling mode begins **cooling the air fast** using its Fast Cooling mode. It then automatically changes to Comfort Cooling mode to **maintain the desired temperature**, so don't have to keep changing the settings.

### 2-Step Cooling Mode



When it's turned on, the Samsung air conditioner begins cooling every corner much faster using its Fast Cooling mode. It works at the maximum Hz, while the ultra turbo setting powerfully spreads the air across a wide area by swinging its blades.

When it reaches the target temperature it automatically changes the mode to Comfort Cooling, which blows the air gently and adjusts the angle of the blades upwards, so it keeps you comfortable without feeling cold.



# 3. ENERGY EFFICIENCY



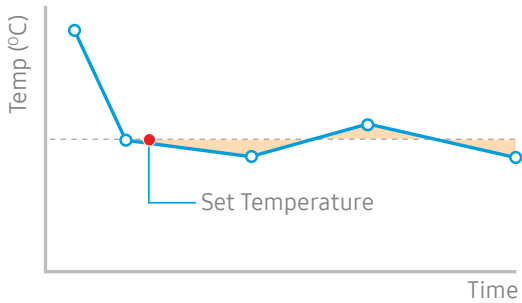
## What is the Digital Inverter?



Samsung Digital Inverter Technology saves energy while the air conditioner is on by maintaining the ideal temperature **without constantly turning the compressor off and on**.

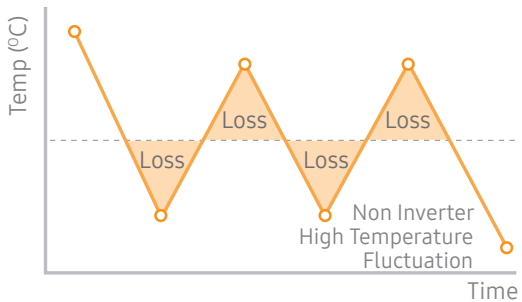
### Digital Inverter

Digital Inverter Technology automatically adjusts the power to cope with any temperature variances, assuring you have optimal comfort.



### Non Inverter

Non-Inverter air conditioners continuously shut down when they reach the set temperature, which causes large fluctuations in temperature and comfort.

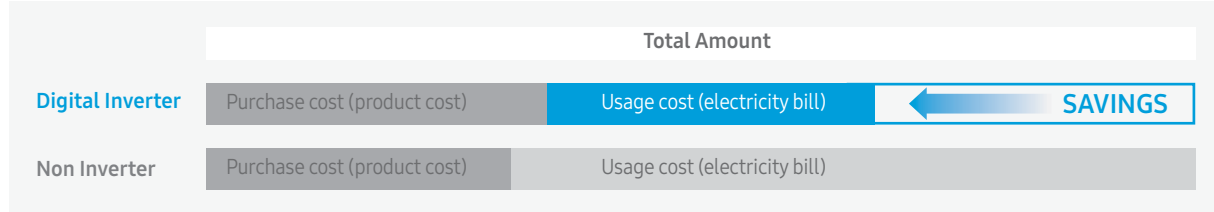


\* Tested on AR09HSSDAWK. Compared with Samsung conventional model AQ09TSB.

## Save more money with the Digital Inverter Payback



Although the unit price of the Digital Inverter air conditioner is initially higher than a non-inverter air conditioner, it may pay for itself in time with the money you save on electricity bills.



\* Based on AR12HVSPBSN compared with Samsung conventional model AR12HCSUAWQ. It may vary based on the region and the electricity pricing system.

## Works smart, Saves energy



The 2017 Digital Inverter 8-Pole consumes only 32% of the energy used by conventional models\*. It maintains the desired temperature without frequently turning off and on, so it's much more **quiet** and more **durable**.

\* Tested on AR09HSSDAWK compared with Samsung conventional model AR09HCFSTWK.

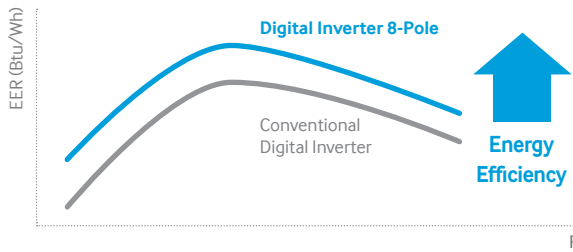


## Better energy efficiency



With the Digital Inverter 8-Pole, It achieves better energy efficiency.

\* Based on UG9AJ5090FER compared with Samsung conventional model, UG9A090FUAER.



RPS

## Digital Inverter Compressor

The Digital Inverter Compressor provides more credible durability with its 10 year warranty.

\* The warranty policy may vary based on the model & region.





# 4. AIR PURIFICATION

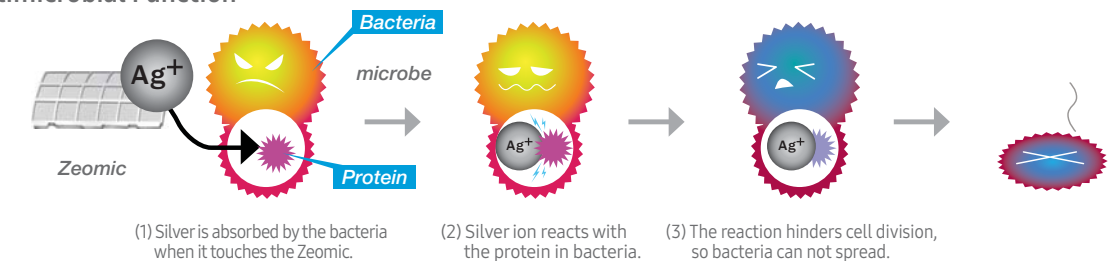


## Easy Filter Plus\_Filters airborne contaminants and allergens

Samsung air conditioner has a **superior filter mesh** that keeps your air **fresh** and the unit **clean**. It covers 100% of the air inlet hole and is coated with a unique anti-bacterial and anti-virus material.

\* Tested on TG07 ZEOMIC compared with TG07. Tested by FITI for Staphylococcus aureus, Klebsiella pneumoniae and Aspergillus niger.  
Tested by Japan Food Research Laboratories for H5N1. Tested by Institute of Tokyo Environmental Allergy for Cry J1, Derf1.  
\*\* Filter name may vary based on the model & region. (Easy filter, Easy filter Plus, 3 Care filter)

### Antimicrobial Function

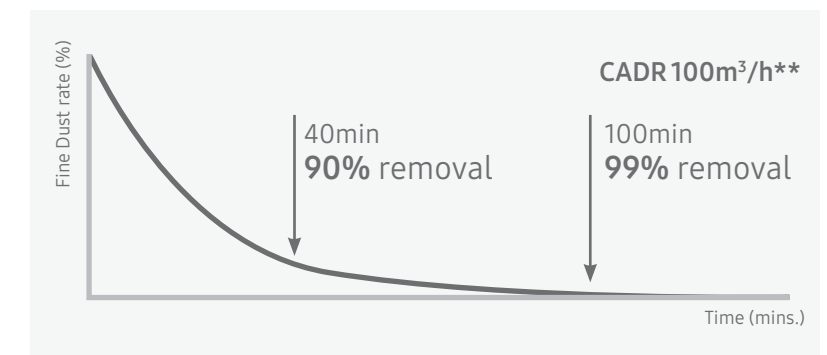


## PM2.5 Filter\_Captures up to 99% of fine dust

PM2.5 filter which covers the whole air suction area, has an **electrostatic charger** to give fine dust a positive charge, so it is **strongly attracted** to the negative alloy plate.

A PM2.5 Filter keeps your air clean by capturing 90% of fine dust in 40 minutes and 99% in 100 minutes. It covers 100% of the air inlet hole and is also washable, so it's easy and cost-effective to maintain.

\*\* Tested by China household appliances detection.  
Based on AR13KVSSLWKST.  
\* Size of chamber : 30m<sup>3</sup>

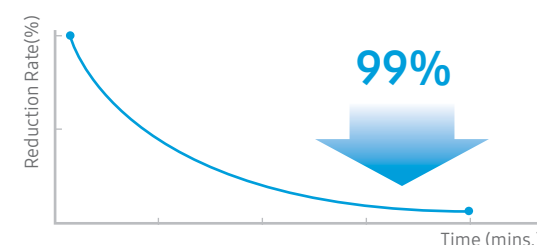


## Virus Doctor\_Reduces up to 99% of viruses

Virus Doctor reduces up to 99% of certain harmful viruses, bacteria, mold and airborne allergens\*.

\* Based on SPI device, Tested in Kitasato Environmental Science Center (Japan) & Chungnam National University (Korea)  
Data has been measured under specific testing conditions and may vary based on environmental factors. (Size of chamber : 500cc~1m<sup>3</sup>, Device only, Measurement time 60~300min)

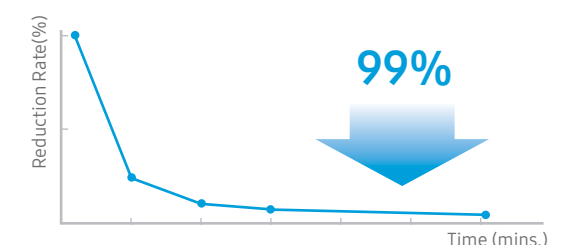
### Influenza subtype A H1N1 Inactivation Test



\* Research carried out by : Professor Seo Seng-hui of Chungnam National University (Developed the world's first H1N1 vaccine for the human body)  
\* Test Sample : Device only \*Size of chamber : 500cc  
\* Subtype A H1N1, A/California/04/09

### MRSA (Antibiotic-resistant bacterium)

Virus doctor reduces 99% of MRSA, which is resistant to antibiotics



\* Testing Institute : Kitasato Environmental Science Center  
\* Measurement time : 2 hours \* Test sample : Device only \* Size of chamber : 1m<sup>3</sup>  
\* MRSA(Staphylococcus aureus ATCC 33591)

## Ultra Wide PM2.5 Filter

Samsung air conditioners feature a wide filter that covers 100% of the air inlet hole. Unlike conventional models that only have partial filters, Samsung Air Conditioner's PM2.5 Filter completely filters all of the air coming in, so it captures fine dust more effectively and emits clean air.



CONVENTIONAL

SAMSUNG TRIANGLE

\* Tested on AR10KVSSLWK models compared with AS-1267.



# 5. SMART FUNCTIONS



## Control it anywhere

Samsung air conditioners offer **Wi-Fi control** using a Smart Home App on your smartphone, which lets you remotely turn it on and off, control the functions and schedule its operation at anytime and anywhere. \*

\* Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.



## Create smart home with an app

The Smart Home App also lets you **centrally control** all of your **Samsung smart appliances** with a range of useful tools. With Master key, you can schedule your air conditioner to start in the morning or when you get home.

\* Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.

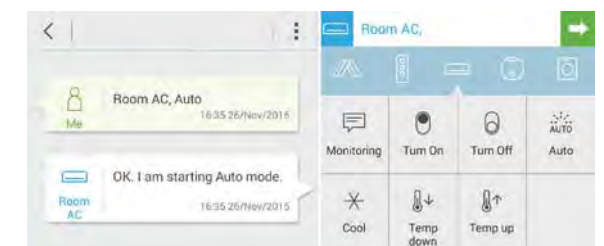


## Real time update from your AC



Smart Chat gives you **live feedback** about how your air conditioner is operating. You can check and control it as if you were chatting.

\* Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.

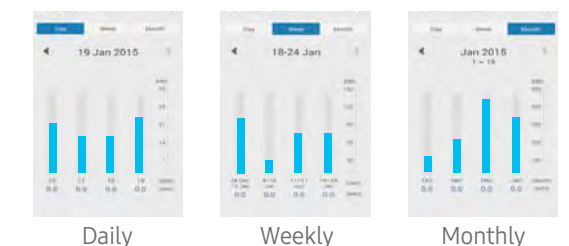


## Energy consumption monitoring



You can check the amount of electricity consumed daily, weekly or monthly. You can also limit the power consumption to ensure **maximum energy efficiency**.

\* Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.  
\* Based on rated wattage when operating. The usage shown on a Smart Home APP may slightly differ from the amount of electricity actually consumed.



## Easy troubleshooting



The Smart Check automatic error-monitoring system detects and diagnoses problems and provides easy troubleshooting solutions using a smartphone App. So it **saves you time and potentially expensive repair bills\***.

\* This function only operates for certain error modes and is not a substitute for periodic service checkups. Samsung application account is necessary.



## Ensure proper installation



Smart Installation is a self-diagnosis feature that ensures your Samsung air conditioner is installed perfectly by your service engineer. **It automatically checks for installation faults** that can cause problems when using the air conditioner.

\* Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.





# 6. DURABILITY



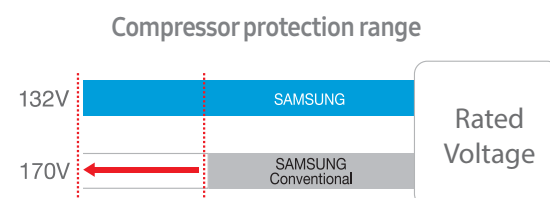
## Triple Protection Plus



### 1 Compressor protection

Samsung advanced compressor **protects itself** from **unstable electrical** conditions and is also until 132V, compared to a conventional 170V.

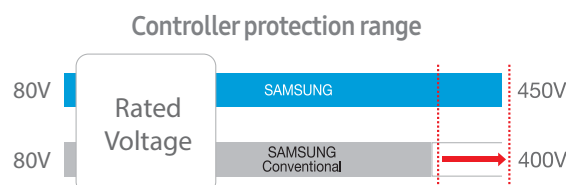
\* Based on AR18KCFHGWK compared with Samsung conventional model AS18ULA.



### 2 Controller protection

Samsung's advanced controller adjusts itself to avoid breakdowns from voltage surge. This special technology **withstands power fluctuations from 80V to 450V**.

\* Based on AR18KCFHGWK compared with Samsung conventional model AS18FCMID.



### 3 Fin & Cabinet protection

The anti-corrosion fin condenser and MCC\* are designed with strong corrosion-resistant material to **protect them from rusting**. And the cabinet is now thicker, so it can ensure harsher conditions.

\* MCC : Multi Channel Condensor

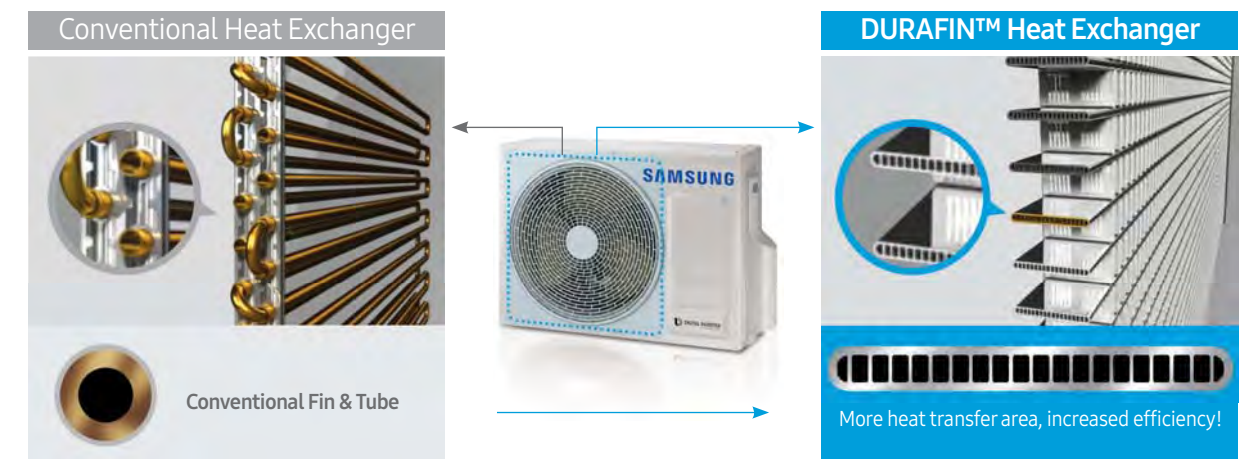
\* Tested on AR18KCFHGWK. Compared with Samsung conventional model AS183UGC.



## DURAFIN™

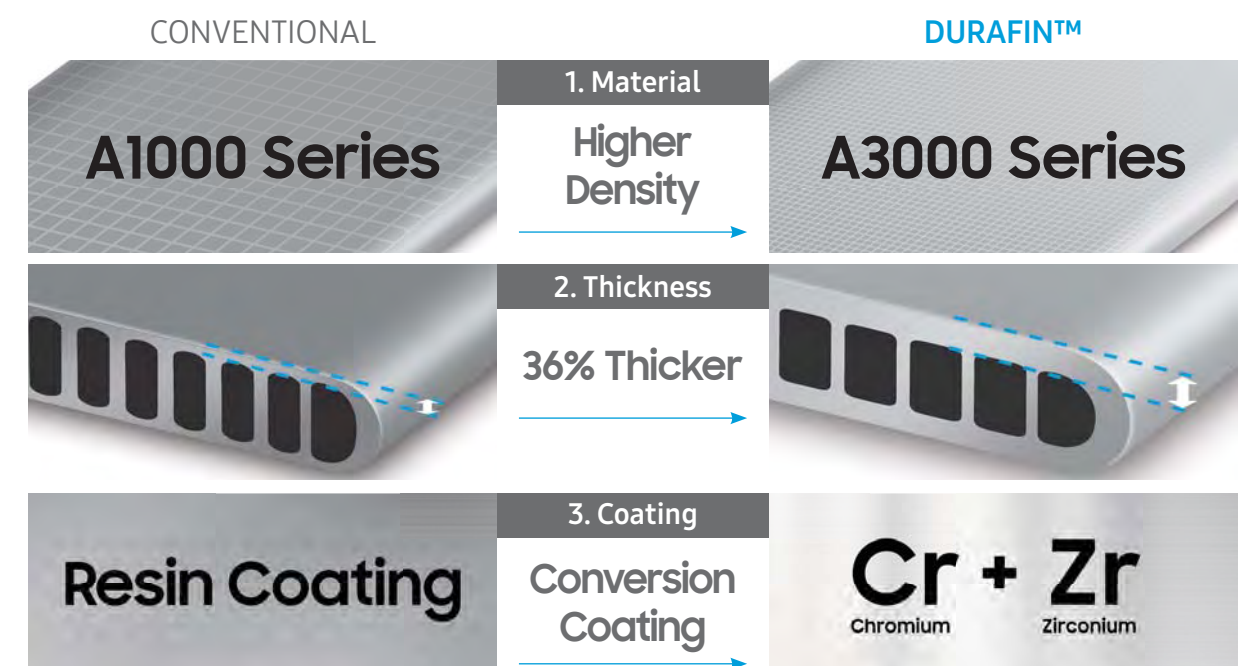


Thanks to the improved corrosion-resistant material, Samsung DURAFIN™ protects itself from rusting. And its unique shape provides more space for heat transfer, resulting in **better efficiency\***.



\* Based on AR18KRFNEWK compared with Samsung conventional model AR18JRFNFWK.

DURAFIN™ has been improved even MORE!



\* Based on AR18KRFNEWK compared with Samsung conventional model AR18JRFNFWK.

**Durable even in a salty air environment**

DURAFIN™ passes the Sea Water Acetic Acid Test(SWAAT) over 90 days.

\* Based on AR18KRFNEWK compared with Samsung conventional model AR18JRFNFWK.





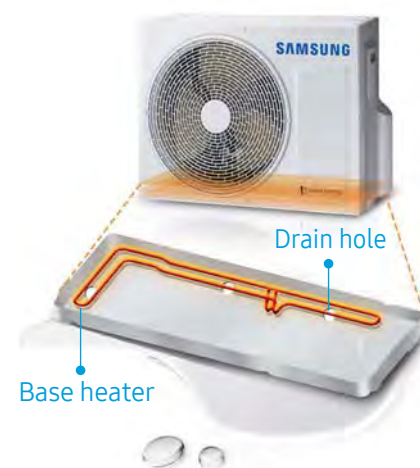
# 7. HEATING



## Excellent heating performance even at -25°C

The outdoor unit is equipped with a **base heater** that prevents it from becoming frozen, and also has a **drain hole** to improve the drainage of any melted water. So, even at -25°C, it continues working well in heating mode without freezing.

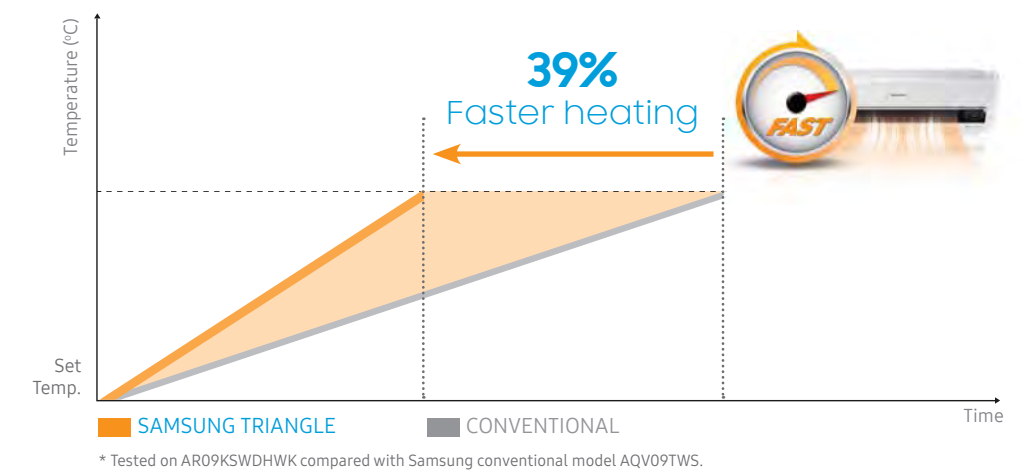
\* Based on internal testing result, tested on AR09JSFPPWQ.



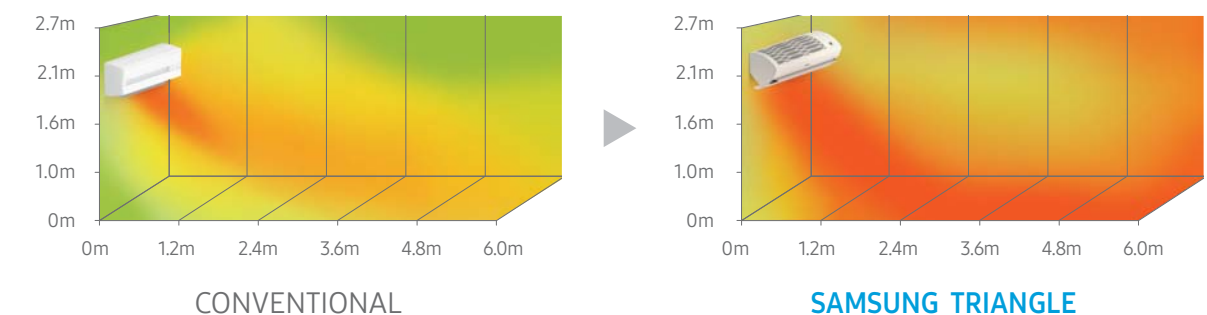
## Heats faster



Fast heating mode quickly distributes warm air to every corner of your room. Thanks to the unique triangular architecture, it heats areas quickly, **reaching desired temperatures faster** than conventional models.



## Heat efficiency comparison



\* Tested on AR09HSSDHWK/CV compared with Samsung conventional model AQ09UWBNSAM.



## 8. ADDITIONAL FEATURES

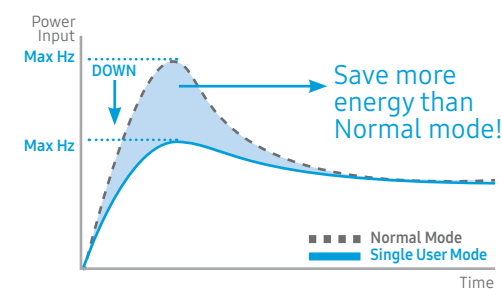
### Energy saving option for single person



The Single User mode uses **less compressor capacity, reducing power consumption\***. So you can use it when you're alone without worrying about the electricity bill.

\* Based on AR09KSWDHWK.

\* Based on accumulated power consumption of normal mode vs. single user mode.

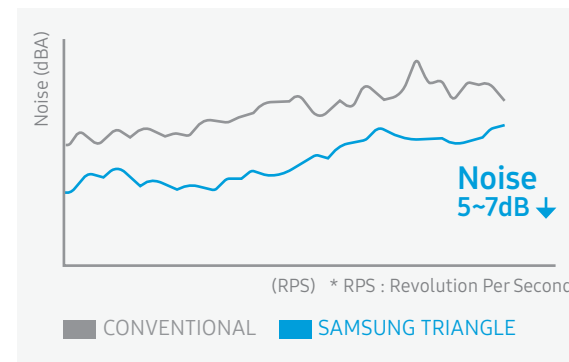
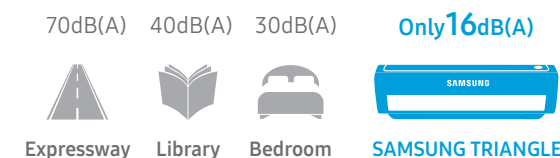


### Quiet operation



With the world's first 8-pole motor in the compressor of an outdoor unit, the Samsung air conditioner works much more **smoothly** and **quietly**. Its stable operation produces less vibration and noise – only 16 dB, which is quieter than a library.

\* Tested on AR12JSPFBWK.



\* Based on UG9AJ5090FER compared with Samsung conventional model UG9A090FUAER.

### Stylish & innovative design



The pure Crystal Gloss™ finish and unique curved design deliver a premium look and performance. Encased in dual-injected, transparent material, its elegant finish blends seamlessly into any modern household.



### Stay fresh



When the air conditioner is turned off, the Auto Clean function automatically runs a fan to **remove dust and moisture in the heat exchanger**. So it stays clean and dry, which prevents the growth of bacteria and mildew.



### Automatic temperature control



Auto Change Over automatically selects the operating mode (cooling or heating) required to maintain the set temperature. So you can **enjoy a consistently comfortable environment** without continually changing settings.



### Easy to Clean



The Samsung air conditioner's Easy Filter Plus is located outside, on the top. So it can easily be taken out, cleaned and put back – without having to open a cover or pull hard to get it out.



Easy to Detach

Easy to Clean



# TIPS FOR INSTALLER

## - EASY TO INSTALL

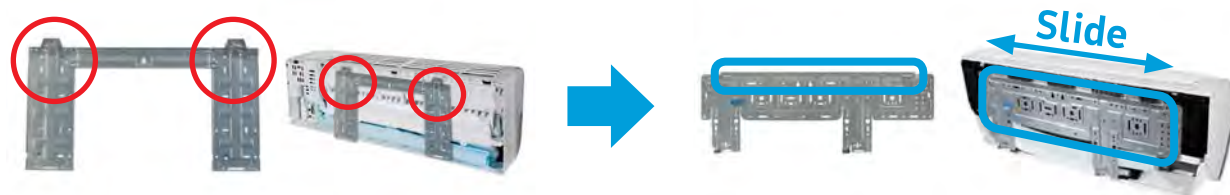


### Convenient plate hanger

TIPS

A conventional bracket has to be fitted precisely on two fixed hooks. So you have to find the right location to hang it.

Samsung's roller type bracket makes mounting the unit much easier. Simply hang it on the unit and find the best place to install it by sliding the bracket from side to side.



### Detachable bottom cover

TIPS



Conventional Air Conditioner

Previously, you had to hold the unit with some tools while connecting the piping and wiring, so it was awkward to install.



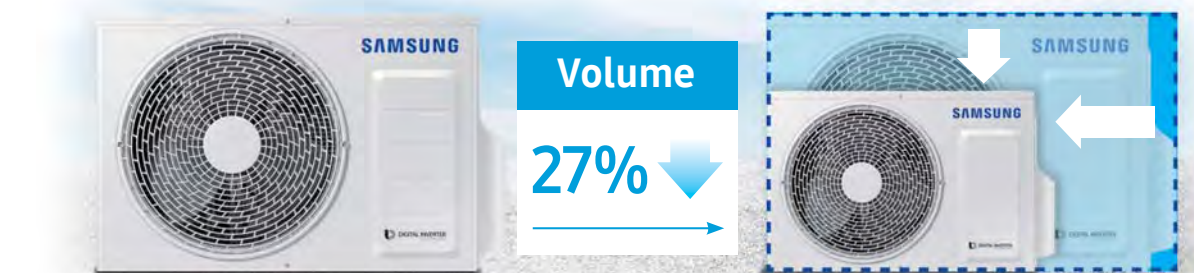
Samsung Triangle

There is a detachable bottom cover as the wires and pipe are located under the unit. So you can detach it easily and do not need to hold the unit while connecting pipes.

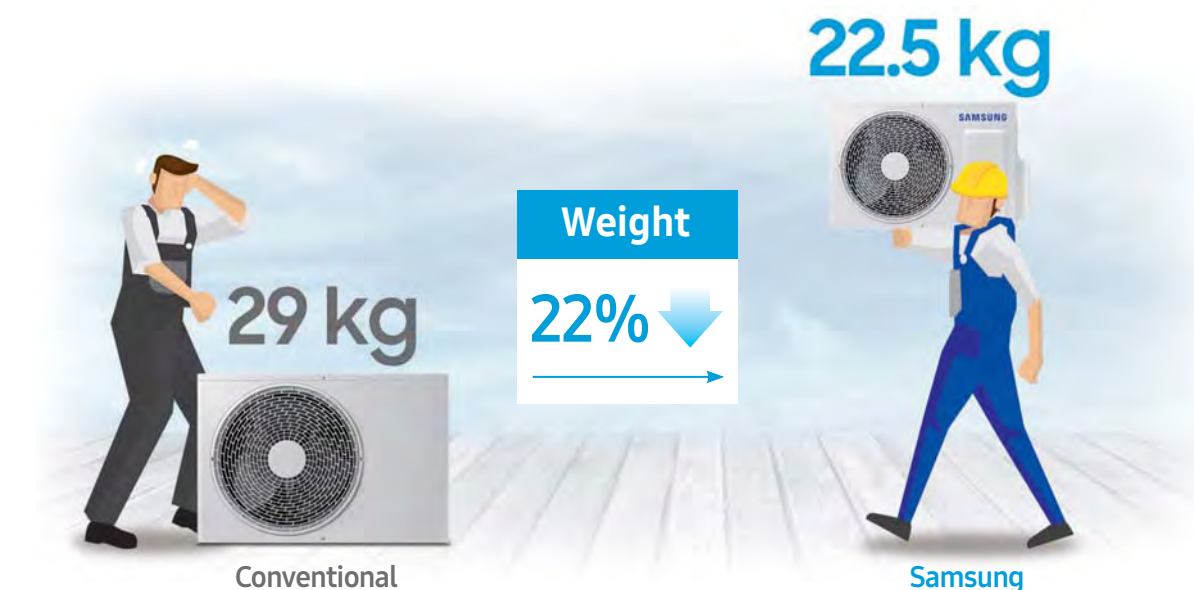
### Compact outdoor unit

TIPS

The volume of the outdoor unit has been reduced by 27%, and its weight has been cut by 22% from 29kg to 22.5kg. So, it is more convenient to carry and makes better use of space.



\* Based on 12K in Europe



\* Based on 12K in Europe





## WIND-FREE AIR CONDITIONER

### AR9500M – SILVER



- Wind-Free Cooling
- Digital Inverter 8-Pole
- Premium Metallic Panel
- Virus Doctor
- Easy Filter Plus
- Wi-Fi Control
- DuraFin™

### AR9500M – WHITE



- Wind-Free Cooling
- Digital Inverter 8-Pole
- Virus Doctor (Optional)
- Easy Filter Plus
- Wi-Fi Control
- DuraFin™

### AR9500M – WHITE



- Wind-Free Cooling
- Digital Inverter 8-Pole
- PM2.5 Filter
- Wi-Fi Control (Optional)
- DuraFin™



## INVERTER



### AR7500

- Digital Inverter 8-Pole
  - 8-Pole Motor
  - POWERboost technology™
- DURAFIN™
- Triangle Architecture
- Virus Doctor
- PM 2.5 Filter (Optional)
- Wi-Fi Control (Optional)



### AR5500

- Digital Inverter 8-Pole
  - 8-Pole Motor
  - POWERboost technology™
- DURAFIN™
- Triangle Architecture
- Virus Doctor (Optional)
- Wi-Fi Control (Optional)



### AR5400

- Digital Inverter 8-Pole
  - 8-Pole Motor
  - POWERboost technology™
- 3 Care Filter
- DURAFIN™



## NON-INVERTER



### AR7000

- Fast Cooling
- Easy Filter
- DURAFIN™
- Virus Doctor
- Auto Clean



### AR5000

- Fast Cooling
- Easy Filter
- DURAFIN™
- Auto Clean



### AR4000

- Fast Cooling
- 3 Care Filter
- DURAFIN™
- Auto Clean



### AR3000

- Fast Cooling
- Full HD Filter
- Auto Clean



\*Product line-up may vary based on the region.