Samsung System Air Conditioner CAC and FJM

Achieve multi-room temperature control with a flexible, easy-to-install and energy-efficient solution



Table of contents

CAC Single	3
Free Joint Multi	7
Indoor Units	10
Legal and additional information	49

2

CAC

Overview

Samsung's single split unit is a smart choice for conserving both running costs and energy consumption. This economical outdoor unit employs advanced technologies to minimize waste and improve efficiency. By adopting smart inverter technology. Samsung Ceiling Air Conditioner (CAC) Single not only offers silent operation but also provides outstanding cooling and heating performance.





SAMSUNG

3

The Samsung CAC Single air conditioner system delivers optimal comfort, efficiency and performance with features such as:

- World-class energy efficiency. Decrease energy consumption by up to 50 percent with a digital inverter system featuring an economical mode.
- Superior performance. Weather severe temperatures dependably and maximize comfort with wide temperature allowance.

CAC World-class energy efficiency

Maintain optimal comfort and control with energyand cost-efficient technologies

Featuring a suite of energy-optimizing technologies, Samsung CAC Single delivers top-class energy efficiency to support businesses in saving costs and the environment. Plus, CAC Single with its smart technologies fully complies with new European Union (EU) regulations for more efficient performance.



New Energy Label

*Table 1: Introduction of revised energy consumption labelling for air conditioners as per EU Directive 2011/626/EU

Quick, efficient heating and cooling

Smart inverter technology offers powerful, guick cooling and heating with minimal electricity consumption, which means real cost savings and less energy waste. The EU has established new regulations to drastically cut the power consumption of air conditioners. Inefficient units will be gradually withdrawn from the market starting in 2013. To further support this initiative, the EU is introducing an improved energy labeling system to provide consumers a better idea of how much electricity their units consume

Up to 50 percent less energy use

After reaching the set temperature, the digital inverter air conditioner changes its operation mode to economical. By avoiding inefficient and frequent switching on and off of the compressor, the digital inverter saves up to 50 percent in energy consumption compared to non-inverter air conditioners.



Multi-unit operation

Instead of connecting just one indoor unit, users can connect two, three or four indoor units with a single outdoor unit for more efficient cooling and heating. The indoor units operate and are controlled simultaneously as one cycle within the same mode via one remote controller for up to four rooms. This system is ideal for spaces requiring multiple indoor units, such as open-plan offices or shops.

2 Rooms	3 Rooms	4 Rooms
3.5 + 3.5		
5.2 + 5.2		
6.0 + 6.0	5.2 + 5.2 + 5.2	
7.1 + 7.1	5.2 + 5.2 + 5.2	3.5 + 3.5 + 3.5 + 3.5
	3.5 + 3.5 5.2 + 5.2 6.0 + 6.0	3.5 + 3.5 5.2 + 5.2 6.0 + 6.0 + 5.2 71 + 71 5.2 + 5.2

*4Way & Mini4Way CST is available.



4



Nordic CAC Enhanced heating performance

Ensure supreme comfort with upgraded heating and reliable performance

Samsung's Nordic CAC system air conditioner features enhanced efficiency, operational range and design for improved heating performance in cooler temperatures. And with its extended range, it also supports optimal cooling for comfort in warmer climates.

High-performance heating

Nordic CAC is designed to deliver high-performance heating in low temperatures, providing users comfortable, consistent warmth in frigid environments. It reinforces heating performance by a maximum of 31 percent at -20°C, and increases heating performance by10 – 30 percent, depending on the temperature.



World-class efficiency

Nordic CAC achieves world-class efficiency to minimize energy consumption and costs. In fact, all Nordic CAC models are efficiency rated SEER A++ / SCOP A+.



5

Wide range of operation

The Nordic CAC system air conditioner not only excels in heating performance, but it also provides exceptional cooling with its expansive operating range. It offers cooling operation from -20°C to 50°C, and guaranteed heating performance from -25°C to 24°C for indoor comfort all-year-round.



Feature upgrades

The following improvements have been made to optimize the unit's performance in frigid climates:

• **Base heater.** To prevent water condensation from freezing, a base heater (150 W) has been applied to the unit design.



• Cabinet grid. To prevent damage from snow drifts, the cabinet grid size has been increased, while the vertical grid size is two times larger.





CAC Single Superior performance

Stabilize the atmosphere with broad temperature allowance and control

Samsung is dedicated to supporting comfortable living and working environments based on the strength of its technologies. With a single unit, CAC Single delivers reliable comfort and control over multiple areas to ensure a pleasant atmosphere in any climate.

Wide temperature performance

No matter how extreme the temperature, the high-performing CAC Single can handle the condition—without the need for an additional unit. Featuring a wide temperature allowance, it can cool in heat of up to 50 and provide warmth in the freezing cold of -20°C to ensure a constant and comfortable home environment.

Ideal comfort in minutes

The CAC Single digital inverter air conditioner works at maximum capacity at startup. As soon as the temperature reaches the desired or set temperature, CAC Single performs fine adjustments to cope with any changes. This means less temperature fluctuation and ideal comfort in a matter of minutes.



Fast cooling and heating

When users change the temperature setting, the CAC Single uses the compressor's maximum capacity to quickly reach the desired temperature. As a result, the unit delivers 15 percent faster cooling and 50 percent faster heating for a more comfortable ambiance without the long wait.



Simultaneous, multi-room control

Instead of connecting to just one indoor unit, CAC Single can connect up to four units with a single outdoor unit for more efficient cooling and heating. With one remote controller, users can simultaneously operate the indoor units in up to four rooms as one cycle within the same mode. This system is ideal for spaces requiring multiple indoor units, such as open-plan offices or shops.

Versatile piping installation

6

CAC Single outdoor units offer a selection of pipe directions. The internal pipe connection ports allow four different pipe directions, supporting a neater, more organized-looking unit upon installation.



SAMSUNG

Free Joint Multi

Experience ultimate comfort at home or work with reliable, efficient performance

The Samsung Free Joint Multi (FJM) system air conditioner combines efficiency and reliability to deliver outstanding performance in a space-saving design. Supporting up to five indoor units, Samsung FJM is a perfectly optimized cooling system for residences and smaller buildings with limited installation space. Its lightweight, small-scale build and one-button auto-addressing enable easy, lowcost installation, while its uniquely quiet design ensures soothing comfort and maximum efficiency.



The Samsung FJM system air conditioner delivers optimal comfort, efficiency and performance with features such as:

- High performance. Rely on smooth, efficient operation with high-performance compressor technology.
- Easy installation. Ease installation and minimize effort with a small footprint and one-button auto-addressing.
- Low noise levels. Enjoy a more peaceful home or work environment with guiet operation, thanks to double-layered sound insulation.

Free Joint Multi

Free Joint Multi High performance

Maintain optimal comfort and control with energy and cost-efficient technologies

Featuring a suite of energy-optimizing technologies, Samsung FJM delivers top-class energy efficiency to support businesses in saving costs and the environment. Plus, CAC Single with its smart technologies fully complies with new European Union (EU) regulations for more efficient performance.



Drive higher performance with unmatched stability

A key contributor to Samsung FJM's efficiency is its advanced compressor technology. With its smart compressor design and premium moving parts, the FJM air conditioning system delivers balanced performance for high reliability and FJM fully complies with new EU regulations for more efficient performance.

Smooth performance

Samsung Free Joint Multi adopts the innovative Twin Brushless Direct Current (BLDC) rotary compressor for more efficient performance. Its stable twin eccentric cams and two balance weights reduce torque variation by 70 percent compared to the conventional Single BLDC compressor, offering smoother, more consistent operation. High-quality moving parts such as robust bearings, as well as premium matching rollers and vanes, produce a high degree of stability and durability.



Twin eccentric cams [•] 2 balance weights ably Stable Moving Parts Optimal material matching rollers and vanes High robust bearings

Conventional

Streamline installation with a compact design and automated operation

Easy installation and low noise level

The FJM's compact design means that it can be easily incorporated into a variety of professional and residential situations, with the flexibility to support up to five indoor units. In addition, the onebutton auto-addressing feature simplifies installation, which results in minimal disruption to the day-to-day activities of busy companies.

Easy, one-touch setup

FJM's one-button auto-addressing solution makes installation easier than ever.



Neat and simple

With a single FJM outdoor unit, users can connect up to five indoor units, so property owners can keep the building exterior clean and neat.



Enjoy minimal noise levels for maximum comfort

With its superior insulation and low vibration, FJM offers a comforting environment undisturbed by bothersome noise levels typical of standard air conditioning systems. Residents can enjoy a more restful night and employees can increase focus levels with less disturbance.

Insulated, quiet operation

Double-layered sound insulation material fully covers the compressor to absorb and minimize the noise for quieter operation, making it more discreet despite its high-quality performance.



Sine Wave Controller

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



Indoor Units

11 **Cassette Type** 12 360 Cassette 4Way Cassette S 14 4Way Cassette S (600 x 600) 18 22 Slim 1Way Cassette 2Way Cassette 25 **Ducted Type** 28 Duct S 29 Slim Duct 33 MSP Duct 34 **HSP Duct** 35 Outdoor Air Processing Duct 36 Wall Mount Type 37 39 **Console Type Ceiling Type** 40 **Concealed Floor Standing** 42 **DVM S Hydro Unit** 43 P Series (Maldives) 44 **ERV/ERV Plus** 45



10

SAMSUNG

Cassette Type

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

Offered in a variety of patterns, Samsung Cassette Type indoor units give a finishing touch to the interior design. We incorporate the most advanced technologies to offer optimized comfort and pleasure.

Combining sleek finishes and innovative technologies, Samsung Cassette Type air conditioning systems offer superior performance, flexible installation and easy operation.

A Sub Duct enables the same air conditioner unit to cool an Powerful air flow additional smaller space nearby. (The cassette unit is fitted with a Wide blades in the indoor unit deliver cool or warm air at greater knockout component to accommodate for this.) distance to provide even cooling and heating throughout the room.

Ceiling dust prevention

The newly designed panel controls air direction in a way to avoid contact with the ceiling. This smart design prevents dust from accumulating on the ceiling after long periods of operation, keeping the interior space cleaner than ever.



Convenient setup

The high lift-up drain pump lifts condensed water up to 750 mm compared to 700 mm for conventional products, allowing for more flexible, convenient installation.

Fresh air intake

Samsung Cassette Type units intake fresh air through the cassette to provide a cleaner, more energizing room atmosphere.

Multi-room cooling

360 Cassette

All round cooling and comfort

The Samsung 360 Cassette air conditioner offers a brand new way of staying comfortably cool in every corner of the room. Its innovative circular design not only means it perfectly fits in everywhere, adding a sophisticated look to many different sites, but it also blows cool air in all directions, so that the whole room is the same temperature*. And its bladeless outlet ensures that cool air is gently dispersed, without creating a cold draft**, and doesn't block the air flow, even at low angles, so it expels 25% more air* and spreads it farther.

EVENLY CIRCULATES & COOLS EVERY CORNER

Unike 4-way, cassette type air conditioners that create areas of uneven airflow where cool air can't reach*, a circular outlet blows cool air in all directions, so every corner of a room is the same temperature**.

* Samsung testing compared to a general 4 way cassette type air conditioner. ** Within an 9.3m radius the temperature difference is less than 0.6°C.



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



360 Cassette

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 air flow, it also expels 25% more air* and spreads it farther.



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

Circular to perfectly fit in everywhere

Its innovative circular design can match a multitude of interiorIntuitively control its performance and see where the air is going.designs, so it perfectly fits in everywhere. Its minimalist modernThe Wireless Remote Controller's* Jog shuttle and button offer astyling creates a sophisticated look and its circular shape stands outfun way to adjust the air flow and a Circular LED Display shows itsbeautifully.direction.



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.



All round simpler & intuitive control

* Optional.



4Way Cassette S

Stage a beautiful yet comfortable environment

With its newly improved design, 4Way Cassette S supports a clean, aesthetically appealing atmosphere and adds a sense of sophistication to work and living spaces. Not only is this unit attractively designed, but it also uses advanced technologies to optimize comfort in any environment.



The Samsung 4Way Cassette S indoor air conditioning system delivers polish, comfort and efficiency with features such as:

- Stylishly clean design. Add panache to interior spaces with a choice of clean, streamlined panel patterns in a lightweight build.
- **Robust operation.** Control the atmosphere perfectly with an advanced design for superior air flow and cooling/heating performance.
- Low maintenance and simple installation. Ease installation and minimize maintenance with a detachable, no-drip design.



14

SAMSUNG

4Way Cassette S Stylishly clean design

Complement any interior with a sleek, lightweight design

The new Samsung 4Way Cassette S indoor air conditioner comes in a choice of patterns with a simple panel to better match the interior design. Its uniquely lightweight frame makes installation easy, while clever blade construction keeps the unit clean for a tidy appearance.



Aesthetic panel and display

4Way Cassette S offers two different pattern designs for the panel. Users can select either the Waffle or Classic pattern to create just the right look to suit their design preference. Plus, the simple display design with rounded corners adds a chic sophistication to the interior.



Neat and clean design

The indoor 4Way Cassette S boasts a smart design that promotes a neat and clean look. The completely hermetic blade structure keeps the indoor unit clean by preventing dust or other foreign substances from entering it. The internal parts of the indoor unit are also out of sight when the blade is shut, thus improving the unit's appearance.

Lightweight build

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



*Based on10kW

4Way Cassette S Robust operation

Achieve peak performance with optimal airflow and superior control

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

Quick cooling and heating

The Samsung 4Way Cassette S indoor unit achieves the desired set temperature up to 25 percent faster than conventional products.



Optimal airflow for high ceilings

Using only the remote controller, operators can achieve optimum fan speed for high ceilings without adjusting the dual inline package (DIP) switch on the printed circuit board (PCB). The fan speed adjustment function evenly distributes cool and warm air throughout spaces with high ceilings of up to 3.5 m. And the high ceiling mode delivers even more powerful airflow throughout the interior space, enlarging the airflow coverage area for heights of up to 4.6 m.

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.

Silent, uniform air distribution

The aerodynamically designed Turbo Fan minimizes blade movement noise, meaning that 4Way Cassette S is noticeably quieter than conventional models. Plus, the Turbo Fan's wide blades provide evenly distributed extreme cooling and heating from four separate outlets so the entire room cools down or warms up faster.

Full-surround airflow

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



Cleaner, healthier air

16

Users can sanitize indoor air with the optional Virus Doctor for a cleaner work or living environment. The easy-to-install Virus Doctor generates active hydrogen and oxygen ions to eliminate airborne contaminants, completely eradicate airborne bacteria and allergens, and even neutralize OH (hydroxyl) radicals.

4Way Cassette S Low maintenance and simple installation

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 in convenience, comfort and performance.

Drip-free operation

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



SAMSUNG

Easy leveling and installation

Each corner portion of the 4Way Cassette S panel is detachable. This makes it easier for users to adjust the height, and makes installation and leveling much easier and quicker.

Simple cleanup

4Way Cassette S indoor units have detachable airflow blades, which means users don't need to remove the entire panel to clean the blade, making maintenance even easier.



4Way Cassette S (600 x 600)

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 harmonizes with the indoor space, while efficient cooling and heating performance make 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 in an elegant design with features such as:

- Tasteful design and compact, lightweight build. Create a polished ambiance with a discreetly sized design and a choice of attractive panel patterns.
- Enhanced comfort control. Optimize comfort and save energy with optional motion detection.
- Low maintenance and powerful airflow. Ease installation and maintenance and maximize airflow with an efficient design and robust performance.



4Way Cassette S (600 x 600) Tasteful design, Compact, Lightweight build

Refine the interior with an elegant, compact design

Samsung's 4Way Cassette S(600 x 600) air conditioner can be The enhanced Samsung 4Way Cassette S (600 x 600) indoor air installed on a single standard ceiling tile (600W x 600D) which conditioner features a selection of simple panel patterns to blend helps minimize installation time and effort. seamlessly into any interior design. Its uniquely lightweight frame blends effortlessly and beautifully into any décor, while clever blade construction keeps the unit clean for a tidy appearance.

Attractive panel and display

The 4Way Cassette S (600 x 600) features a fashionable panel with a simple, beveled corner design. The rounded panel frame promotes a neat, tidy look for an aesthetic flair that blends perfectly with any ambience.



SAMSUNG

Ultra-compact size



Light, robust design

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



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)—the world's first—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 maximize energy efficiency.



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.

Ideal airflow distribution

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



* Only for 4-Way 600x600 connected with DVM products

Cleaner, healthier air

20

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







4Way Cassette S (600 x 600) Low maintenance and powerful air flow

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 in convenience, comfort and performance.

Drip-free operation

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



Fresh, immaculate appearance

The indoor 4Way Cassette S (600 x 600) integrates an innovative blade design that keeps the unit clean. The completely hermetic blade structure prevents dust and other foreign substances from entering it for a fresh, tidy look. Plus, the internal parts of the indoor unit are out of sight when the blade is shut, further improving the unit's appearance.



SAMSUNG

Easy leveling and installation

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



Slim 1Way Cassette Discreet style and performance

Enhance any environment with the best of air conditioning performance and sleek style

Samsung Slim 1Way Cassette is an optimized air solution that suits both practical and aesthetic needs with its simple design and efficient cooling operation. The slim, rounded design of the Slim 1Way Cassette unit creates a near-seamless ceiling for a clean ambiance. And its progressive design, including superior blade technology, delivers high performance and easy management without compromise.

Visually appealing panel

Slim 1Way Cassette projects refined simplicity. The clean lines and simple display design make this a modern classic, which looks great with any interior.

Slim and compact design

At a height of only 135 mm, the Slim 1Way Cassette is the world's thinnest indoor air cooling unit. The compact, lightweight design makes installation and maintenance easier than ever with a panel area that's been reduced by 30 percent. And with its high performance and understated elegance, the unit blends seamlessly into interiors of all types and styles.



22

Visually appealing panel

Discreet style and performance

Enhance any décor with refined elegance and comfort

Sim 1Way Cassette features a simple and refined design. The clean lines and simple display design make this a modern classic, which looks great with any interior.





SAMSUNG





Slim and compact design Discreet style and performance

Ease installation and maintenance with a slim and compact design

At a height of only 135mm, the Slim 1Way Cassette is the world's thinnest indoor air cooling unit. The compact, lightweight design makes installation and maintenance in your space easier than ever. These high-performing units are so discreet that they can easily blend into interiors of all types and styles.

Lighter indoor unit

Samsung is the first to apply ABS cabinets into its indoor units to provide the lightest units on the market.

2Way Cassette

Equip even the narrowest of spaces with highperformance cooling and heating

Samsung 2Way Cassette is perfectly suited for long and narrow places with limited installation space, thanks to its compact, slim frame. The unit distributes airflow from two sides, providing powerful cooling and heating performance in an instant for a pleasant environment.



Min. 170mm

Ceiling

24

Panel area has been reduced by 30%.

Allow at least 170mm for

the installation.



Air reaches every corner of the room.



SAMSUNG

The 2Way Cassette indoor air conditioning unit delivers optimal airflow and efficiency with features such as:

- **Exceptional operation and control.** Easily maintain a calming, comfortable atmosphere with broad airflow coverage, temperature control and self-diagnosis.
- **Easy, flexible installation.** Reduce the time and effort of installation with a compact size that fits the ceiling space impeccably.

2Way Cassette

2Way Cassette Exceptional operation and control

Create a pleasant atmosphere and maintain it effortlessly

The slim build and smart operation of the Samsung 2Way Cassette make it easy to set the ideal indoor climate even in uniquely sized spaces. And maintaining such comfort levels is just as simple with optimum temperature control and self-diagnosis mode.

Long, narrow fit

With its slim and compact size, the 2Way Cassette indoor unit is just the right air solution for long, narrow places such as corridors and classrooms. This unit saves up to 26 percent more space when compared to conventional 4Way cassettes, and melds quietly into the interior design.

Broad coverage

The Twin Cross Flow Fan integrated into 2Way Cassette spreads cool or warm air farther and wider throughout rectangular spaces with less noise.



Even airflow distribution

The 2Way Cassette blades swing right and left to evenly distribute cool and warm air to every nook and cranny of the interior, keeping the environment pleasant and comfortable.



Optimized temperature control

The Optimum Temperature Control function detects and minimizes temperature difference between the top and bottom of the space to maintain an ideal temperature. Users can set the temperature detection option on the indoor unit or with the optional remote controller (MWR-WE10).



(A): Temperature set by remote controller
(B): Temperature set by indoor unit
Average of (A+B): The average temperature

Self-diagnosis mode

26

In the event of a malfunction, the indoor unit operates the selfdiagnosis mode to display an error code indicated by an LED light, enabling users to easily resolve the problem.



Easy, flexible installation

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

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

Small size, big performance

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





Included Panel weight 5.6kW

SAMSUNG

27

Standardized 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 nearly unnoticeably into the interior framework.



Ducted Type

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 affording users more flexible installation options. Offering a comprehensive lineup, Samsung Ducted Type air conditioning units offer just the right solution for every need--from the office or shop to the restaurant kitchen.

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 750 mm, compared to a limit of 700 mm on conventional models, for flexible and convenient installation.

28

Duct S

Experience performance and convenient comfort for any weather condition

Samsung Duct S delivers unparalleled cooling and heating and flexible management with customizable comfort settings in any climate—all year round. Plus, it boasts a slim, compact size and multiple access points for easy setup exactly where needed.



SAMSUNG

The Duct S indoor air conditioning unit delivers smooth, consistent operation and convenience with features such as:

- **Efficient operation.** Stage the desired atmosphere with energy-efficient performance and customized airflow.
- Smart management. Cool spaces efficiently and manage the air conditioning unit even while away, with features designed for efficiency and control.
- **Easy, flexible setup.** Install and maintain even multiple units with a compact and easily accessible design.



Duct S Efficient operation

Deliver consistent cooling and heating with innovative operation for maximum comfort

Samsung Duct S is a global frontrunner in energy-efficient design, temperature control and power. Its aerodynamic blade technology increases airflow silently while adjustable air tuning customizes the indoor climate for any situation.

World-class energy efficiency

The Samsung Duct S unit boasts cutting-edge technologies to deliver stellar energy efficiency.

- **Twin Rotary BLDC Compressors.** These robust compressors reduce fluctuation and vibration by 75 percent for effective reluctance.
- FME/FMC (Flat Micro-channel Evaporator/Condenser). Samsung's FME/FMC technology achieves a 30 percent increase in efficiency compared with the conventional fin and tube type. It has also enabled a 30 percent decrease in unit size.

Silent performance

The Samsung Duct S includes aerodynamic blades that increase air volume by10 percent with less noise for powerful comfort with less distraction.

Easy air tuning

Smart Tuning provides the delicate control needed for optimum comfort for any occasion. Users can easily fine-tune operational power to suit their activity level, while also ensuring minimum noise and energy savings.



Automatic air volume

Duct S features ingenious technology that senses the current air volume and pressure and then quickly adjusts its performance to ensure optimum comfort, whatever the duct length.



Powerful cooling

With the integration of the all new sirocco fan, the Duct S ensures sufficient air volume by adopting a bigger, more powerful fan than conventional models.

Cleaner, healthier air

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

Duct S Smart management

Minimize maintenance with innovative management and anywhere control

Samsung Duct S offers smart management features and settings that enable users to spend less time maintaining the unit and more time on what matters most to them. Users can enjoy stress-free comfort and control all year and all day long.

Intuitive zone control

With the Duct S Zone Controller, users can cool multiple spaces easily while conserving energy. Up to eight zones can be connected and controlled by a single indoor unit. This function enables users to create the perfect ambiance in different rooms and reduce power consumption by turning the dampers on and off. All this control is wielded easily from a stylish, wide touchscreen that supports intuitive and simple operation.

All-season comfort

Away Mode enables users to maintain comfort and energy savings with thermal storage operation to keep the room cool during the summer season and warm during winter.



31

Anytime temperature control

The Duct S enables users to have separate settings for daytime and nighttime, so they can live and sleep in perfect comfort.

Three-step quiet performance

Ensure quiet operation during the night with a reduced noise level of 3-7 dB. Duct S minimizes noise levels with 3-step quiet operation—1 step: 3 dB; 2 step: 5 dB; 3 step: 7 dB.

Agile, anywhere operation

With optional Smart Wi-Fi, users can control their AC anywhere, anytime using a smart device, and turn it off easily to conserve energy, even while away from home.

EZ Filter, easy maintenance

The Duct S includes a filter that is easy to assemble and disassemble. And filter cleanup and maintenance are hassle-free—simply rinse the filter under running water.

Duct S Easy, flexible setup

Streamline management with a flexible design

The Samsung Duct S is designed especially for simple installation, handling and maintenance. Its discreet, accessible design makes for easy upkeep, while the smart plug-and-connect drainage streamlines maintenance for even multiple units.

Slim design and light weight

A streamlined construction makes the Duct S convenient to install and maintain in any building. Its compact, slender design reduces its volume and weight compared to conventional air conditioners. Duct S is 30 percent smaller than its counterparts, so it fits easily into small spaces. But despite its small frame, Duct S offers exceptional efficiency, while its light weight supports convenient handling and setup.

Wide range of ESP

Users can choose from a complete range of Duct S products to deliver the right capacity, right ESP and right sized product.

Three-way access

With its smart, multi-entry design and slide fit, users can access the Duct S from three directions (top, side and bottom) for easy maintenance.

Plug-and-connect drainage

The optional Plug and Connect External Type drain pump takes the hassle out of draining the unit. Simply plug it in and connect it, and with the single drain pump, maintaining all the building's Duct S units is easier than ever. Plus, the advanced check valve prevents drain water backflow, freeing the unit from the bacteria and fungi of water stagnation in the drain pan.





32

SAMSUNG

Slim Duct Ultra-light, adaptable design



Temper any environment with industry-best lightweight design and optimized 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 200 mm 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.



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.



Quiet performance

34

The external static pressure control makes it easy to customize 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 900 mm enable flexible installation and management for added user convenience.



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.



Silent operation

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



SAMSUNG

35



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.



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.

Outdoor Air Processing Duct 100% fresh treated air supply

Conserve energy and costs with practical, highpowered operation

Samsung's new Outdoor Air Processing Duct is an outside fresh air treatment unit with integrated ventilation, combining fresh air processing and air conditioning via a single system.

Air conditioning indoor units and an Outdoor Air Processing unit can be connected to the same refrigerant line, resulting in enhanced design flexibility and a significant reduction in total system costs. A BLDC motor extends the savings with considerably less energy consumption.

High-efficiency motor

The BLDC motor supports the highest efficiency level possible. Its low-consumption design saves up to 32 percent more energy than conventional products for more economical and practical operation.

Quiet operation

Equipped with the proficient BLDC motor, Outdoor Air Processing Duct operates quietly with a sound level as low as 42 dB, slightly higher than that of a library. Such distraction-free operation ensures optimum comfort and calm for any environment.



Full-range temperature processing

Samsung Outdoor Air Processing Duct supplies fresh air to the interior environment by cold or heat processing a wide spectrum of outside temperatures ranging from -5°C - 52°C.

Flexible installation

This light and compact unit, with its shorter height of 390 mm, enables users to conveniently install and manage it in a variety of areas with a host of installation options.



Flexible static pressure control

If the installation area of the duct exceeds the standard, then the static pressure control system maintains the optimized air volume by adjusting the fan speed.



Wall Mount Type

Breathe easily with wall-mounted systems designed for all-day freshness

Samsung Wall Mount Type air conditioners have been designed from the ground up to be exceptionally efficient. With their stylish, innovative designs, these wall-mounted air conditioners optimize comfort with cool, clean, healthy freshness for everyday living.

Improved blade operation

Samsung's wide twin blade can open up to 90° for more effective cooling. The longer twin blade ensures that air reaches every corner of the room with greater control.

Superior dust filtration

A Full High Density (HD) filter creates cleaner air through enhanced filtration, reducing microscopic dust particles by up to 90 percent.



SAMSUNG

37

Cleaner, healthier air

Virus Doctor eliminates the harmful substances and viruses breeding in the atmosphere of living spaces, thus providing the highest level of indoor air quality. This smart solution creates a purified zone, eliminating the hazards of airborne allergens and controlling the active oxygen that contributes to disease, cancer and accelerated aging.

Good's sleep

Samsung's Wall Mount Type units feature Good'sleep mode for a comfortable bedroom climate perfectly tempered for a restful night. With automatic temperature and moisture adjustment, all three vital stages of sleep are protected from humidity and heat so users wake up fully rested and refreshed.

AR9000, 7000, 5000 Series Triangular design, powerful cooling

Cool every corner of the room with a unique, efficiency-boosting design

Samsung AR9000, 7000, 5000 Series units are designed with efficiency in mind. Their uniquely triangular design improves performance to circulate cool, clean air throughout every inch of the room. In addition, their smart design includes easy-to-remove filters for easy management and healthier airflow.

Faster, farther cooling performance

The units' distinctive triangular design has a wider intake, so more air can be drawn in. The improved width and angle of the outlet, extra v-blades and bigger fan also ensure that air is cooled and expelled faster and farther. The result is refreshingly cool air that reaches every corner of the room—with no blind spots. Their Smart Inverter also provides significantly greater energy efficiency.



Easy-access maintenance

Unlike conventional filters that are often difficult to access, the Samsung wall-mounted unit filter is on the outside, at the top of the device. Easy access means users can take out the filter, clean it and put it back without having to open a cover or pull hard to get it out. And its antibacterial coating filters dust, dangerous airborne contaminants and allergens for healthier breathing.



Console Type Luxurious style and calm

Create an exquisite interior complemented by elegant design and quiet performance

The slim, elegant Samsung Console Type indoor unit is designed to perfectly fit spaces with high ceilings and numerous windows while maintaining an optimal indoor temperature. Samsung's console air conditioning solution makes any environment more pleasant and comfortable with features such as:

Two-way airflow

Featuring a 2-way air outlet, Samsung's console unit includes two separate air outlets for cooling and heating. The warmer air comes out from the bottom part of the air outlet to spread the warm air evenly throughout the room. Users stay cooler or warmer in every corner of the room.



Quiet comfort

This powerful, efficient cooling and heating system makes the room more comfortable than ever before with quiet operation of only 23 dB. Users can select from four different operating modes: high, medium, low and silent (applicable to CAC only).



38

SAMSUNG

Slim, low-profile design

Samsung's console type air conditioner is only 199 mm thick, the slimmest on the market, and its unobtrusive design easily integrates into any décor.

Stay-clean panel

The intelligently designed clean panel keeps dust from accumulating, so the unit and the room stay cleaner.

Sophisticated control

The touchscreen display delivers convenient control, and is an elegant example of functional art.



Ceiling Type Slim yet functional design

Distribute refreshing airflow where needed with a compact, flexible design

Samsung's Ceiling Type indoor unit has 2-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.



7.1kW Model

40

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 the ceiling or on the floor.





Ceiling Type (large capacity) Powerful cooling with a long distance wind

Combine simple neat and innovated technologies to experience superior performance and easy operation

Samsung has been rewriting product descriptions beyond the industry standards. As one of such company's product, Samsung Ceiling focused on sending "sufficient" amount of conditioned air to "distant" places to cover huge area. For convenient installations and maintenances, the Ceiling concentrated service direction on one side. Do not get stressed with air conditioning. Just leave it to Samsung Ceiling.



Fast cooling, 15m air flow

When users need air conditioning, they really need it quickly. While the ceiling applied latest flow-efficient blowers to increase amount of air it discharges, it also mounted single BLDC motor to reduce noises and possibilities of abrupt changes of modes. With increased size of inlet area and fluid dynamically designed inner passages, customers can experience incomparable cooling power.

Also, with the advanced blade, which can move from 4o to 45o, Samsung ceiling type can refreshingly cool air that reaches every corner of the room with no blind spots.



SAMSUNG

Simple display

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



- Ice Blue : Operating

- Yellow Green : Schedule
- Red : Error
- Orange : Filter Alarm
- Time Limit + Operating Pattern

Single side installation

Due to difficulties in accessing their installed locations, easiness to maintain ceiling indoor units should be considered seriously. Relatively thin width of the product makes locating all service ports at one side difficult. However, for better customer experience, Samsung challenged to this difficulty.

Concealed Floor Standing Design flexibility for unique spaces

Accommodate individual space requirements with adaptable, silent performance

The Samsung Concealed Floor Standing unit offers the utmost in versatility in solving varied cooling and heating needs. This unit effectively adjusts its performance to meet the needs of the space, such as high ceilings and lots of windows, while maintaining the desired temperature.

High performance for versatile installations

The Concealed Floor Standing unit offers wide versatility in solving cooling and heating space requirements for a variety of environments, such as offices, schools and hotels. Whether on the floor or mounted, the unit compensates for conditions such as high ceilings and windows while delivering consistent cooling and heating performance. When mounted in a window, the unit blocks the air from getting through the gap in the window and maintains the desired indoor temperature.



Silent operation

42

This silent yet powerful unit, operating at a mere 27 dB, offers an efficient cooling and heating solution that makes spaces more comfortable and carefree than ever before.



DVM S Hydro unit All in one system

Streamline operation and installation with all-in-one cooling and heating

Samsung's All In One System air conditioner is the ultimate heating and cooling solution. The All in One operates in both air-to-water mode and air-to-air mode. Coupled, these two operation modes help



SAMSUNG

43

Simplified control

Equipped with related input and output terminals, the Samsung All In One unit eliminates the need for additional connections with BACnet and LonWorks interface kits.

P Series (Maldives) Fast, efficient cooling performance

Quickly cool the room while maximizing energy savings

The new Samsung P Series (Maldives) creates a clean, cool environment quicker than ever with advanced cooling and inverter technology, and superior filtration. P Series (Maldives) operates at its maximum speed in Turbo Cooling mode to quickly reach the set temperature. Users can also save on energy consumption and expenses with automatic temperature control.

Full-capacity efficiency

With Smart Inverter technology, P Series (Maldives) consumes minimal power by using the compressor's full capacity to quickly reach the desired temperature setting faster than non-inverter models. Plus, Smart Inverter technology adjusts fluctuations to maintain a constant temperature and keep things quiet.



Smart savings, easy management

Smart Saver mode eliminates the hassle of turning off the air conditioner when the room is sufficiently cooled, and then turning it back on when the temperature rises. Smart Saver automatically runs the AC in the least amount of time necessary to keep the room comfortable. As a result, users save up to 31 percent electricity to minimize expenses while keeping themselves cool.

Improved dust filtration

A Full HD filter ensures the room is kept fresh and clean with enhanced dust and allergen filtration. Filter cleaning is also convenient—simply rinse the filter under running water.

Refreshing sleep

44

Good'sleep mode creates a comfortable bedroom climate that ensures a good night's rest. With automatic temperature and moisture adjustment, all three vital stages of sleep are protected from humidity and heat so users wake up fully rested and refreshed.

ERV / ERV Plus

Enjoy high-efficiency ventilation for a more refreshing atmosphere

Indoor air quality is gaining more and more attention as increasingly more people become ill 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 minimizing energy loss for maximum efficiency. Its intelligent structure incorporates features specifically designed for flawless ventilation and efficient operation.

Heat Recovering Method of ERV System



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.
- **Optimized design.** Ease installation and drive higher, more efficient airflow with a slim, compact design.



ERV / ERV Plus Superior energy savings

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:

- 1. A 2-way ventilation design with air inlets and outlets on both sides of the units provides superior ventilation efficiency.
- 2. The remaining surface of the heat exchange area transfers heat energy while preventing the discharged contaminants from reentering.
- 3. 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.

Auto Mode

ERV and ERV Plus automatically change 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 operation hours. Decreased air conditioner operation lessens the cooling and heating load while maintaining optimal performance.



ERV / ERV Plus Enhanced performance

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

With Samsung ERV and ERV Plus systems, users can enjoy highperformance 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 highefficiency 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.



SAMSUNG

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 offer 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).



Perfect design for maximum airflow

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



Slim build

48

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 270 mm. Compared to traditional units with rectangular-type heat exchangers, Samsung ERV units use space more efficiently with their slim, diamondshaped design.



Legal and additional information

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies, redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems and semiconductors. We are also leading in the Internet of Things space through, among others, our Digital Health and Smart Home initiatives. We employ 307,000 people across 84 countries. To discover more, please visit our official website at www.samsung. com and our official blog at global.samsungtomorrow.com

For more information

For more information about Samsung, visit www.samsung.com/business.

49

Copyright © 2015 Samsung Electronics Co., Ltd. All rights reserved. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Specifications and designs are subject to change without notice. Nonmetric weights and measurements are approximate. All data were deemed correct at time of creation. Samsung is not liable for errors or omissions. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognized and acknowledged.

Samsung Electronics Co., Ltd. 129 Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Korea

www.samsung.com

2016-02