

2021

AIR CONDITIONER

RESIDENTIAL

LG HVAC SOLUTION



Enjoy A New Level Of Fresh Air

AirCare Complete System™

LG DUALCOOL, LG ARTCOOL brings the freshness of nature to your home.

The all-new AirCare Complete System uses a filtration process with UVnano™ and Ionizer that removes fine dust and even bacteria, ensuring the breeze around you is always fresh. ensuring the air you breathe is always fresh. Breathe in the nature - right at home.

ART COOL™

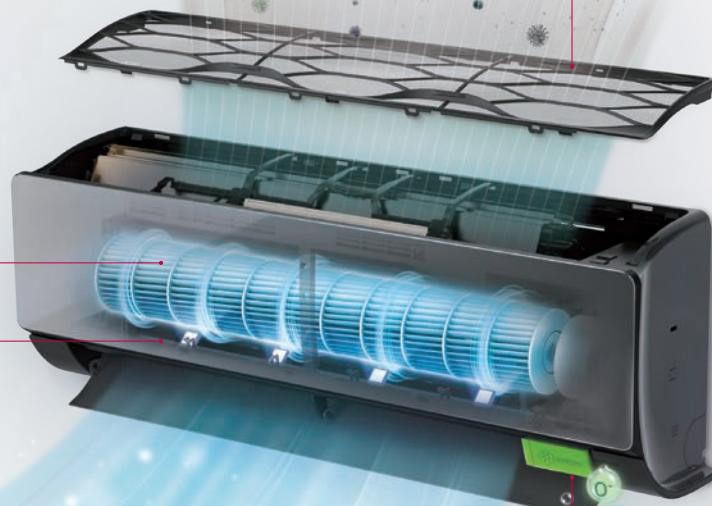
MIRROR

Auto Cleaning

Automatically dries out any moisture collected in the unit to prevent the formation of dirty and harmful scraps.

Pre-Filter™

Traps big dust particles from the start.



UVnano™

Keeps your fan 99.99% bacteria-clean with UV LED light to ensure fresh and clean air is delivered.

Plasmaster™ Ionizer⁺

Stay cool and keep the air healthy by removing 99.9%* of adhering bacteria and deodorizing.

What is **AirCare** Complete System™ ?

Filtering System

+

UVNano™

DUALCOOL™ DELUXE

Auto Cleaning

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Pre-Filter™

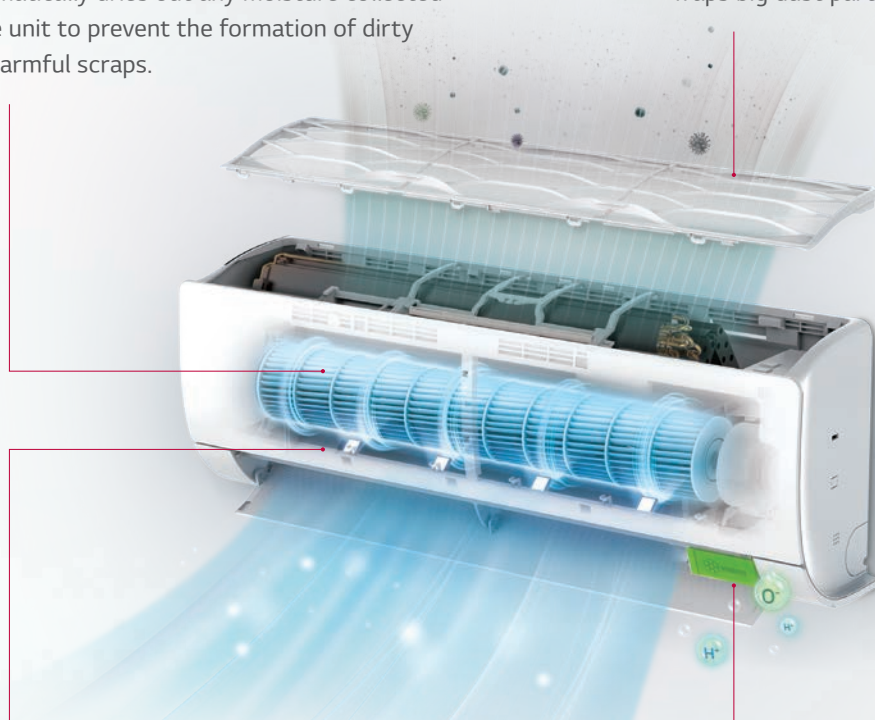
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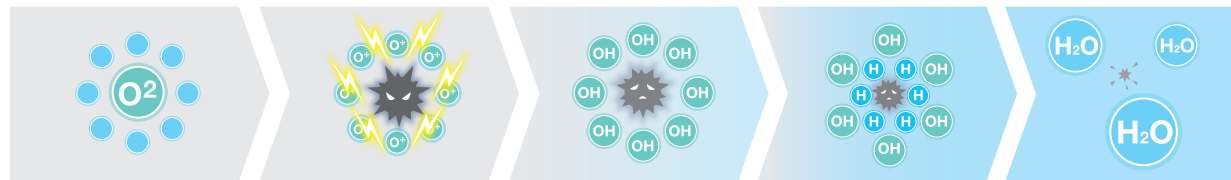
The powerful Plasmaster Ionizer⁺ protects you from bad odors and Escherichia coli and Staphylococcus in the surface with over 3 million ions to Reduce to make a safer, and cleaner environment.

- ☐ Specifications may vary for each model.
- ☐ Depending on the experimental conditions.

How It Works

Reduction and Deodorization (Utilizes Over 3 Million Ions)

Plasmaster Ionizer+ reduces E.coli and Staphylococcus in the surface with over 3 million ions.

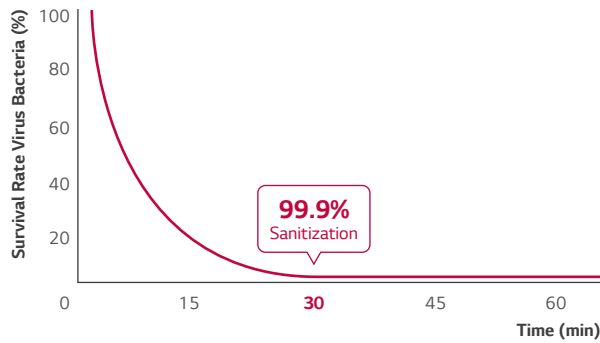


| Ion Cluster Generation | Surrounding Harmful Substances | Harmful | OH Radical Production | OH Radicals inactivate harmful substances | Chemical Reaction | Sterilization |
|----------------------------|--------------------------------|----------------------|-----------------------|---|-----------------------------------|---|
| Ions are released into air | H- and O- bond to particles | to harmful particles | OH radicals | inactivate harmful substances | OH radicals bond with H particles | H ₂ O molecules are produced |

Test Result

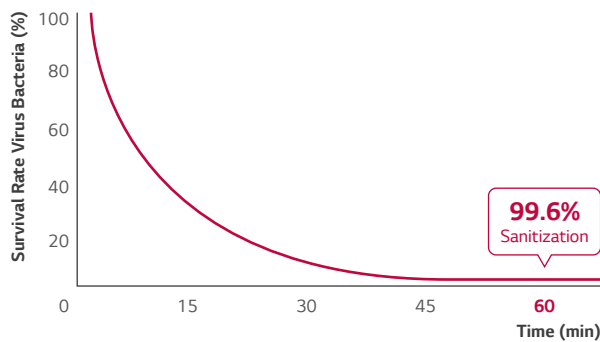
Reduction Performance Evaluations

Reduce Bacteria E.coli over 99.9% in 30 min.



- ☐ Test Conditions :
Space : 52m³ Chamber (measuring with the specimen in the center of test chamber)
Temperature & Humidity : Normal
Bacteria : E coil colon bacillus
Tested by Intertek

Sterilize staphylococcus over 99.6% in 60 min



- ☐ Test Conditions :
Space : 52m³ Chamber (Measuring with the specimen in the center of test chamber)
Temperature & Humidity : Normal
Bacteria : Staphylococcus Aureus
Tested by Intertek

Odor strength decrease in 60 minutes

An odor of measured as 2 European odor units (ouE/m³) or less indicates that the level of odor falls within permissible limits.

| Odor strength level | Offensive odor substance sensitivity |
|---------------------|--------------------------------------|
| 4. Very Strong | Food waste smell |
| 3. Strong | Bathroom smell |
| 2. Moderate | Indoor life smell |
| 1. Light | Mountain smell |

Odor strength reduces from 3.6 to 1.5, to include airborne odor as well as that on the curtains, clothes and other similar materials.

- ☐ Test conditions : Space : 8m³ Chamber
Temperature & Humidity : Normal
Tested by Intertek



New UV LED technology “UVnano” is applied to LG DUALCOOL, and it keeps the fan (inside of indoor unit) 99.99% bacteria-clean with ultraviolet light to ensure that the air passing through is clean too.

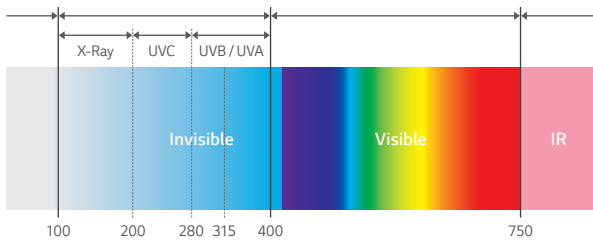
UVnano is an integrated marketing name that applies LG Electronics' entire home appliances and it is a compound of the words UV(ultraviolet) and nanometer (unit of length).

What is UVnano and How It Works?

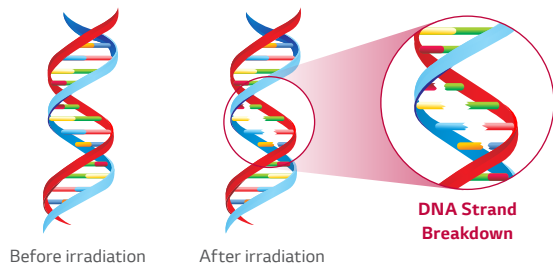
- Emit Ultraviolet rays of UVC wavelength directly damage the DNA of microorganisms (bacterial/MOLD/virus), making it impossible to multiply.
- High absorption into DNA at 260 to 270 nm wavelengths

DNA Absorption Efficiency by Wavelength

Electromagnetic Spectrum and Types



Destruction Nuclear Sequence (Chain)



Ultraviolet light is a form of radiation which is not visible to the human eye. It's in an invisible part of the “electromagnetic spectrum”. Radiated energy, or radiation, is given off by many objects: a light bulb, a crackling fire, and stars are some examples of objects which emit radiation.



Benefit & Verification

Keep the fan 99.99% bacteria-clean for a cleaner breeze.

Test Result



Remove up to **99.99%** of bacteria-clean from the fan.



- Test Condition
- Test Model : S3NM12JL1GA(SJ), S3NM24K21GA(SK)
 - Test Standard : LG test method with referenced to ISO 20743:2007
 - Bacteria : Staphylococcus aureus, Staphylococcus epidermidis, Klebsiella pneumoniae

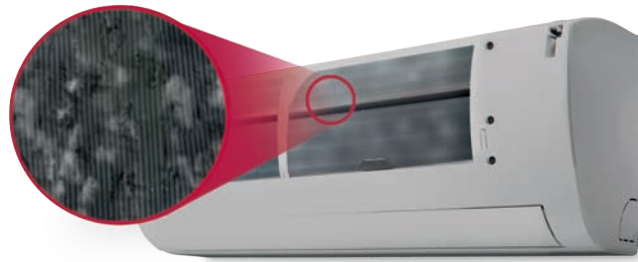
Auto Cleaning

The interior of the air conditioner is maintained clean by drying off the heat exchanger, then cleaning the interior once more.

▣ Specifications may vary for each model.

Pain Point

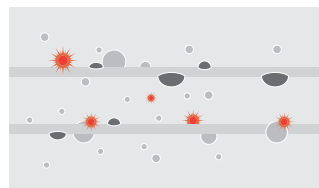
The main cause of odor within air conditioners is mold and bacteria growing on the heat exchanger. These germs can spread when the heat exchanger is wet.



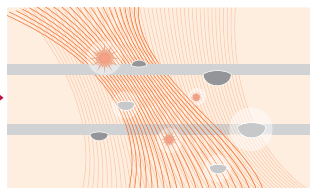
How It Works

Cleans Filter with Regular Air Flow

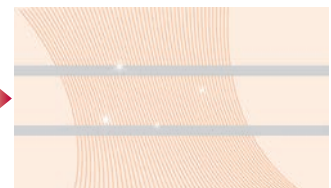
The comprehensive auto cleaning function prevents the formation of bacteria and mold on the heat exchanger, providing an enhanced environment.



By dehumidifying, the auto cleaning function prevents potentially harmful substances from forming on the surface of the heat exchanger.



The indoor environment remains odorless with the advanced deodorizing function.

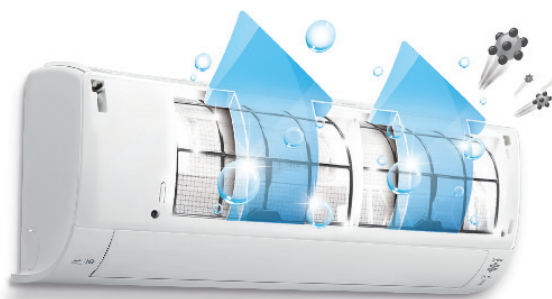


By preventing polluting of the heat exchanger caused by various germs and bacteria.

Benefit

Removes Harmful Particles

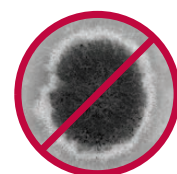
Auto Cleaning provides clean air by preventing bacteria, mold and odors that can otherwise accumulate in an indoor unit.



Bacteria
Prevention



Odor
Prevention



Mold
Prevention

Smart Diagnosis

Smart Diagnosis allows you to monitor the health of your air conditioner directly from your smartphone.

- ▣ Specifications may vary for each model.
- ▣ When connected to Multi ODU, Smart Diagnosis function may not be supported.

What is Smart Diagnosis?

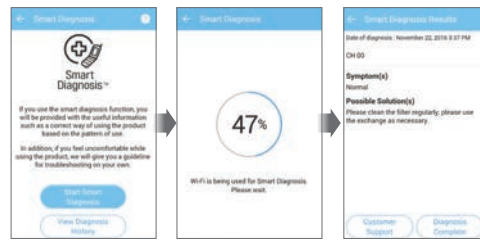
Smart Diagnosis allows users to conveniently check setup, installation, troubleshooting and other information directly from a smartphone.

- ▣ Builds upon widespread smartphone use and offers greater USP diversification
- ▣ Perfect for consumers who are unable to view information about their air conditioner via a display or remote control.

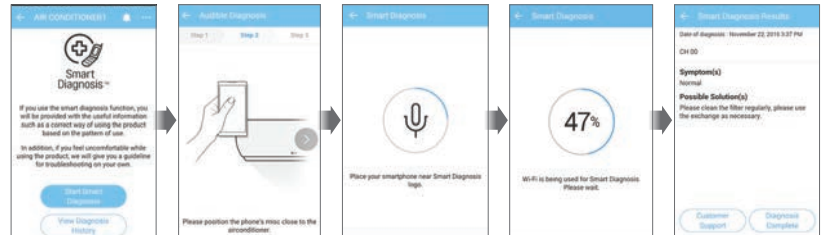
How it Works

Embedded Wi-Fi Model

By using "LG ThinQ" App and clicking "Start Smart Diagnosis", monitor and check diagnosis results conveniently via Wi-Fi.

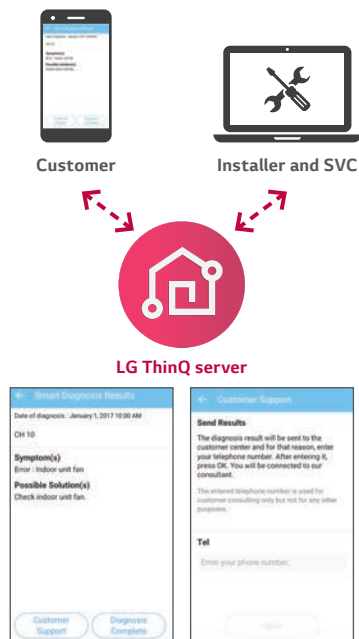


Non Embedded Wi-Fi Model



Benefit

Easily comprehensible error messages make detecting a solution and contacting the service center simple and convenient.



For Consumer



- Easily check operational status of a product without a display or one that provides limited information.
- Save energy by monitoring key operational information and power consumption.
- Using the Maintenance Guide helps to improve device performance and increase product life-span.

For Installer and SVC



- Understand the product better by easily confirming operational status and information.
- Intuitively diagnose problems by comparing current and past usage data.
- Maintain installation capabilities and reduce installation errors by quickly confirming device operational status.

Embedded Wi-Fi

Control your air conditioners by using Android or iOS based smartphones.

LG ThinQ



Download the LG ThinQ app from Google or Apple app stores.

LG ThinQ



How it Works

Embedded Wi-Fi modem

Enable "LG ThinQ" on your air conditioner.

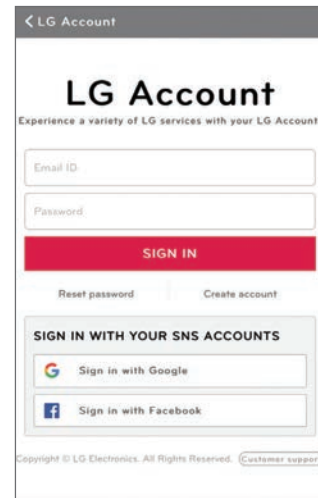


By using the embedded Wi-Fi modem, get ready for innovation without boundaries.



Easy Registration and Log-in

Follow the interactive set-up LG Account steps that will activate LG ThinQ's impressive features.



Wi-Fi Connectivity

Each individual member of your family can customize the air conditioner temperature and fan speed accordingly and then save the settings in their app to run it later. These settings can be saved for each air conditioner too.

Multiple Devices



Multi-Control



Can be controlled by multiple users, but not simultaneously.

Benefit

Simple operation for various functions



Energy Monitoring



Smart Diagnosis



Filter Management

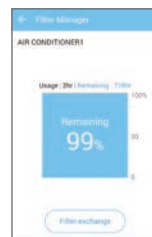


Integrated Home Appliances Control

Monitor and control your LG appliances from one place.



Straight-forward management



Reservation

Energy Monitoring

Smart Diagnosis

Filter Management

Access your air conditioner anytime and from anywhere

with a Wi-Fi equipped device and LG's exclusive control app, LG ThinQ.



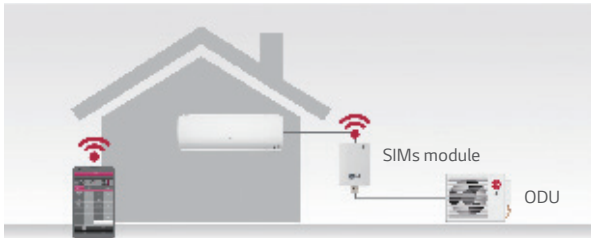
SIMs

By connecting SIMs chip, you can check the status of your air conditioner and diagnose problems from your smartphone.

☐ Specifications may vary for each model. ☐ When connected to Multi ODU, SIMs function may not be supported.

What is the LG SIMs?

Monitor the status of your air conditioner and accurately diagnose problems by connecting it to a smartphone via a SIMs* chip.



* SIMs : Smart Inverter Monitoring System

How It Works



SIMs App

1. Use a SIMs chip to connect a smartphone to an air conditioner.
2. Monitor and diagnose problems in real time using the SIMs app.

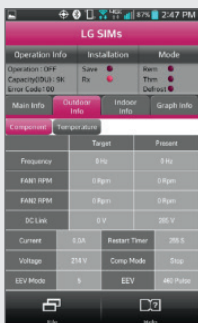
Benefit

Easy Monitoring

Diagnose problems anytime, anywhere with a SIMs chip.

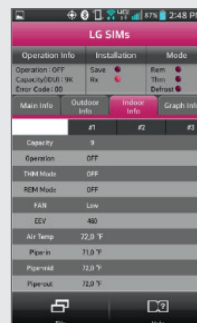
Easy Diagnosis & Quick Response

Easily monitor IDU/ODU and diagnose problems. Save and review diagnostic data.



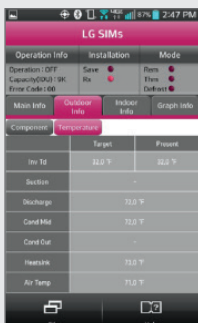
Main

- Current outdoor temperature
- Indoor temperature
- Inverter compressor frequency
- Operating opening
- Error code
- Frequency limits Indoor.
- Outdoor fan speed



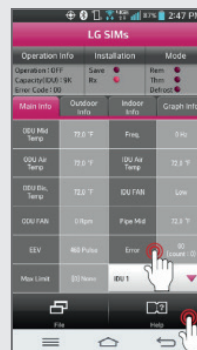
Indoor Unit

- Indoor Unit capacity
- Operation mode
- THM mode
- REM mode
- FAN operating condition
- EEV opening
- Room temperature
- Suction Temperature
- Intermediate temperature
- Exit temperature



Outdoor Unit

- Frequency
- Fan RPM
- DC Link
- Input current
- Input voltage
- EEV operation mode
- Restart timer
- Compressor mode
- EEV opening



Chart

- Room temperature
- Heat exchanger pipe temperature
- Compressor discharge temperature
- Frequency
- Outdoor temperature
- Compressor suction temperature
- Electric current
- Voltage

Certificate



Europe Radio Standard

☐ Smartphone Requirements (iOS : 6.1 or later, Android : 2.3 or later)

Low Refrigerant Detection

Early notification of low refrigerant protects your air conditioner from the risk of damage.

- ▣ Specifications may vary for each model.
- ▣ Depending on the experimental conditions.
- ▣ When connected to Multi ODU, Low Refrigerant Detection function may not be supported.

How It Works

Early Detection of Low Refrigerant Levels

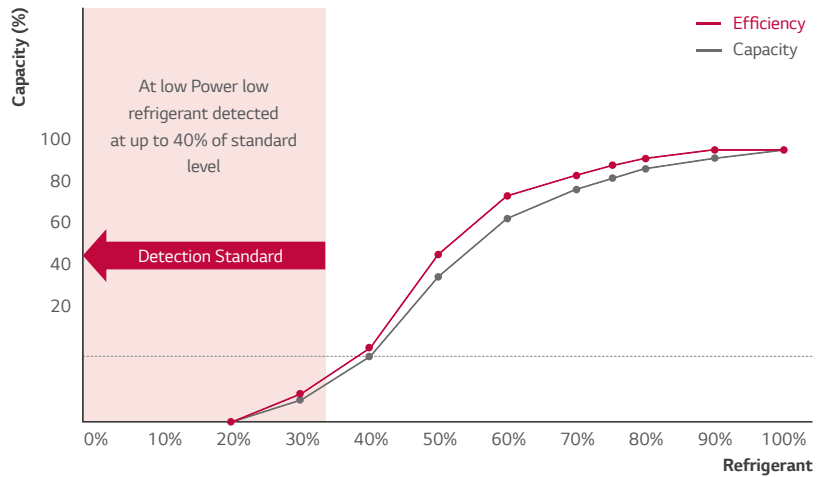
The Air Conditioner is automatically shut down when low refrigerant level is detected.

3 Checkpoints for Low Refrigerant Level :

- 1) The heat exchanger temperature is comparatively cool
- 2) The outdoor unit is working properly
- 3) The energy consumption is working under a standard pattern

If any of the above conditions are not met, for a maximum of 4 times, after 15 minutes of Air Conditioner operation, a low refrigerant level is detected and the Air Conditioner is shut down.

Capacity and Effectiveness of the Refrigerant Levels



- ▣ This function only works under the following conditions
- Indoor/Outdoor temperature is up to 20 degrees Celsius
- Cooling and dehumidification mode

Benefit

Longer Lifespan for Air Conditioner



When low refrigerant Level is detected, it alternately shows CH and 36 on the display.



Inside Insulator Melting



Oil Fire



Rotor Burnout



- ▣ Some models show CH and 38 alternately on the display.

Supreme Energy Efficiency

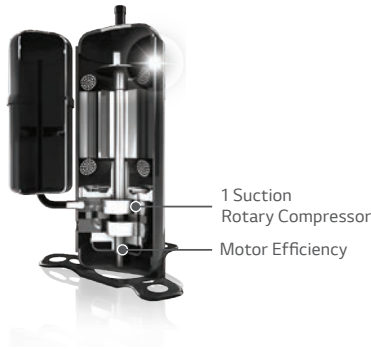
LG's revolutionary Inverter technology boasts powerful yet quiet performance while minimizing energy consumption. With world-class energy efficiency, enjoy comfort as well as energy savings.

Based on F09MT Model. Specifications may vary for each model.

High Efficient Compressor and Reversing Valve

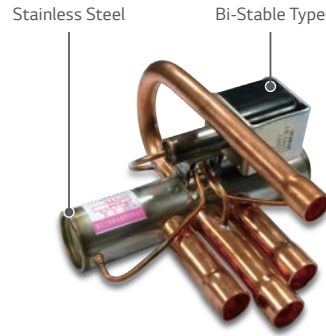
Rotary Compressor and Motor Efficiency

The number of suction connections has been reduced from two to one to increase the efficiency of the refrigerant compression during low speed conditions. The DC motor in LG air conditioners remains unsurpassable incomparable to in the world's top class efficiencies.



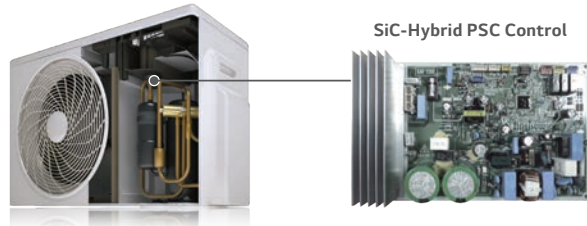
Bi-Stable Reversing Valve

The Input power of 4 way valve has been reduced to 0W by using a Bi-Stable type.



Improved Inverter Drive Efficiency

Used to optimize the time of current flow by controlling the number of converter switching according to energy consumption status. Displays comparatively higher performance and advanced energy efficiency than conventional Inverter air conditioner by reducing power loss with an advanced material component called SiC.



Energy Display

LG's Energy Display panel monitors the amount of energy levels used. Reduce energy consumption while enjoying a comfortable indoor environment by checking your energy level directly on the AC panel.

Specifications may vary for each model. When connected to Multi ODU, Energy Display function may not be supported.

How it Works

Magic Display & Remote Control

With the push of a button on the remote control, indoor unit's LCD display shows the current and total energy use, thus making the users aware of reducing energy consumption.



Benefit

Normal Mode

Current Setting Temp.



Electric Power

Displays Current Energy Use

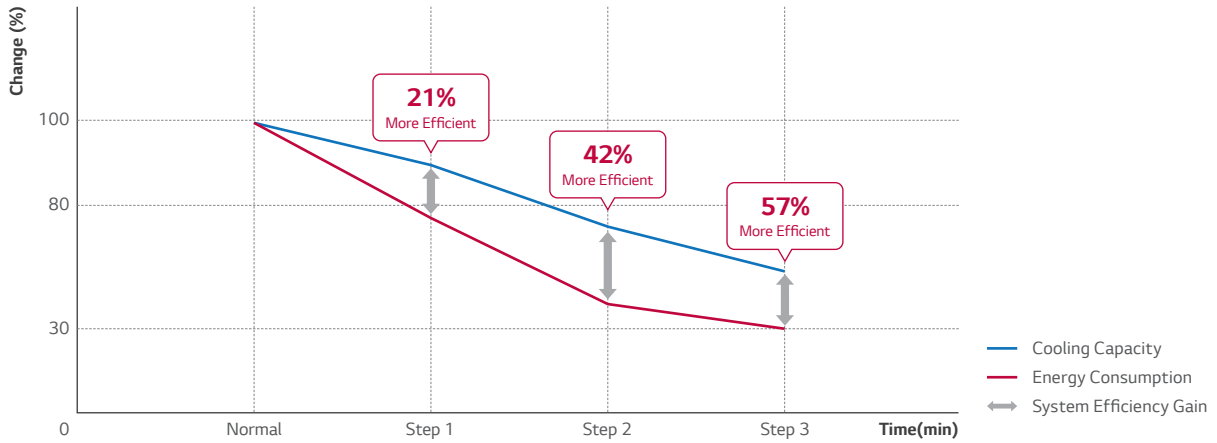


Active Energy Control 4 - Step

LG's Active Energy Control adjusts the energy consumption level and cooling capacity by controlling maximum frequency of the compressor motor.

- ▣ Specifications may vary for each model. ▣ Depending on the experimental conditions.
- ▣ When connected to Multi ODU, Active Energy Control function may not be supported. ▣ Active Energy Control works only cooling mode.

Concept & Benefit

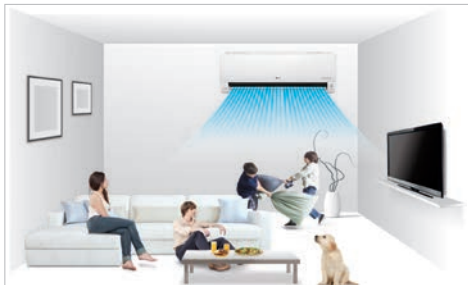


▣ Test Conditions : Normal Temperature (Indoor Temperature at the Cooling Mode : 28°C, Outdoor Temperature : 32°C)
 ▣ Test Model : DC12RH

How It Works

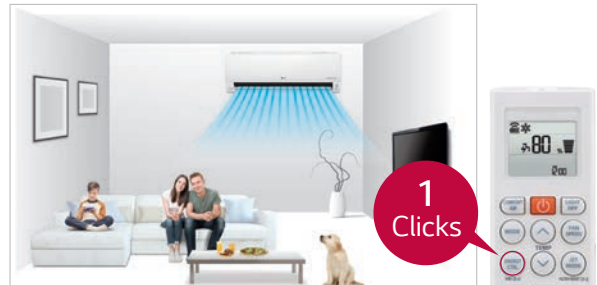
NORMAL 100% energy usage

Many people and high-activity level.



STEP 1 80% energy usage

Few people and moderate-activity levels.



STEP 2 60% energy usage

Fewer people and low-activity levels.



STEP 3 40% energy usage

Fewest people with no activity.



Comfort Air (Indirect Air)

LG provides pure hygienic and temperature regulated atmosphere surrounding your living space. An automatic vane angle adjustment sets perfect vane angle and air volume.

☐ Specifications may vary for each model.

Concept

Comfort Air changes the air flow angle to ensure that air is directed away from occupants to promote more comfortable environments optimized for sleeping and more.

How It Works

Control Panel



Remote Control

Comfort Vane

This option conveniently sets an AC's louvers to a preset position so that outflowing air is directed away from a room's occupants.



Scene 1: Inclines to a maximum 80° angle.

Sets vane angle to highest position :
Optimized for gentle airflow cooling.

Indoor Unit Display



Remote Controller Display



Scene 2: Declines to a maximum 10° angle.

Sets vane angle to lowest position :
Optimized for gentle airflow heating.

Indoor Unit Display



Remote Controller Display



4 Way Swing

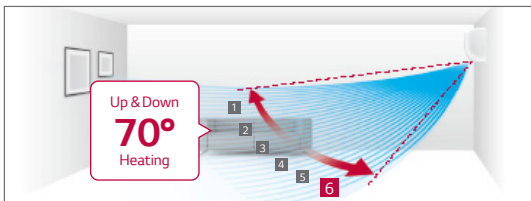
Cool air reaches out to the entire room regardless of where the air conditioner is installed.

☐ Specifications may vary for each model.

How It Works

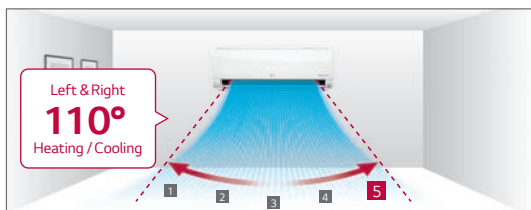
6-Step Vane, Control up to 70°

The vertical vane, which moves up and down, has 6 different settings including full-auto swing.



5-Step Louver, Control up to 110°

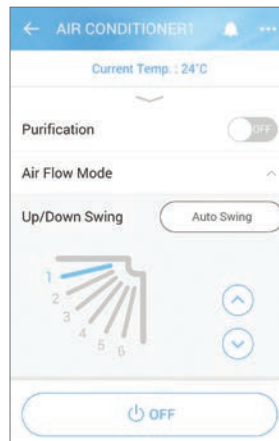
The louver, which sways left and right, has 5 different settings including full auto-swing.



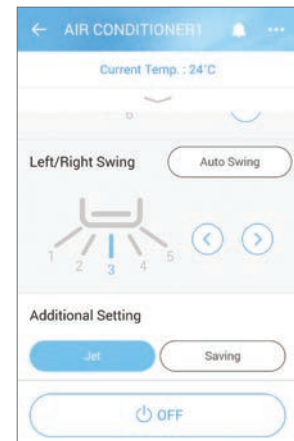
☐ Angle can be different from each model and working mode.

Easy and Simple Control

Airflow direction can be changed by LG ThinQ Wi-Fi app.



Up/Down Swing



Left/Right Swing

Gold Fin™

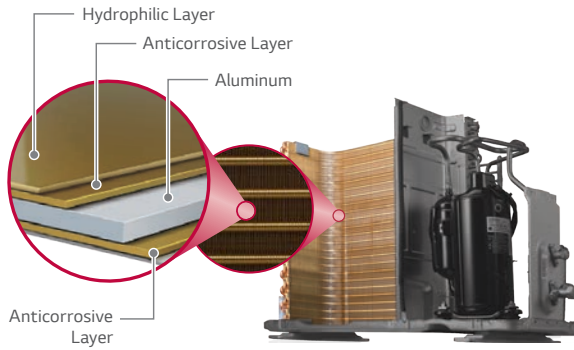
The Gold Fin™ coating protects the surface of the heat exchanger from unnecessary wear and corrosion.

☐ Specifications may vary for each model. ☐ Depending on the experimental conditions.

How It Works

Corrosion-resistant protective layer

The gold-colored special coating on the fin of the heat exchanger prevents corrosion, extending the life of the unit.



Test Result

Conventional Fin

Gold Fin™



* Test result 360 hrs. after being exposed to sodium chloride.

Fast Cooling

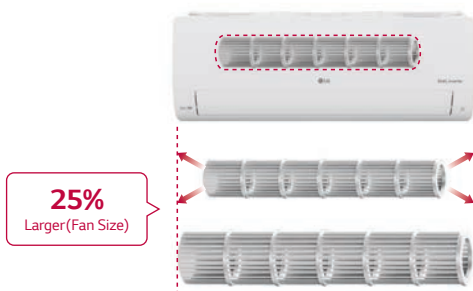
The cool airflow reaches all the corners of the room, keeping the space cool and comfortable.

☐ Specifications may vary for each model. ☐ Depending on the experimental conditions.

Pain Point

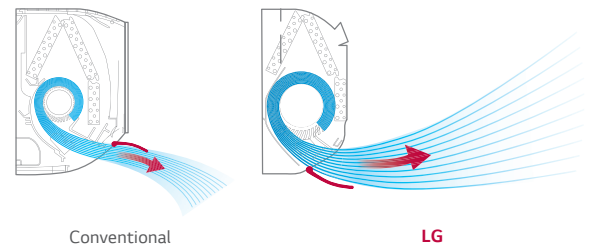
Bigger Skew Fan

A 25% larger skew fan emanates highly powerful blasts of air.



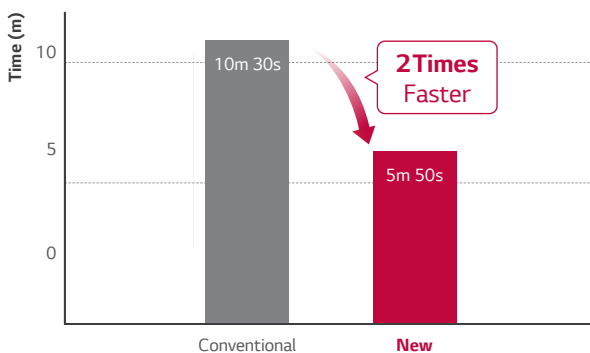
Cooling Outlet

A larger, optimally designed cooling outlet emanates to large areas and cools spaces faster.



Test Result

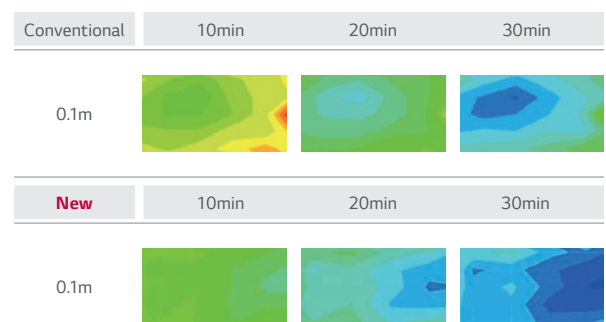
Test Result



☐ Test Conditions :

Indoor temperature 33°C, Outdoor temperature 35°C,
Relative humidity 60%, Setting temperature 26°C
Test room size : 4.3 m * 7.0 m * 2.3 m

Changes in Temperature Over 30 Minutes



☐ Test Conditions :

Outdoor temperature : 35°C, Indoor temperature : 33°C,
Humidity : 60%, Remote control : 26°C High
Test room size : 4.3 m * 7.0 m * 2.3 m

Jet Cool

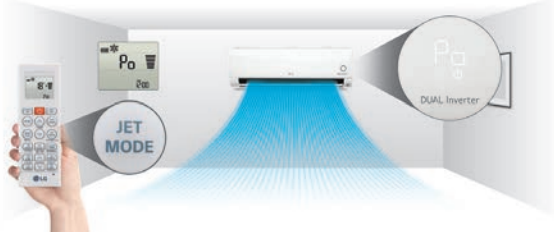
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How It Works

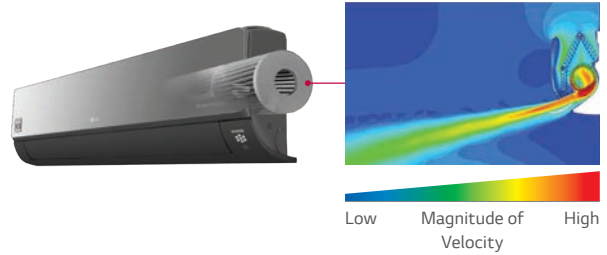
One Click "Jet Mode"

Reduces the temperature of outflowing air to 18°C for 30 minutes with just one click.



More Powerful Performance

By reducing the second vortex, which decreases airflow within the air outlet, and enlarging the fan size, the amount of airflow is increased to 13.0 CMM.



Fast Heating

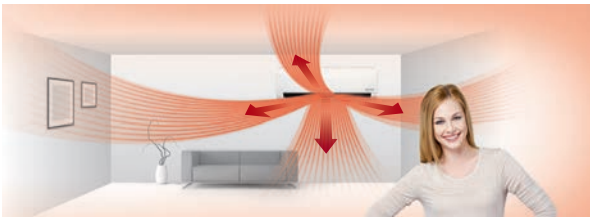
LG Residential Air Conditioners satisfy your heating needs while consuming less energy, by heating a wider space in a shorter period of time to create a warm and comfortable living environment.

☐ Specifications may vary for each model. ☐ Depending on the experimental conditions.

How It Works

4 Way Auto Swing (Easy Airflow Control)

4 Way Auto Swing adjusts airflow based on the surrounding environment, allowing for optimal distribution of warm air to living areas and enabling quick heating.



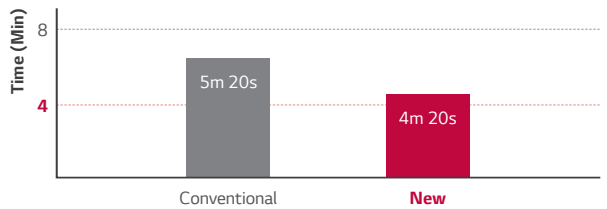
Vertical Airflow

When heating, the vane sends heated air downwards to maintain a pleasant and balanced room temperature.



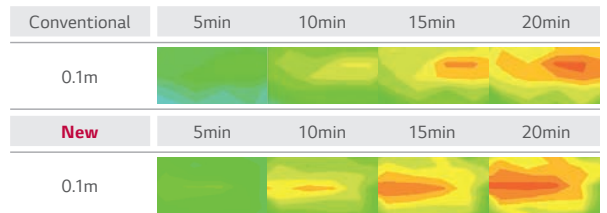
Benefit & Test Result

22% Quick Heating



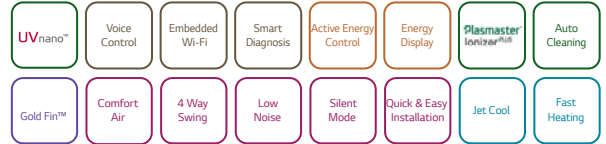
☐ Test Conditions :
Outdoor temperature : 7°C, Indoor temperature : 12°C,
Humidity : 87%, Remote control : 30°C Power

Changes in Temperature Over 20 Minutes



☐ Test Conditions :
Outdoor temperature : 7°C, Indoor temperature : 12°C,
Humidity : 87%, Remote control : 30°C Power

ARTCOOL MIRROR



LG participates in the ECP programme for EUROVENT VRF program. Check ongoing validity of certification : www.eurovent-certification.com

Single Combination

| UNIT | | | | 9K | 12K | 18K | 24K |
|--------------------------------|-----------------------|------------------------------|----------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|
| INDOOR | | | | AC09BH NSJ | AC12BH NSJ | AC18BH NSK | AC24BH NSK |
| Capacity | Cooling | Min. / Rated / Max. | kW | 0.89 / 2.50 / 3.70 | 0.89 / 3.50 / 4.04 | 0.90 / 5.00 / 5.50 | 0.90 / 6.60 / 7.42 |
| | Heating | Min. / Rated / Max. | kW | 0.89 / 3.30 / 4.10 | 0.89 / 4.00 / 5.10 | 0.90 / 5.80 / 6.40 | 0.90 / 7.50 / 8.64 |
| | Heating -7°C | Rated | kW | 2.60 | 3.00 | 4.20 | 6.00 |
| Power Input | Cooling / Heating | Rated | W | 656 / 800 | 1,080 / 1,050 | 1,562 / 1,611 | 2,164 / 2,238 |
| EER | | | W/W | 3.81 | 3.24 | 3.20 | 3.05 |
| S.E.E.R. | | | | 7.00 | 6.60 | 7.00 | 6.90 |
| P design C | | | kW | 2.50 | 3.50 | 5.00 | 6.60 |
| COP | | | W/W | 4.13 | 3.81 | 3.60 | 3.35 |
| S.C.O.P | | (Average / Warmer) | | 4.00 / 4.90 | 4.00 / 4.90 | 4.30 / 5.30 | 4.30 / 5.30 |
| P design H (Average / Warmer) | | | kW | 2.50 / 1.30 | 2.50 / 1.30 | 3.90 / 2.10 | 5.00 / 2.70 |
| Energy Label (A+++ to D Scale) | Cooling | | | A++ | A++ | A++ | A++ |
| | Heating | (Average / Warmer) | | A+ / A++ | A+ / A++ | A+ / A+++ | A+ / A+++ |
| Annual Energy Consumption | Cooling | | kWh | 125 | 186 | 250 | 335 |
| | Heating | (Average / Warmer) | kWh | 875 / 371 | 875 / 371 | 1,270 / 555 | 1,628 / 713 |
| Sound Pressure | Cooling | S / L / M / H | dB(A) | 19 / 27 / 35 / 41 | 19 / 27 / 35 / 41 | 31 / 34 / 39 / 44 | 31 / 34 / 42 / 47 |
| | Heating | L / M / H | dB(A) | 27 / 35 / 41 | 27 / 35 / 41 | 34 / 39 / 44 | 34 / 42 / 47 |
| Sound Power | Cooling | | dB(A) | 59 | 59 | 60 | 65 |
| Air Flow Rate | Cooling | S / L / M / H / Max. (Power) | m ³ /min | 3.0 / 4.2 / 7.5 / 10.0 / 12.5 | 3.0 / 4.2 / 7.5 / 10.0 / 12.5 | 8.0 / 10.5 / 13.0 / 14.5 / 15.5 | 8.0 / 10.5 / 13.1 / 16.1 / 18.3 |
| | Heating | L / M / H | m ³ /min | 5.6 / 7.2 / 10.0 | 5.6 / 7.2 / 10.0 | 11.0 / 13.5 / 16.0 | 11.0 / 14.3 / 17.6 |
| Dehumidification Rate | | | l/h | 1.1 | 1.3 | 1.8 | 2.5 |
| Running Current | Cooling | Min. / Rated / Max. | A | 1.10 / 3.30 / 6.00 | 1.10 / 4.70 / 6.00 | 1.20 / 6.90 / 9.00 | 1.20 / 9.80 / 14.00 |
| | Heating | Min. / Rated / Max. | A | 1.10 / 4.00 / 7.00 | 1.10 / 4.70 / 7.00 | 1.20 / 7.10 / 9.50 | 1.20 / 10.00 / 14.00 |
| Starting Current | Cooling / Heating | Rated | A | 3.30 / 4.00 | 4.70 / 4.70 | 6.90 / 7.10 | 9.80 / 10.00 |
| Power Supply | | | Ø / V / Hz | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 |
| Circuit Breaker | | | A | 15 | 15 | 20 | 25 |
| Power Supply Cable | | | N x mm ² | 3 x 1.0 | 3 x 1.0 | 3 x 1.5 | 3 x 2.5 |
| Power & Transmission Cable | | | N x mm ² | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) |
| Dimension | | | mm | 837 x 308 x 192 | 837 x 308 x 192 | 998 x 345 x 212 | 998 x 345 x 212 |
| Net Weight | | | kg | 9.9 | 9.9 | 12.8 | 13.5 |
| Fan Motor Output | | | W | 30 | 30 | 30 | 58 |
| OUTDOOR | | | | AC09BH UA3 | AC12BH UA3 | AC18BH UL2 | AC24BH U24 |
| Operation Range | Cooling | Min. / Max. | °C DB | -10 / 48 | -10 / 48 | -15 / 48 | -15 / 48 |
| | Heating | Min. / Max. | °C DB | -10 / 24 | -10 / 24 | -10 / 24 | -10 / 24 |
| Sound Pressure | Cooling / Heating | High | dB(A) | 48 / 50 | 48 / 50 | 53 / 55 | 54 / 57 |
| Sound Power | Cooling | High | dB(A) | 65 | 65 | 65 | 70 |
| Air Flow Rate | | High | m ³ /min | 27 | 27 | 35 | 49 |
| Piping | Liquid (ODU / IDU) | Min. / Max. | m | 3 / 15 | 3 / 15 | 3 / 20 | 3 / 30 |
| | Elevation (ODU / IDU) | Min. / Max. | m | 7 | 7 | 10 | 15 |
| Piping Connection | Liquid | OD (Outside) | mm (inch) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) |
| | Gas | OD (Outside) | mm (inch) | 9.52 (3/8) | 9.52 (3/8) | 12.7 (1/2) | 15.88 (5/8) |
| Drain Hose Size | | OD (Outside) | mm (inch) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) |
| Refrigerant | Type | | | R32 | R32 | R32 | R32 |
| | Charge at 7.5m | | kg | 0.700 | 0.700 | 1.000 | 1.100 |
| | | | t-CO ₂ eq | 0.473 | 0.473 | 0.675 | 0.743 |
| | Additional Charge | | g/m | 20 | 20 | 20 | 20 |
| | | | | 675 | 675 | 675 | 675 |
| Fan Motor Output | | | W | 43 | 43 | 43 | 85 |
| Compressor Type | | | | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary |
| Net Weight | | | kg | 26.0 | 26.0 | 35.2 | 46.4 |
| Dimension | | | mm | 717 X 495 X 230 | 717 X 495 X 230 | 770 X 545 X 288 | 870 X 650 X 330 |
| ACCESSORIES & OTHERS | | | | | | | |
| Multi Compatible | | | | Y | Y | Y | Y |
| PI 485 | | | | - | - | - | - |
| Dry Contact | | | | Y | Y | Y | Y |
| Wired Remote Controller | | | | Y | Y | Y | Y |

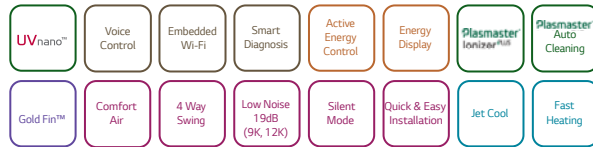
☐ This product contains Fluorinated greenhouse gases (R32).

☐ S : Sleep / L : Low / M : Medium / H : High

☐ GWP : Global warming potential

☐ t-CO₂eq : F-gas(kg)*GWP/1000

☐ Specification, design and feature are subject to change without prior notice.



LG participates in the ECP programme for EUROVENT VRF program. Check ongoing validity of certification : www.eurovent-certification.com

Single Combination

| UNIT | | | | 9K | 12K | 18K | 24K |
|--------------------------------|-----------------------|------------------------------|----------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|
| INDOOR | | | | DC09RH NSJ | DC12RH NSJ | DC18RH NSK | DC24RH NSK |
| Capacity | Cooling | Min. / Rated / Max. | kW | 0.89 / 2.50 / 3.70 | 0.89 / 3.50 / 4.04 | 0.90 / 5.00 / 5.50 | 0.90 / 6.60 / 7.42 |
| | Heating | Min. / Rated / Max. | kW | 0.89 / 3.20 / 5.00 | 0.89 / 4.00 / 6.00 | 0.90 / 5.80 / 6.40 | 0.90 / 7.50 / 8.64 |
| | Heating -7°C | Rated | kW | 3.20 | 3.50 | 4.20 | 6.00 |
| Power Input | Cooling / Heating | Rated | W | 572 / 711 | 933 / 976 | 1,562 / 1,611 | 2,164 / 2,238 |
| EER | | | W/W | 4.37 | 3.75 | 3.20 | 3.05 |
| S.E.E.R. | | | | 7.90 | 7.60 | 7.00 | 6.90 |
| P design C | | | kW | 2.50 | 3.50 | 5.00 | 6.60 |
| COP | | | W/W | 4.50 | 4.10 | 3.60 | 3.35 |
| S.C.O.P | | (Average / Warmer) | | 4.60 / 5.40 | 4.60 / 5.40 | 4.30 / 5.30 | 4.30 / 5.30 |
| P design H (Average / Warmer) | | | kW | 2.80 / 1.50 | 2.90 / 1.50 | 3.90 / 2.10 | 5.00 / 2.70 |
| Energy Label (A+++ to D Scale) | Cooling | | | A++ | A++ | A++ | A++ |
| | Heating | (Average / Warmer) | | A+ / A++ | A+ / A++ | A+ / A+++ | A+ / A+++ |
| Annual Energy Consumption | Cooling | | kWh | 111 | 161 | 250 | 335 |
| | Heating | (Average / Warmer) | kWh | 852 / 389 | 883 / 389 | 1,270 / 555 | 1,628 / 713 |
| Sound Pressure | Cooling | S / L / M / H | dB(A) | 19 / 27 / 37 / 42 | 19 / 27 / 37 / 42 | 31 / 34 / 39 / 44 | 31 / 34 / 42 / 47 |
| | Heating | L / M / H | dB(A) | 27 / 37 / 42 | 27 / 37 / 42 | 34 / 39 / 44 | 34 / 42 / 47 |
| Sound Power | Cooling | | dB(A) | 60 | 60 | 60 | 65 |
| Air Flow Rate | Cooling | S / L / M / H / Max. (Power) | m ³ /min | 3.5 / 5.5 / 9.0 / 11.0 / 13.0 | 3.5 / 5.5 / 9.0 / 11.0 / 13.0 | 8.0 / 10.5 / 13.0 / 14.5 / 15.5 | 8.0 / 10.5 / 13.1 / 16.1 / 18.3 |
| | Heating | L / M / H | m ³ /min | 6.5 / 9.0 / 11.0 | 6.5 / 9.0 / 11.0 | 11.0 / 13.5 / 16.0 | 11.0 / 14.3 / 17.6 |
| Dehumidification Rate | | | l/h | 1.1 | 1.3 | 1.8 | 2.5 |
| Running Current | Cooling | Min. / Rated / Max. | A | 1.00 / 2.50 / 6.00 | 1.00 / 4.00 / 6.00 | 1.20 / 6.90 / 9.00 | 1.20 / 9.80 / 14.00 |
| | Heating | Min. / Rated / Max. | A | 1.00 / 3.20 / 7.00 | 1.00 / 4.30 / 7.00 | 1.20 / 7.10 / 9.50 | 1.20 / 10.40 / 14.00 |
| Starting Current | Cooling / Heating | Rated | A | 2.50 / 3.20 | 4.00 / 4.30 | 6.90 / 7.10 | 9.80 / 10.00 |
| Power Supply | | | Ø / V / Hz | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 |
| Circuit Breaker | | | A | 15 | 15 | 20 | 25 |
| Power Supply Cable | | | N x mm ² | 3 x 1.0 | 3 x 1.0 | 3 x 1.5 | 3 x 2.5 |
| Power & Transmission Cable | | | N x mm ² | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) |
| Dimension | | | mm | 837 x 308 x 189 | 837 x 308 x 189 | 998 x 345 x 210 | 998 x 345 x 210 |
| Net Weight | | | kg | 9.1 | 9.1 | 11.9 | 12.7 |
| Fan Motor Output | | | W | 30 | 30 | 30 | 58 |
| OUTDOOR | | | | DC09RH UL2 | DC12RH UL2 | DC18RH UL2 | DC24RH U24 |
| Operation Range | Cooling | Min. / Max. | °C DB | -15 / 48 | -15 / 48 | -15 / 48 | -15 / 48 |
| | Heating | Min. / Max. | °C DB | -15 / 24 | -15 / 24 | -10 / 24 | -10 / 24 |
| Sound Pressure | Cooling / Heating | High | dB(A) | 49 / 51 | 49 / 51 | 53 / 55 | 54 / 57 |
| Sound Power | Cooling | High | dB(A) | 65 | 65 | 65 | 70 |
| Air Flow Rate | | High | m ³ /min | 35 | 35 | 35 | 49 |
| Piping | Liquid (ODU / IDU) | Min. / Max. | m | 3 / 20 | 3 / 20 | 3 / 20 | 3 / 30 |
| | Elevation (ODU / IDU) | Min. / Max. | m | 10 | 10 | 10 | 15 |
| Piping Connection | Liquid | OD (Outside) | mm (inch) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) |
| | Gas | OD (Outside) | mm (inch) | 9.52 (3/8) | 9.52 (3/8) | 12.7 (1/2) | 15.88 (5/8) |
| Drain Hose Size | | OD (Outside) | mm (inch) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) |
| Refrigerant | Type | | | R32 | R32 | R32 | R32 |
| | Charge at 7.5m | | kg | 0.800 | 0.800 | 1.000 | 1.100 |
| | | | t-CO ₂ eq | 0.540 | 0.540 | 0.675 | 0.743 |
| | Additional Charge | | g/m | 20 | 20 | 20 | 20 |
| | GWP | | | 675 | 675 | 675 | 675 |
| Fan Motor Output | | | W | 43 | 43 | 43 | 85 |
| Compressor Type | | | | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary |
| Net Weight | | | kg | 34.1 | 34.1 | 34.4 | 46.0 |
| Dimension | | | mm | 770 x 545 x 288 | 770 x 545 x 288 | 770 x 545 x 288 | 870 x 650 x 330 |
| ACCESSORIES & OTHERS | | | | | | | |
| Multi Compatible | | | | Y | Y | Y | Y |
| PI 485 | | | | Y | Y | Y | Y |
| Dry Contact | | | | Y | Y | Y | Y |
| Wired Remote Controller | | | | Y | Y | Y | Y |

ⓘ This product contains Fluorinated greenhouse gases (R32).

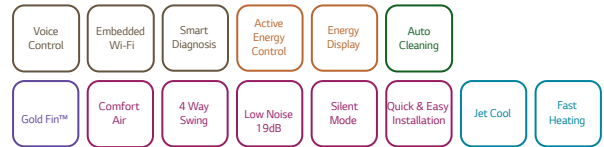
ⓘ S : Sleep / L : Low / M : Medium / H : High

ⓘ GWP : Global warming potential

ⓘ t-CO₂eq : F-gas(kg)*GWP/1000

ⓘ Specification, design and feature are subject to change without prior notice.

DUALCOOL STANDARD PLUS



LG participates in the ECP programme for EUROVENT VRF program. Check ongoing validity of certification www.eurovent-certification.com

Single Combination

| UNIT | | | | 9K | 12K | 18K | 24K |
|--------------------------------|-----------------------|------------------------------|----------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|
| INDOOR | | | | PC09SQ NSJ | PC12SQ NSJ | PC18SQ NSK | PC24SQ NSK |
| Capacity | Cooling | Min. / Rated / Max. | kW | 0.89 / 2.50 / 3.70 | 0.89 / 3.50 / 4.04 | 0.90 / 5.00 / 5.50 | 0.90 / 6.60 / 7.42 |
| | Heating | Min. / Rated / Max. | kW | 0.89 / 3.30 / 4.10 | 0.89 / 4.00 / 5.10 | 0.90 / 5.80 / 6.40 | 0.90 / 7.50 / 8.64 |
| | Heating -7°C | Rated | kW | 2.60 | 3.00 | 4.20 | 6.00 |
| Power Input | Cooling / Heating | Rated | W | 656 / 800 | 1,080 / 1,050 | 1,562 / 1,611 | 2,164 / 2,238 |
| EER | | | W/W | 3.81 | 3.24 | 3.20 | 3.05 |
| S.E.E.R. | | | | 7.00 | 6.60 | 7.00 | 6.90 |
| P design C | | | kW | 2.50 | 3.50 | 5.00 | 6.60 |
| COP | | | W/W | 4.13 | 3.81 | 3.60 | 3.35 |
| S.C.O.P | | (Average / Warmer) | | 4.00 / 4.90 | 4.00 / 4.90 | 4.30 / 5.30 | 4.30 / 5.30 |
| P design H (Average / Warmer) | | | kW | 2.50 / 1.30 | 2.50 / 1.30 | 3.90 / 2.10 | 5.00 / 2.70 |
| Energy Label (A+++ to D Scale) | Cooling | | | A++ | A++ | A++ | A++ |
| | Heating | (Average / Warmer) | | A+ / A++ | A+ / A++ | A+ / A+++ | A+ / A+++ |
| Annual Energy Consumption | Cooling | | kWh | 125 | 186 | 250 | 335 |
| | Heating | (Average / Warmer) | kWh | 875 / 371 | 875 / 371 | 1,270 / 555 | 1,628 / 713 |
| Sound Pressure | Cooling | S / L / M / H | dB(A) | 19 / 27 / 35 / 41 | 19 / 27 / 35 / 41 | 31 / 34 / 39 / 44 | 31 / 34 / 42 / 47 |
| | Heating | L / M / H | dB(A) | 27 / 35 / 41 | 27 / 35 / 41 | 34 / 39 / 44 | 34 / 42 / 47 |
| Sound Power | Cooling | | dB(A) | 59 | 59 | 60 | 65 |
| Air Flow Rate | Cooling | S / L / M / H / Max. (Power) | m ³ /min | 3.0 / 4.2 / 7.5 / 10.0 / 12.5 | 3.0 / 4.2 / 7.5 / 10.0 / 12.5 | 8.0 / 10.5 / 13.0 / 14.5 / 15.5 | 8.0 / 10.5 / 13.1 / 16.1 / 18.3 |
| | Heating | L / M / H | m ³ /min | 5.6 / 7.2 / 10.0 | 5.6 / 7.2 / 10.0 | 11.0 / 13.5 / 16.0 | 11.0 / 14.3 / 17.6 |
| Dehumidification Rate | | | l/h | 1.1 | 1.3 | 1.8 | 2.5 |
| Running Current | Cooling | Min. / Rated / Max. | A | 1.10 / 3.30 / 6.00 | 1.10 / 4.70 / 6.00 | 1.20 / 6.90 / 9.00 | 1.20 / 9.80 / 14.00 |
| | Heating | Min. / Rated / Max. | A | 1.10 / 4.00 / 7.00 | 1.10 / 4.70 / 7.00 | 1.20 / 7.10 / 9.50 | 1.20 / 10.00 / 14.00 |
| Starting Current | Cooling / Heating | Rated | A | 3.30 / 4.00 | 4.70 / 4.70 | 6.90 / 7.10 | 9.80 / 10.00 |
| Power Supply | | | Ø / V / Hz | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 |
| Circuit Breaker | | | A | 15 | 15 | 20 | 25 |
| Power Supply Cable | | | N x mm ² | 3 x 1.0 | 3 x 1.0 | 3 x 1.5 | 3 x 2.5 |
| Power & Transmission Cable | | | N x mm ² | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) | 4 x 1.0 (Including Earth) |
| Dimension | | | mm | 837 x 308 x 189 | 837 x 308 x 189 | 998 x 345 x 210 | 998 x 345 x 210 |
| Net Weight | | | kg | 8.7 | 8.7 | 11.9 | 12.7 |
| Fan Motor Output | | | W | 30 | 30 | 30 | 58 |
| OUTDOOR | | | | PC09SQ UA3 | PC12SQ UA3 | PC18SQ UL2 | PC24SQ U24 |
| Operation Range | Cooling | Min. / Max. | °C DB | -10 / 48 | -10 / 48 | -10 / 48 | -15 / 48 |
| | Heating | Min. / Max. | °C DB | -10 / 24 | -10 / 24 | -10 / 24 | -10 / 24 |
| Sound Pressure | Cooling / Heating | High | dB(A) | 48 / 50 | 48 / 50 | 53 / 55 | 54 / 57 |
| Sound Power | Cooling | High | dB(A) | 65 | 65 | 65 | 70 |
| Air Flow Rate | | High | m ³ /min | 27 | 27 | 35 | 49 |
| Piping | Liquid (ODU / IDU) | Min. / Max. | m | 3 / 15 | 3 / 15 | 3 / 20 | 3 / 30 |
| | Elevation (ODU / IDU) | Min. / Max. | m | 7 | 7 | 10 | 15 |
| Piping Connection | Liquid | OD (Outside) | mm (inch) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) | 6.35 (1/4) |
| | Gas | OD (Outside) | mm (inch) | 9.52 (3/8) | 9.52 (3/8) | 12.7 (1/2) | 15.88 (5/8) |
| Drain Hose Size | | OD (Outside) | mm (inch) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) | 21.5 (27/32) |
| Refrigerant | Type | | | R32 | R32 | R32 | R32 |
| | Charge at 7.5m | | kg | 0.700 | 0.700 | 1.000 | 1.100 |
| | | | t-CO ₂ eq | 0.473 | 0.473 | 0.675 | 0.743 |
| | Additional Charge | | g/m | 20 | 20 | 20 | 20 |
| | | GWP | | 675 | 675 | 675 | 675 |
| Fan Motor Output | | | W | 43 | 43 | 43 | 85 |
| Compressor Type | | | | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary | Inverter Twin Rotary |
| Net Weight | | | kg | 25.1 | 25.1 | 34.4 | 46.0 |
| Dimension | | | mm | 717 x 495 x 230 | 717 x 495 x 230 | 770 x 545 x 288 | 870 x 650 x 330 |
| ACCESSORIES & OTHERS | | | | | | | |
| Multi Compatible | | | | Y | Y | Y | Y |
| PI 485 | | | | - | - | - | - |
| Dry Contact | | | | Y | Y | Y | Y |
| Wired Remote Controller | | | | Y | Y | Y | Y |

☐ This product contains Fluorinated greenhouse gases (R32).

☐ S : Sleep / L : Low / M : Medium / H : High

☐ GWP : Global warming potential

☐ t-CO₂eq : F-gas(kg)*GWP/1000

☐ Specification, design and feature are subject to change without prior notice.

Standard Wired Remote Controller



Standard III
PREMTB100



Standard III
PREMTBB10



Standard II
PREMTB001



Standard II
PREMTBB01

| Model Name | PREMTB100 PREMTBB10 | PREMTB001 PREMTBB01 |
|-------------------------------------|--|------------------------|
| Operation Mode | On / Off, Fan Speed Control, Temperature Setting | |
| Mode Change | Cooling, Heating, Auto, Dehumidification, Fan | |
| Auto Swing / Vane Control | • | • |
| Reservation | Simple, Sleep, On / Off, Weekly, Holiday | |
| Time Display | • | • |
| Electrical Failure Compensation | • | • |
| Child Lock | • | • |
| Operation Status LED | • | • |
| Indoor Temperature Display | • | • |
| Wireless Remote Controller Receiver | - | • |
| Size (W x H x D, mm) | 120 x 120 x 16 | 120 x 121 x 16 |
| Backlight | • | • |
| Display AirQuality Status | - | - |

※ Refer to each model PDB for applicable models.

PI 485



PMNFP14A1

Power : Single phase AC 220V 50/60Hz

Max. no of the indoor units that can be connected : 64 UNITS

Model applied : RAC / Multi / Single / Therma V

☐ Refer to each product PDB for applicable models.

Remote Controller



Prestige
ARTCOOL Mirror,
DUALCOOL Deluxe,
Standard Plus

| Button | Display Screen | Description |
|----------------|----------------|---|
| | - | To turn on / off the air conditioner. |
| | 88 °C | To adjust the desired room temperature in cooling, heating or auto changeover mode. |
| COMFORT AIR | - | To adjust the air flow to indirect wind. |
| LIGHT OFF | - | To set the brightness of the display on the indoor unit. |
| MODE | | To select the cooling mode. |
| | | To select the heating mode. |
| | | To select the dehumidification mode. |
| | | To select the fan mode. |
| FAN SPEED | | To select the auto changeover / auto operation mode. |
| | | To adjust the fan speed. |
| ENERGY CTRL | - | To bring the effect of the power saving. |
| JET MODE | | To change room temperature quickly. |
| | | To adjust the air flow direction vertically or horizontally. |
| | | |
| ROOM TEMP | | To display the room temperature. |
| °C ↔ °F [5sec] | | To change unit between °C and °F. |
| SET/ CANCEL | - | To set / cancel the functions and timer. |
| | - | To adjust time. |
| | - | To turn on / off air conditioner automatically. |
| | - | To cancel the timer settings. |



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<http://partner.lge.com/uk>

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