



Dual Inverter
Compressor



Residential Air Conditioner Products



Dual Inverter
COMPRESSOR



1.0 1.5 2.0 2.5

Deluxe (APX)

- + Air Purifying
- + 4way
- + Active Energy Control
- + UV Nano Technology



Dual Inverter
COMPRESSOR



1.0 1.5 2.0 2.5 3.0

Premium (IPC)

- + Ionizer
- + Allergy Filter
- + 4way
- + Active Energy Control



Dual Inverter
COMPRESSOR






1.0 1.5 2.0 2.5

Standard (ISU/W)

- + Allergy Filter
- + Active Energy Control

Major USPs

- 1  **Dual Cool Compressor**
- 2  **Smart ThinQ : Embedded Wi-Fi**
- from Deluxe to Premium
- 3 **Healthcare Functions**
- 4 **Gold Fin Condensers**
- 5  **Green Refrigerant R32 Applied**

Key features

Performance comparison

LG DUALCOOL offers the best performance in any environment



LOOK SIMILAR ?

DIFFERENT ACTION!



“ SINGLE INVERTER ”



“ DUAL INVERTER ”

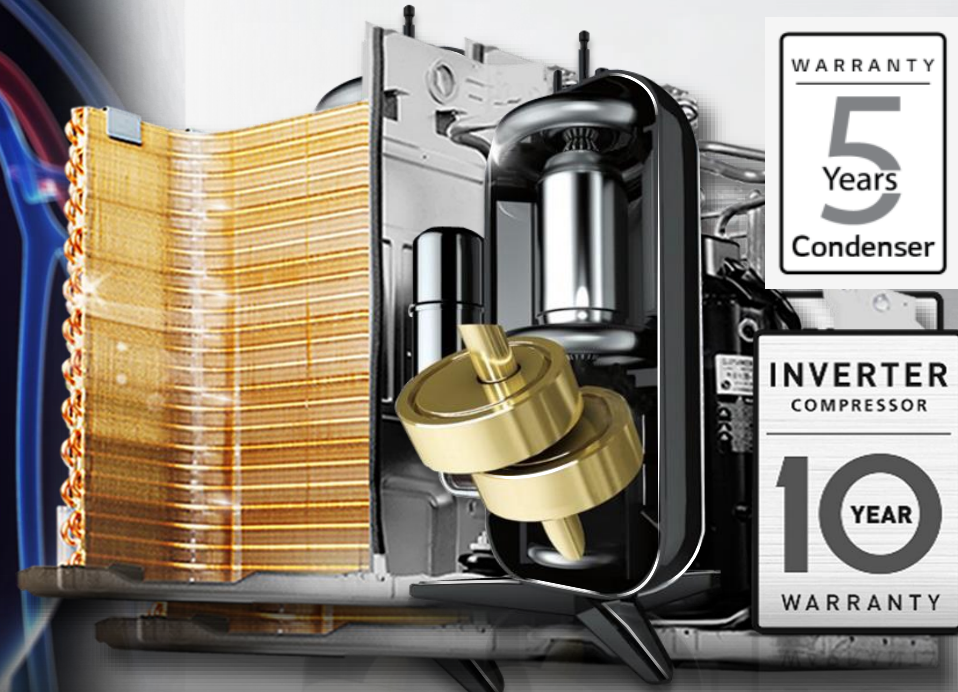
“ **LG DUALCOOL** ”

Key features

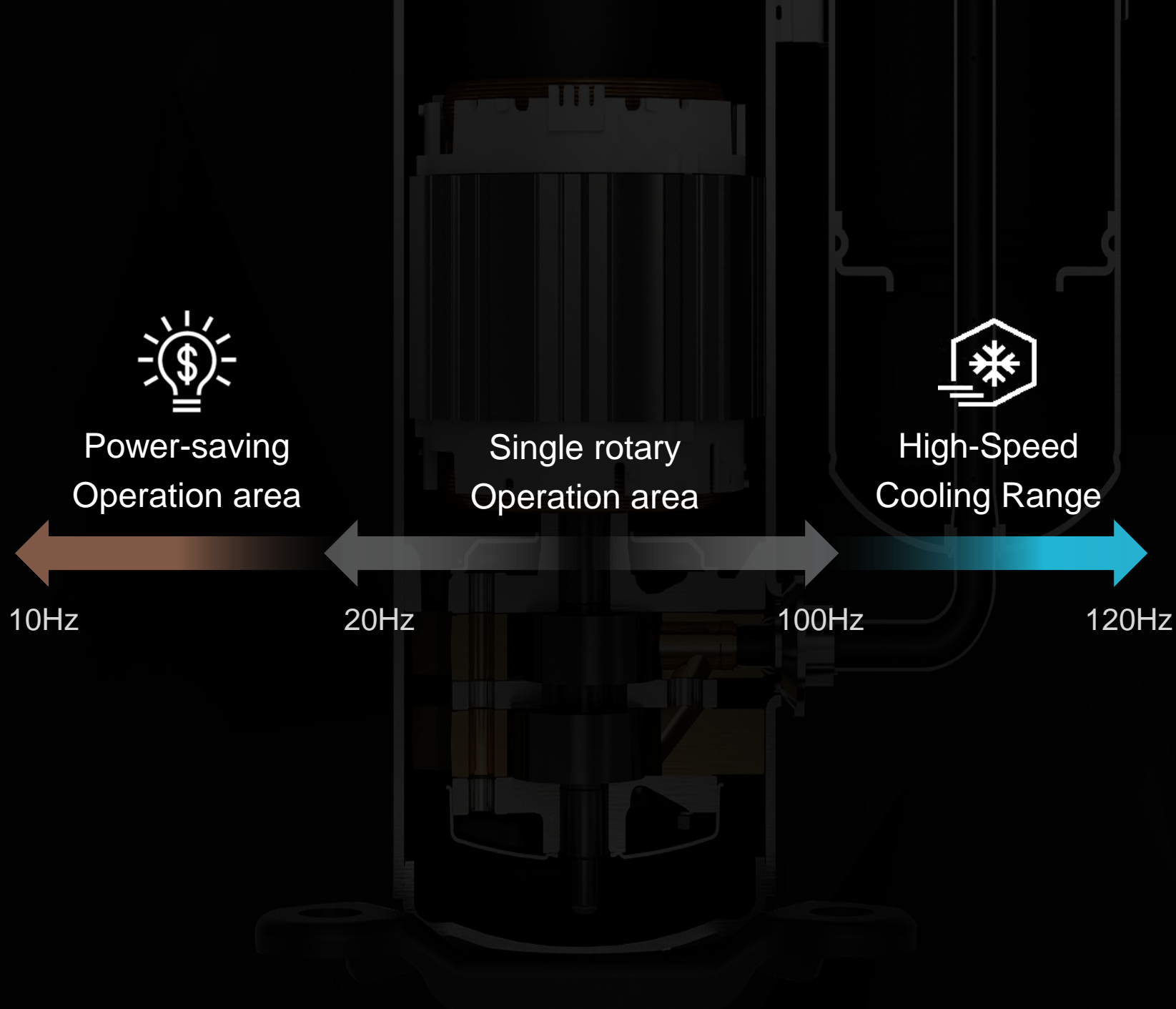
Series Introduction



Heart
Lungs
Lungs



Dual Inverter
Gold Dual™ Inverter
Gold Fin™ condenser



Power-saving
Operation area

10Hz

20Hz

Single rotary
Operation area

100Hz



High-Speed
Cooling Range

120Hz

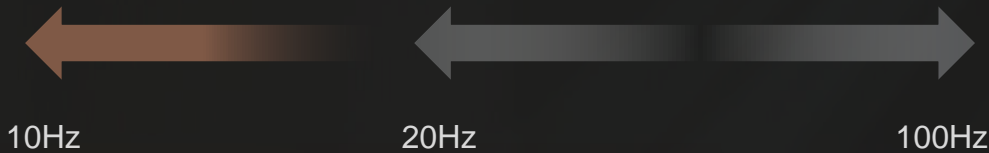


Dual Inverter
COMPRESSOR



Power-saving
Operation area

Single rotary
Operation area



70% ENERGY SAVING
& OPTIMUM TEMPERATURE





Dual Inverter
COMPRESSOR



Single rotary
Operation area

High-Speed
Cooling Range



20Hz

100Hz

120Hz

40% FASTER COOLING
15% MORE COOLING



Energy Saving & Power Cooling

LG's highly efficient advanced inverter technology and innovative energy saving technology provides powerful performance while minimizing energy consumption.



Dual Inverter
COMPRESSOR



Dual Inverter Compressor

Maximum Efficiency & Cooling

How it works

Varied-Speed Dual Rotary

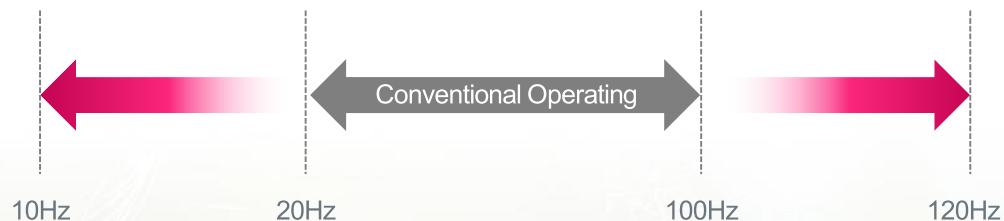
A compressor motor with a wider rotational frequency saves more energy and has a higher speed cooling range than conventional compressor.



Power-Saving Operating Range

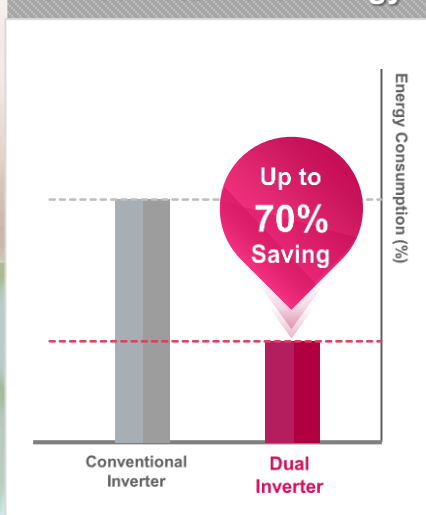


High-Speed Cooling Range

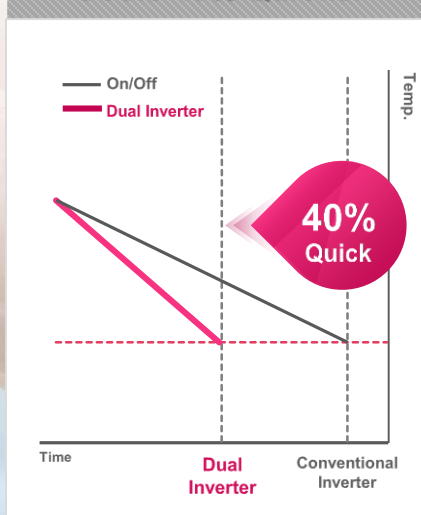


Test Result

Saves 70% More Energy



Cools 40% Quicker

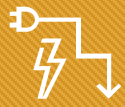


Reduces Vibration by 88%



TUV Rheinland, Verification on Fast Cooling & Power Saving Rate





Active Energy Control

Active Energy Control allows users to adjust energy consumption levels and total cooling capacity by controlling the maximum frequency of the compressor motor

Concept

LG lets you take an active part in conserving energy and saving money with active changes to the Energy Control function, according to the situation.

Energy usage



Step 1

Crowded and very active



Energy usage

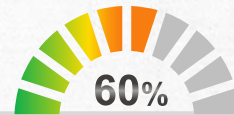


Step 2

Few people and low-activity levels

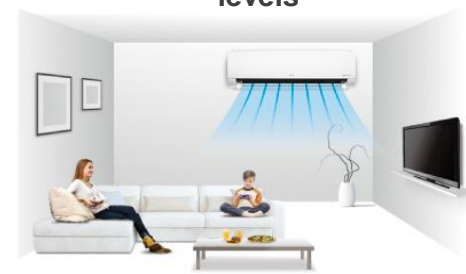


Energy usage

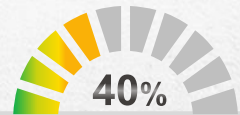


Step 3

Some people & low-activity levels



Energy usage



Step 4

Few people without activity





Power cooling

20m Windblast

Bigger Skew Fan

A 25% larger skew fan expels more powerful blasts of air.



25%
Larger
(Fan Size)

Wider Outlet

An optimally designed larger outlet fills spaces with cooler air faster and farther.



9%
Larger
(Fan Size)





Power cooling

20m Windblast

Test Result



Test Specification

Ambient temperature : 25 ± 3

Voltage : 220-240V~

Test Method : 33919-4520-4701

"LG Air Flow Analysis Standard"

Certificate



TUV Rheinland,
Verification Certifying 20m Airflow

Wind Speed
0.25 m/s



20m

2.2m

60cm





Jet Cool



The optimized design of the air outlet provides more powerful airflow, which cools the room by up to 5 degrees in just 3 minutes.

Concept

Jet cool is able to reach temperature settings up to 3 times faster than other air conditioners, the optimized air outlet design increases the velocity of internal circulation by up to 20%.





16°C Set

Conventional lowest setting temp. 18°C is reduced to 16°C,
so you can have more fast cooling.



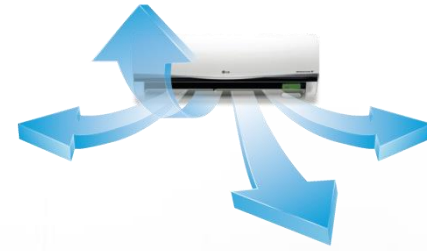
Concept

You can to set the lowest setting temp. is 16°C



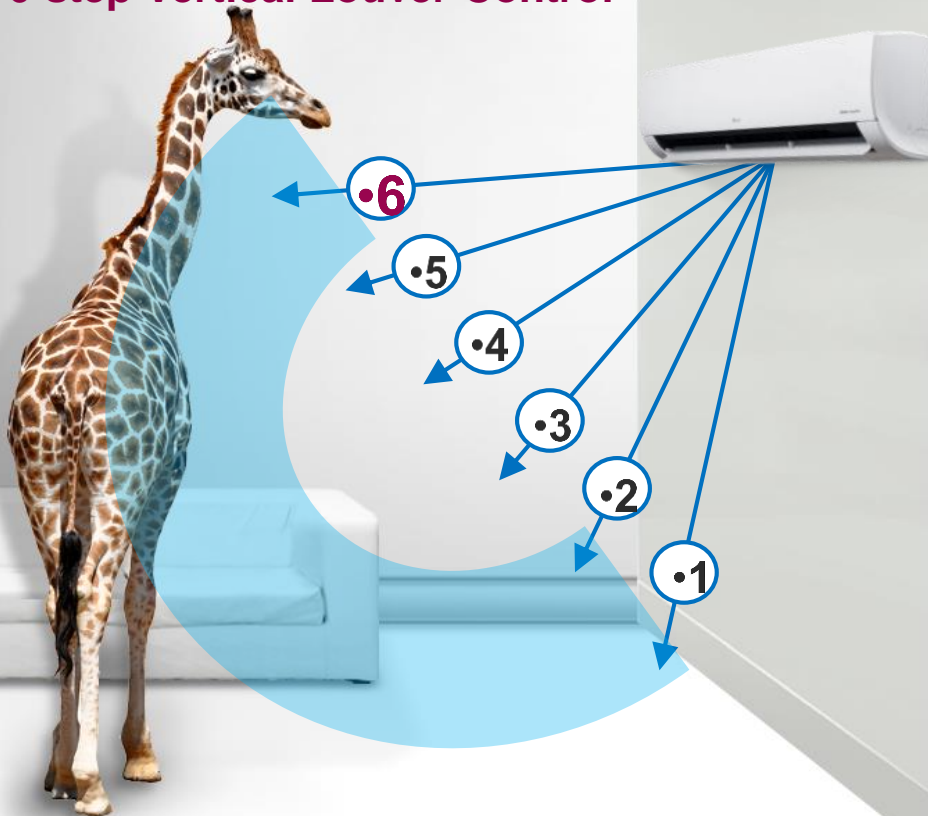


4 Way Swing

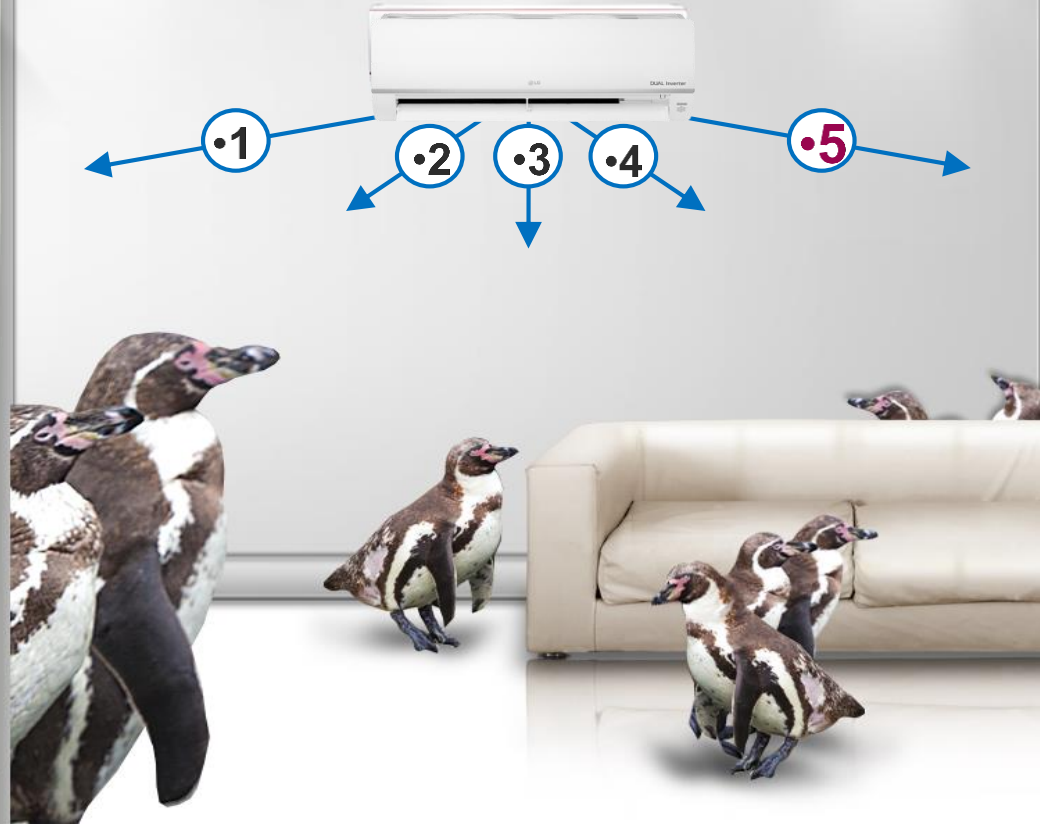


How it works

•6-step Vertical Louver Control



•5-step Horizontal Vane Control





(100%) R32 Refrigerant

All LG Inverter AC use R32 Refrigerant **01**

R32 is an environmental friendly gas which has zero ozone depletion potential **02**

R32 has global warming potential only 625 less than R-410 A 32% **03**

R32 has more faster cooling performance **04**

R32 is easy to buy, cheap and low toxicity **05**





Inverter Durability

Improved durability of LG air conditioner.

Excellent Durability

10 Year Inverter Compressor Warranty

The Compressor is to the Air Conditioner the same as the engine is to the vehicle with the 10 Year Warranty on the Compressor.

Gold Fin™

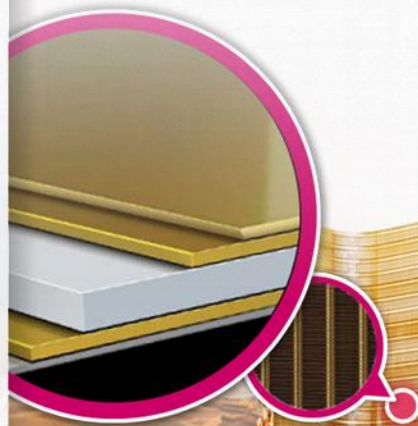
LG's exclusive anti-corrosion coating protects the heat exchanger from corrosion and wear that results from prolonged exposure to harsh climate.

5 Year Condenser Warranty

Ultimate Durability with the 5 Year Warranty on the Condenser. (Indoor & Outdoor)

Volt Care (High & Low Voltage Safe)

Upgraded LG PCB (Power Circuit Board) Ensure safety against high-voltage or power surges and ultimately strengthening the air-conditioner's durability. (450V)





Gold Fin™



Gold Fin™

Patented Anticorrosion Coating

Sand and dirt can blow into and damage an air conditioner, causing it to breakdown and decreasing the life of the product.



Test Result

Test result 360 hrs. after being exposed to sodium chloride

Conventional Fin



Gold Fin™





Volt Care (High & Low Voltage Safe)

Extreme Durability

What is Volt Care?

Volt Care protects an air conditioner from potential damage caused by voltage fluctuations. It is composed of Low Voltage Starter and High Voltage Safe technologies. Low Voltage Starter allows the air conditioner to start even with a low power supply, while High Voltage Safe protects the unit and keeps it running efficiently.

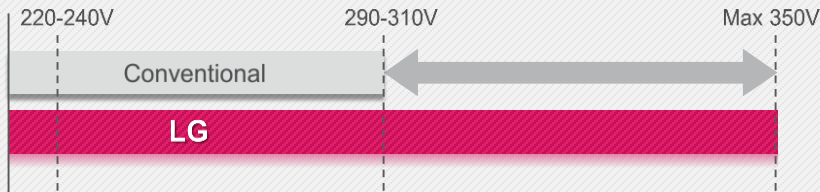


Benefit & Test Result

High Voltage Safe

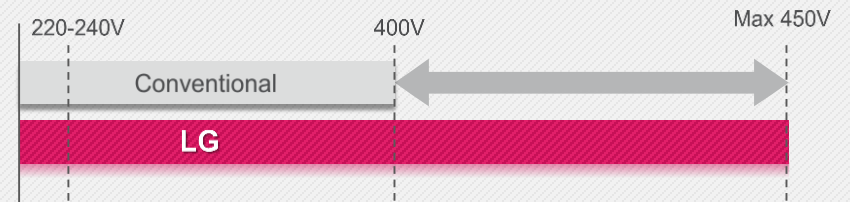
Operation Range

Volt Care ensures full functionality even when electrical current jumps to 350 V. This system provides an operational range that is 20-25% wider than that of most competing models.



PCB Spike

The upgraded PCB can withstand spikes in voltage as high as 400-450 V—around 14% more than the average residential air conditioner.

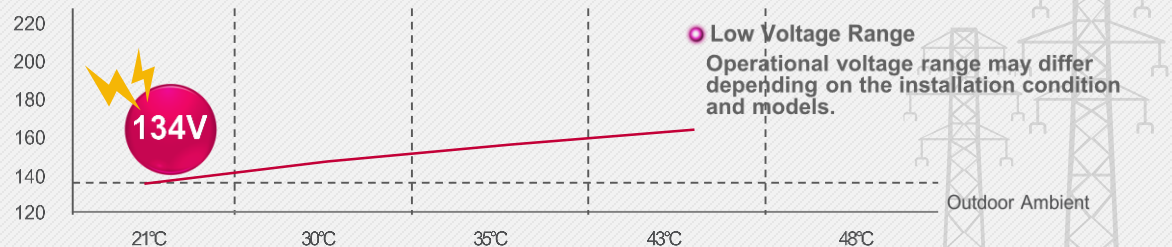


Low Voltage Starter

Operational Voltage Range Test Result

The Low Voltage Starter enables an air conditioner to operate continuously at lower voltage.

*Operational voltage range may differ depending on the installation condition and models.





Health & Comfort





Ionizer

Sterilizes Up to 99.9% Bacteria & Deodorizes

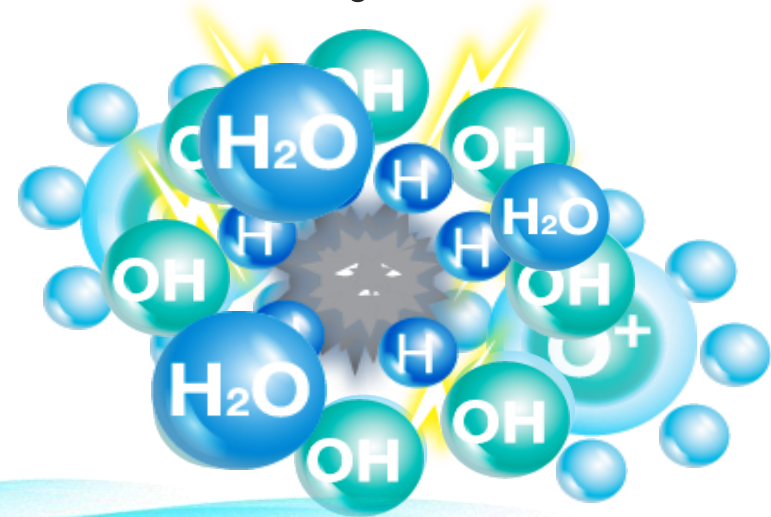


What is ionizer

Over 3 million ion sterilize not only the air going through the air conditioner, but all surrounding harmful substances and even odor.

How it Works

Through a 5-step process, ionizer function has been proven to sterilize over 99% of adhering bacteria within 60 minutes.



Complete Sterilization

- OH radicals react with harmful substances and odors, breaking them down into H₂O, making the air fresh



Dual Protection Filter

The Antibacterial Air Filter is the first line of defense, designed to initially capture dust particles over 10 μ m in size then eliminate finer particles, bacteria from various other sources.

Concept

The Anti Bacterial Air Filter is the first step for dust and bacteria removal in your AC. It was designed to capture dust particles over 10 μ m in size, and then remove finer/smaller particles and bacteria from other sources.

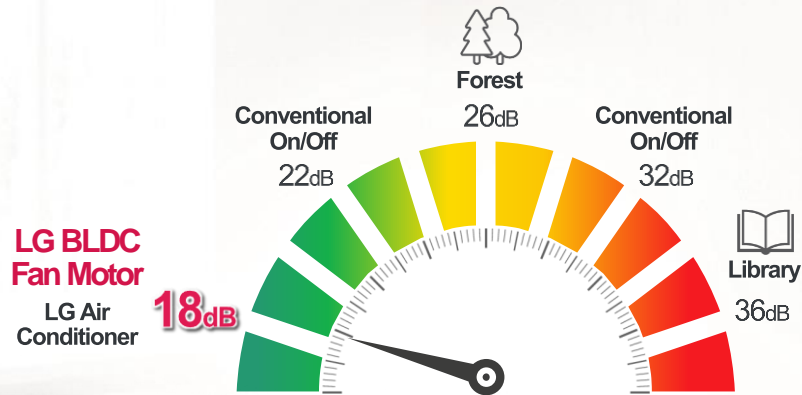




Low Noise(18dB)

Pain point

- Air conditioners can sometimes disrupt living environments if they are too noisy
- especially during the night when their sound is more easily heard.



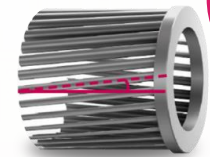
Noise Control Technology

Ultra Quiet 18dB

LG's Unique Skew Fan



Conventional



Skew Fan

15°
Tilted Stabilizer

BLDC Fan motor



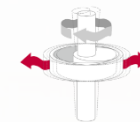
AC Motor



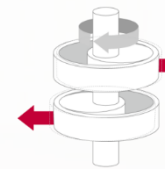
BLDC Motor

Advanced Motor

Dual Inverter Compressor



Single Rotary



Dual Inverter

40%
cut Torque Variation



Comfort Air

Pain point

Having the air conditioner turned on while asleep can lower body temperature or cause discomfort, especially if the outflowing air is blowing directly onto a room's occupants.

1 Touch Soft Air adjusts vane angle to prevent this, providing ultimate sleeping comfort



How it works

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 occupancy

Benefit

- **Convenient Control**
Enjoy utmost comfort in just one click
- **Cool and Healthy Air**
Prevents sudden drops in body temperature.

Remote Control



Scene 1

Inclines to a maximum 70° angle



- Sets vane angle to highest position.
- Cooling & heating without uncomfortable airflow.
- Optimized for gentle airflow cooling.

Scene 2

Declines to a maximum 0° angle



- Sets vane angle to lowest position.
- Cooling & heating without uncomfortable airflow.
- Optimized for gentle airflow heating.



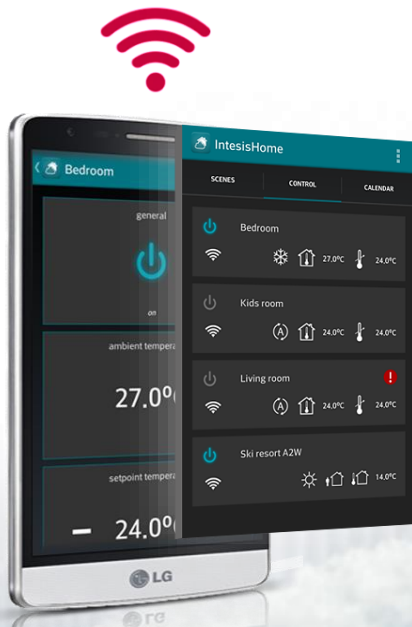
Convenience





Smart ThinQ(Wi-Fi Control)

Easily access and control an air conditioner's functions from anywhere

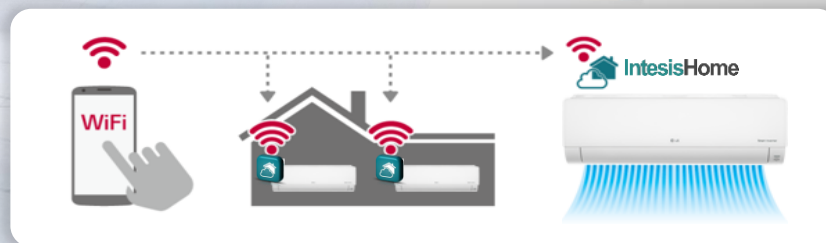


AC Control from Anywhere



AVAILABLE ON THE
App Store

GET IT ON
Google play





Smart ThinQ(Wi-Fi Control)

Wi-Fi Connectivity

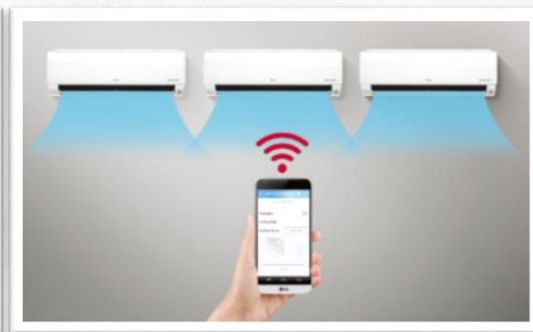
Access your air conditioner at anytime and from anywhere with a Wi-Fi equipped device and LG's exclusive air conditioning control app.



Multiple Devices

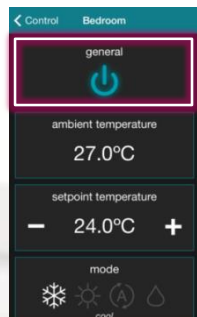
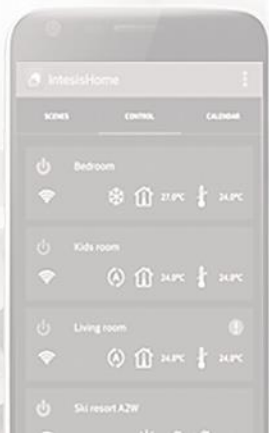


Multi-Control

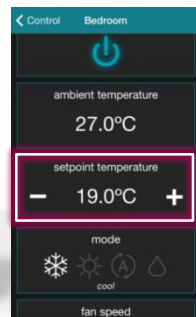


Improved Convenience

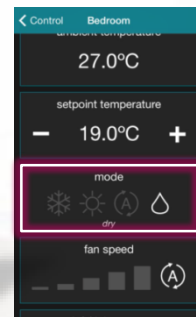
AC Control from Anywhere



On/off



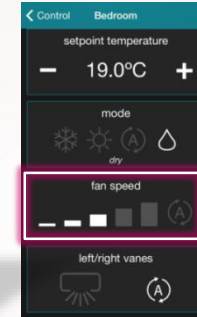
Set Temp



Mode



Vane control



Fan speed



Smart Diagnosis

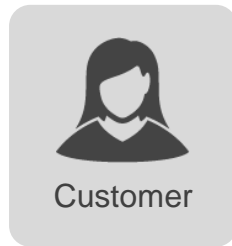
AC Diagnosis via Smartphone

Using Smart Diagnosis

Pushing the Smart Diagnosis button (Pushing  button for 5 seconds) on the remote

By using Smartphones

Transmit Captured Image of Smart Diagnosis (Android/ iOS)



Customer



Run Smart Diagnosis app and press "Receive" button for acoustic communication signal



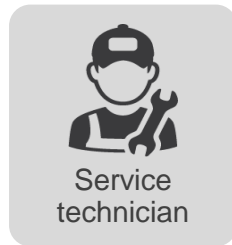
Press Smart Diagnosis button to receive acoustic communication signal transmitted by the indoor unit through the app



Receive data from the product and screen shot



Transfer captured image to the service technician



Service technician



Review received image





Low Refrigerant Detection



Low Refrigerant Cause



Less Cooling



Mechanical Failure

Easy Detection

When low level of refrigerant is detected, alternately show CH and 36 on the display.

Longer Life Span of AC

Why LG Inverter?

“ DUAL Benefits ”



Benefits for Customer (End-User)



More Energy Saving (Max 70% Saving)
with Dual Inverter Compressor



More & Faster Cooling (Max 40% Faster)
with Dual Inverter Compressor



More Durability

- 10 Year Compressor Warranty Program
- 5 Year Condenser Warranty Program
- Gold Fin Condensers



More Convenience

- Low Noise 18dB
- Wi-Fi Control
- Precise Temperature Control
- Comfort Air
- Healthcare



Benefits for Customer Installer / ASC



Easy Maintenance

- Low Refrigerant Detection
- Smart Diagnosis



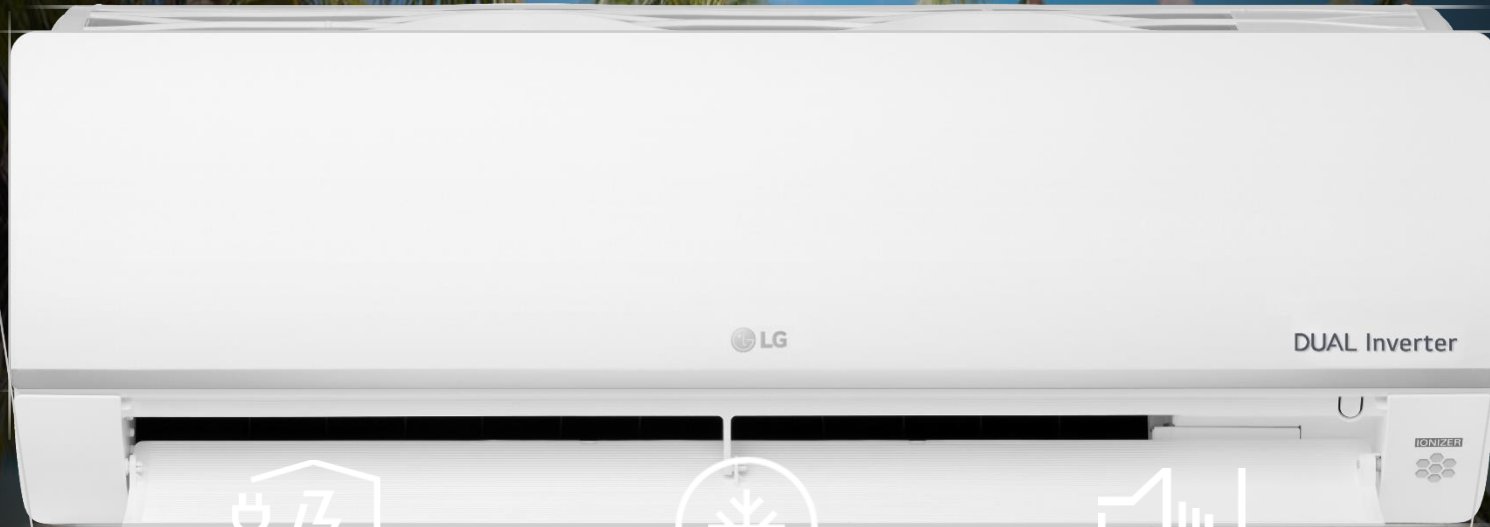
Easy Installation

- Compact & Slim Indoor Unit





Dual Inverter
Compressor



70% Energy
Saving



40% Faster
Cooling



Low Noise
18dB



Window Type



Dual Inverter
COMPRESSOR



0.8 1.0 1.0 1.5 2.0 2.5

Inverter (WC/WL)
+ Energy Saving up to 70%
+ Fast Cooling up to 30%
+ Low Noise 44dB
+ 4way swing (manual)



0.8 1.0 1.5 2.0




Premium (PC)
+ 4way swing (manual)
+ Remote Control



0.8 1.0 1.5

Standard (LC)
+ 4way swing (manual)
+ Manual Timer

Major USPs

- 1 **Enhanced Inverter Lineup**
- 2  **Dual Compressor applied**
- 3  **Smart ThinQ : Embedded Wi-Fi**
- 4  **Green Refrigerant R32 Applied**
- 5 **Timer and Remote Models**



Dual Inverter Compressor Technology

What is Dual Inverter Compressor

LG Inverter units adjust and constantly vary the compressor speed to maintain the desire temperature with minimal fluctuations to ensure your comfort is not compromised. LG compressor also powerful yet silent in performance while greatly lowering energy consumption by as much as 70%.

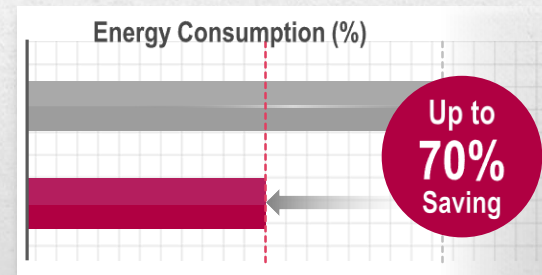
How it works

Varied-Speed Dual Rotary

A compressor motor with a wider rotational frequency saves more energy and has a higher speed cooling range than conventional compressor.



Inverter operation at low Hz enables energy saving up to 70%.



*Test Condition
 Indoor : 18°C
 Outdoor : 35°C
 Test : Inverter vs. On-off



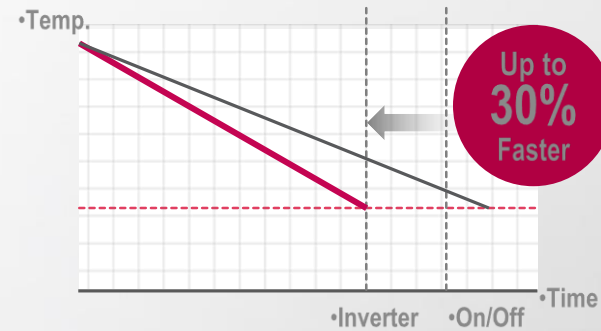
Fast cooling up to 30%



Keep cool this summer with new large top air discharge that allow you to feel the air in all the corners of the room. Now cooling is more faster and powerful, and keeping the space cool and comfortable.



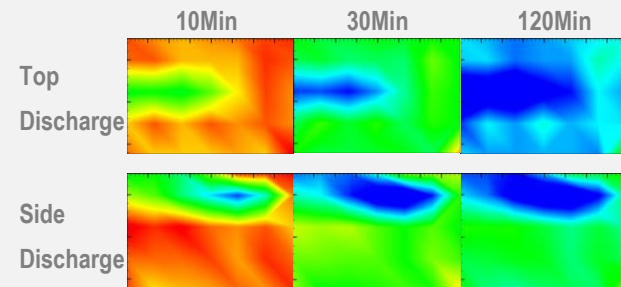
•Fast Cooling



Reduces time to reach desired temperature up to 30

•Even Cooling

Even Cooling



*Test Condition
Indoor : 18°C
Outdoor : 35°C
Test : Inverter vs. On-off

1.1m 환경챔버 TEST

Power-Saving Operating Range

High-Speed Cooling Range





Superior Cooling Capacity

LG DUAL Inverter compressor 1.0 HP model can cool up to 12,000 KJ same as on/off 1.5HP

Inverter (1.0HP)



•Dual Rotary

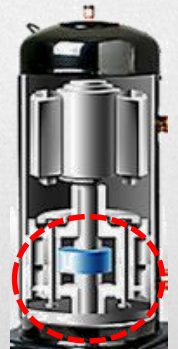


Cooling Capacity (Max) 12,000 Kj/Hr

Non Inverter (1.5HP)



Cooling Capacity (Max) 12,500 Kj/Hr

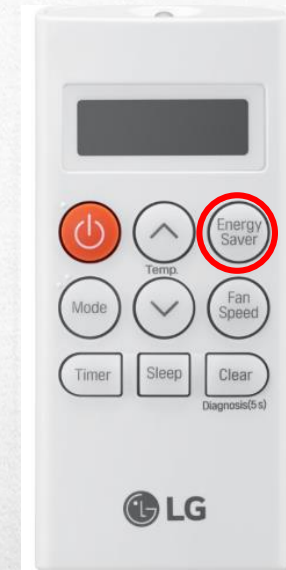
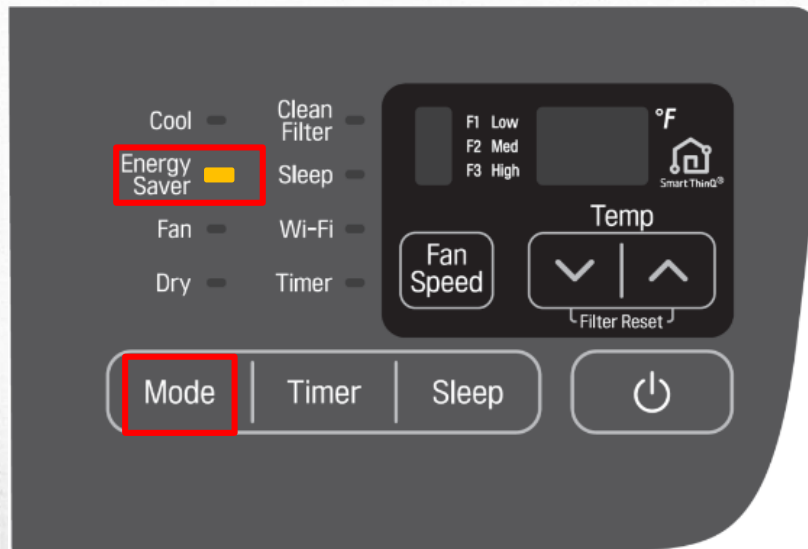


•Single Rotary



Energy Saving Mode

In this mode the compressor and fan turn off when the set temperature is achieved. Approximately every 3 minutes the fan turns on to allow the unit sensor to accurately determine if more cooling is needed.



※ You can save electric charge by set this mode

※ It can be entered by Remote Controller

When the compressor stops cooling, the fan also stop.

The fan will turn on approximately every 3 minutes and check the room air to determine if cooling is needed.



Even Air Flow

4-way deflection disperses cool air quickly and effectively in multiple directions to each corner of the room.



- Inverter Comfort Air flow
- ✓ Minimized temperature fluctuation due to Dual Inverter's low Hz operation
 - Pleasant cooling compared to on-off which turns on & off frequently



16°C Set



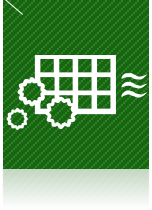
Conventional lowest setting temp. 18°C is reduced to 16°C,
so you can have more fast cooling.



Concept

You can to set the lowest setting temp. is 16°C





Auto Clean Function

In the Cooling and Dry Mode, moisture generated inside the indoor unit is removed.

How it works

Press Energy Saver button on the remote control for 3 seconds.

 is displayed on the remote control

NOTE

● If you turn off the unit, the fan continues to run for 10 minutes and cleans the inside of the indoor unit.



Available Model:

LA080WC

LA100WC



Low Noise(44dB)



Low Noise 44dB

LG air conditioners operate at low sound levels, thanks to LG's unique skew fan and DUAL Inverter Compressor™ which eliminate unnecessary noise and allow for smooth operation.

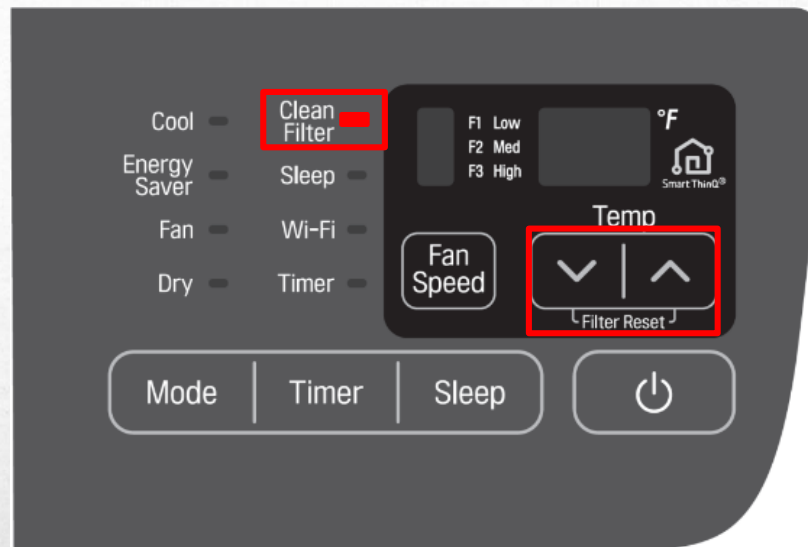


Clean Filter

❑ The LED lights up to notify you that the filter needs to be cleaned.

→ After cleaning the filter, press “Temp∧∨” together to turn off ‘Clean Filter’ light.

(Filter reset must be done from unit control panel not remote control).



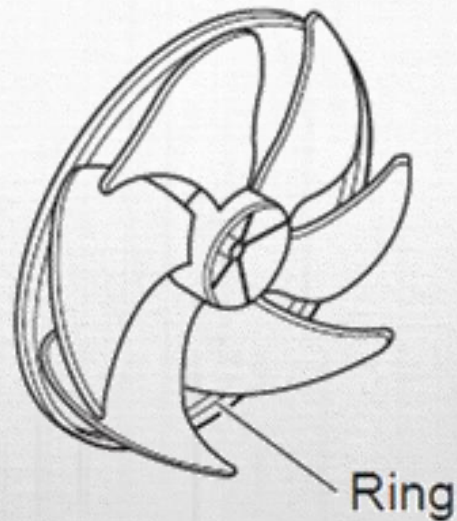
※ If want to cancel the model
Push “Temp ∨ ∧” together

※ This feature is a JUST Reminder to clean the air filter for more efficient operation.
The LED light turns on after 250 hours of operation

Slinger Fan

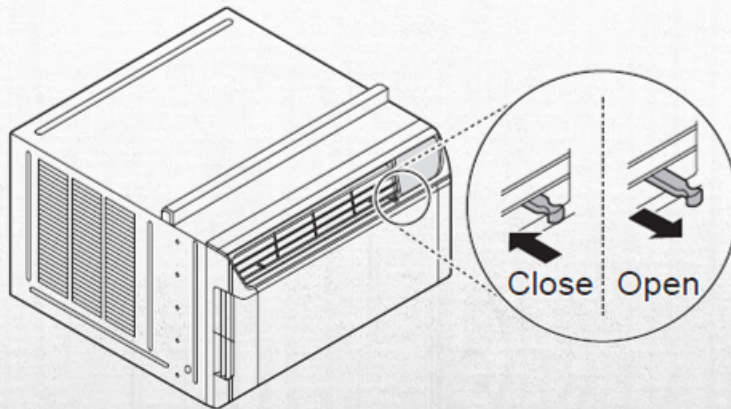
This air conditioner is equipped with a slinger fan.

The fan's outer ring picks up the condensed water from the base pan if the water level gets high enough. The water is then picked up by the fan and expelled through the condenser, making the air conditioner more efficient.



Ventilation

- ❑ Push the ventilation level in to the closed position to maintain the best cooling performance. Pull the ventilation lever out to open the vent and draw fresh air into the room.



Does the ventilation lever open?

The ventilation lever must be in the **CLOSE** position in order to maintain the best cooling condition. Otherwise hot air will come into the room.

→ Put the ventilation lever at the “**CLOSE**” position

When you want to come the fresh air into the room, set the ventilation lever at the “**OPEN**” position and set the fan mode



Smart ThinQ(Wi-Fi Control)

Easily access and control an air conditioner's functions from anywhere



AC Control from Anywhere



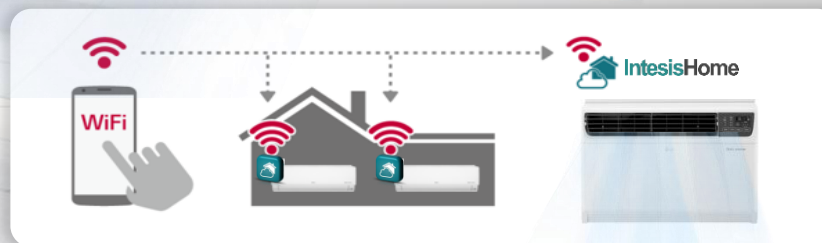
Manage the Air Around You.

With more ways to manage and monitor your air conditioner, LG **SmartThinQ** technology lets you live smarter and breathe easier.



AVAILABLE ON THE
App Store

GET IT ON
Google play



Thank You