MULTI SPLIT R32

Product Introduction (Smart Inverter)

AirCare Complete System™

UVnano™

Air Purification

Contents : Outdoor Unit

1. Intro

2. Supreme Energy Efficiency

3. High Operation Reliability

4. Comfort & Convenience

Intro

- Line-up

Line-up

Outdoor unit

kW	4.1	4.7	5.3	6.2	7.0	7.9	8.8
Multi Piping Type							
1Ø	MU2R15 UL0	MU2R17 UL0	MU3R19 U21	MU3R21 U21	MU4R25 U21	MU4R27 U40	MU5R30 U40
Max. Connectable IDUs	2	2	3	3	4	4	5

Indoor unit

	kW	1.5	2.1	2.5	3.5	4.2	5.0	7.1
Ceiling Cassette	1 way			MT09R NU1	MT11R NU1			
	4 way	MT06R NR0	MT08R NR0	CT09F NR0	CT12F NR0		CT18F NQ0	CT24F NB0
Ceiling Concealed Duct	Middle Static						CM18F N10	CM24F N10
	Low Static			CL09F N50	CL12F N50		CL18F N60	CL24F N30

Line-up

Indoor unit

	kW	1.5	2.1	2.5	3.5	4.2	5.0	7.1
Wall Mounted Type	ARTCOOL Gallery			MA09R NF1	MA12R NF1			
	ARTCOOL Mirror UVnano™ Wi-Fi		AM07BH NSJ	AC09BH NSJ	AC12BH NSJ		AC18BH NSK	AC24BH NSK
	Air Purification Wi-Fi			AP09RT NSJ	AP12RT NSJ			
	Deluxe UVnano™ Wi-Fi		DM07RH NSJ	DC09RH NSJ	DC12RH NSJ		DC18RH NSK	DC24RH NSK
	Standard Plus	PM05SP NSJ	PM07SP NSJ	PC09SQ NSJ	PC12SQ NSJ	PM15SP NSJ	PC18SQ NSK	PC24SQ NSK
	Wi-Fi	MJ05PC NSJ	MJ07PC NSJ	MJ09PC NSJ	MJ12PC NSJ	MJ15PC NSJ	MJ18PC NSK	MJ24PC NSK
	Standard 2 Wi-Fi		MS07ET NSJ	S09ET NSJ	S12ET NSJ		S18ET NSK	S24ET NSK

Wi-Fi embedded.
Wi-Fi module (PWFMDD200) is optional for other models.

Supreme Energy Efficiency

- High Level SEER/ SCOP
- Peak Current Control
- Mode Lock

High Level SEER/ SCOP

The advanced technologies of LG achieve the lowest energy consumption, especially in cooling as can be seen from the SEER class given according to ErP Regulations.

• Certified by Eurovent
• Based on 4.1, 5.3 & 6.2 kW

SEER / SCOP class (ErP regulation)

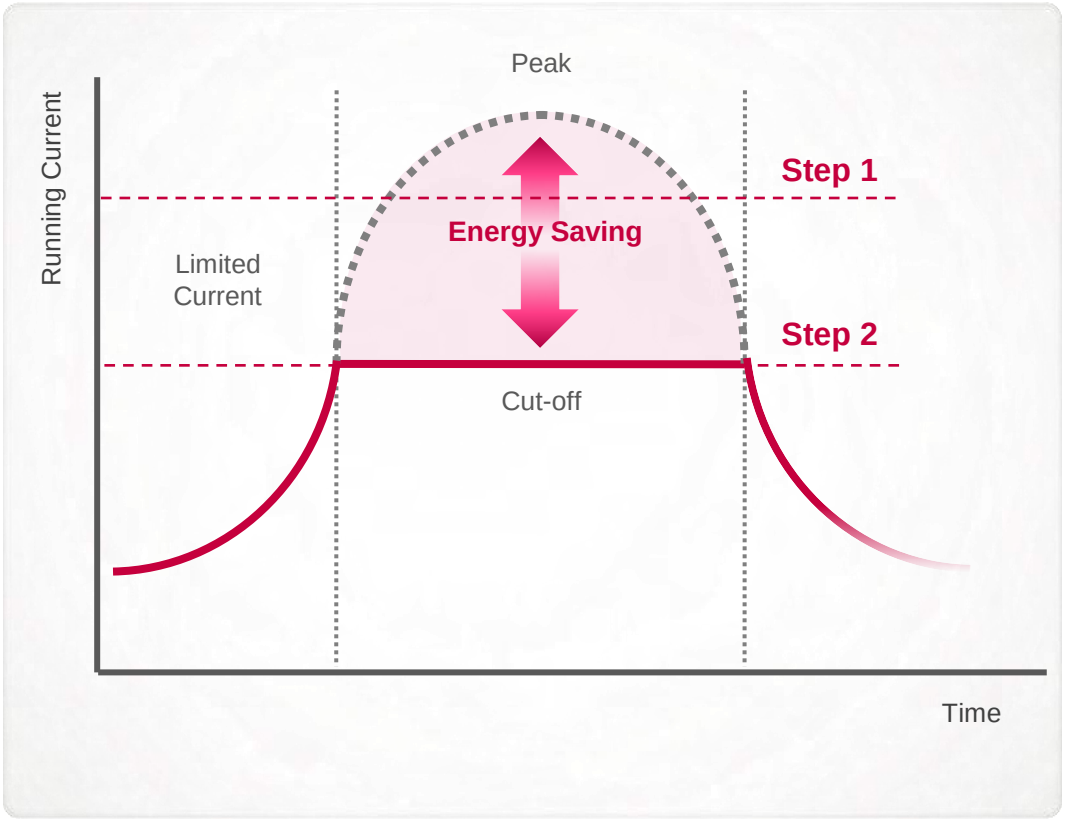
kW	4.1	4.7	5.3	6.2	7	7.9	8.8
SEER	8.50	7.80	8.50	8.50	8.00	8.00	8.20
	A+++	A++	A+++	A+++	A++	A++	A++
SCOP	4.20	4.20	4.4	4.4	4.40	4.20	4.20
	A+	A+	A+	A+	A+	A+	A+

• Energy Labeling (Europe Only)

	SEER	SCOP
A+++	SEER≥8.5	SCOP≥5.1
A++	6.1 ≤ SEER < 8.5	4.6 ≤ SCOP < 5.1
A+	5.6 ≤ SEER < 6.1	4.0 ≤ SCOP < 4.6
A	5.1 ≤ SEER < 5.6	3.4 ≤ SCOP < 4.0
B	4.6 ≤ SEER < 5.1	3.1 ≤ SCOP < 3.4
C	4.1 ≤ SEER < 4.6	2.8 ≤ SCOP < 3.1
D	3.6 ≤ SEER < 4.1	2.5 ≤ SCOP < 2.8

Peak Current Control

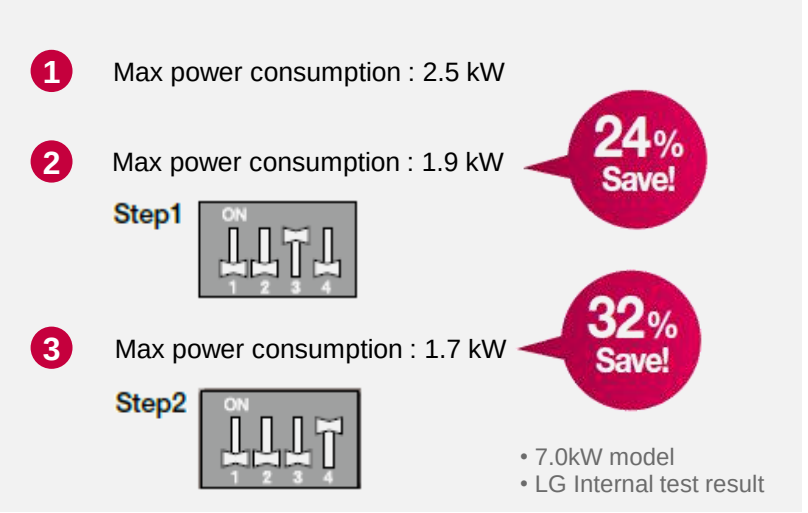
Through the peak current control technology, it is possible to save the energy and operation cost.
User can choose either cooling-only or heating-only operation by setting the dip switch.



※ When using Peak current control, the cooling capacity may not be sufficient.

- By limiting to the maximum running current, the air conditioner can avoid running on the peak current level.
- This function can reduce energy cost during peak periods when electricity is more expensive.

[How to set dip switch]



※ Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB,
Outdoor Ambient Temp. 35°CDB / 24°CWB

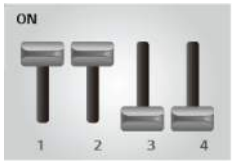
Mode Lock

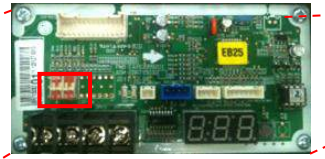
Air conditioning system can be locked to operate cooling only or heating only *by wired remote controller or adjusting dip switch*.*

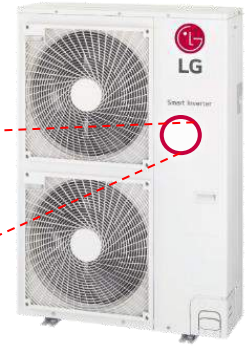
Cooling Only

Heating Only

Dip Switch Setting







LG

* Dip switch setting has the priority

High Operation Reliability

- Corrosion Resistance Black Fin
- Quick Cooling & Heating
- Twin Rotary Inverter Compressor
- Wide Operation Range

Corrosion Resistance Black Fin

The black coating with enhanced epoxy resin is applied for strong protection from various corrosive external conditions such as salt contamination and air pollution including fumes.

※ Test result

Longer Lifespan, Lower Maintenance Costs

- Hydrophilic film (Water flow)
  The Hydrophilic coating minimizes moisture buildup on the fin.
- Acryl + Epoxy + Melamine resin (Corrosion resistant)
  The Black coating provides strong protection from corrosion
- Aluminum Fin

Verification of Corrosion Resistance Performance Testing

Verification of Corrosion Resistance Performance

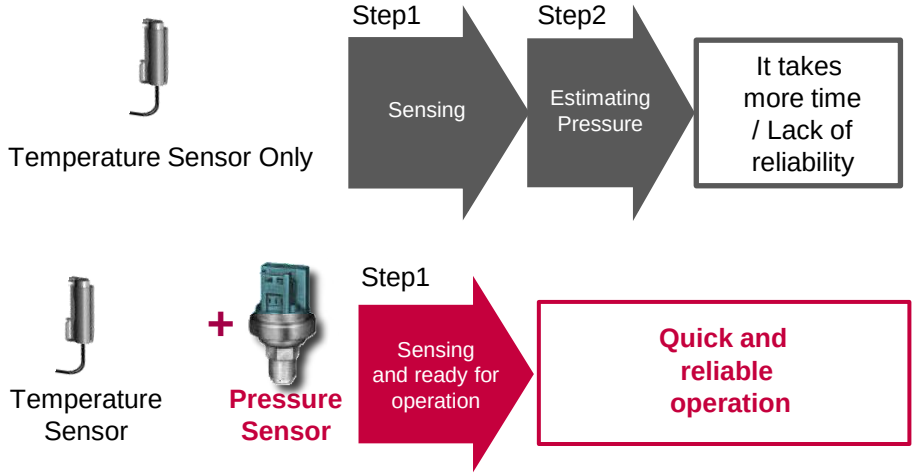
Corrosion improved aluminum fin (Black II)

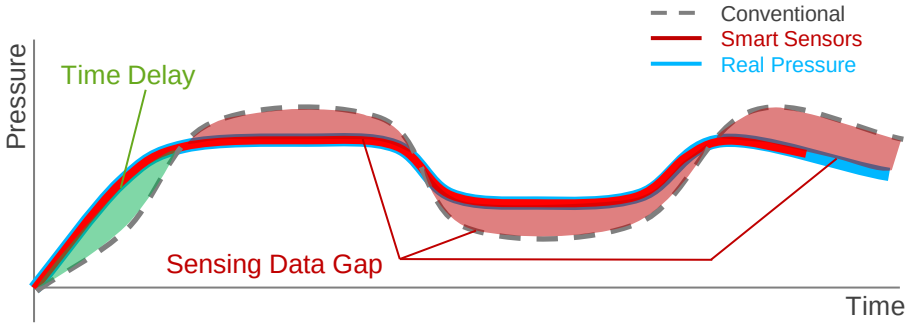
Resists 27 years simulated severe corrosion(Black II)

Quick Cooling & Heating

Through the pressure & temperature control, you can save the time to reach the desired temperature.
You can experience the quick and reliable operation with the LG Multi Split.

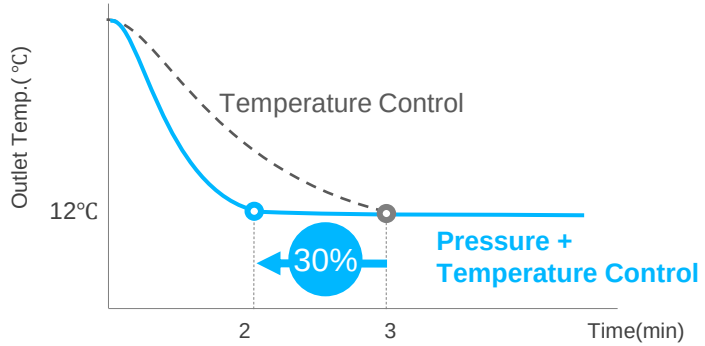
- Quick response due to sensing with ready for operation.
- Ensures to reach target performance point without failing to keep a reliable operation.



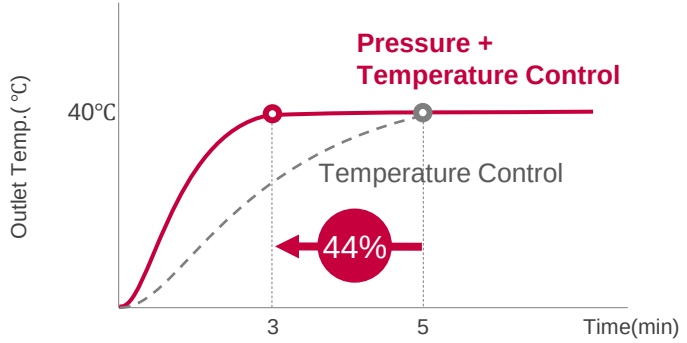


- Pressure control takes up to 30% and 44% less time to reach the desired temperature for cooling and heating, respectively, with high level of accuracy and stability.

Cooling



Heating



※Based on internal test data

Twin Rotary Inverter Compressor

Parts of Inverter Twin Rotary Compressor have been improved to assure a longer life span.

Twin Rotary Inverter Compressor

Flow Optimization

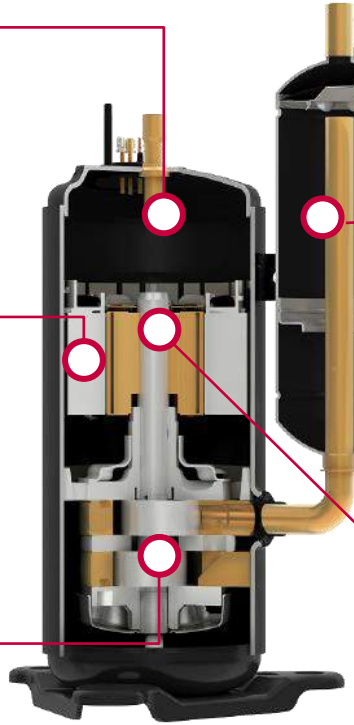
Reduced oil inflow by increasing the length of oil discharge pipe, which keeps enough oil inside the compressor to prevent compressor abrasion.

Concentrated Winding Motor

Oil path area is improved by over 50% by increasing the extra stator cavity. Due to this, caloric value of motor is reduced, improving the cooling function of stator coil.

Twin Rotary Rotor

Upper and lower part rotor offset imbalance in shaft rotor rotation. Vibration and noise are reduced. Max torque load decreased by 45% compared to single rotor.



Suction Optimization

Reduced suction loss and improving oil collection through the optimization of suction path.

Surface Coating

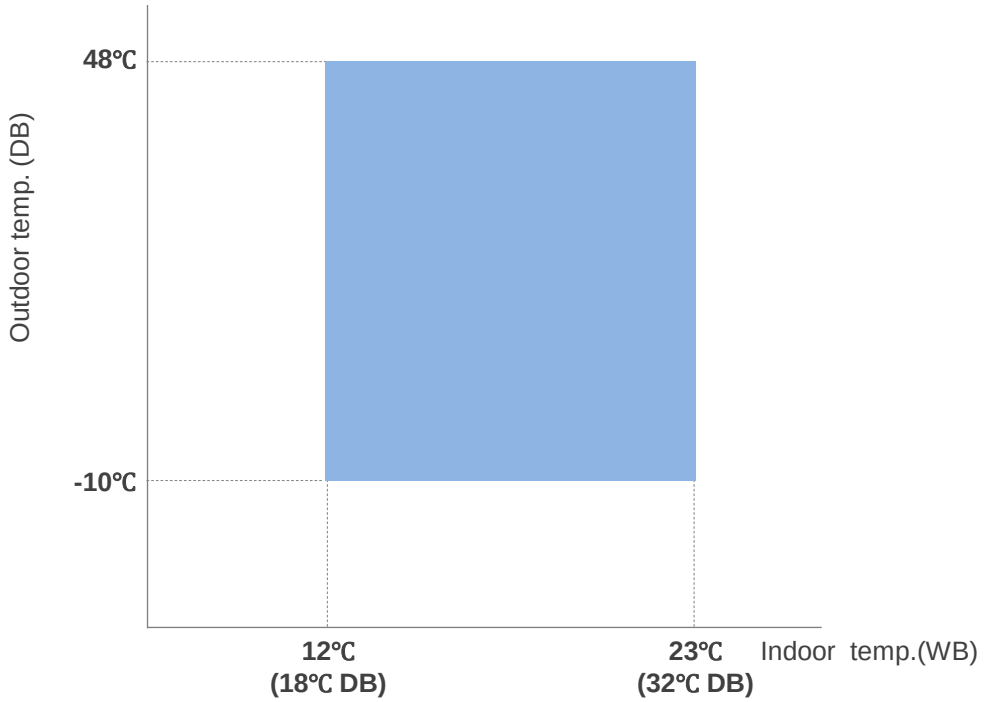
Surface coating of outstanding abrasion resistance property on vane and crank shaft.

Wide Operation Range

Thanks to the wide operation range, models using R32 refrigerant are suitable for cooling in winter season.

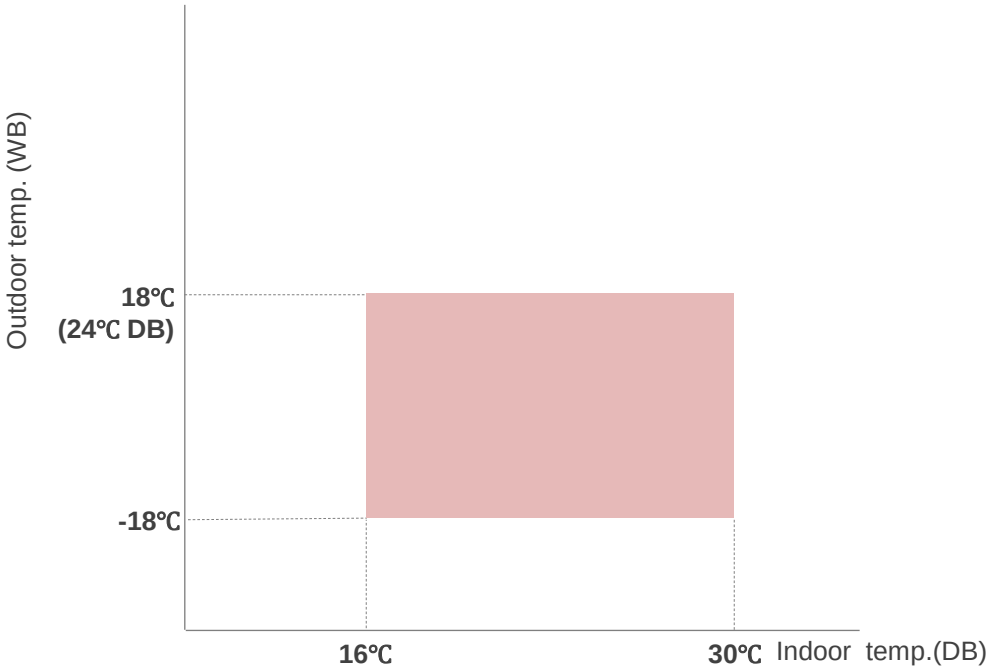
Cooling Mode

- Cooling operation area



Heating Mode

- Heating operation area



Comfort & Convenience

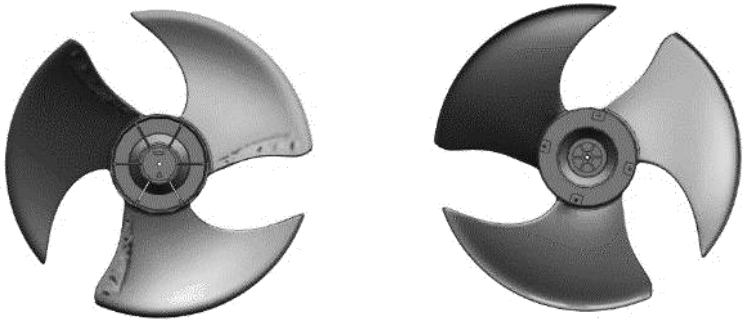
- Biomimetic Fan
- Night Silent Operation
- LG ThinQ
- Scheduled Operation
- Easy Troubleshooting
- Pump Down
- Wiring Error Check
- Mobile LGMV

Biomimetic Fan

The biomimetic fan design was able to achieve lower noise under the same conditions.

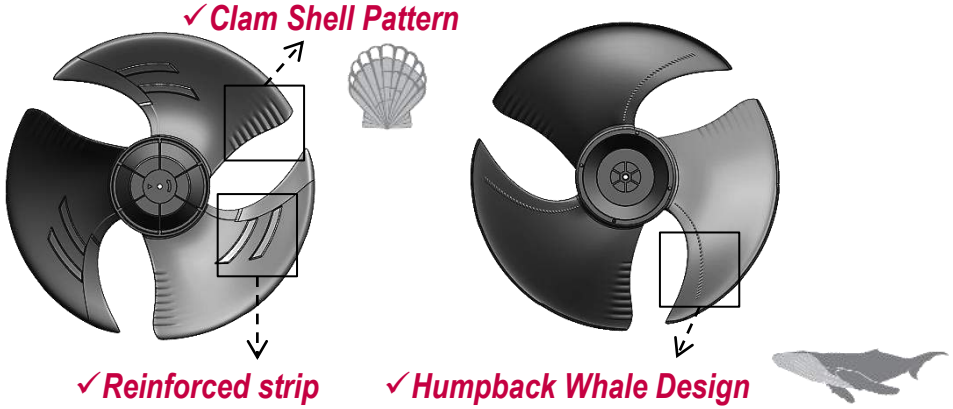
Previous Fan

- **General** fan design
- Sound pressure level **53.1 dB(A)** (110CMM / 2 fan/ fan noise only)



New Design Fan

- **Biomimetic** fan design
- Sound pressure level **49.6 dB(A)** (110CMM / 2 fan/ fan noise only)



Sound pressure levels (cooling)

Previous

Line up	kW	7.9	8.8	11.2	12.1	14.1	16.7
R410A	dB[A]	51	51	53	53	54	54

New

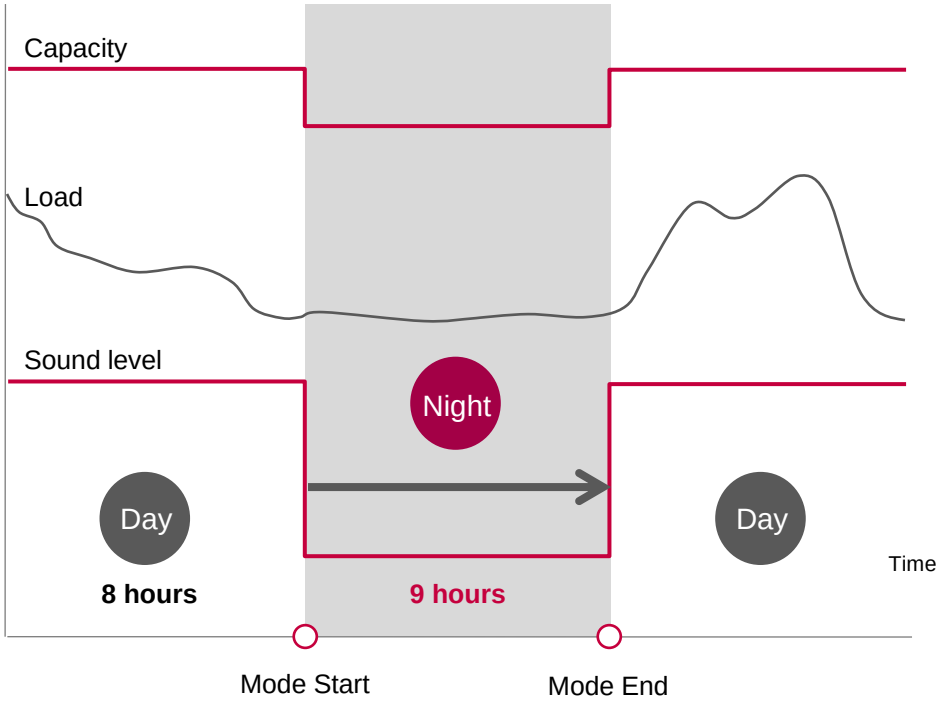
Line up	kW	7.9	8.8	11.7	12.3	14.1	16.4
R32	dB[A]	50	50	-			
R410A	dB[A]	-		53	51	53	53

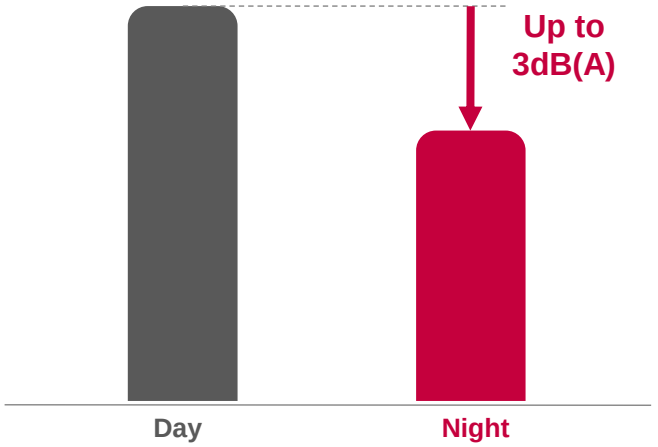
※ Applied to MU4R27 U40, MU5R30 U40, MU5M40 U44, FM40AH U34, FM48AH U34, FM56AH U34, FM41AH U34, FM49AH U34, FM57AH U34

Night Silent Operation

Night Silent operating can reduce noise levels at night time by simply setting the dip switch on the PCB of the outdoor unit.

Cooling Mode

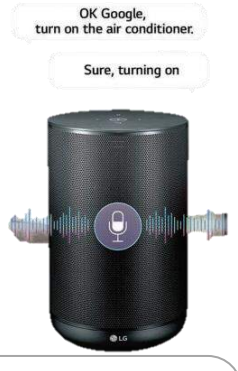


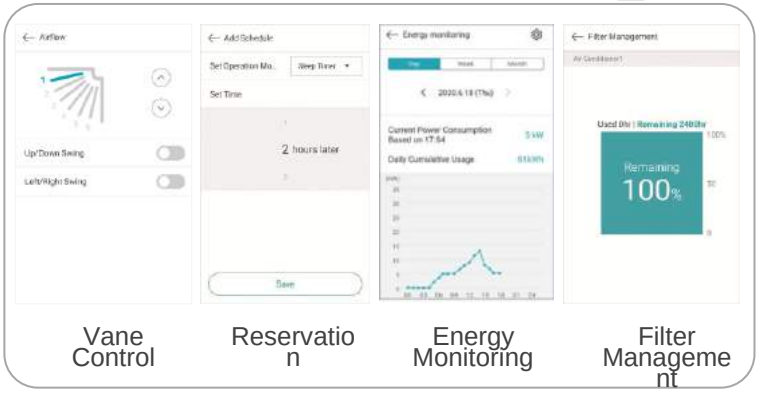


Control your air conditioners using the smart devices as Android or iOS based smartphones via Wi-Fi.

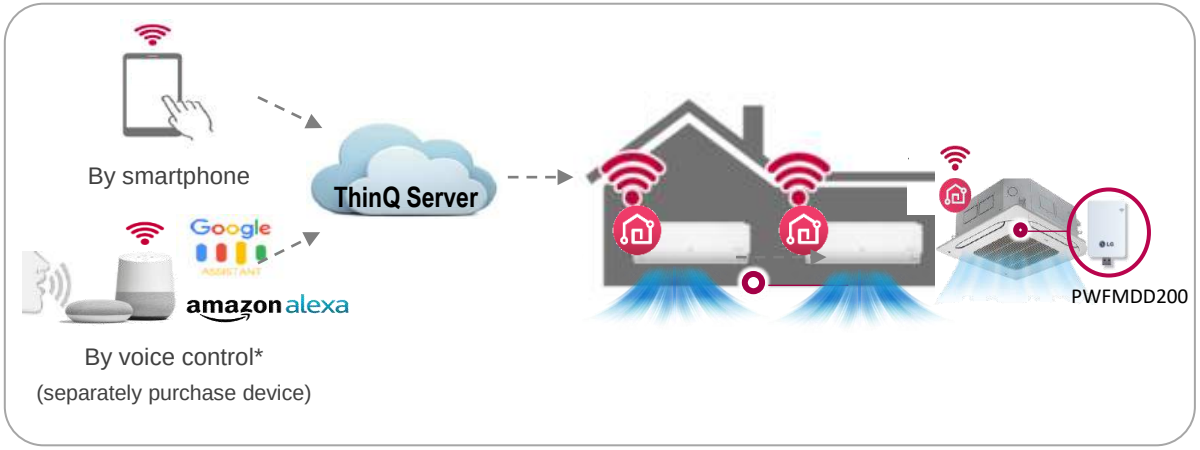
Enhance your daily life!

Remote Control + Monitoring + Voice Control





Access your air conditioner anytime and from anywhere



* Device availability in your country can be checked at
Google : https://support.google.com/store/answer/2462844?hl=en
Amazon : https://developer.amazon.com/en-US/docs/alexa/device-apis/list-of-interfaces.html

Simple operation for various functions

- On/Off
- Mode Selection
- Current temperature
- Set temperature
- Vane Control
- Reservation
- Energy Monitoring
- Filter Management
- Smart Diagnosis

※ Search “LG ThinQ” on Play store or Appstore then download the app.
※ Functionality may be different according to each IDU model.
※ Embedded : Wall Mounted Unit(SJ, SK Chassis / Grade : Standard Plus ↑)
Option : Ceiling Mounted Cassette, Ceiling Concealed Duct

LG

Scheduled Operation

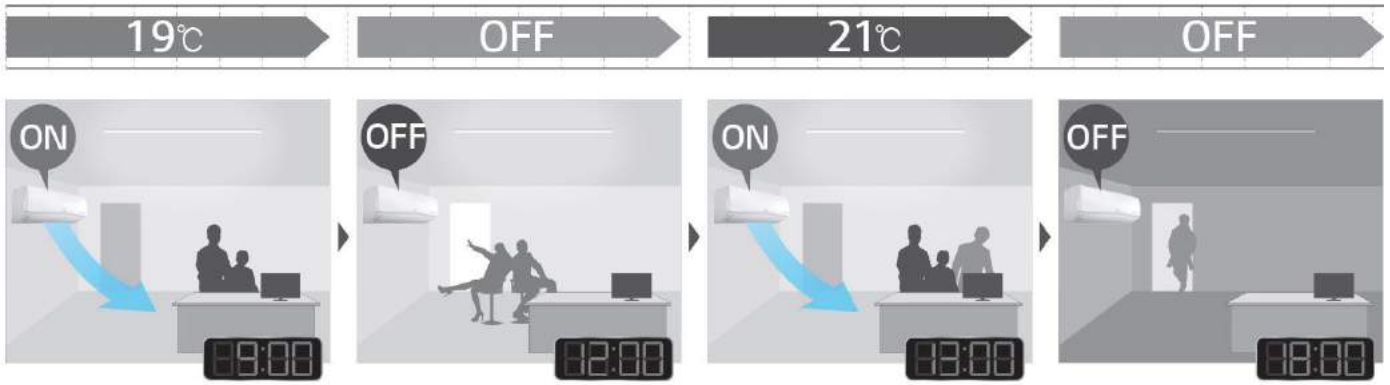
You can set up to 30 schedules for one day or a week.

[Schedule 1]

Setting temperature : 19℃
Operation time : 09:00 ~ 12:00

[Schedule 2]

Setting temperature : 21℃
Operation time : 13:00 ~ 18:00



※ : These functions need to connect to the wired remote controller.

Premium

- Daily 5 schedules
- Up to 35 schedules for a week

※ Click for more details

Standard III

- Up to 30 schedules for one day or a week

Standard II

- Daily 2 schedules
- Up to 14 schedules for a week

Easy Troubleshooting

The operation status is recorded until a malfunction occurs.
Service engineer can analyze the malfunction cause more easily during maintenance.

Conventional

Service engineer has to look for many causes of failure one by one.

Too much effort is required to diagnose the source of trouble

Multi Split (LG Only)

Service engineer can diagnose malfunction causes using recorded data.

Save time & improve accuracy of malfunction diagnosis

The operation status has been recorded up to 3minutes before failure.

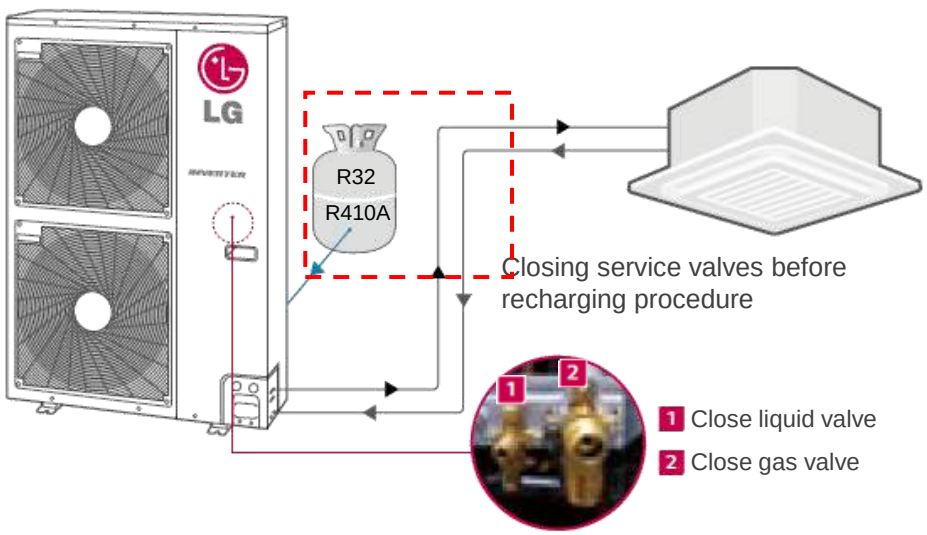
Service engineer can check recorded data through smartphone when Wi-Fi module is installed in outdoor unit.

Pump Down

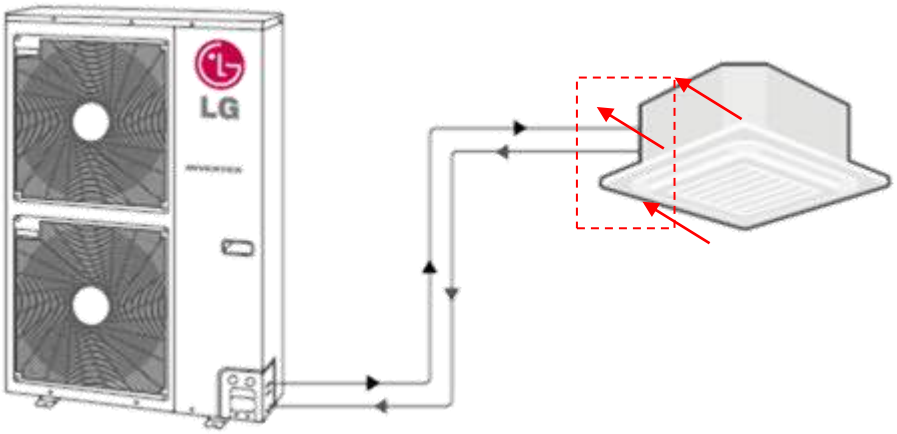
The Pump down(Forced cooling operation) allows refrigerant to be recharged or pumped down regardless of the indoor and outdoor temperature.

This function is very useful when indoor units are being relocated or repaired during winter.

Recharging



Pump Down

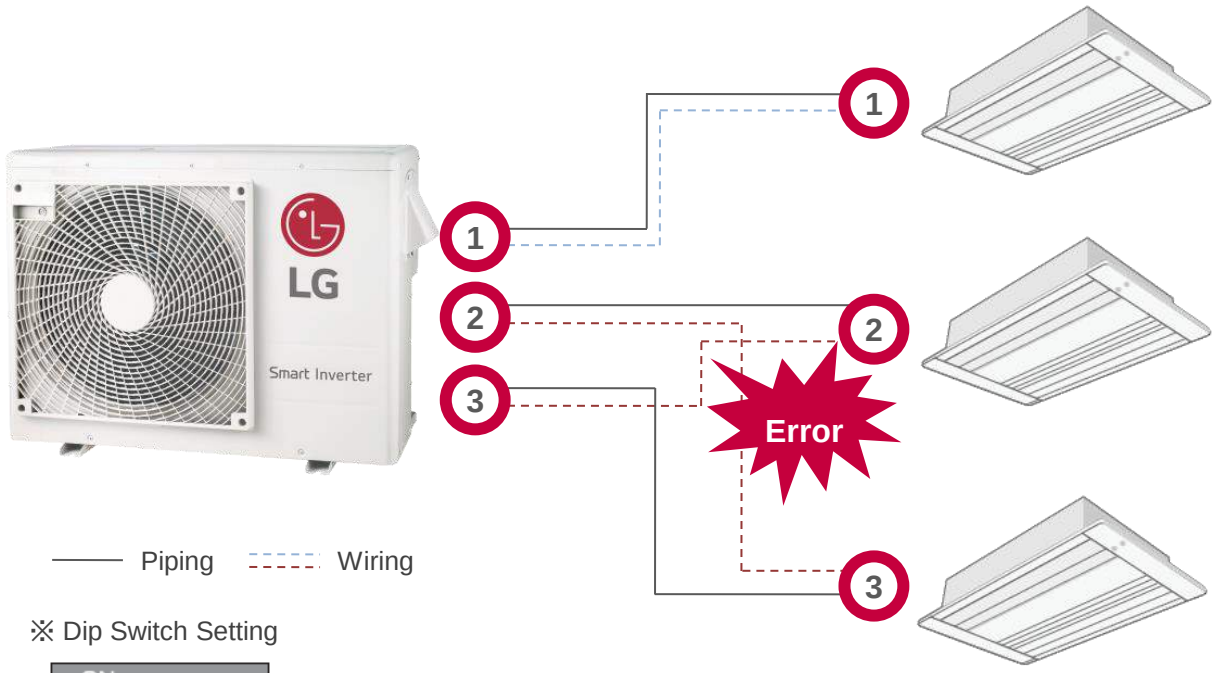


Possible to pump down refrigerant forcibly during winter when indoor or outdoor condition may not meet operation range.

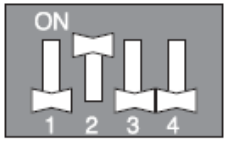
Wiring Error Check

During trouble shooting after installation, installers can check whether the transmission cable has been connected correctly by using the wiring error check function. It can be shown at outdoor PCB.

This wiring error check function can reduce the time taken to check for transmission cable errors.



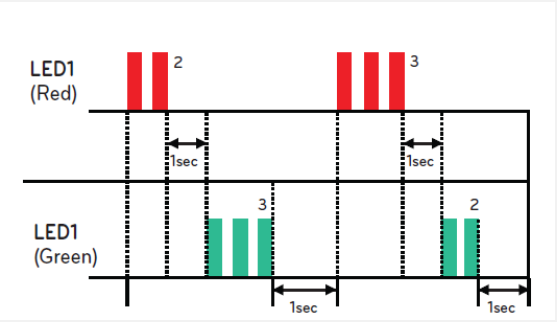
※ Dip Switch Setting



[LED Result]

- If the wiring is correct, the Green LED will light up.
- If the wiring is wrong, display is as below.
  - Red LED : Piping Number
  - Green LED : Wiring Number (Room)

Ex)
If the Red LED blinks twice and the Green LED blinks 3 times, 2nd wire is connected to the 3rd indoor unit.

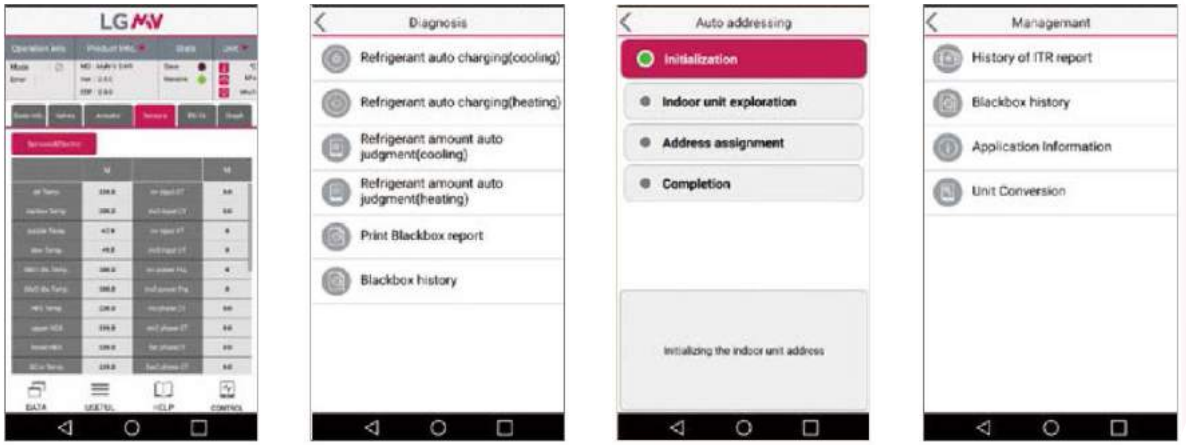


Mobile LGMV (Monitoring View)

Monitor the status of your air conditioner and diagnose problems by connecting it to a smartphone.

Error Indicator

Error Code	Contents
01	Air temperature sensor of indoor unit
02	Inlet pipe temperature sensor of indoor unit
03	Communication error : Wired Remote Controller ⟷ Indoor Unit
	⋮



A technician not only can check the **cycle information** with diagrams & graph, but also can check easily the **error status** (troubleshooting guide) and take action immediately.

※ Search “Mobile LGMV” on Google market or App store then download the app.
※ Wi-Fi modem (PWFMDD200) is required by option.

Contents : Indoor Unit

Preview : Application Scene

1. Wall Mounted Unit

2. Ceiling Mounted Cassette

3. Ceiling Concealed Duct

Application Scene

A variety of sleek, elegant indoor units complement any home's interior. With various indoor types, LG Multi Split is the most suitable for various residential spaces.

Wall Mounted Unit

UVnano™

- DUALCOOL with AirCare Complete System
- DUALCOOL with Air Purification
- Fast Cooling & Heating
- Comfort Air
- Quick & Easy Installation

Bacteria, Smog, Pollen and Micro Dust ..

And then,
are we safe at home?

DUALCOOL™ with AirCare Complete System™

Wall Mounted Unit

LG provides fresh & clean air by the 4 steps of total care system.
The Only total air care system with UVnano.

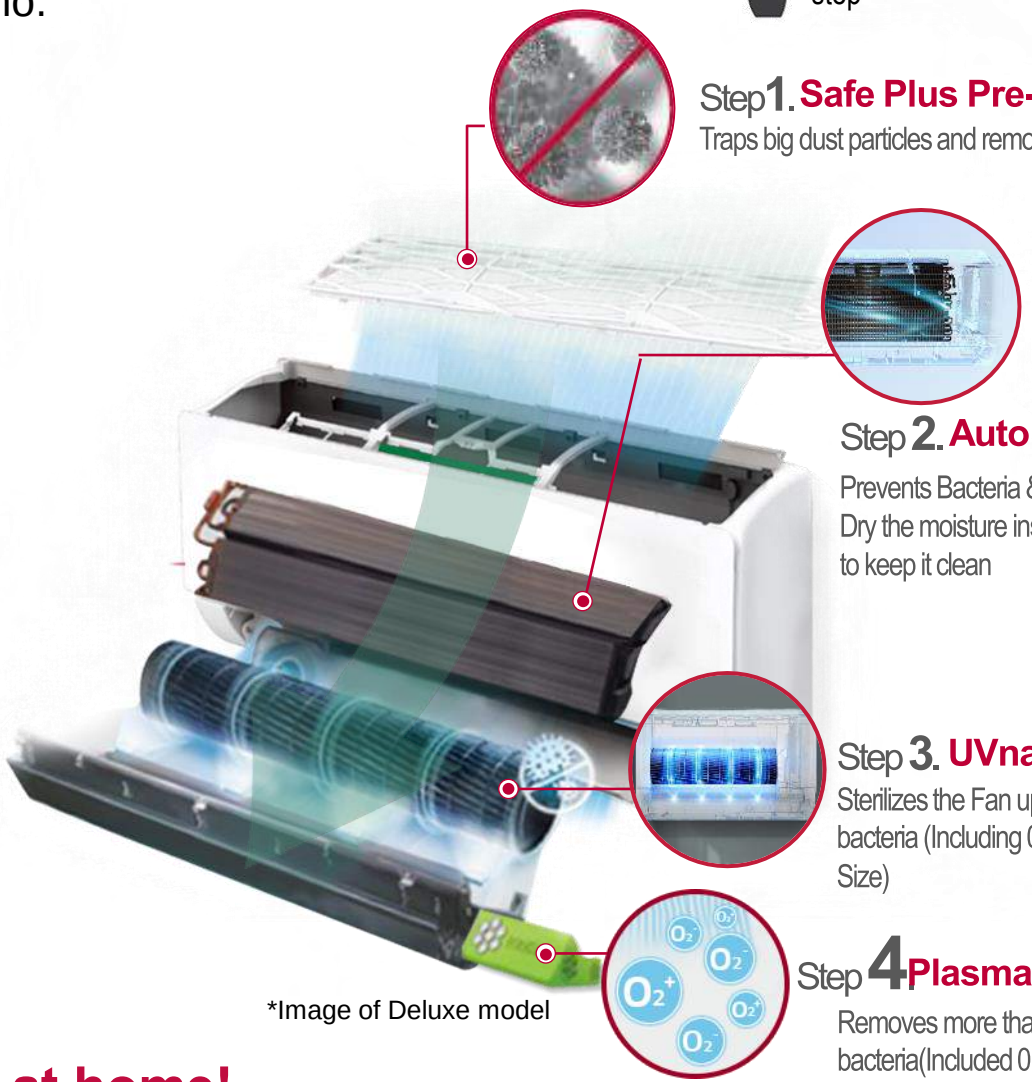
LG Only & Best

AirCare Complete System™

Filtering System + UVnano

- STEP 1 Pre-Filter
- STEP 2 Auto Cleaning
- STEP 3 UVnano™
- STEP 4 Plasmaster Ionizer Plus

Click for more details of each step



Step 1. Safe Plus Pre-Filter

Traps big dust particles and remove 99.9% bacteria

Step 2. Auto Cleaning

Prevents Bacteria & Mold
Dry the moisture inside the indoor unit to keep it clean

Step 3. UVnano

Sterilizes the Fan up to 99.99% of bacteria (Including 0.1~0.3 ㎛ in Size)

Step 4 Plasmaster Ionizer+

Removes more than 99.9% of bacteria(Included 0.1~0.3 ㎛ in Size)

*Image of Deluxe model

Safe at home!
Without any fear or anxiety

※ Applied to model of *Deluxe(DM**RH) & ARTCOOL Mirror(AM**BH)*

LG

DUALCOOL™ with Air Purification

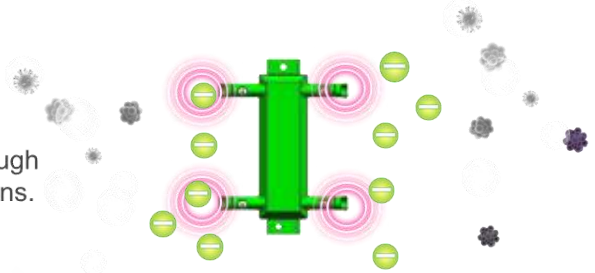
Wall Mounted Unit

An air conditioner and an air purifier in one. PM1.0 sensor is automatically activated and filtration system uses over 3 million ions to capture and remove microscopic dust particles.

Perfect Air Purifier with 4 stages

Step 2. Ion Diffuser

Ion diffuser from 4 electrode (Inside).
Ionizer reduces harmful microscopic particles by infusing the air passing through the air conditioner with over 3 millions ions.



Step 3. 0.3μm Micro Dust

Effective particle capture.
(Dust Filter / Micro Dust Filter)

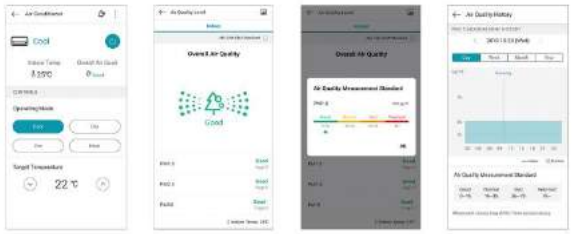
Step 1. PM1.0 Dust

LG Dust Sensor can detect dust sizes of 0.7 micrometers. The. sensor can measure the dust concentrations of PM 1.0, PM 2.5 and PM 10.

Step4. Display

Display 4 or 6 different LED colors according to air quality status.

Conveniently manage air quality with the LG ThinQ app



※ *Applied to model of Air Purification(AP**RT)*

Fast Cooling (Jet Cool)

※ Specifications may vary for each model.

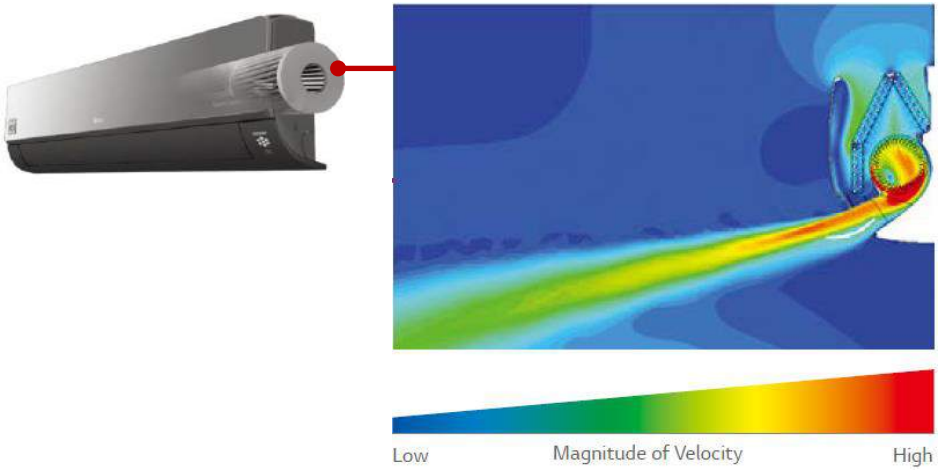
LG air conditioners provide optimized high-speed airflow, which cools the room faster while delivering cool air evenly in every direction.

One Click “Jet Mode”

Reduces the temperature of outflowing air to 18℃ 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.



• PC24SQ model
-Cooling
Fan speed : 0.3m/s / Discharge angle: 25°,
Cooling range :15.0m
-Heating
Fan speed : 0.3m/s / Discharge angle: 45°,
Heating range : 19.5m

Fast Cooling (4 Way Swing)

※ Specifications may vary for each model.

Cool air reaches out to all directions and each corner of the room regardless of where the air conditioner is installed.

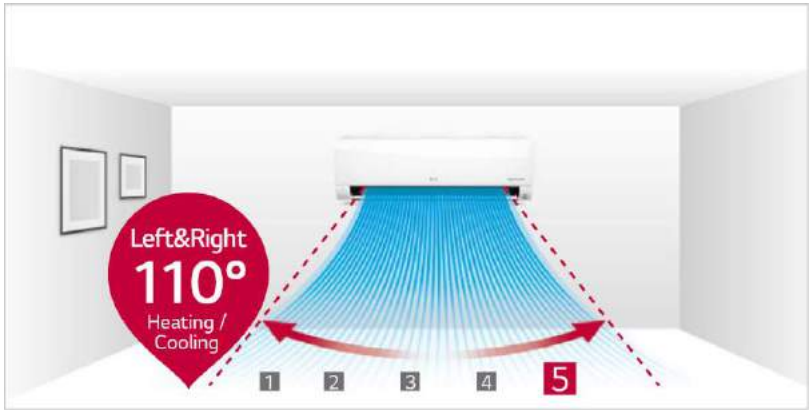
6-Step Vane, control up to 70º

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

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

5-Step Louver, Control up to 55º

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



Comfort Air

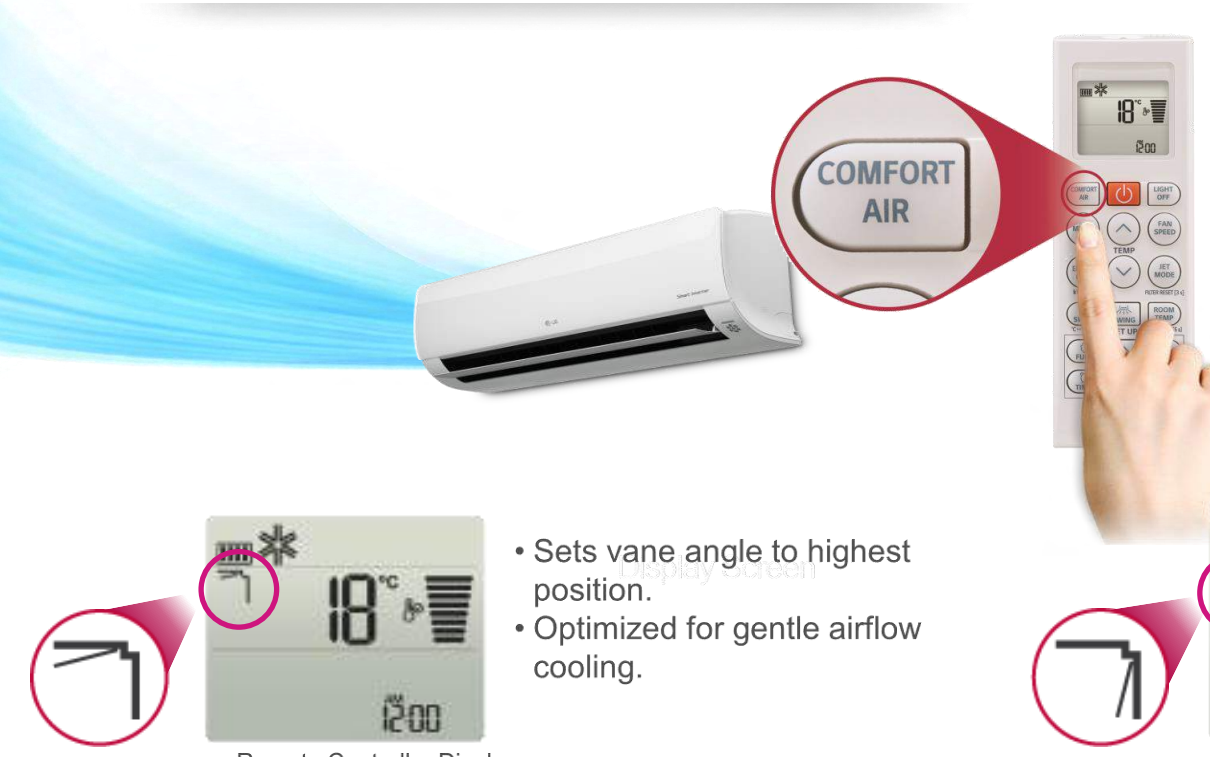
※ Specifications may vary for each model.

LG Air Conditioner provides comfortable air to your living space.

Comfort Vane

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

Scene 1: Inclines to a maximum 70° angle



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

• Remote Controller Display

Scene 2: Declines to a maximum 0° angle.

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

• Remote Controller Display

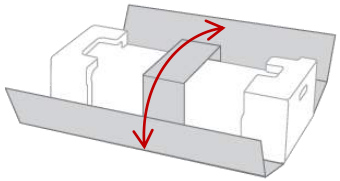
Quick & Easy Installation

※ Specifications may vary for each model.

It is possible to install in a shorter period of time.

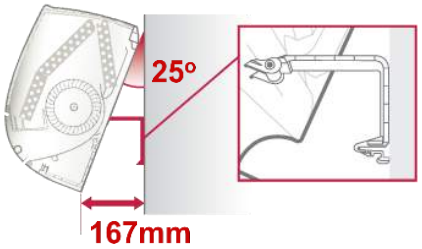
One Simple Packaging

Open the packaging with just one touch.



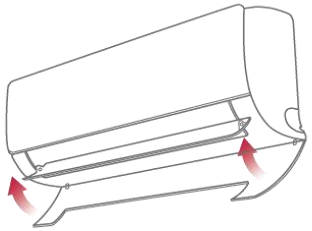
Installation Support Clip

Adequate space between the wall and the unit for easier installation.



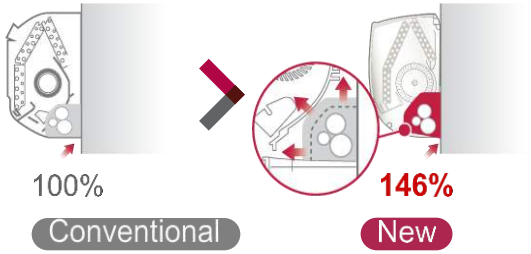
Detachable Bottom Cover

Detachable for easier installation and access.



Wider Tubing Space

Wider space for hiding the unorganized tubing parts, making it appear clean and tidy.



Ceiling Mounted Cassette

1 Way
4 Way

- Air Purification with CST
- Steps of Air Purification with CST

1 Way

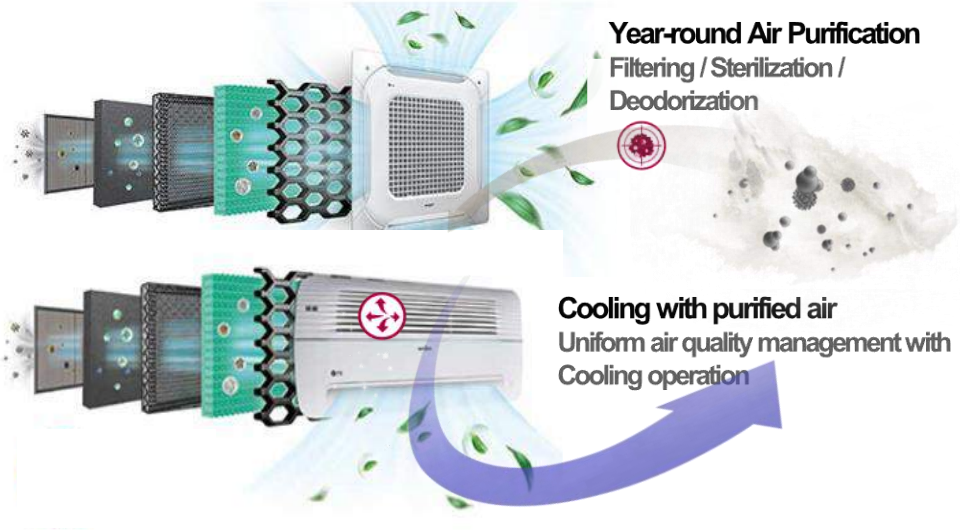
- Comfort Air
- Direct & Indirect Wind
- Compact Size
- Filter Maintenance & Sign

4 Way

- New Design Panel
- Compact Size
- High Ceiling Mode
- Independent Vane Control
- Convenient Panel Installation

Air Purification with CST

Creates a healthy living environment in all seasons along with air-conditioning.



[Verification for Ultrafine dust removal]
[Verification for Culturable bacteria and virus removal]

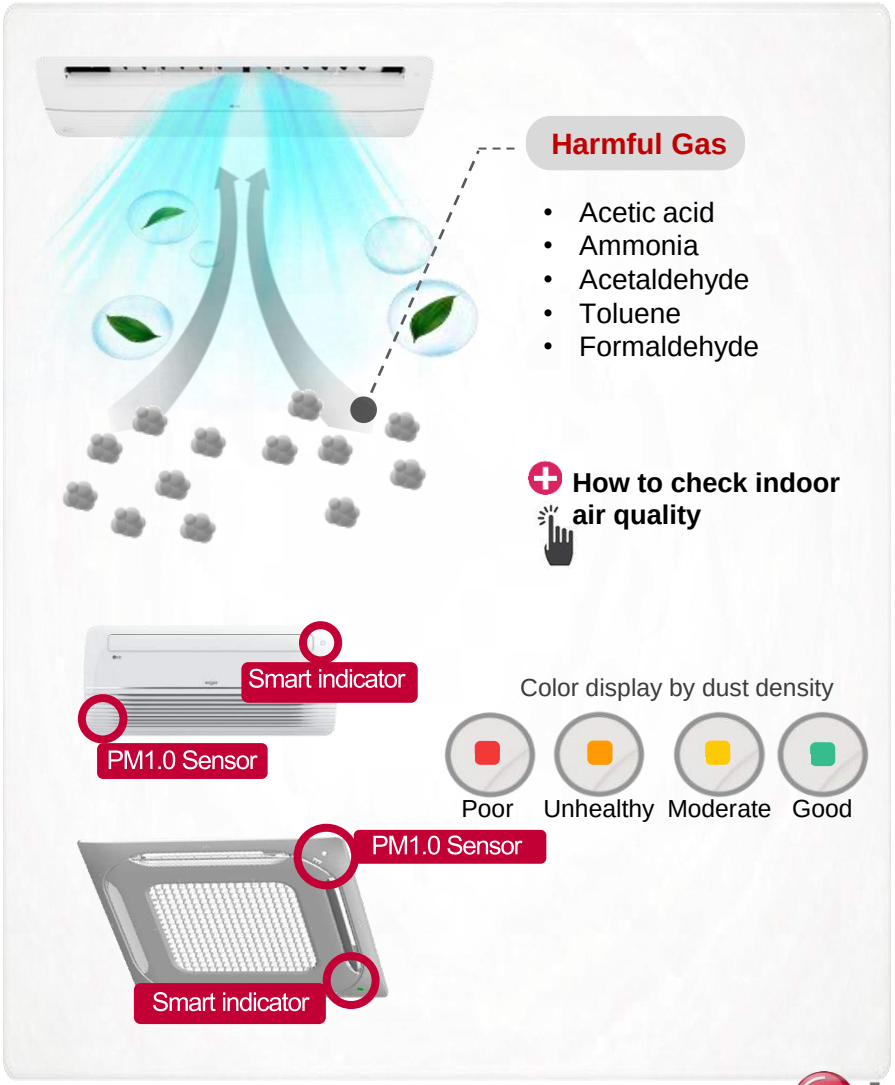
[1 Way CST]

- Virus (Bacteriophage Phi-X174): 95.3% removed within 30 minutes
- Bacteria (Staphylococcus): 91.2% removed within 60 minutes
- Ultrafine dust removal (50 nm, 100 nm): 99.9% removed

[4 Way CST]

- Virus (Bacteriophage Phi-X174): 99.9% removed within 30 minutes
- Bacteria (Staphylococcus): 99.9% removed within 60 minutes
- Ultrafine dust removal (50 nm, 100 nm): 99.9% removed

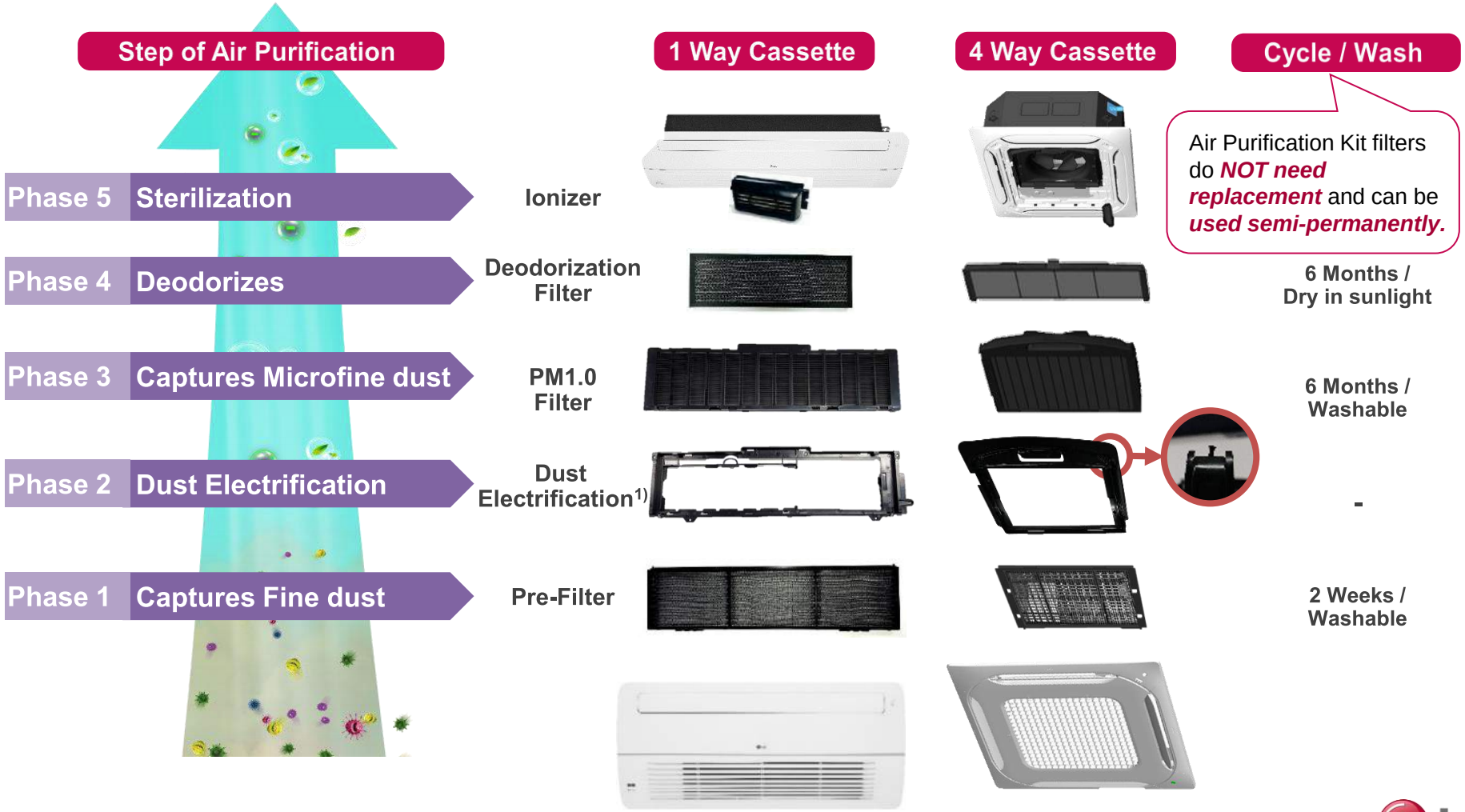
※ Air purification kit optional.



Steps of Air Purification with CST

5 Steps air cleaning process removes invisible ultra fine dust, odor and germs to ensure a clean and healthy living environment.

※ Technology details



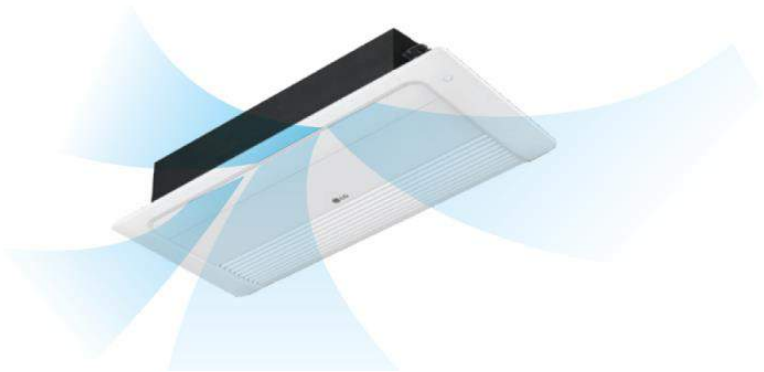
1) It increases the electrostatic force of particle to improve collection efficiency.

※ Normally HEPA filter type must be replaced regularly. It means that it costs expensive for maintenance.

Comfort Air

Two vane angles can be controlled in 6 steps from 20˚ to 70˚, depending on the indoor environment and personal preference.

4 Way Discharge



No cooling blind spot

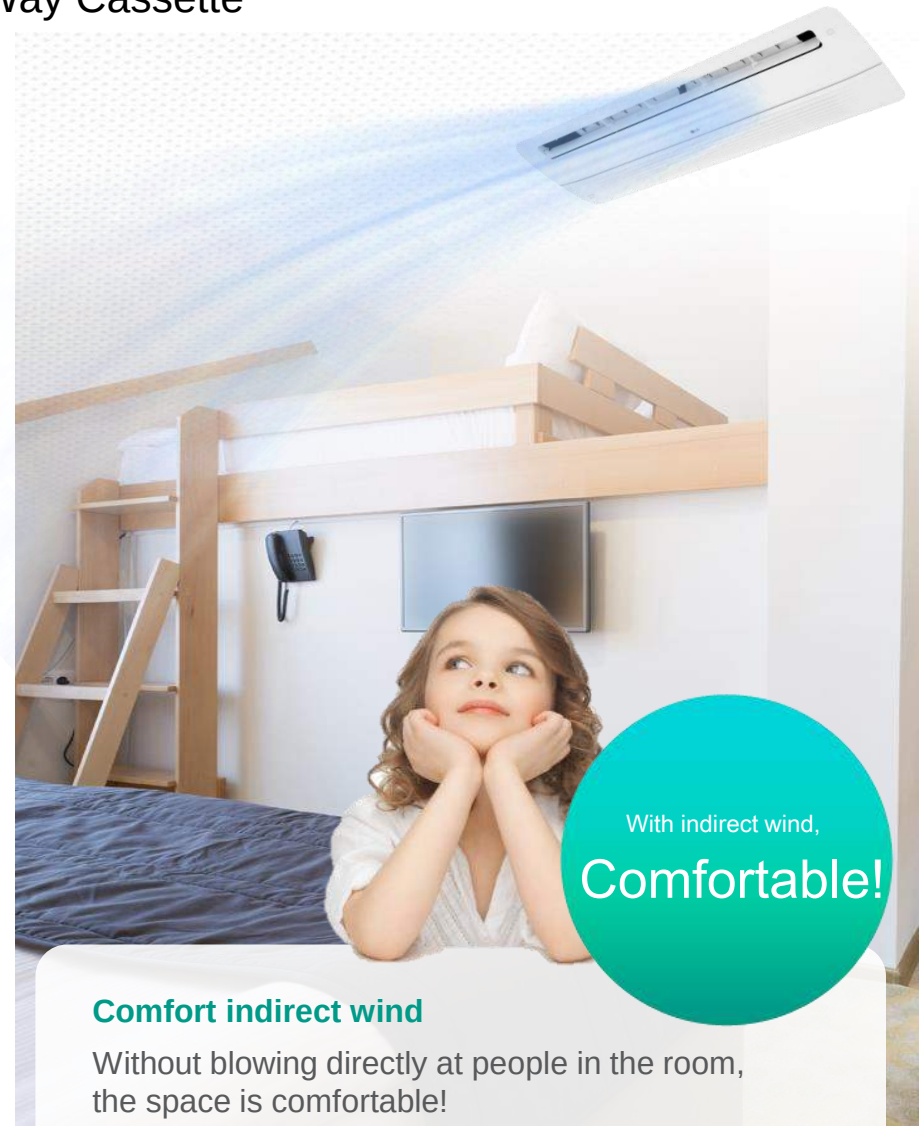
Automatic 4-way wind direction
The wind is discharged evenly up, down, left, and right automatically, so there is no cooling blind spot.

Auto Swing(left and right)

6 Different steps

Direct & Indirect Wind

1 Way Cassette



Comfort indirect wind

Without blowing directly at people in the room, the space is comfortable!

Cool direct wind

Cooler on a hot day.

Compact Size

Slim & compact design not only saves space, but also reduces installation costs.

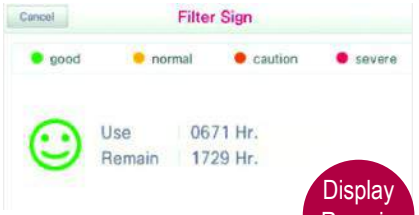
The height of 1 Way Cassette is 132mm, making it the ideal solution for ***installation in limited space.***

Cooling Capacity	Chassis	Body		Panel (W×H×D, mm)	
(kW)		(W×H×D, mm)	Weight(kg)	Glossy	Non-glossy
2.0 ~ 4.0	TU	860×132×450	11.7	1,160×34×500	1,100×34×500

Filter Maintenance & Sign

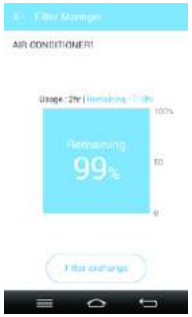
1 Way Cassette notifies the user of the time of cleaning not only by the remote controller or mobile application, but also by the LED display on the cassette. It makes the filter management easy and the indoor environment can be kept clean.

Filter Sign



Wired Remote Controller

Display Remain Time



Mobile Application*

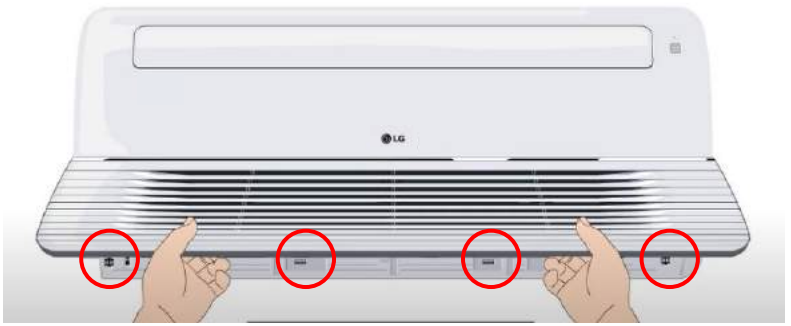
Indicator Color

Clean filter in cooling/heating Mode

Clean filter when product is not operating

Description	Lamp Color
Cooling mode	Green
Heating mode	Green
Time to clean filter in cooling/heating Mode	Yellowish Green
Time to clean filter when product is not operating	Orange
Hot start or defrost mode before starting heating mode	Green
When reservation set on	Yellowish Green

One touch magnetic



The 1 way cassette easily maintained when they need filter change or cleaning by one touch magnetic.

* Wi-Fi Module is an Option

New Design Panel(Inlet grill, White color, Dual vane)

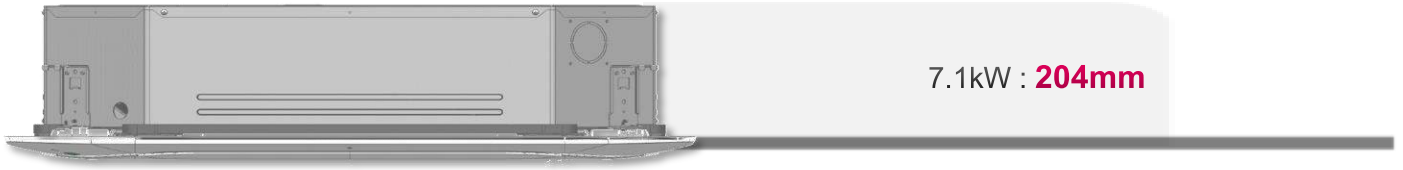
New grille design and clean white color panels.

※Dual vane model : CT24F NB0
Convenient function of Dual Vane

Compact Size

Slim & compact design not only saves space but also improves workability.
It’s designed to suit most of building designs and fit into various spaces.

Length Width : 570X570mm

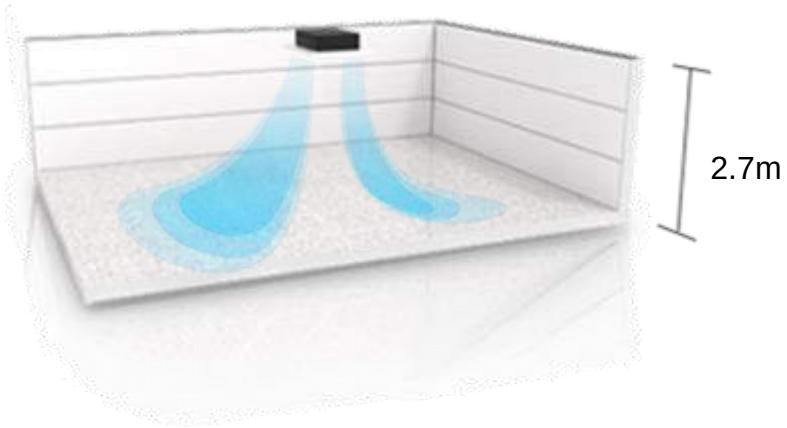


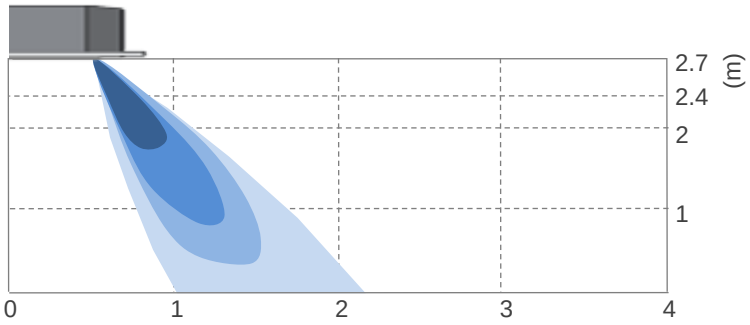
Length Width : 840X840mm

High Ceiling Mode

Airflow in the space having 4.2m ceiling height is possible with this indoor unit.
Further, air flow can be strengthened by adjusting the fan speed.

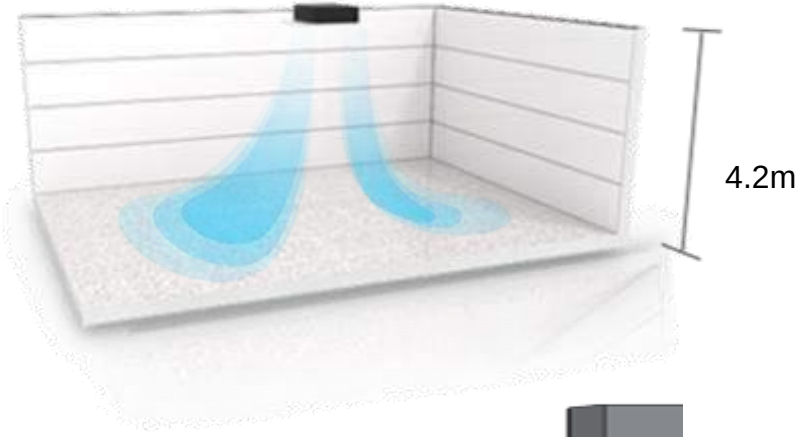
Basic Mode

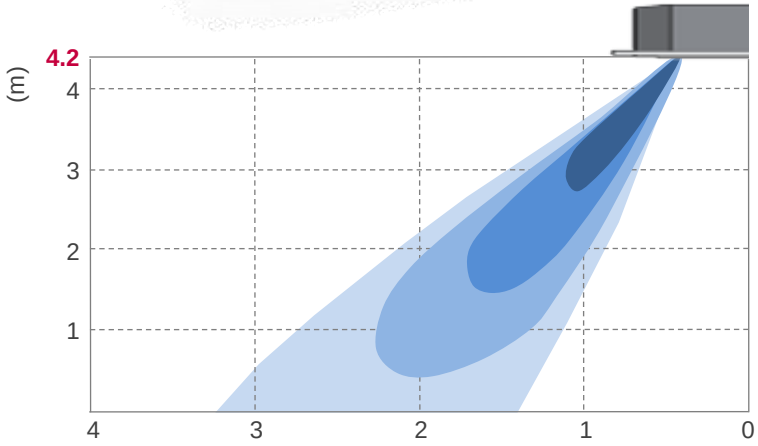




High Ceiling Mode

※ Dual vane 5.0m





※ Value is based on heating condition

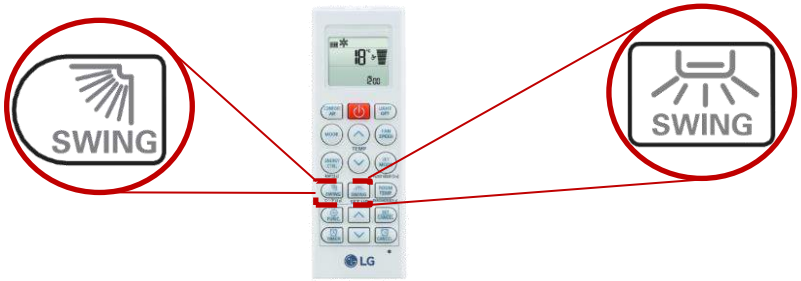
Independent Vane Operation

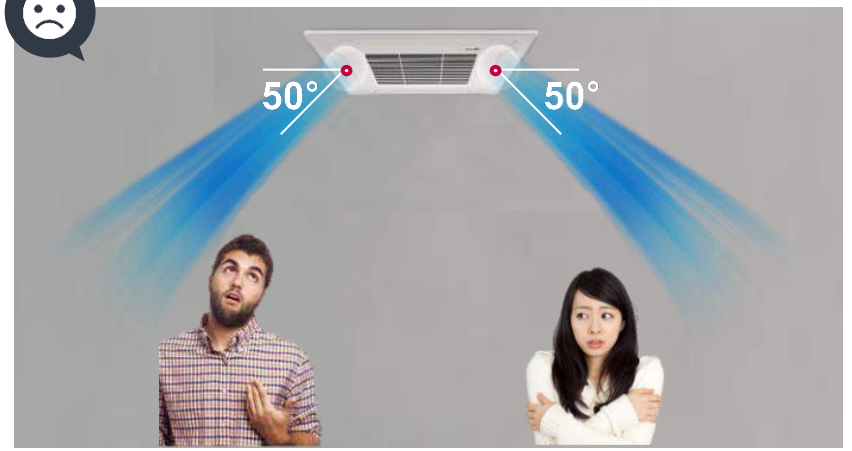
The independent vane operation function uses separate motors, making it possible to control all four vanes independently.

Independent Vane Operation

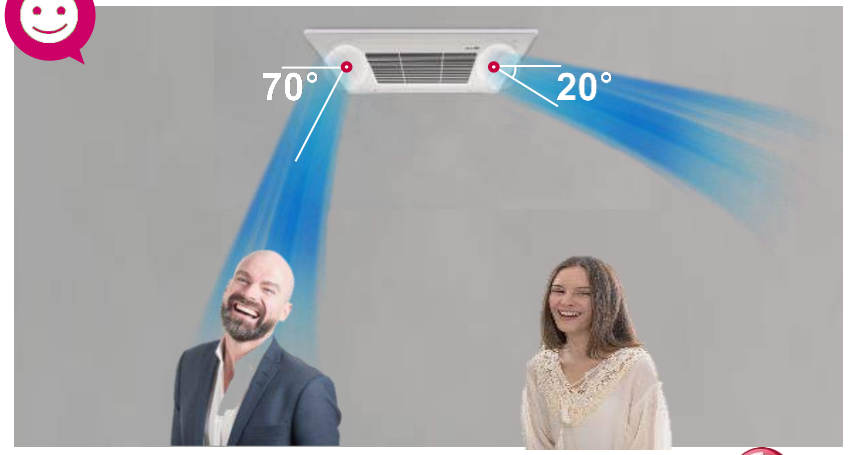
[Individual vane control] [Swirl swing]

[Individual vane control]





Feel Hot Feel Cold



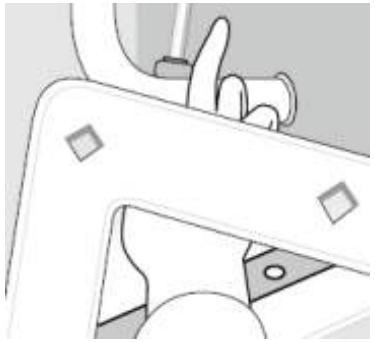
Feel Cool Feel Comfortable

Convenient Panel Installation

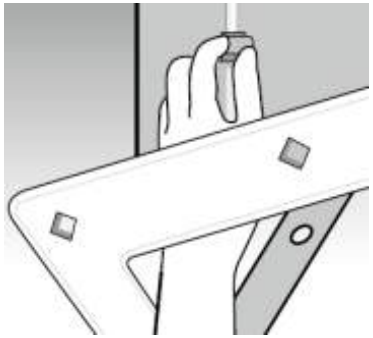
The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe. And it is easy to install the panel to the body, using the button type panel design.

Detachable Corner Design

Drain Leakage Check



Hanger adjust



One Push Panel

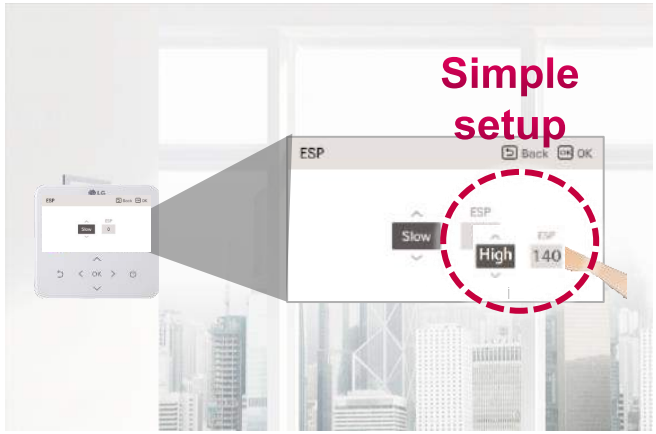
Ceiling Concealed Duct

- E.S.P. (External Static Pressure) Control
- Minimized Size
- Light Weight
- High Head Drain Pump
- Two Thermistors Control
- Low Noise

E.S.P. (External Static Pressure) Control

E.S.P. control function enables control of air volume easily with a remote controller. The BLDC motor can control fan speed and air volume regardless of the external static pressure.

Set RPM by simple touch on remote control to change airflow

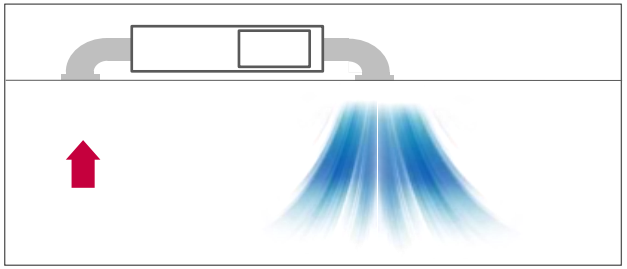


※ ESP Setting guide (Wired Remote Controller) :

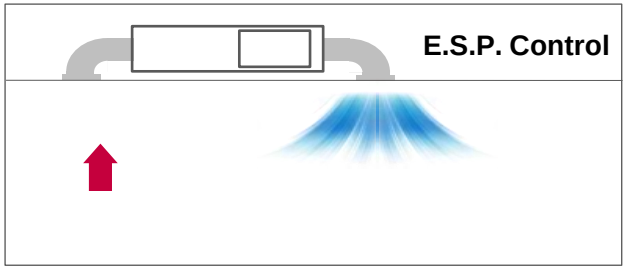
- Standard III (PREMTB100/B10) : Menu → Setting → Installer → ESP setting
- Standard II (PREMTB001/B01) : Button click → 03 : XX → ESP setting

Conventional

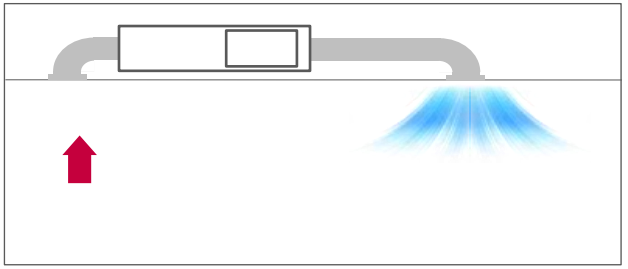
MULTI SPLIT



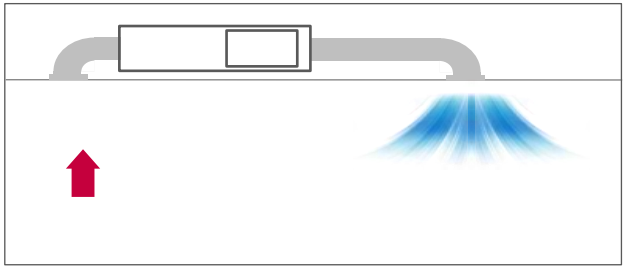
Over Cooling / Heating



Comfort Cooling / Heating



Weak Cooling / Heating



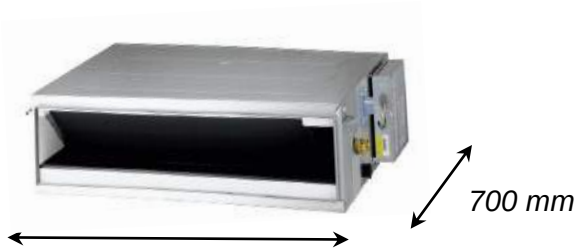
Comfort Cooling / Heating

※ Wired remote controller is necessary.

Minimized Size

The Low-static ducts provide ideal solution for installation in limited space.

Previous

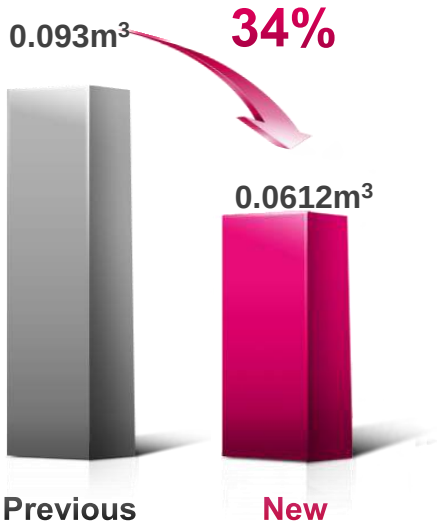


1.5~2.6kW / 3.5~5.3kW

New

1.5~2.6kW / 3.5~5.3kW

Volume

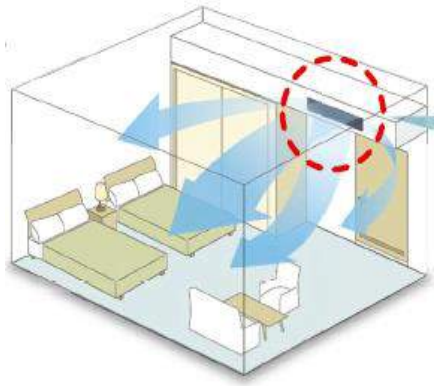


All models are reduced volume.

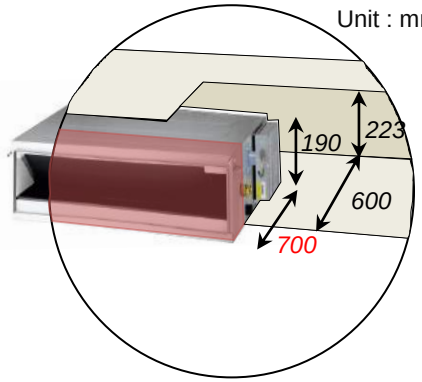
* 5.0 ~ 9 kW model

Installation site

The new model can fit in limited installation space.
Also, it can reduce the required ceiling space when installed in an apartment of villa.

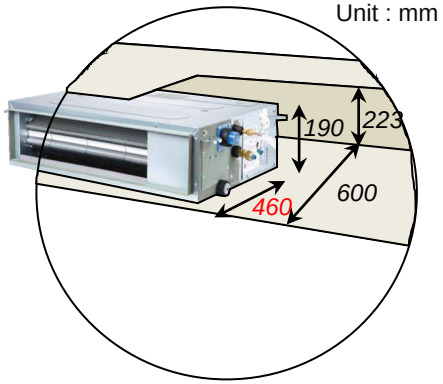


▪ Previous



Cannot be installed

▪ New



Can be installed

* Applied except for model ***CL24F***

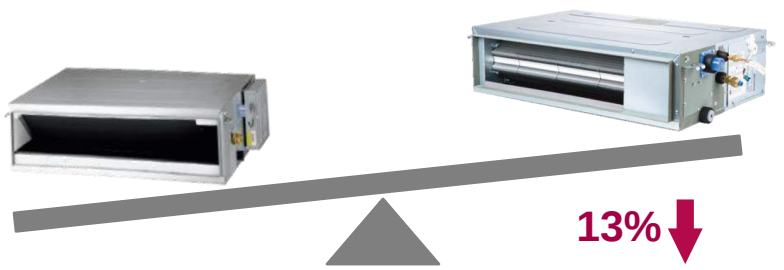
Light Weight

Light weight of the new low-static model makes it easy to carry. It saves labor cost for installation and maintenance.

Light Weight

New model duct is lighter than conventional product.

Previous **New**



13%↓

Case of 3.5~5.3kW

Unit : kg

	Capacity(kW)	1.5~2.6kW	3.5~5.3kW
Weight	Previous	17.5	23
	New	**14.6**	**20**

Cost saving for installation & maintenance

Unit : kg

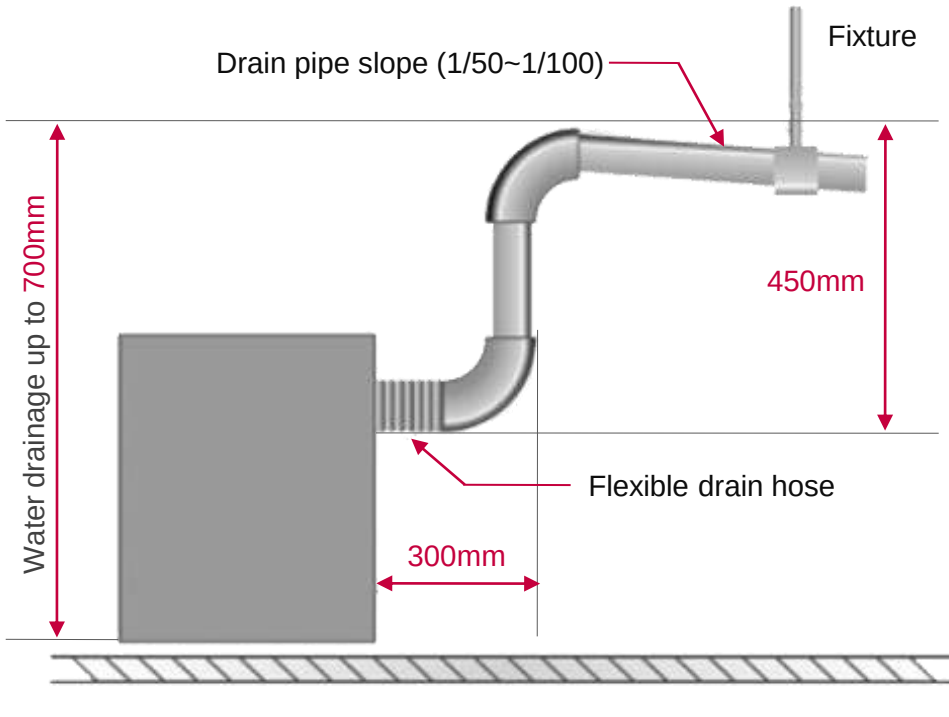
age	18↓	19~35	36~50	51↑
recommended lift weight	12	15	13	10

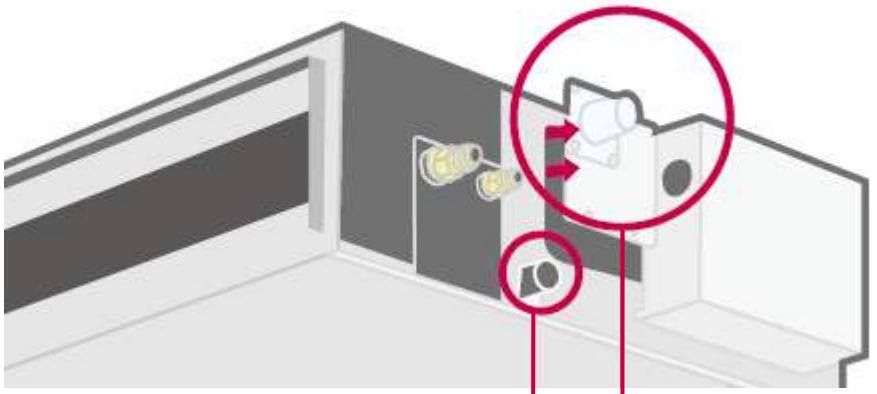
※ Source : Special action for lifting weights.
(2015, from Korea Occupational Safety and Health Agency)

* Applied except for model ***CL24F***

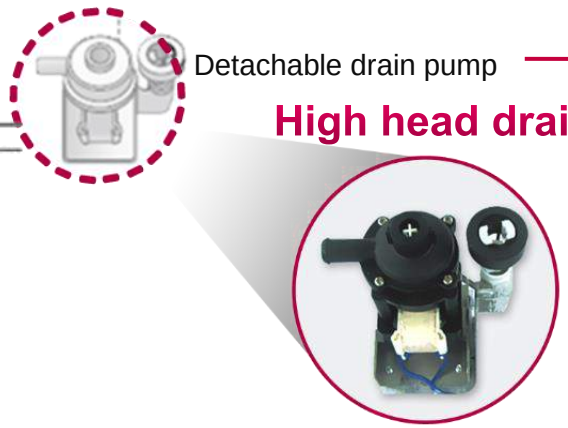
High Head Drain Pump

High head drain pump automatically drains water up to 700mm of drain-head height.
It provides a perfect solution for water drainage.





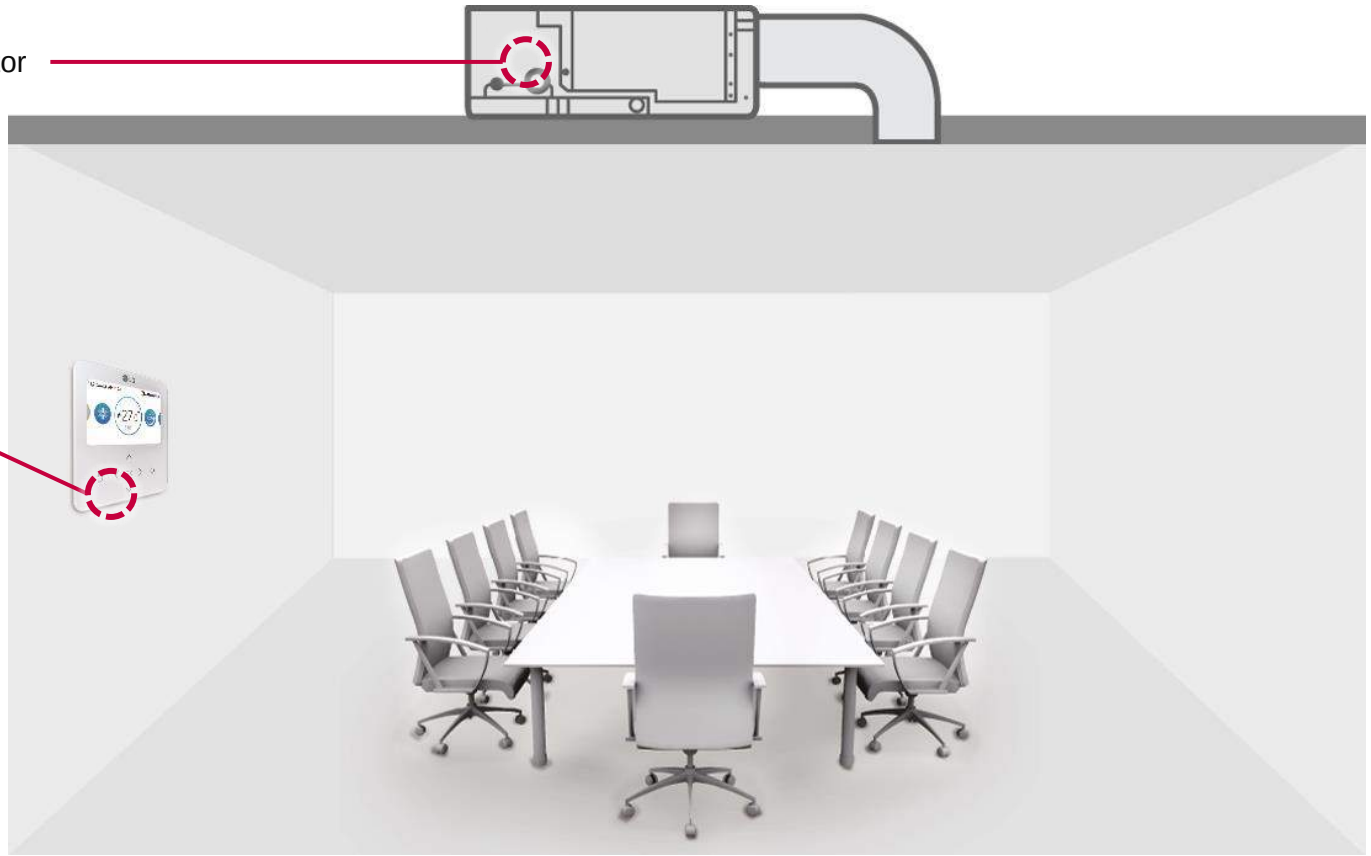
High head drain pump



Mid-static duct: Accessory (ABDPG) / Low-static duct : Included

Two Thermistors Control

The indoor temperature can be checked using the thermistors in the remote controller as well as from the indoor unit. Two thermistors check indoor air temperature and select the optimal temperature for a more comfortable environment.



Compares temperatures sensed from different positions, and automatically selects the optimum temperature for users

Low Noise

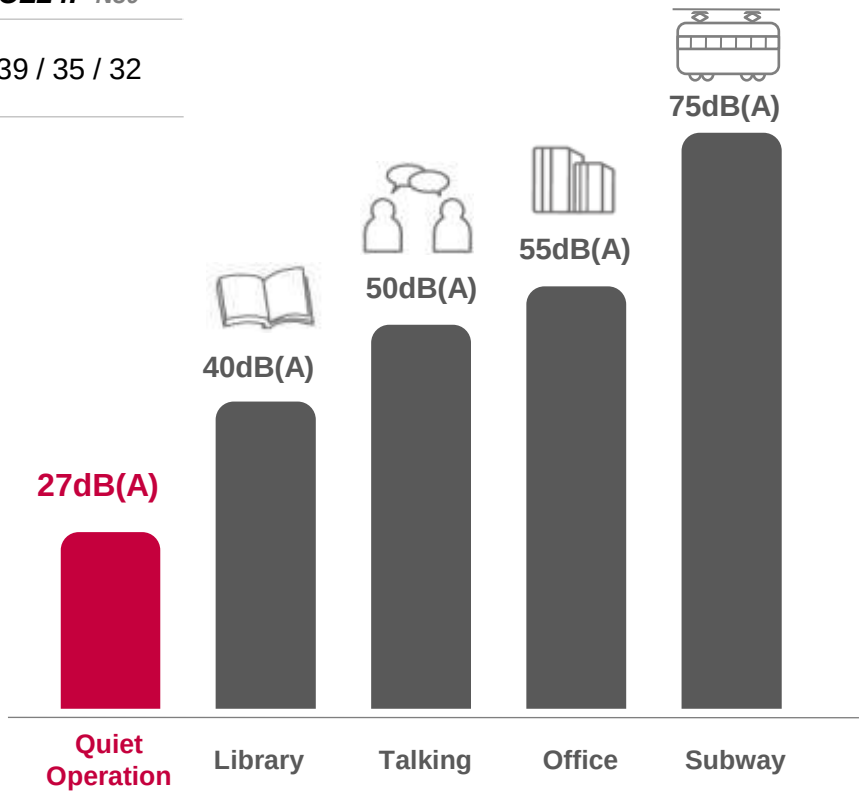
The noise level of low static ducts have been reduced, even though ESP has been increased.

Unit : dB(A)

Low-static duct	***CL09F*** *N50*	***CL12F*** *N50*	***CL18F*** *N60*	***CL24F*** *N30*
Sound Pressure (High / Medium / Low)	35 / 30 / 27	35 / 30 / 27	34 / 31 / 29	39 / 35 / 32

Unit : dB(A)

Mid/High-static duct	***CM18F*** *N10*	***CM24F*** *N10*
Sound Pressure (High / Medium / Low)	34 / 32 / 30	35 / 34 / 32



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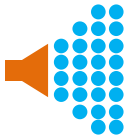
App. Corrosion Resistance Black Fin

Through the internal durability test at a corrosive environment, Black Fin's performance is proved that it is improved compared to the previous heat exchanger fin.

SST (Salt Spray Test)

Test Process

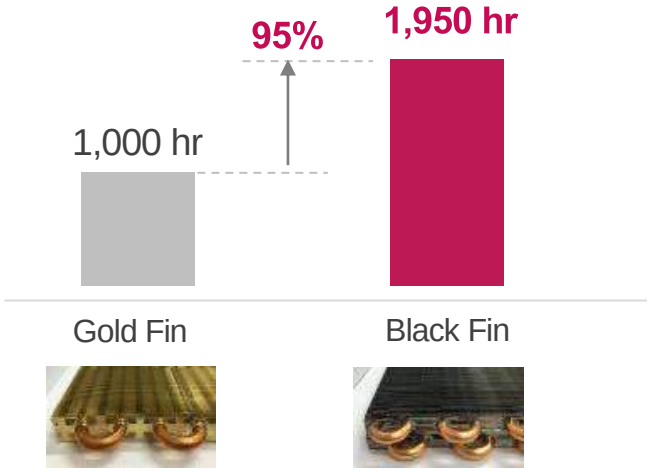


× Process repeated

Fog [1] (35℃, 24hr)

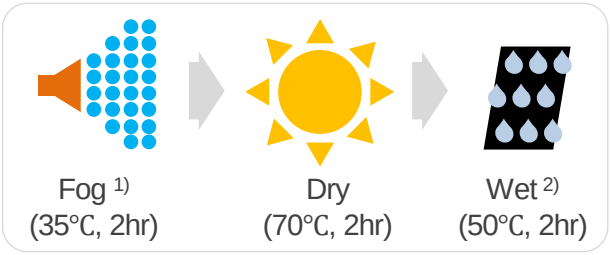
Test process is conducted according to ISO 9227.
1) Salty water concentration : NaCl aqueous solution (5%)

Test Result (5% Area of defects compared to initial)



CCT (Cyclic Corrosion Test)

Test Process

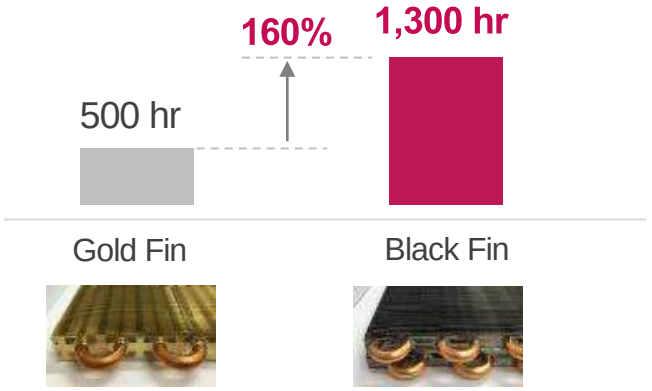


Fog [1] (35℃, 2hr) → Dry (70℃, 2hr) → Wet [2] (50℃, 2hr)

× Process repeated

Test process is conducted according to ISO 14933.
1) Salty water concentration : NaCl aqueous solution (5%)
※ Dry condition changed : 60℃, 4hr → 70℃, 2hr
2) Deionized water

Test Result (5% Area of defects compared to initial)



Traps big dust particles and remove 99.9% bacteria from the start.

Why?

To traps big dust particles and remove *99.9%* bacteria from the start.

How?

Safe Plus Pre-Filter containing with Ant-Bacterial material ZnO (Zinc Oxide) traps larger dust particles and removes 99.9% of bacteria as the first line of defense from the start. In addition to, it's very convenient to detach and clean pre-filter, Now try to clean the air entering the air conditioner from the starting step.

Anti-Bacterial Pre-Filter

from the staring

Test Result

Bacteria Removal Test

Traps big dust and removes **99.9%** of bacteria in 18 hours. (S.aureus / K.pneumoniae / E.coli)

*Test Condition Disclaimer
KOTITI and FITI Verification of the Antibacterial Activity
- Test Standard : Antibacteria Test ISO 20743:2013
- Bacteria(Stain Number)
  Staphylococcus aureus (ATCC 6538)
  Klebsiella pneumoniae (ATCC 4352)
  Escherichia coli (ATCC 8739)
- Result : 99.9% antibacterial activity

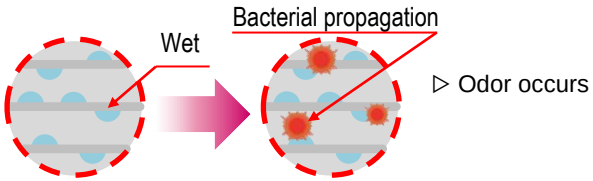
Test Verification Report KOTITI and FITI Verification of the Antibacterial Activity

App. Auto Cleaning

Prevents bacteria and mold buildup with drying out any moisture.

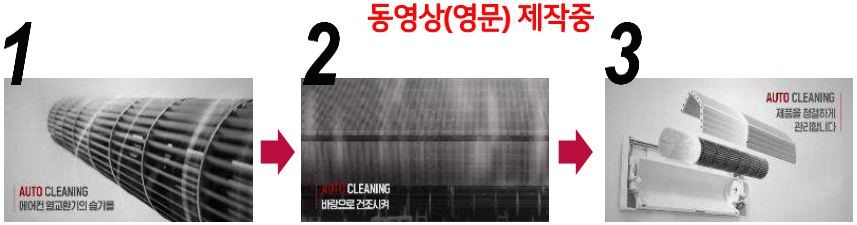
Why?

It is wet inside of AC after air conditioners operation.
The main cause of bad odor inside of AC is mold and bacteria growing on the heat exchanger. These germs can spread when the heat exchanger is wet.



How it works?

동영상(영문) 제작중

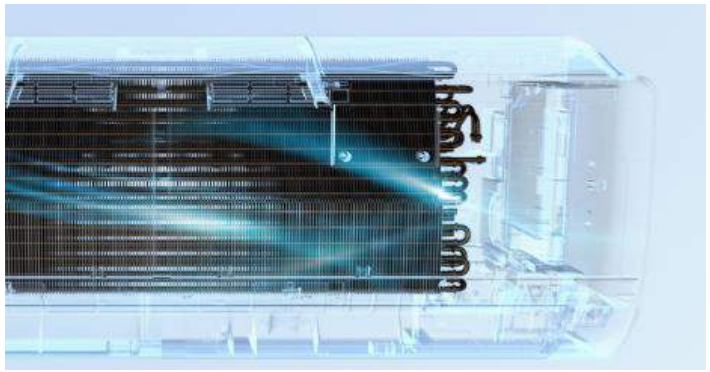


After using the air conditioner,

LG Auto Cleaning function automatically dries the heat exchanger

And prevents formation of bacteria and mold on the heat exchanger.

LG Auto Cleaning function automatically dries the heat exchanger and prevents formation of bacteria and mold that can grow with moisture and cause odor, keeping the unit clean even from the inside

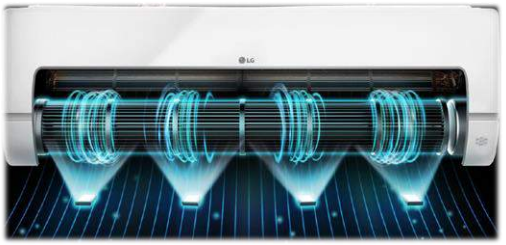


Keeps your fan 99.99% bacteria-clean for a cleaner breeze.

Why?

Clean air will come out if the inside of air conditioner, especially fan is not cleaned well.

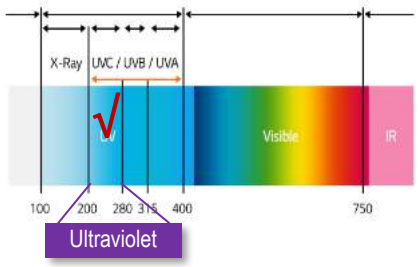
New UV LED technology is applied to LG DUALCOOL, So it keeps your fan 99.99% bacteria removal with ultraviolet light to ensure that the air passing through is clean too.



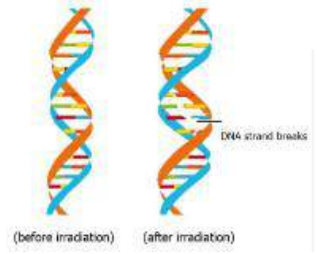
How it works?

Ultraviolet rays of UVC wavelength directly damage the DNA of microorganisms (bacterial/MOLD/virus), making it impossible to multiply

DNA absorption efficiency by wavelength



Destruction Nuclear Sequence (Chain)



Test Result

Bacteria Removal Test

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

TÜVRheinland®

7k 9k&/12k 18k&24k

*** UVnano is** an integrated marketing name that applies LG Electronics' entire home appliances, ie Refrigerator, Washing Machine, Air Conditioners .

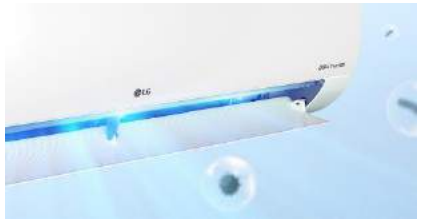
LG UVnano Product

Humidifier Stand AC Water Purifier Refrigerator

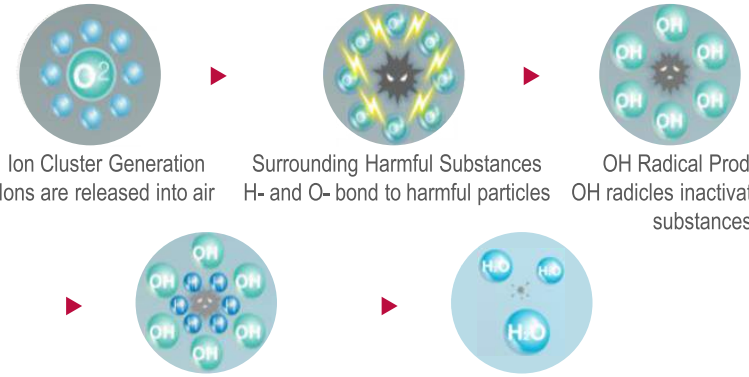
Eliminates 99% adhering harmful bacteria & Deodorizes

Why?

Homes often contain countless harmful microscopic adhering particles that can adversely affect your health.



How it works?

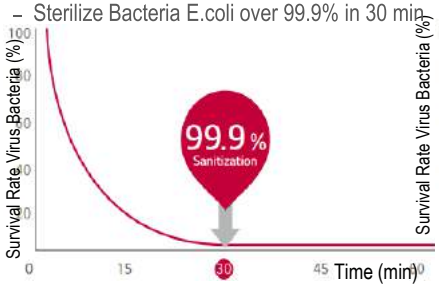


Plasmaster Ionizer+ reduces harmful microscopic particles attached to furniture or clothes by infusing the air with over 3 million ion particles. The Ionizer has been proven to sterilize over 99% of bacteria within 60 minutes.

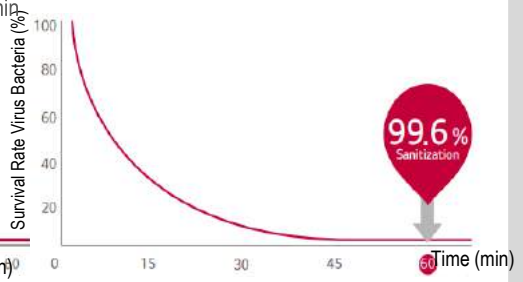
Test Result

1. Sterilization Performance Evaluations

– Sterilize Bacteria E.coli over 99.9% in 30 min



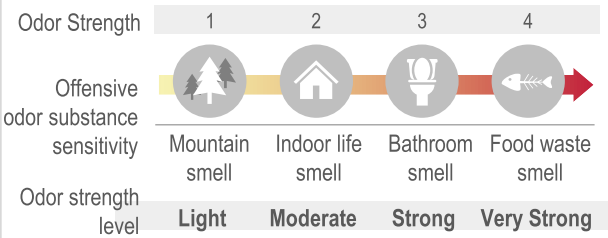
※ Test Conditions : Space : 52m3 Chamber (measuring with the specimen in the center of test chamber)
Temperature & Humidity : Normal
Bacteria : E coil colon bacillus
Tested by Intertek

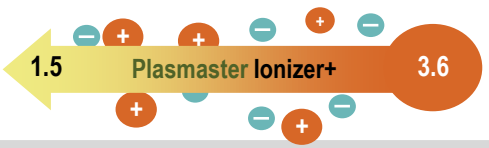


※ Test Conditions : Space : 52m3 Chamber (Measuring with the specimen in the center of test chamber)
Temperature & Humidity : Normal
Bacteria : Staphylococus Aureus
Tested by Intertek

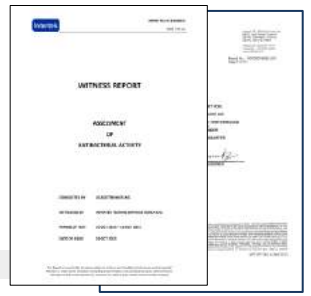
2. Odor strength decrease in 60 minutes

An odor of strength 2 or less indicates that there is odor but no sense of displeasure (degree of odor permissible).





Test Verification Report

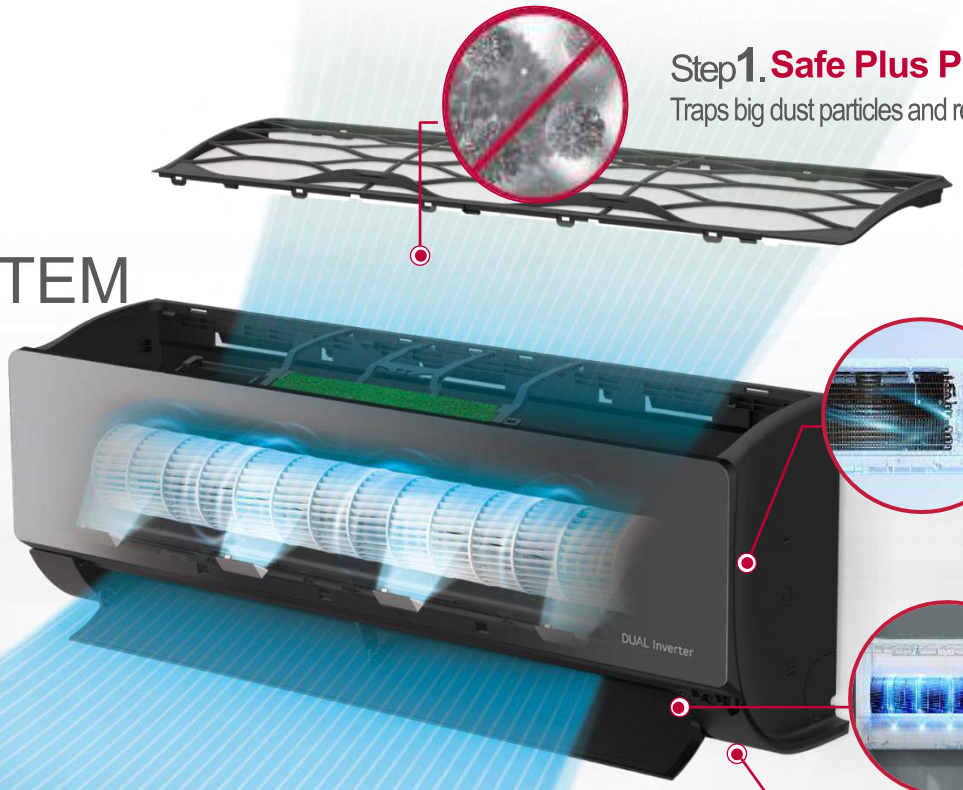


Intertek

DUALCOOL™

COMPLETE AIR PURIFICATION SYSTEM

- STEP 1 Pre-Filter
- STEP 2 Auto Cleaning
- STEP 3 UVnano™
- STEP 4 Plasmaster Ionizer Plus



Step 1. Safe Plus Pre-Filter
Traps big dust particles and remove 99.9% bacteria

Step 2. Auto Cleaning
Prevents Bacteria & Mold
Dry the moisture inside the indoor unit to keep it clean

Step 3. UVnano
Sterilizes the Fan up to 99.99% o bacteria (Including 0.1~0.3 ㎛ in Size)

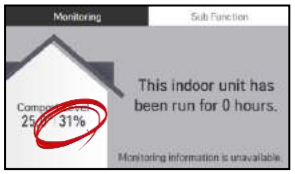
Step 4. Plasmaster Ionizer+
Removes more than 99.9% of bacteria(Included 0.1~0.3 ㎛ in Size)

*Image of Artcool Mirror

App. Convenient Remote Controller

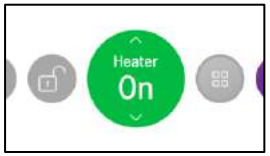
Standard III remote controller offers 4.3 inch LCD screen with luxurious design which well-matches interior design through simple button layout.

Humidity Display



External Equipment Control

- User can turn on or off the external equipment through 1 Digital Output port



User Friendly Design

- Intuitive GUI design using circle theme

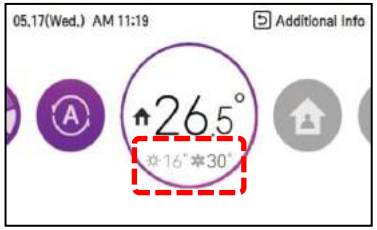
Standard III Remote Controller

Multi Language support

- English, French, German, Spanish, Italian
  Portuguese, Polish, Czech, Russian, Chinese

2 Set point

- Room temperature is decided
  by setting 2 set point for cooling and heating

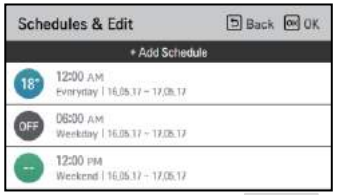


for Cooling

for Heating

Optimized Schedule

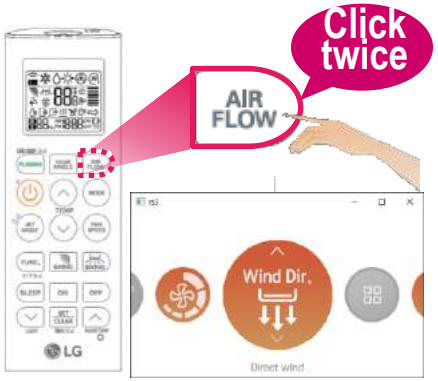
- Easy making schedule from daily to yearly



Note : Some function may not work in some products

App. Direct Wind

Warm wind can be reaches up to 5m without a high ceiling kit.



Recommended direct wind reach

Power airflow

* Settings are required in installer mode.

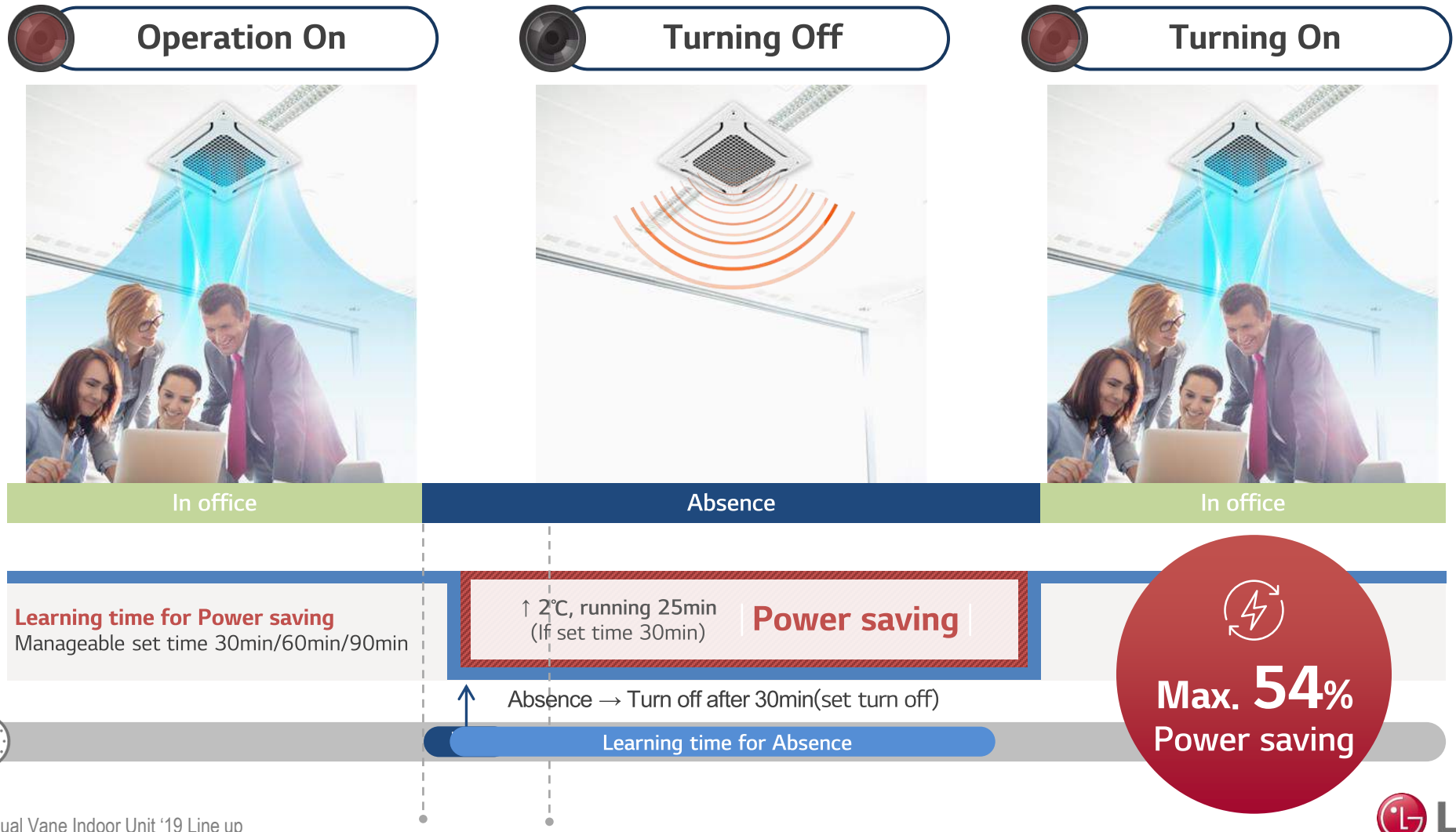
App. Human Detection

Human detection function identifies presence of people in order to provide pleasant airflow.
The sensor detects when no one is present and stops / activates operation, saving 54% of energy.

- Smart Dual Vane Indoor Unit '19 Line up
- Available only for products with Human Detecting sensor.

App. Human Detection

The sensor detects when no one is present and stops / activates operation, saving 54% of energy.



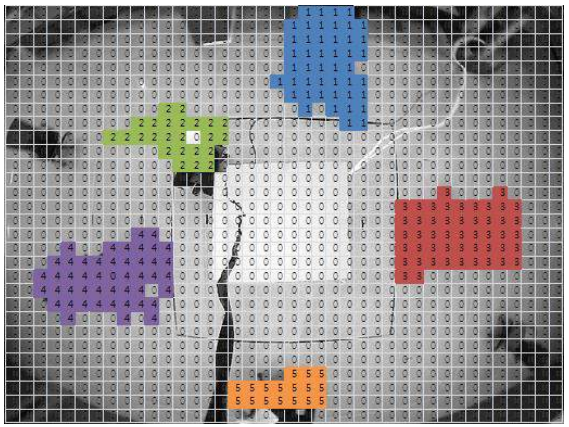
- Smart Dual Vane Indoor Unit '19 Line up

-Data Based on actual test of LG, single product 2 hours measurement result(cooling 26 ℃, power wind)

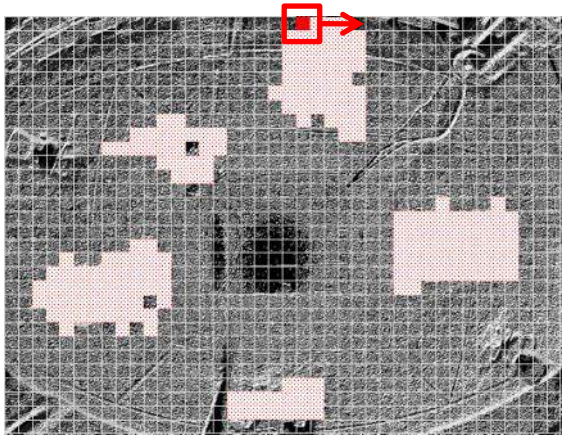
App. Human Detecting Process

Step 1) Select candidates to be recognized as a human body based on motion detection.

Inputting Image

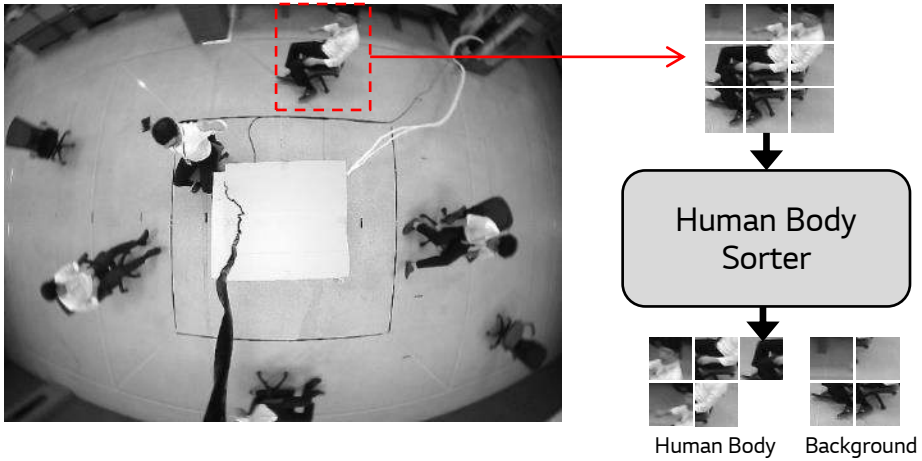


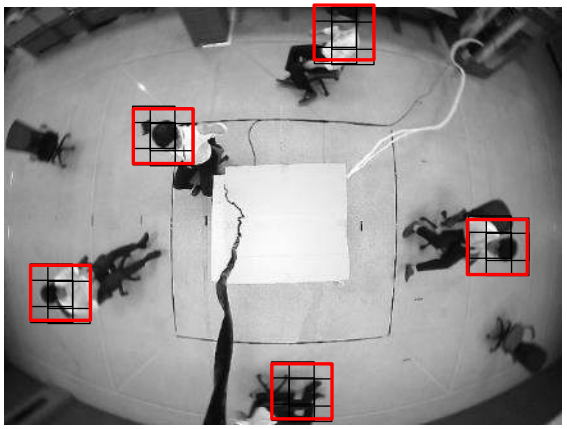
Detecting Motion



Selecting Human Body Candidates

Step 2) Among selected human body candidates, judge whether if is human body or not through 5 stages sorter.





Final detected Human Body

※ Images are not saved.