SINGLE SPLIT R32

Total Product Introduction

CONTENTS

SINGLE SPLIT R32

1. Intro
2. Why LG Single Split?
3. What about Indoor Units?
4. Segment Application
5. Appendix

LG

Intro

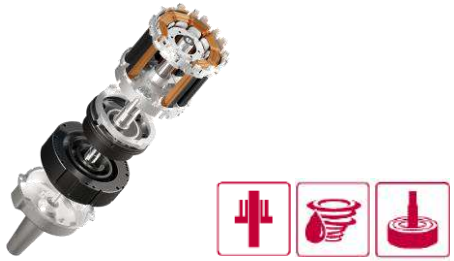
- LG Single Split
- Total Line up
- Extended Solution
  - H-Inverter : High Performance
  - Standard : Wide Application
  - Compact : Maximize Space Utilization

LG Single Split

R1 Compressor™

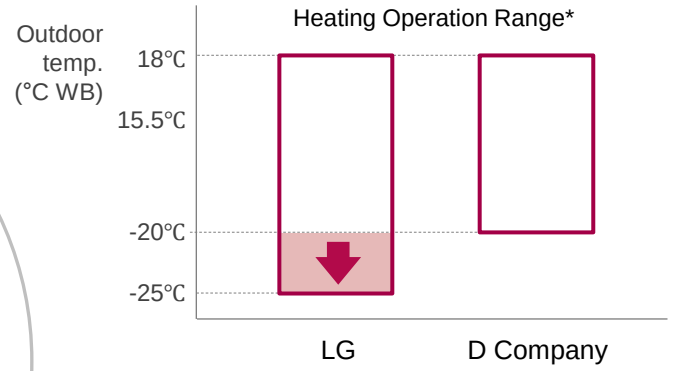
R1 Compressor is one that combines high-efficiency and the simple compressing structure.

- Assuring higher durability
- Lower Noise
- Lower Vibration
- Improve Reliability & Performance



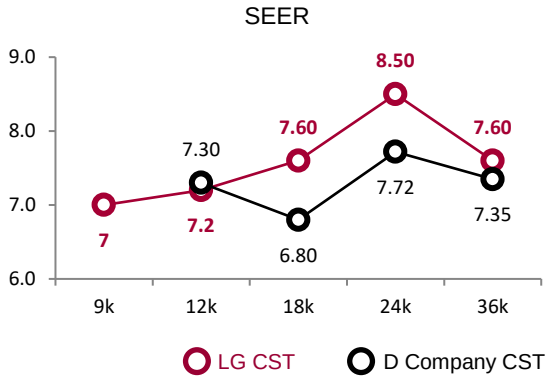
Wide Operation

LG's advanced inverter technology brings wide operation with high reliability.



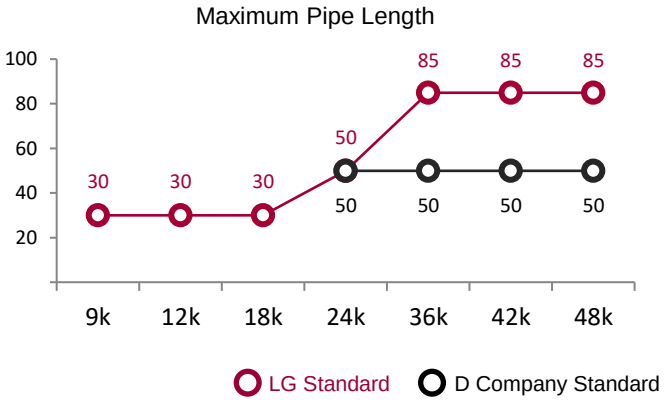
High Efficiency A+++

LG's advanced inverter technology brings high efficiency and performance.



Long Pipe Installation

LG provide long pipe installation for design flexibility



* Specifications can be different as per each model or combination.

Total Line up

kW		Type	2.5	3.4	5.0	6.8	8.0	9.5	12.0	13.4	14.6
kBtu/h		Type	9	12	18	24	30	36	42	48	60
Single Split	Outdoor Unit	H NEW!	UUA1	UUA1	UUB1	UUC1	UUC1	UUD1 UUD3	UUD1 UUD3	UUD1 UUD3	UUD1 UUD3
		S	UUA1	UUA1	UUB1	UUC1	UUC1	UUD1 UUD3	UUD1 UUD3	UUD1 UUD3	UUD1 UUD3
		C			UUA1	UUB1	UUB1	UUC1			
	Ceiling Mounted Cassette – Round	S						●		●	
	Ceiling Mounted Cassette – 4Way	H NEW!	●	●	●	●	●	●	●	●	●
		S	●	●	●	●	●	●	●	●	●
		C NEW!			●	●	●	●			
	Ceiling Concealed Duct – Mid Static	H NEW!		●	●	●	●	●	●	●	
		S			●	●	●	●	●	●	●
		C			●	●	●	●			
	Ceiling Concealed Duct – Low Static	H NEW!		●	●						
		S	●	●	●	●					
		C NEW!			●	●					
	Ceiling Suspended	H NEW!			●	●	●	●	●		
		S			●	●	●	●	●	●	●
		C NEW!			●	●	●	●			
	Console	S NEW!	●	●	●						
	Wall Mounted	S					●	● NEW!			
		C					● NEW!	●			

Extended Solution

Customer has various options to select suitable model as desired condition.

H-INVERTER

High Performance

(13 Sets) (12 Sets) (7 Sets)

Total 32 Sets

- SEER A+++ ~ A++
- 17% higher heating capacity at low ambient condition
- 7% higher cooling capacity at overload condition

STANDARD

Wide Application

(13 Sets) (15 Sets) (11 Sets) (3 Sets) (7 Sets)

(4 Sets)

Total 53 Sets

- SEER A++ ~ A+
- Max. pipe length up to *85m
- Wide Operation Range
- Synchro Function* (Max. 4 IDUs)

COMPACT

Compact Size

(4 Sets) (6 Sets) (4 Sets) (2 Sets)

Total 16 Sets

- SEER A++ ~ A
- Max. pipe length up to *50m
- Compact size

* This specification can be different as per each model or combination.

H-Inverter

High Performance with lower energy consumption

Energy Saving

SEER class : A+++ ~ A++

High heating capacity at low ambient condition

17% higher than standard

High cooling capacity at overload condition

7% higher than standard

* This specification can be different as per each model or combination.

Standard

Wide Application with diverse design range

Total 53 Combination covering whole capacity range(2.5~14.6kW) for light commercial

4-way Cassette	Ceiling Suspended	Wall Mounted	Concealed Duct	Console	Round Cassette
13 Sets	11 Sets	7 Sets	15 Sets	3 Sets	4 Sets

Total 53 Sets

Flexible Installation

Max. pipe length up to 85m*

Wide Operation Range

Cooling(DB) : -20 ~ 52 °C*
Heating(WB) : -25 ~ 18 °C*

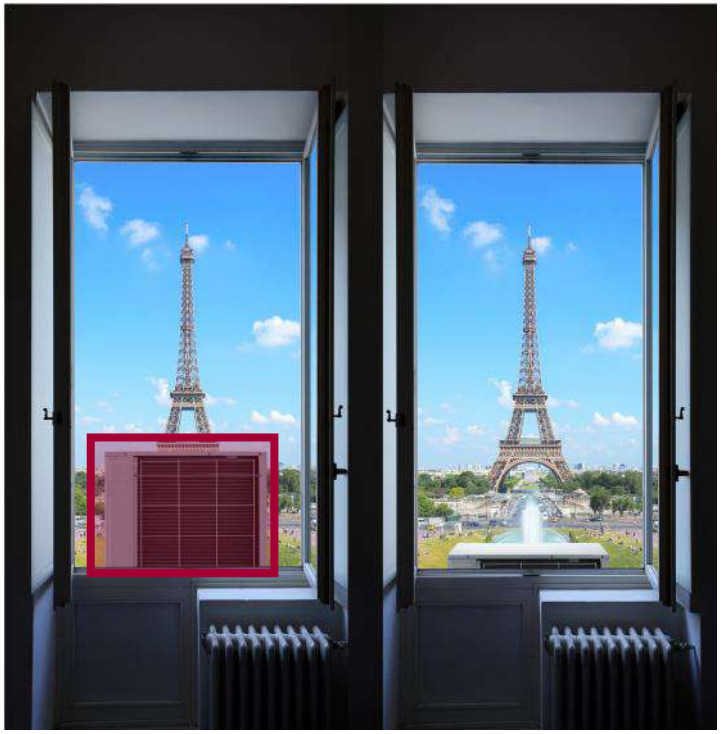
Energy Saving

SEER class : A++ ~ A+

* This specification can be different as per each model or combination.

Compact

Maximize Space Utilization with **Compact Size**



In case of 9.5kW (36kBtu/h),

Height & Face Area

40%

Decrease

Compact Size

Smaller Outdoor Unit

Energy Saving

SEER class : A++ ~ A

Flexible Installation

Max. pipe length up to 50m*

* This specification can be different as per each model or combination.

Why LG Single Split?

- High Performance & Energy Saving
- Comfortable Environment
- Convenient Control System
- Enhanced Solutions

Why LG Single Split?

High Performance & Energy Saving

High SEER / SCOP l R1 Compressor™ l Dual Sensing Control l Human Detection l Quick & Reliable Operation
Corrosion Resistance Black Fin l Continuous Cooling Operation l Long Pipe Installation

Comfortable Environment

Maintain the Perfect Balance l Provide Low Noise

Convenient Control System

LG ThinQ™ l Easy Control (Central Controller) l Mobile LGMV l Trouble Diagnosis (Black Box Function)

Enhanced Solution

Synchro Function l Connection with AHU

High SEER/ SCOP

The advanced technologies of LG achieve the high SEER value.

High Efficiency

SEER / SCOP class (ErP regulation)

kW	2.5	3.4	5.0	6.8	8.0	9.5	Average
SEER	7.0	6.8	7.6	8.5	7.8	7.6	7.6
	A++	A++	A++	A+++	A++	A++	A++
SCOP	4.0	4.0	4.4	4.8	4.8	4.5	4.4
	A+	A+	A+	A++	A++	A+	A+

※ These values are based on the **H-Inverter model** and can be different as per combination.

• Energy Labeling (Europe Only)

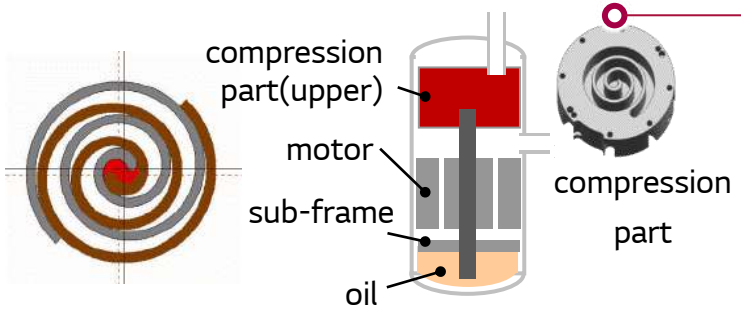
	SEER	SCOP
A+++	SEER≥8.5	SCOP≥5.1
A++	6.1 ≤ SEER < 8.5	4.6 ≤ SCOP < 5.1
A+	5.6 ≤ SEER < 6.1	4.0 ≤ SCOP < 4.6
A	5.1 ≤ SEER < 5.6	3.4 ≤ SCOP < 4.0
B	4.6 ≤ SEER < 5.1	3.1 ≤ SCOP < 3.4
C	4.1 ≤ SEER < 4.6	2.8 ≤ SCOP < 3.1
D	3.6 ≤ SEER < 4.1	2.5 ≤ SCOP < 2.8

* Based on Ceiling Cassette (6.8 kW)

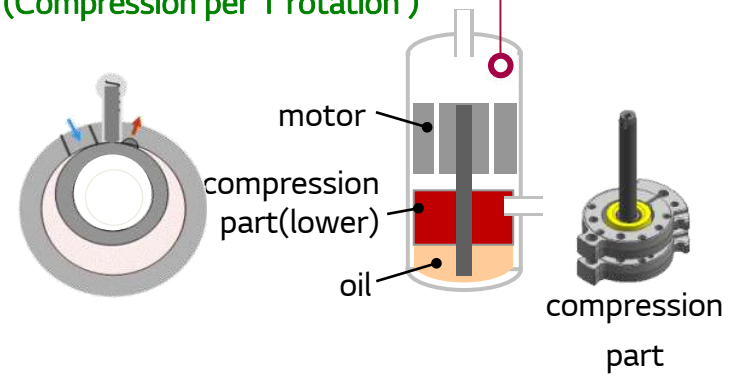
R1 Compressor is one that combines high-efficiency, low sound characteristics of the scroll and the simple compressing structure of the rotary compressor.

Conventional Compressor

- **Scroll** : High efficiency / Low sound
  (Continuous compression, but complex structure)



- **Rotary** : Simple structure
  (Compression per 1 rotation)

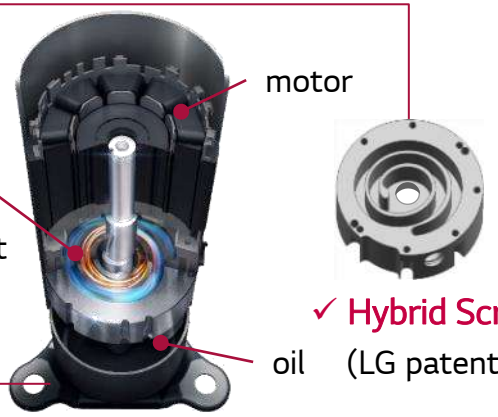


R1 Compressor™

- **Revolutionary Scroll**
  High efficiency / Stable & Simple Structure

✓ Compression parts (upper → lower)

Scroll penetrated by shaft
→ remove tilting moment



✓ Hybrid Scroll Shape (LG patent)*

✓ Simple structure : without sub-frame
Oil feeding structure better than previous scroll

Extended operation (Max. 150Hz)
Low noise & Vibration (Max. 4dB(A)↓)
Less weight (20%↓)

* Patent registration number (S.Korea : 10-1059880, USA : RE46106)

※ R1 compressor is only applied to UUD1, UUD3

Dual Sensing Control_ Dry Summer

Dual sensing control is a function that changes evaporation temperature according to temperature & humidity.

Previous

- Single sensing Smart Load Control (Temperature only)
- Excessive latent heat elimination regardless of humidity
- Waste Energy to eliminate latent heat

New

- Dual sensing Smart Load Control (Temperature and Humidity)
- Comfortable environment by making the room less dry
- Increased Seasonal Efficiency

1) Te : Evaporating Temperature

* Dual Sensing Control requires Standard III Wired Remote Controller(optional).

Dual Sensing Control_ Wet Summer

In wet summer season, the system senses the high humidity level and increases operating ratio to decrease humidity level rapidly for making room condition in comfort zone.

Previous

- High humidity condition is not considered by only sensing the room temperature.
- General latent heat elimination regardless of humidity

New

- Comfortable environment
- With quick latent heat elimination by sensing humidity
- At higher humidity, the compressor runs more powerfully

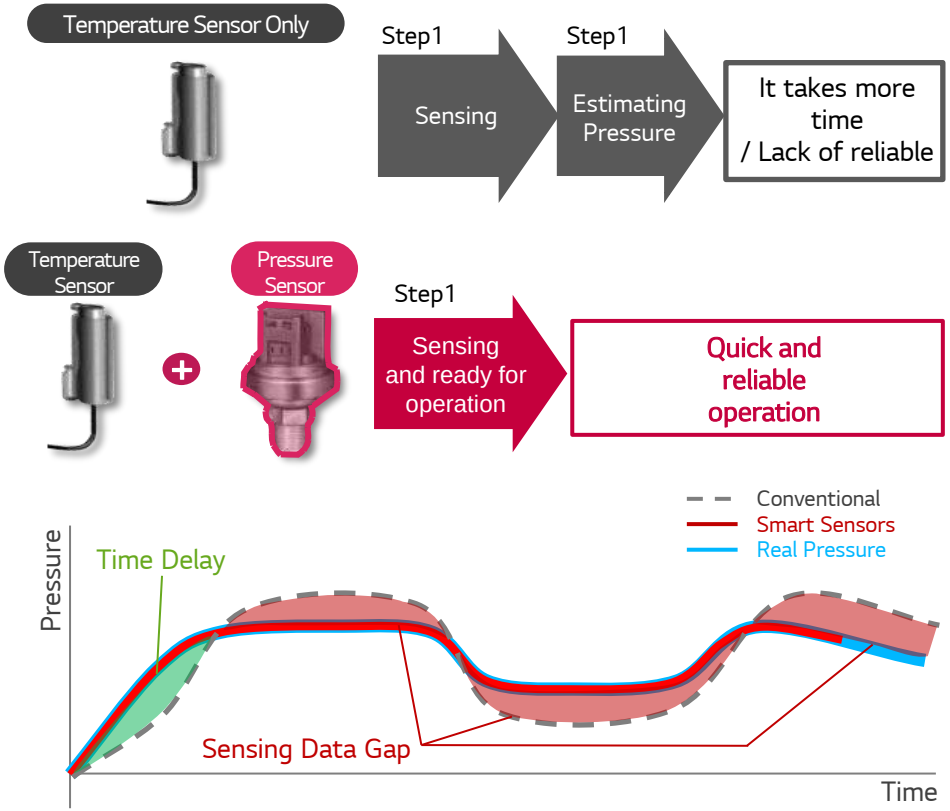
1) Te : Evaporation Temperature

* Dual Sensing Control requires Standard III Wired Remote Controller(optional)

Quick & Reliable Operation

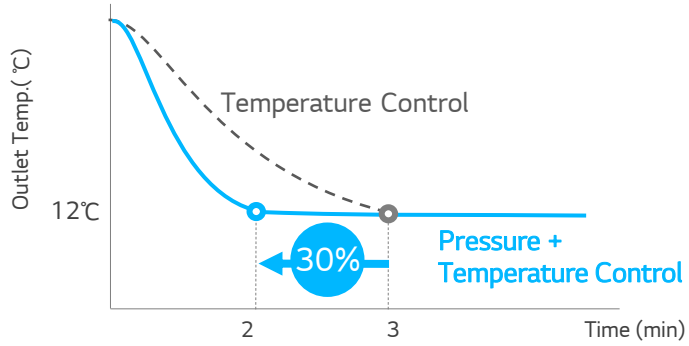
Through pressure & temperature sensing, you can save time to reach the desired temperature.
And high reliability is ensured by precise and precise control.

- Quick response due to sensing with ready for operation.
- Ensures to reach target performance point without compressor damage from liquid compression or oil shortage.

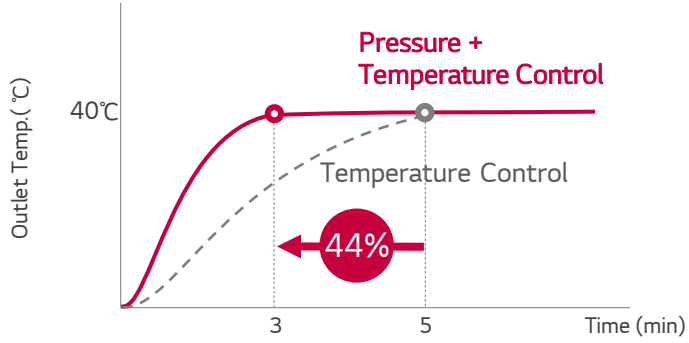


- Pressure control takes less time to reach the desired temperature up to 30% in cooling and 44% in heating with high levels of accuracy and stability.

Cooling



Heating



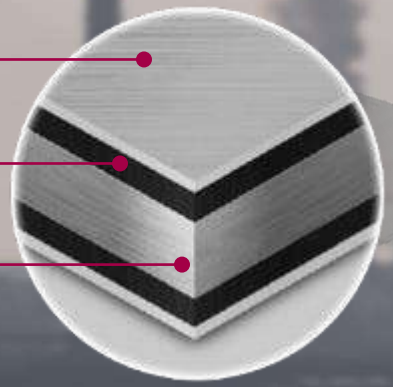
※ Based on internal test data

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 from factories.

Longer Lifespan, Lower Maintenance Costs

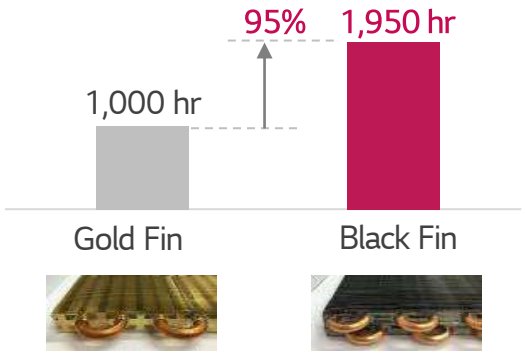
- Hydrophilic film (Water flow)
  The Hydrophilic coating minimizes moisture buildup on the fin.
- Complex resin (Corrosion resistant)
  The Black coating provides strong protection from corrosion
- Aluminum Fin



Note : Product is not fully treated for anti-corrosion. To install near the sea, additional treatment must be required.

Salt Spray Test Result

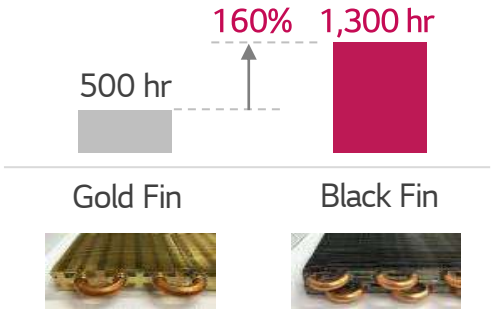
(5% Area of defects compared to initial)



※ Test process is conducted according to ISO 9227.

Cyclic Corrosion Test Result

(5% Area of defects compared to initial)



※ Test process is conducted according to ISO 14933.

Verification
Corrosion Resistance Performance Testing

※ Verification of corrosion resistance performance

- ASTM B117 / ISO 9227 (10,000 hours)

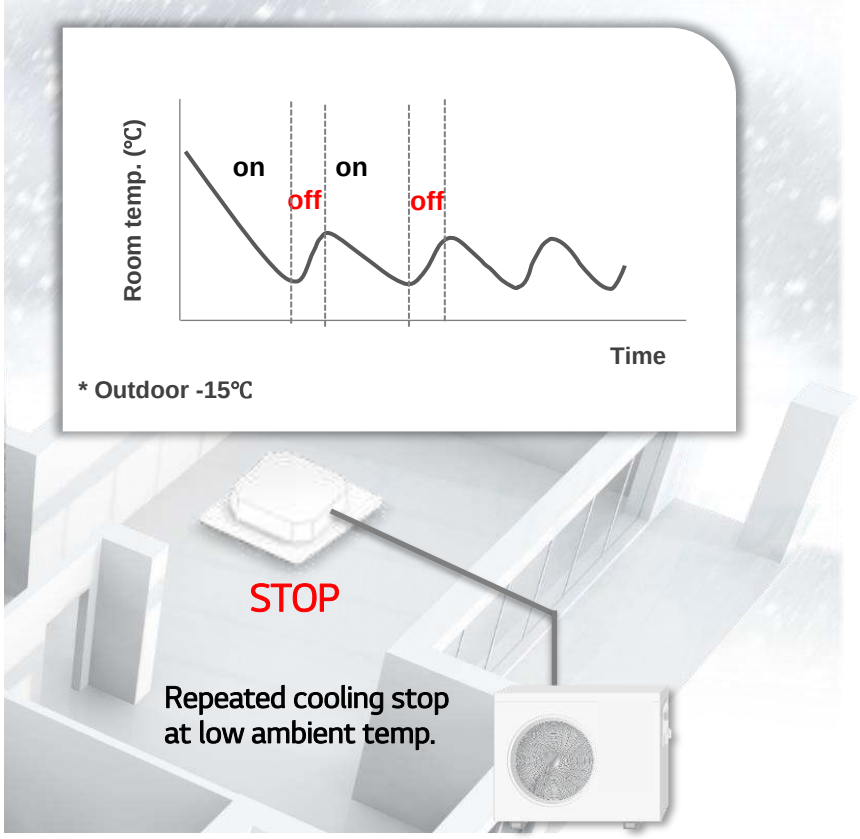
(Last updated : Dec. 2020)

Continuous Cooling Operation

LG Single Split is able to perform continuous cooling at low ambient temperature. (down to -20℃)
With wide operation range, it can be ideal solution for sever, machine rooms and kitchen.

Previous

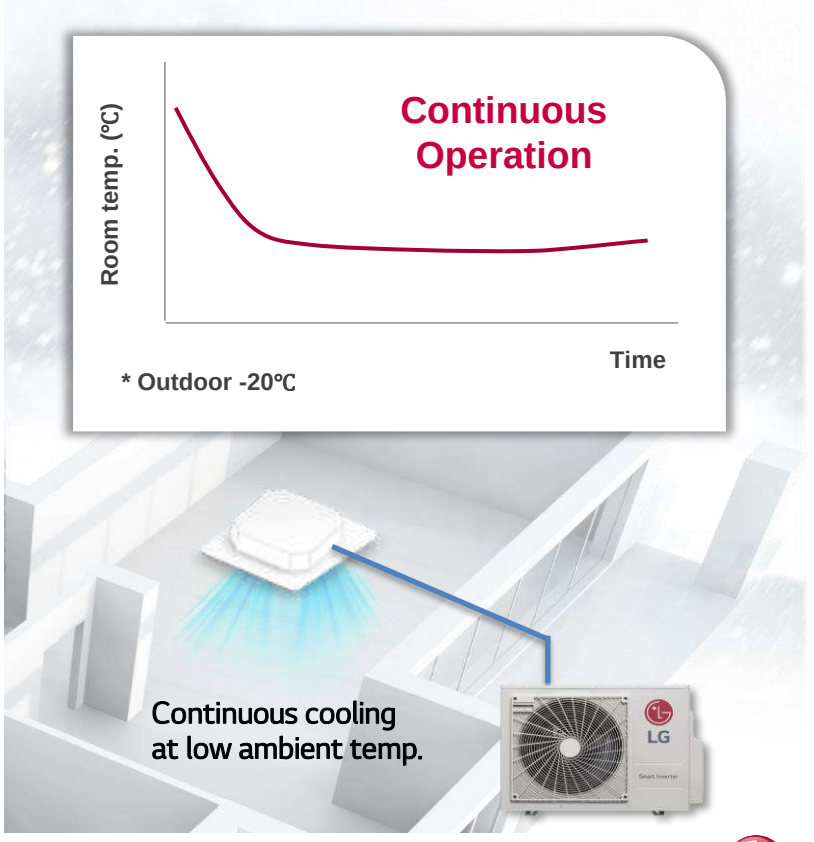
- Repeat run and stop.



* Based on a stand 9.5k model (before 2019)

SINGLE SPLIT R32

- High and Stable cooling performance at low temperatures.



* Based on a stand 9.5k model (2020)

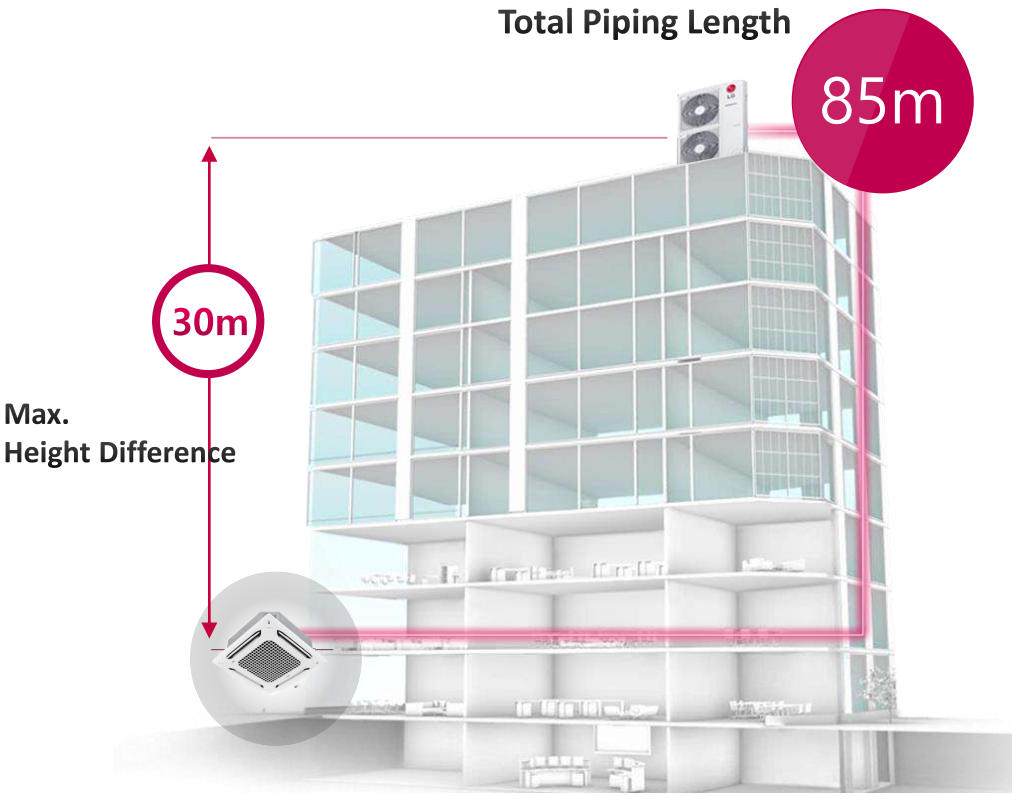
LG

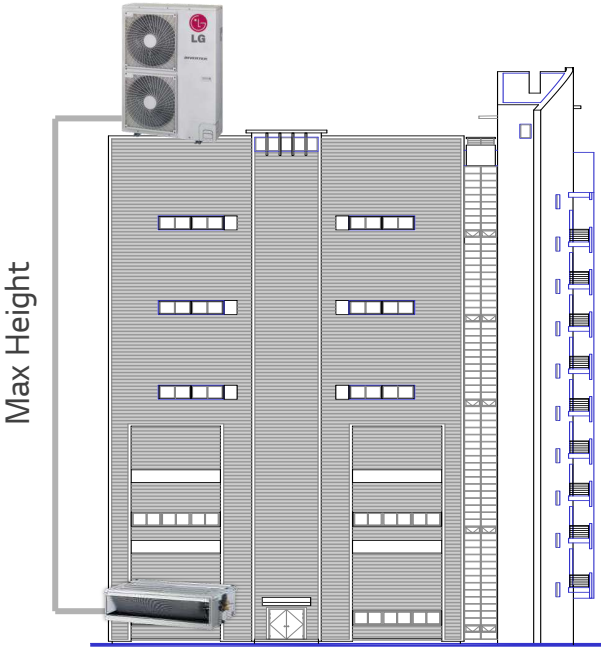
Long Pipe Installation

Maximum pipe length up to 85m and elevation length up to 30m provides flexibility for various condition and easy installation.

Model name	UUA1	UUB1	UUC1	UUD1/3
Maximum pipe length	30 m	30 / 35* m	50 m	85 m
Maximum Height Difference (ODU-IDU)	30 m	30 m	30 m	30 m

* Compact 6.8 / 8.0kW





[Test condition]
- Location : LG HQ
- Installation : Apply the maximum pipe length by model
- Period : 3 month (checking oil level in real time)
- No use U-Trap

Why LG Single Split?

High Performance & Energy Saving

High SEER / SCOP l R1 Compressor™ l Dual Sensing Control l Human Detection l Quick & Reliable Operation
Corrosion Resistance Black Fin l Continuous Cooling Operation l Long Pipe Installation

Comfortable Environment

Maintain the Perfect Balance l Provide Low Noise

Convenient Control System

LG ThinQ™ l Easy Control (Central Controller) l Mobile LGMV l Trouble Diagnosis (Black Box Function)

Enhanced Solution

Synchro Function l Connection with AHU

Maintain the Perfect Balance

By sensing both temperature and humidity, this feature helps avoid over-cooling and dehumidification, maximizing comfort

- Available only for products with Humidity Sensors.
- Accessories are ordered and purchased separately and Installed at field.

Provide Low Noise

Decrease the noise with setting the wired remote controller.

※ Sound Pressure Level [dB(A)]

Capacity (kW)	Sound Pressure (dB)	
	Day	*Night Silent*
5.0	47	46
6.8	48	46
8.0	50	46
9.5	50	46
12.0	51	46
13.4	52	46
14.6	54	46

※ The value is based on the standard model maximum allowed air flow of cooling mode

※ Refer to the install manual for details. (Setting method, operation time)

* The value is based on 14.6kW model.

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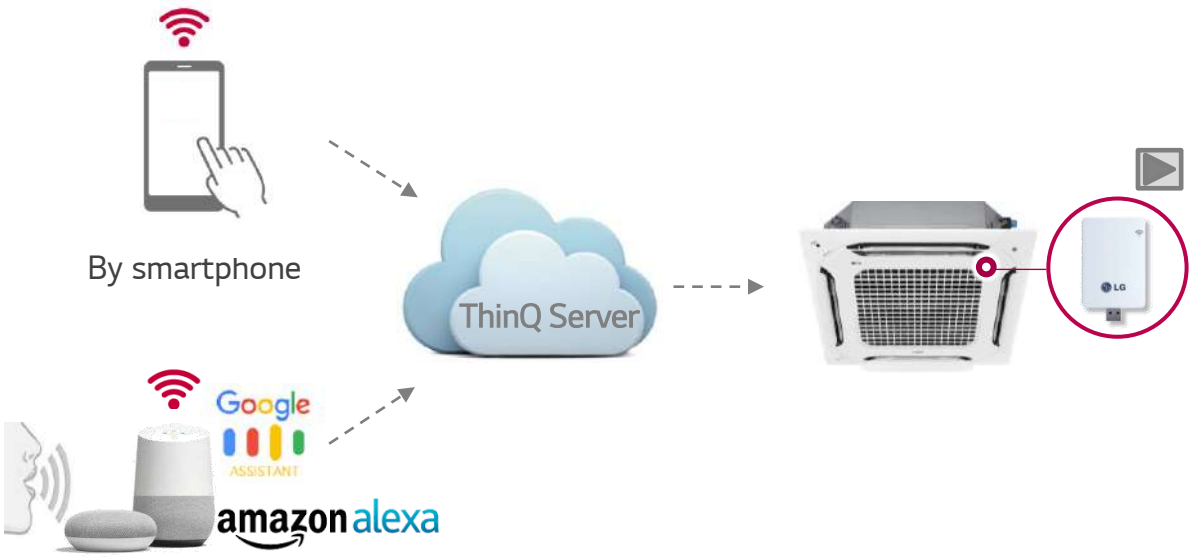
Synchro Function l Connection with AHU

Control your air conditioners using the smart internet devices as Android or iOS based smartphones and voice commands via Google assistant & Amazon alexa.

※ Search “LG ThinQ” on Google or Apple store then download the app.
※ Wi-Fi modem (PWFMDD200) is required.

Access your air conditioner anytime and from anywhere



By voice control
(separately purchase device)

Simple operation for various functions

- On/Off*
- Mode Selection*
- Current temperature*
- Set temperature*
- Set fan speed*
- Vane Control

* This functions are used by google assistant & amazon alexa
※ In some countries, the use of the google assistant & amazon alexa system may be restricted.
- Launched country : Germany, UK, Ireland, Austria, Switzerland, France, Spain, Italy, Russia, Norway, Netherland, Portugal, Turkey, Sweden, Denmark

Easy Control (Central Controller)

PI-485 is a gateway device that provides communication
between LG Outdoor Units and LG central controllers such as ACP, AC Smart.

※ CN_PWR:
AC 220V Connector

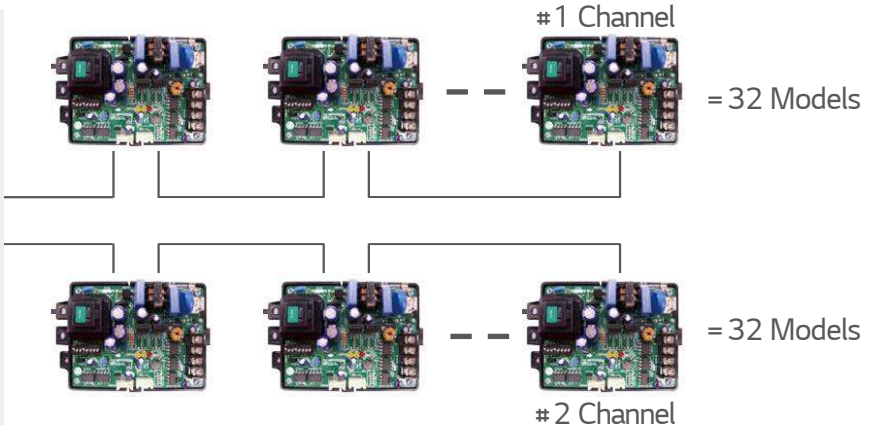
※ BUS_A & BUS_B:
RS-485 (+) & (-)

PI 485 Gateway
(PMNFP14A1)

AC Ez Touch
(PACEZA000)
Max. 1 Channel
Max. 32 unit

AC Smart 5
(PACS5A000)
Max. 2 Channels
Max. 128 unit

ACP 5
(PACP5A000)
Max. 4 Channels
Max. 256 unit



Mobile LGMV

LGMV (Monitoring View) helps engineers to inspect and monitor air conditioning unit easily.

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 check easily the **error status** (troubleshooting guide) and take action immediately.

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

Trouble Diagnosis (Black Box Function)

The operation status has been recorded until failure.
Service engineer can analysis trouble cause more easier when maintenance should be performed.

Without black box function

Service engineer has to identify many causes of failure one by one.

Much time has been required to diagnose trouble

With black box function (Only LG)

Service engineer can diagnose trouble cause by using recorded data.

Save time & improve accuracy of trouble diagnosis

The operation status has been recorded until failure.

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

Why LG Single Split?

High Performance & Energy Saving

High SEER / SCOP l R1 Compressor™ l Dual Sensing Control l Human Detection l Quick & Reliable Operation
Corrosion Resistance Black Fin l Continuous Cooling Operation l Long Pipe Installation

Comfortable Environment

Maintain the Perfect Balance l Provide Customizable Comfort l Provide Clean Air l Provide Low Noise

Convenient Control System

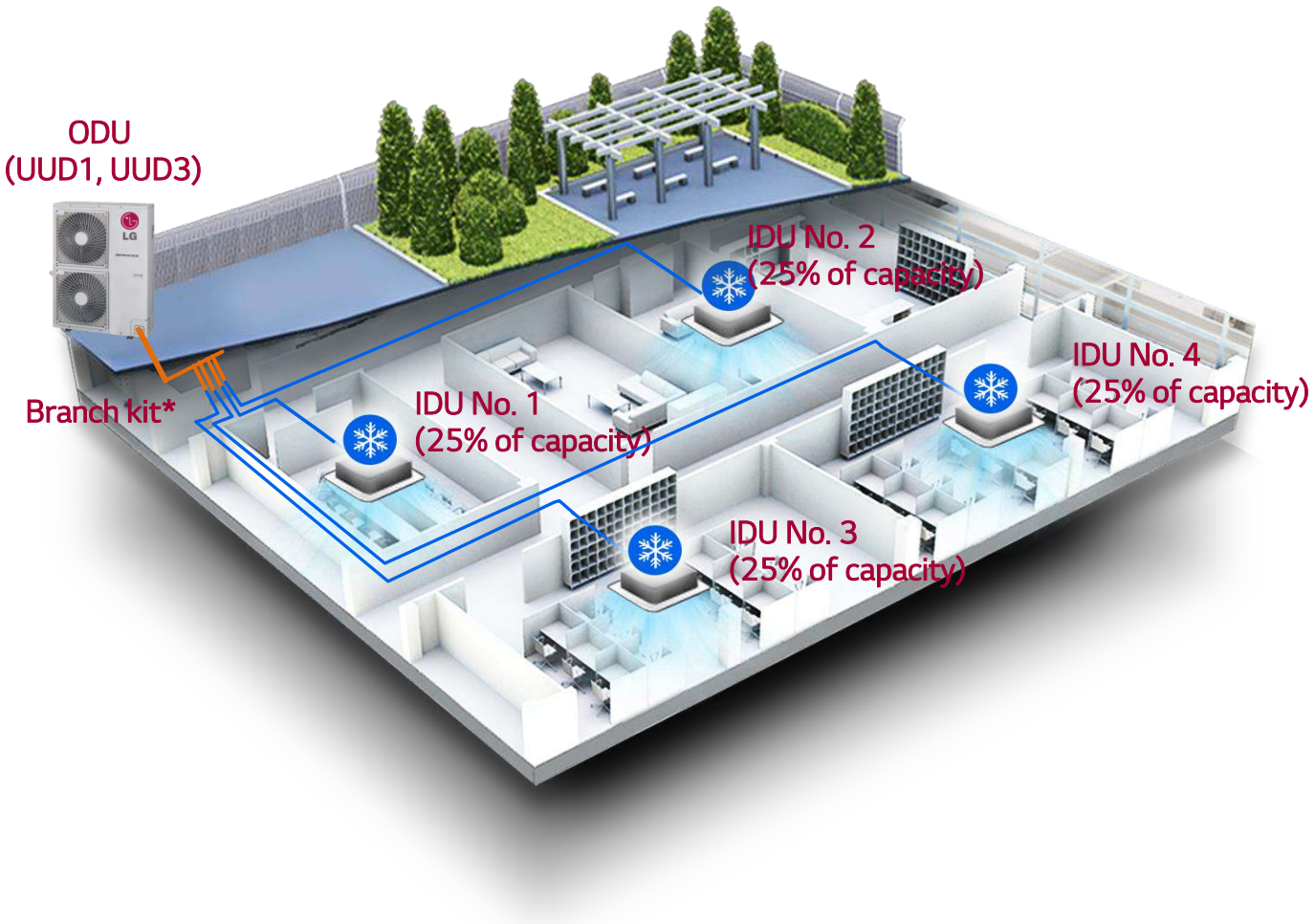
LG ThinQ™ l Easy Control (Central Controller) l Mobile LGMV l Trouble Diagnosis (Black Box Function)

Enhanced Solution

Synchro Function l Connection with AHU

Synchro Function

Maximum 4 indoor units can be combined by using a branch kit and setting dip switch for one outdoor unit. It can be easily applied to various sites.



Max. 4 IDUs combination

IDU (25% of total capacity) x 4EA
= 100% of total capacity

* Branch kit

Connection with AHU

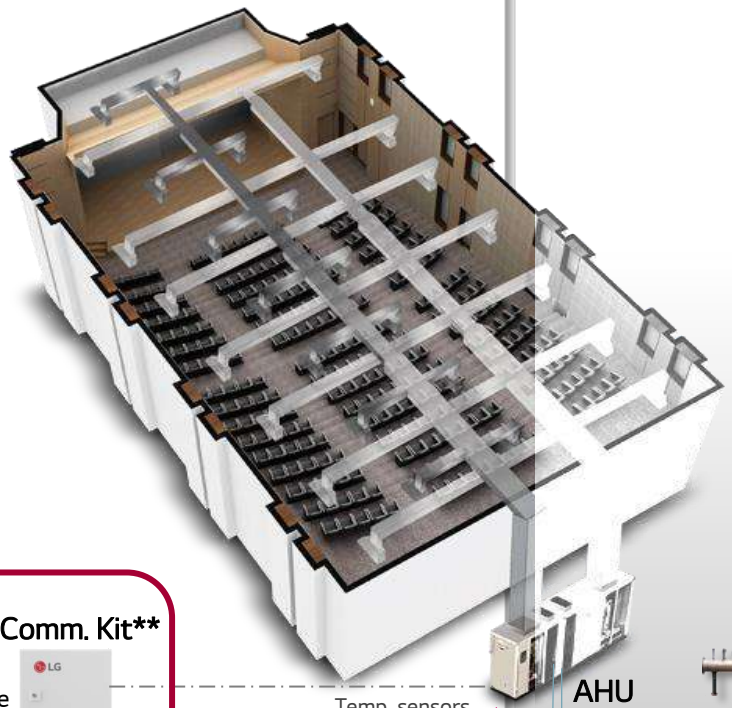
Single split can be connected to AHU using communication kit.

SIMPLE

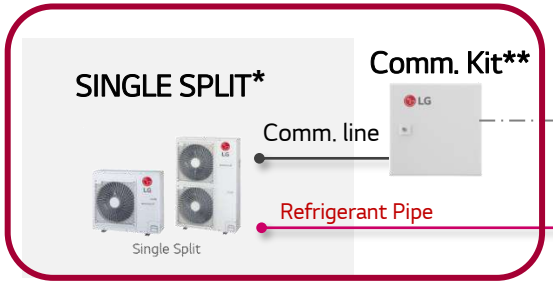
Simple and space saving

Easy installation

Low maintenance cost

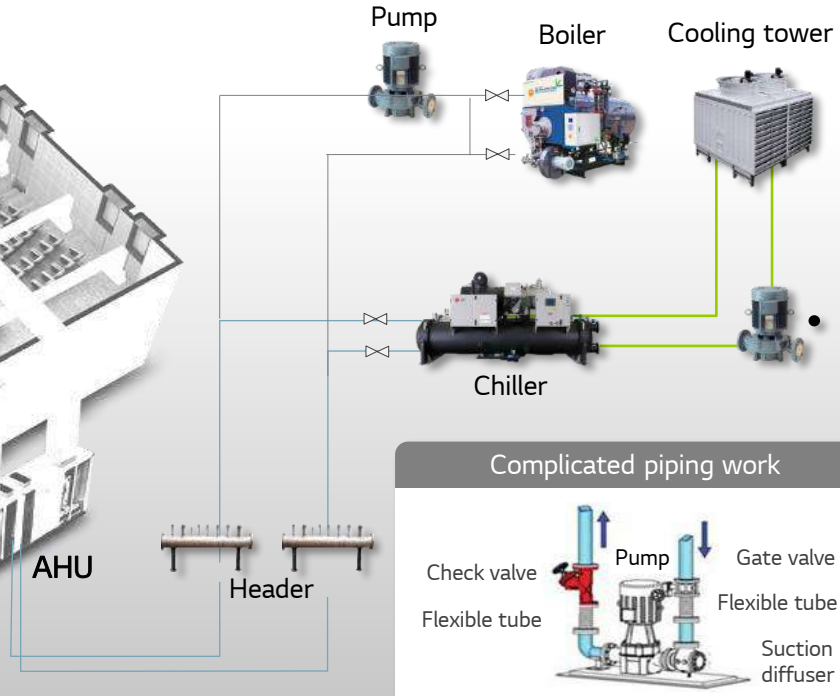


Simple & Easy

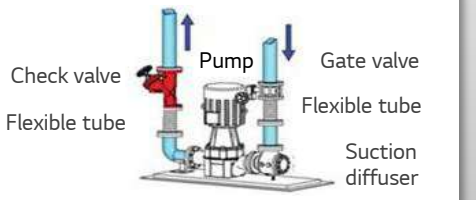


* The single model can be applied only to UUB1, UUC1, UUD1, UUD3

COMPLICATED



Complicated piping work



** Model name of communication kit
- RA air temperature control : PAHCMR000
- SA air temperature control : PAHCMS000

What about Indoor Units?

- 4 Way Cassette
  - Dual Vane 4Way Cassette
  - Mini 4Way Cassette
- Round Cassette
- Duct
  - Mid. Static Duct
  - Low Static Duct
- Console
- Wall Mounted Unit
- Ceiling Suspended
- AHU Comm. Kit

Dual Vane 4Way Cassette

Air Purification in Dual Vane 4 Way Cassette

■ Certified Air Purifying Performance

Air Sterilizer 1)

Removed
99.9% of the bacteria in 60minutes
and
99.4% of Virus in 30minutes

Indoor Air Cleaning
Removed 99.9% of ultrafine dusts
(size 50nm and 100nm)

■ How It Works?

Air purifying kit does **no need replacement** and can be used **semi-permanently.**

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

LG Air Purification Kit

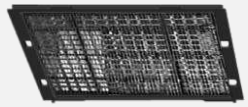
Ionizer
Deactivate bacteria and virus that cause food poisoning and pneumonia

Deodorization filter
High efficiency gas adsorption technology removes life odor & harmful gases

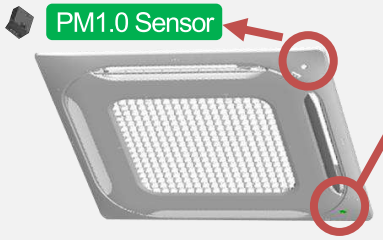
PM1.0 filter
Removes up to 99% of fine particle to ultrafine particle (Able to remove PM 1.0)

Dust Electrification 2)
Anion increases the electrostatic force of particle & this improves filter's collecting efficiency

LG Air Purification Panel



Pre-filter
Multi layer structure removes particle 2.5 times higher efficiency than general pre-filters and particle is reduced by 40% ↑



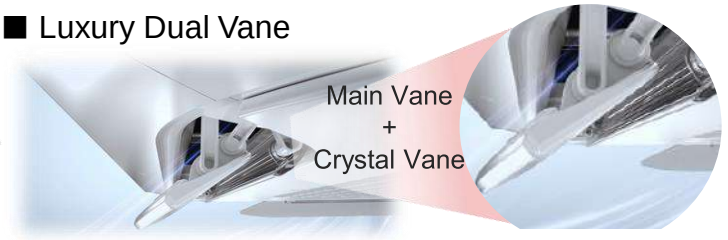
Smart Indicator
Color display by Air quality

1) Example of bacteria : staphylococcus epidermidis, Example of virus : Phi-X174
2) It increases the electrostatic force of particle to improve collection efficiency.
※ Verifications of "the air purification kit" are only for removing airborne virus, and the other verification of the ionizer is for removing virus in the air and on the PM1.0 filter by dust electrification.
※ Ordered and purchased separately the accessory package referring to the model name provided and install at field.

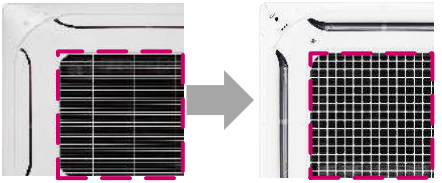
Signature Air Flows in Dual Vane 4 Way Cassette

Premium
Design

■ Luxury Dual Vane



■ New inlet design.



■ Clean and pure white color

• Morning Fog (RAL 120-4)

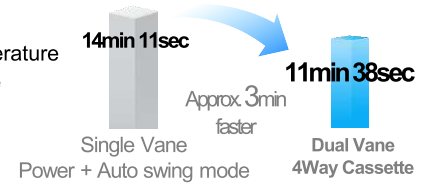
• Ivory White (RAL 9003)

Various
Air flow

Power Cool / Power Heat

Airflow is dynamically moved and controlled in power mode,
Evenly and quickly distributing air to every part of a large space

- Time to reach set temperature
  From 31℃ to 26℃ temperature



Indirect Wind

It keeps space cool and comfortable without delivering
the cold air directly to people.

- Single Vane

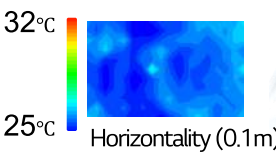
- **Dual Vane**

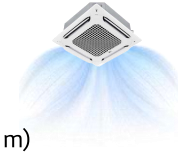
Direct Wind

Warm wind can reach up to 5m with plenty air volume. (@ 0.5m/s)

Up/Down Swing

Moves the vanes up and down to stir the room air and reaches the set temperature evenly.



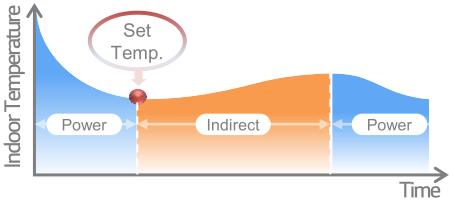


Dual Vane 4Way Cassette **95.3%**

Previous 4Way CST : 79.2%

Smart Mode

Smartly keeps set temperature by adjusting the wind direction automatically.



1. Operates in Power mode until the set temp.
2. When the set temperature is reached
   a cool airflow is generated in indirect mode.
3. When the temperature rises,
   Power mode will be turned on
   in order to keep the set temperature.

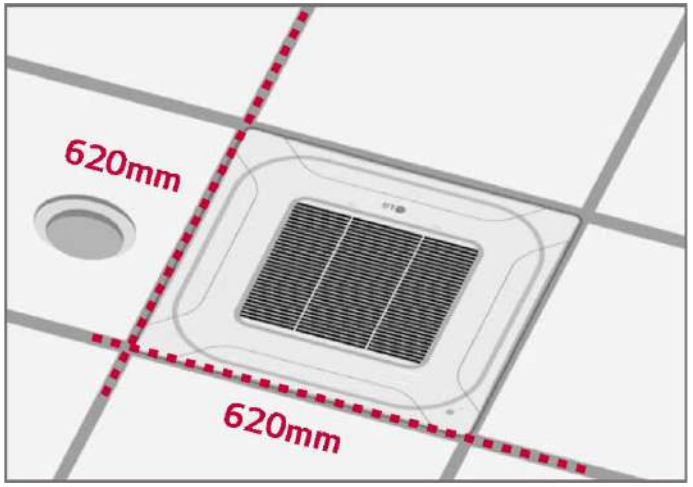
Refresh Mode

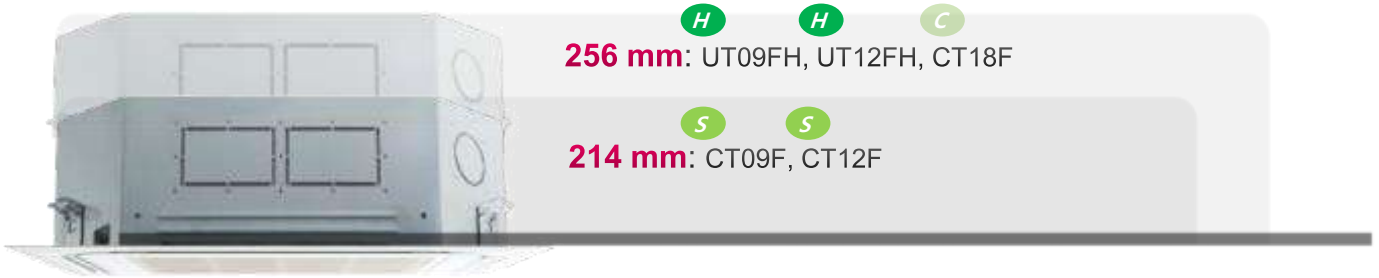
Adjust the temperature of the direct and indirect wind to create a comfortable and efficiency working environment.
Especially suitable for meeting rooms, schools and library.

Mini 4Way Cassette

Compact Size

Slim & compact design not only saves space but also reduces installation costs.
It’s designed to suit most of building designs and fit into various spaces without extra ceiling cutting.





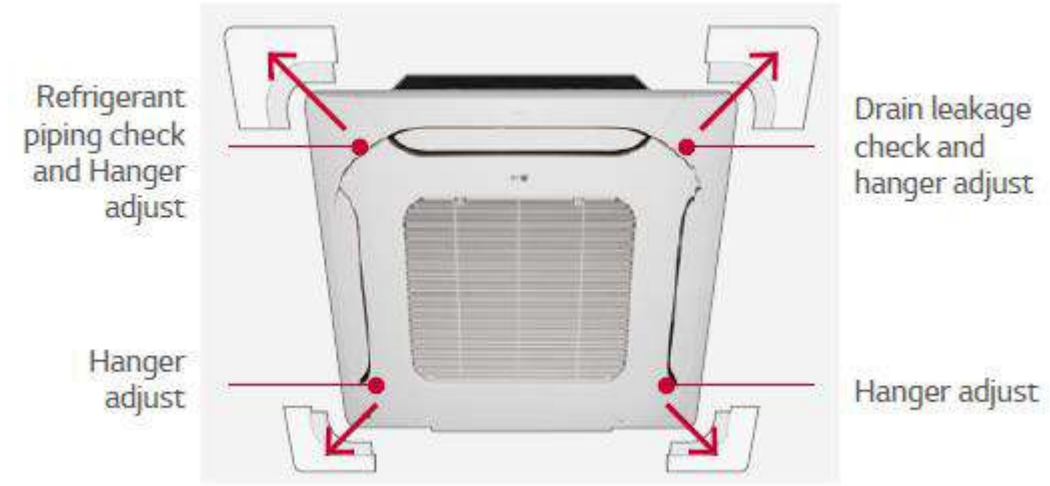
Length Width : 570 X 570 mm

H : H-Inverter
S : Standard
C : Compact

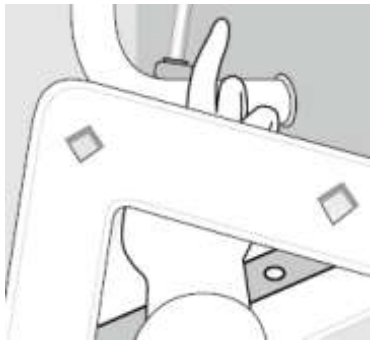
Convenient Panel Installation

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.

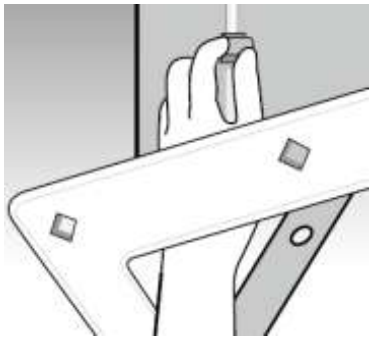
Detachable Corner Design



Drain Leakage Check



Hanger adjust



One Push Panel

Round Cassette

Air Purification in Round Cassette

■ Certified Air Purifying Performance

Air Sterilizer
Removed
99.9% of the bacteria in 60minutes
and
99.4% of Virus in 30minutes

1)

Indoor Air Cleaning
Removed 99.9% of ultrafine dusts
(size 50nm and 100nm)

Verification
Air Purification Kit Air Cleaning Performance

Verification
Air Purification Kit Air Cleaning Performance

AllergyUK
SEAL OF APPROVAL
CERTIFICATE
This is to verify that
LG Electronics Inc.

■ How It Works?

Smart Indicator

Color display by Air quality

LG Air Purification Kit

Deodorization filter
High efficiency gas adsorption technology removes life odor & harmful gases

PM1.0 filter
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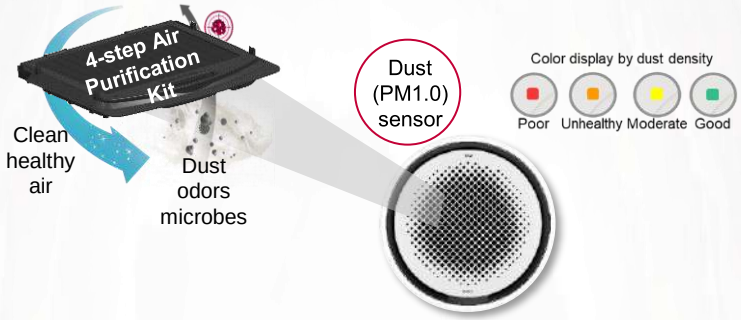
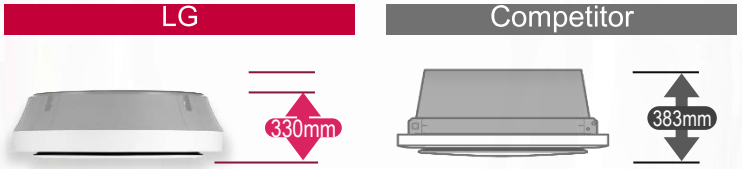
Round Cassette

Since LG has designed a slimmer body and a simpler piping, it can provide better design for open ceiling.

Air Purification in Round Cassette

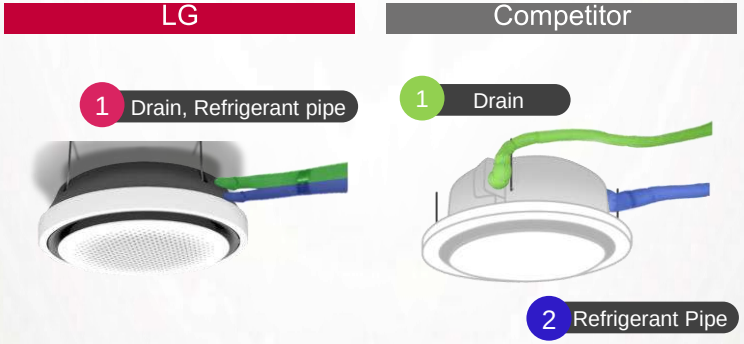


Seems an area bigger with 15% Slimmer body



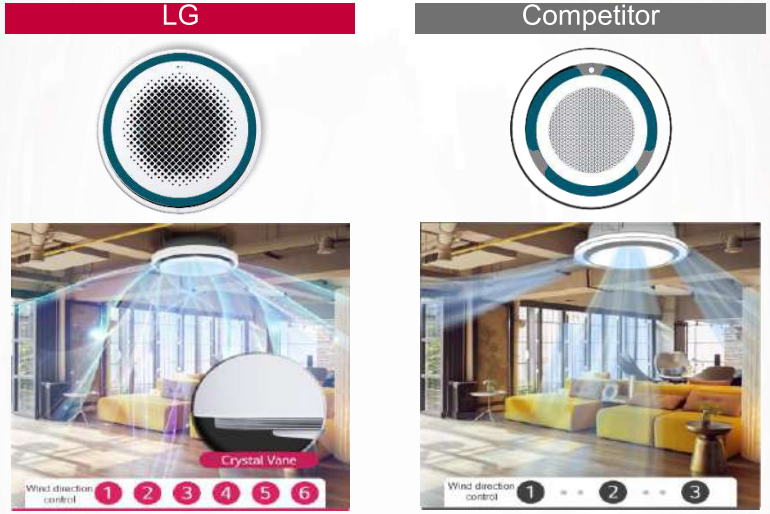
※ Product: 48 kBtu/h

Looks immaculate with Minimal exposure design



We are able to provide full wind without blind spot, and 6 steps of airflow control with the crystal vane is also contributed to maximize comfort.
Moreover, 3D fan strongly support quick and big air volume.

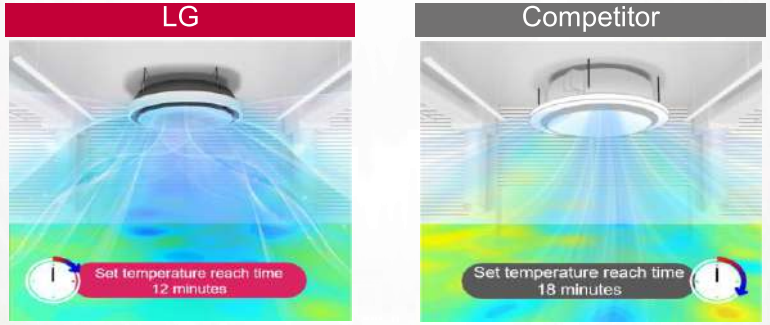
Comfort Feeling by circular airflow without blind spots.



6 Steps Detailed Air Flow Control

3 steps Airflow Control

Comfort Feeling by 30% Faster Cooling



※ Height : Installation 3.2m, Measurement 1.1m

Duct

- Mid. Static Duct
- Low Static Duct

Mid. Static Duct

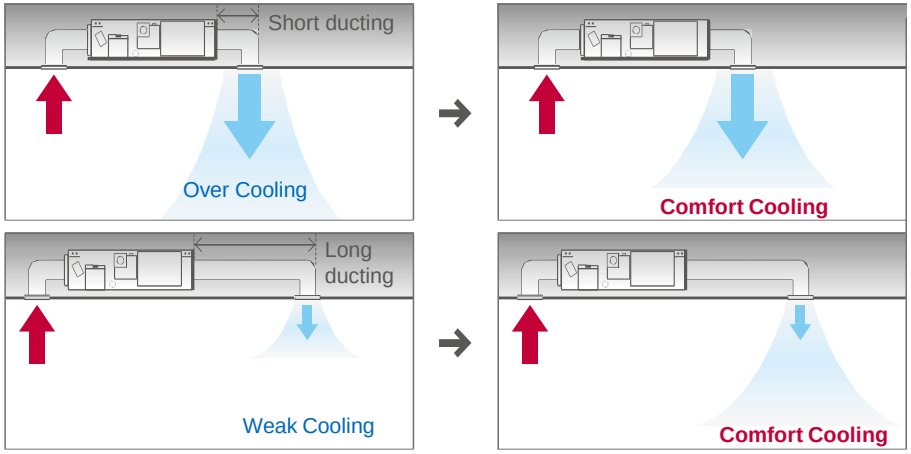
MID. STATIC DUCT

Low Noise

The optimal design for indoor units reduces noise to 23dB(A) to maintain a quiet and comfortable indoor environment.

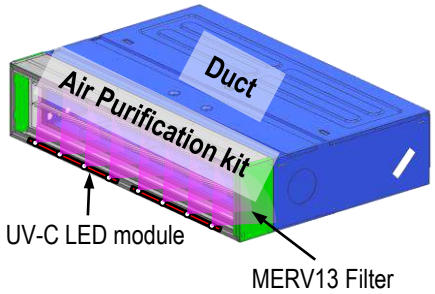
Auto E.S.P. Control*)

The product can control airflow volume by automatically sensing the discordance between the airflow volume and the external static pressure.



Air Purification with UV-C LED T.B.D.

Air purification kit includes MERV13 Filter and UV-C LED module.
MERV13 Filter with Anti-bacterial material purifies indoor air.
UV-C LED sterilizes germs on MERV13 Filter .



- **MERV13 filter to capture micro fine dust including virus**
  - The material of the filter is anti-bacterial, so it inhibits the ability of virus to grow on the surface of filter.
  - Low pressure drop

UVnano

- **UV-C LED to sterilize 99.99% of the germs captured**

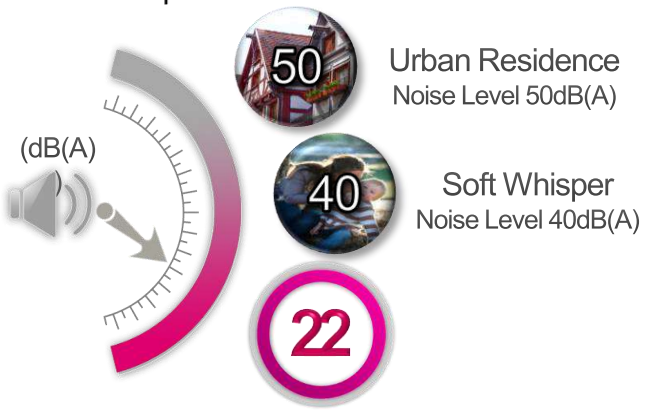
*) Auto E.S.P. will be applied on July 2021.

Low Static Duct

LOW STATIC DUCT

Low Noise

The optimal design for indoor units reduces noise to 22dB(A) to maintain a quiet and comfortable indoor environment.



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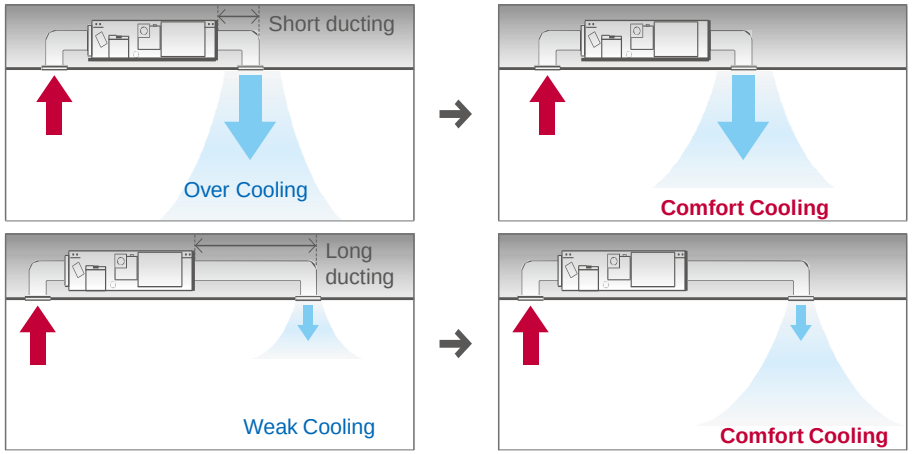
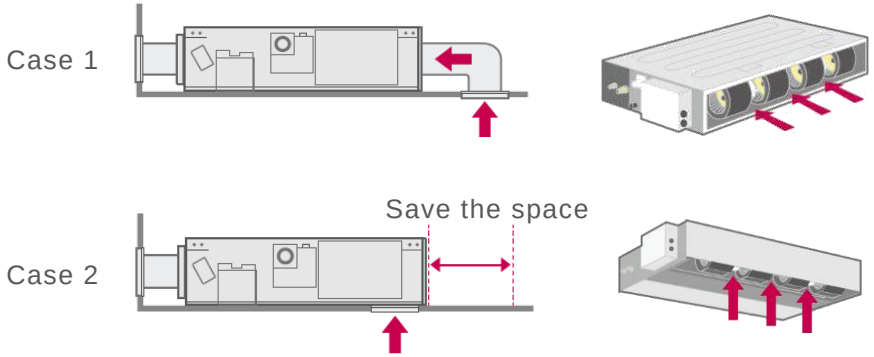


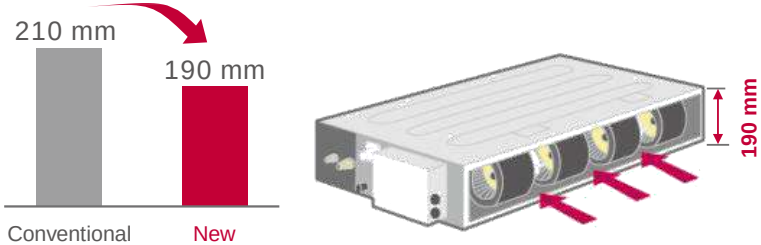
Flexible Installation

It can be installed in limited space. because you can choose air intake from either rear or bottom of the unit.



Minimized Height

New Low-static duct provide ideal solution for installation in limited space.



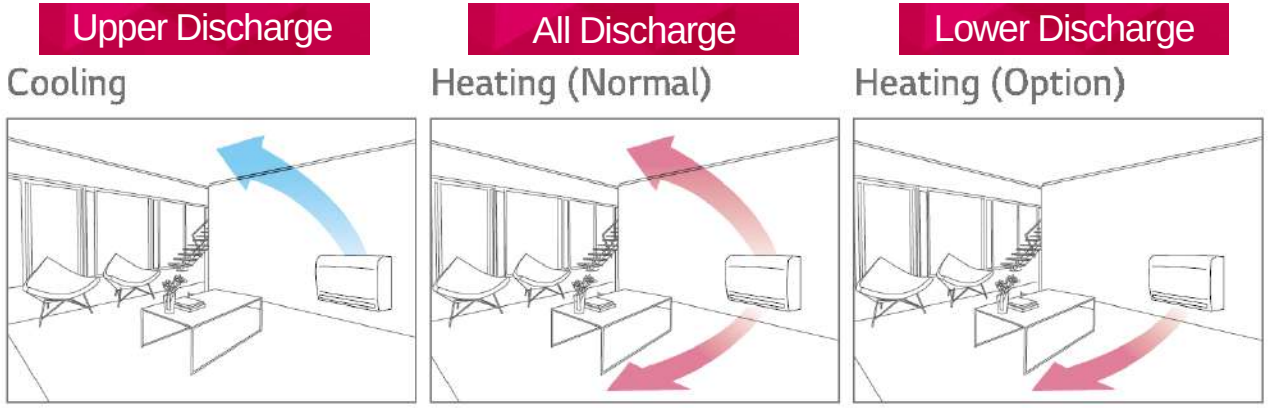
LG

Console

Console

3 Types of Air Flow

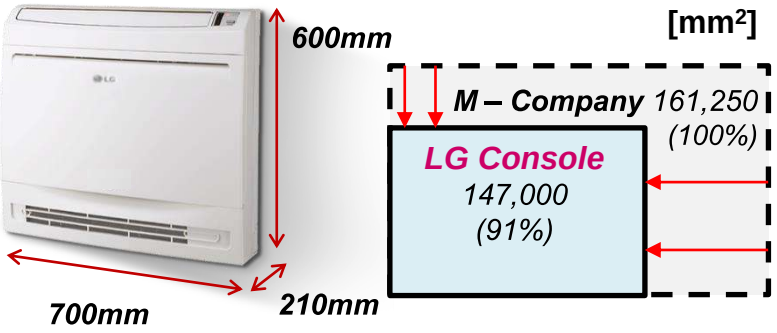
LG console has 3 types of airflow. It will provide comfortable airflow for customers in heating and cooling operations.



Console

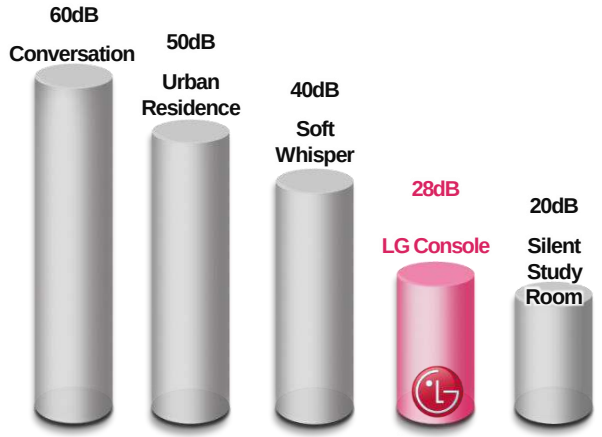
Compact Size

Compact size is less constrained by space.



Low Noise

An optimal design for indoor units with minimal noise level .



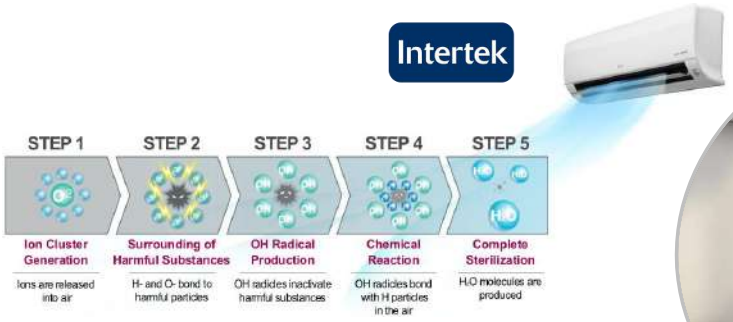
Wall Mounted Unit

Wall Mounted Unit

LG Small Server Room Cooling Solution provides these values; Stable & Reliable operation, saving cost, Easy installation and Convenience that the server room and users need.

Plasmaster Ionizer PLUS

The powerful plasma ionizer protects you from odors and harmful substance.



→ **Sterilization and Deodorization (Utilizes Over 3 Million Ions)**

Comfort

LG Air Conditioner provides soft and comfortable air to your living space.

→ **Comfort Vane**
Set vane angle by cooling or heating

→ **LG's Unique Skew Fan**
By minimizing the surface pressure

→ **BLDC Fan Motor**
By Precise speed control with strong torque and powerful ND magnetism

→ **ALVC (Active Low Vibration Control)**
By a speed-error component estimates the load to compensate for imbalances

Performance

LG provides several methods of fast cooling and heating.

→ **Fast Cooling**
The cool air flow reaches all the corners of the room, keeping the space cool and comfortable.

→ **Fast Heating**
It is possible to create a warm and comfortable living environment by heating a wider space in a shorter time

Convenience

LG provides convenient installation, and the unit has auto cleaning.

→ **Auto Cleaning**
The interior of the air conditioner is maintained clean by drying off the heat exchanger, then sterilizing the interior once more.

→ **Quick & Easy Installation**
By reducing the manpower and time required for installation, it is now possible to install in a shorter period of time.

LG

Ceiling Suspended

Ceiling Suspended Unit

Differentiated Design

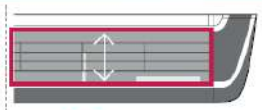
DESIGN AWARD

Powerful Cooling & Heating

Outlet Space

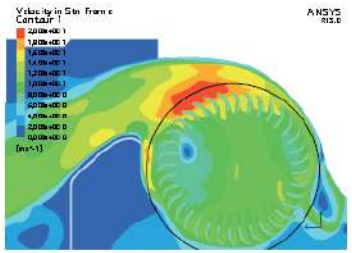
Conventional

Current



115% ENLARGED

Optimized the Airflow Path



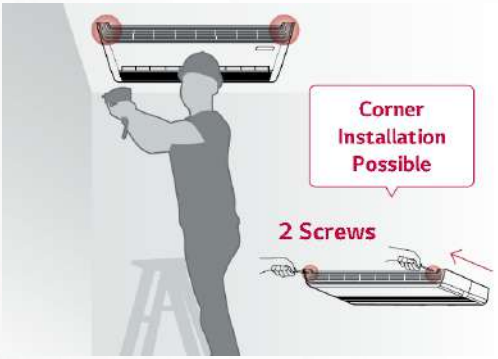
105% IMPROVED

1) Cooling and heating up to 4.2m in height from floor, 15m away from ceiling.

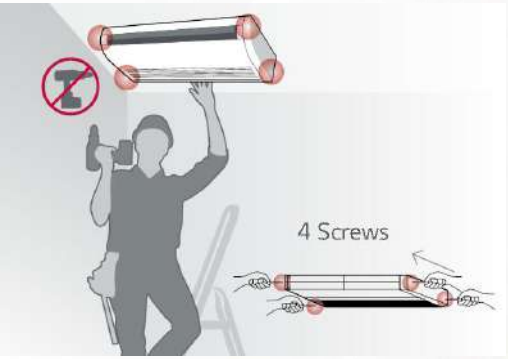
Two Thermistors Control

Easy Installation

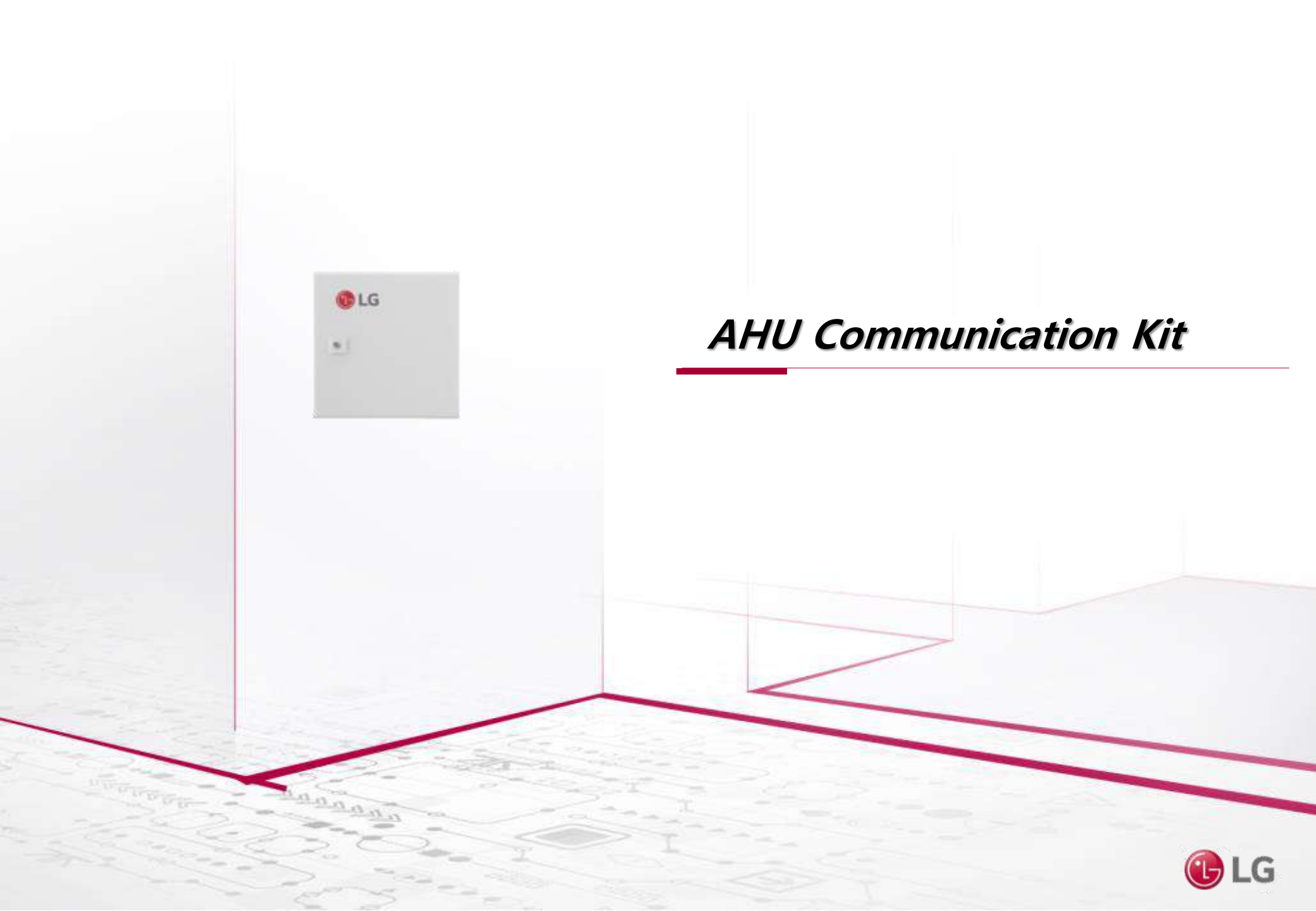
LG



Competitor



LG



AHU Communication Kit

Connection with AHU

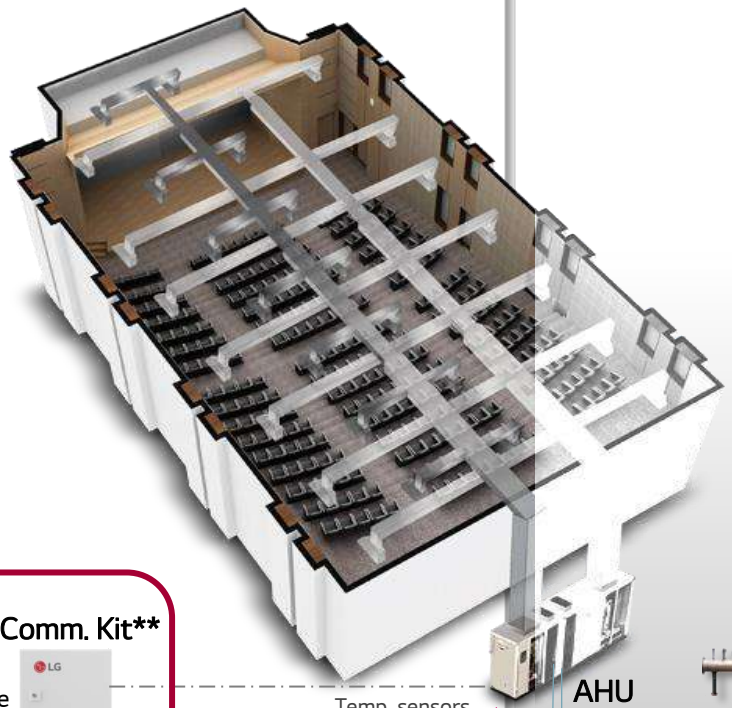
Single split can be connected to AHU using communication kit.

SIMPLE

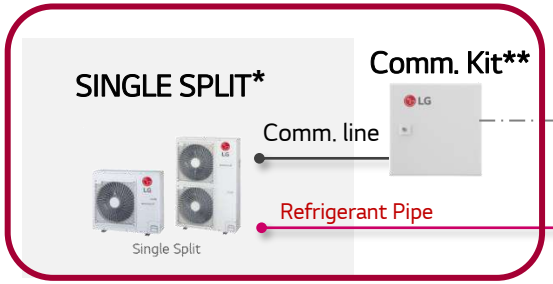
Simple and space saving

Easy installation

Low maintenance cost

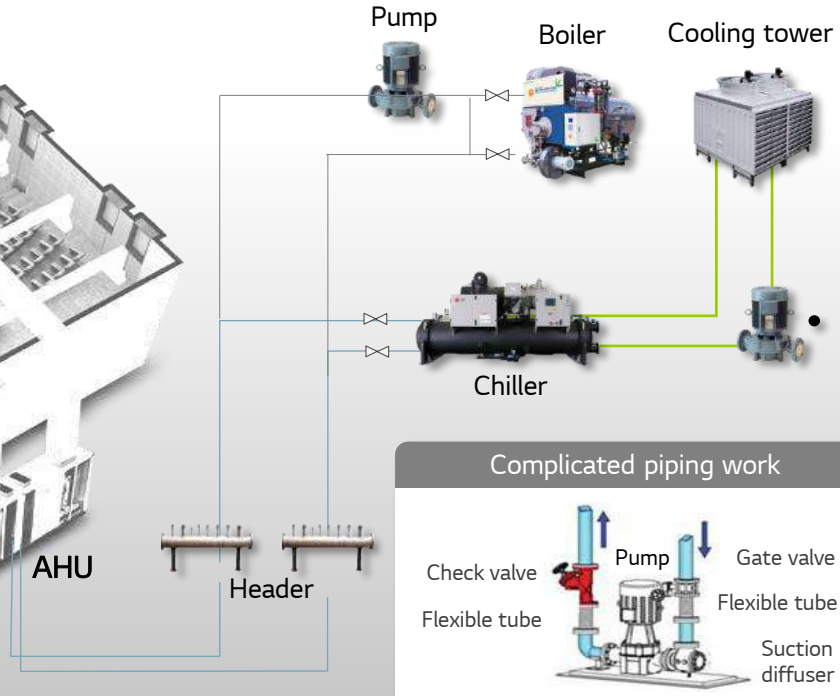


Simple & Easy

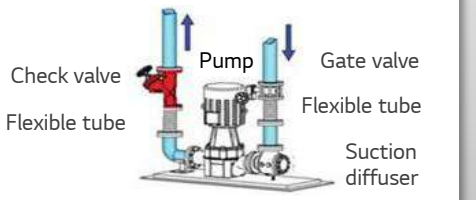


* The single model can be applied only to UUB1, UUC1, UUD1, UUD3

COMPLICATED



Complicated piping work

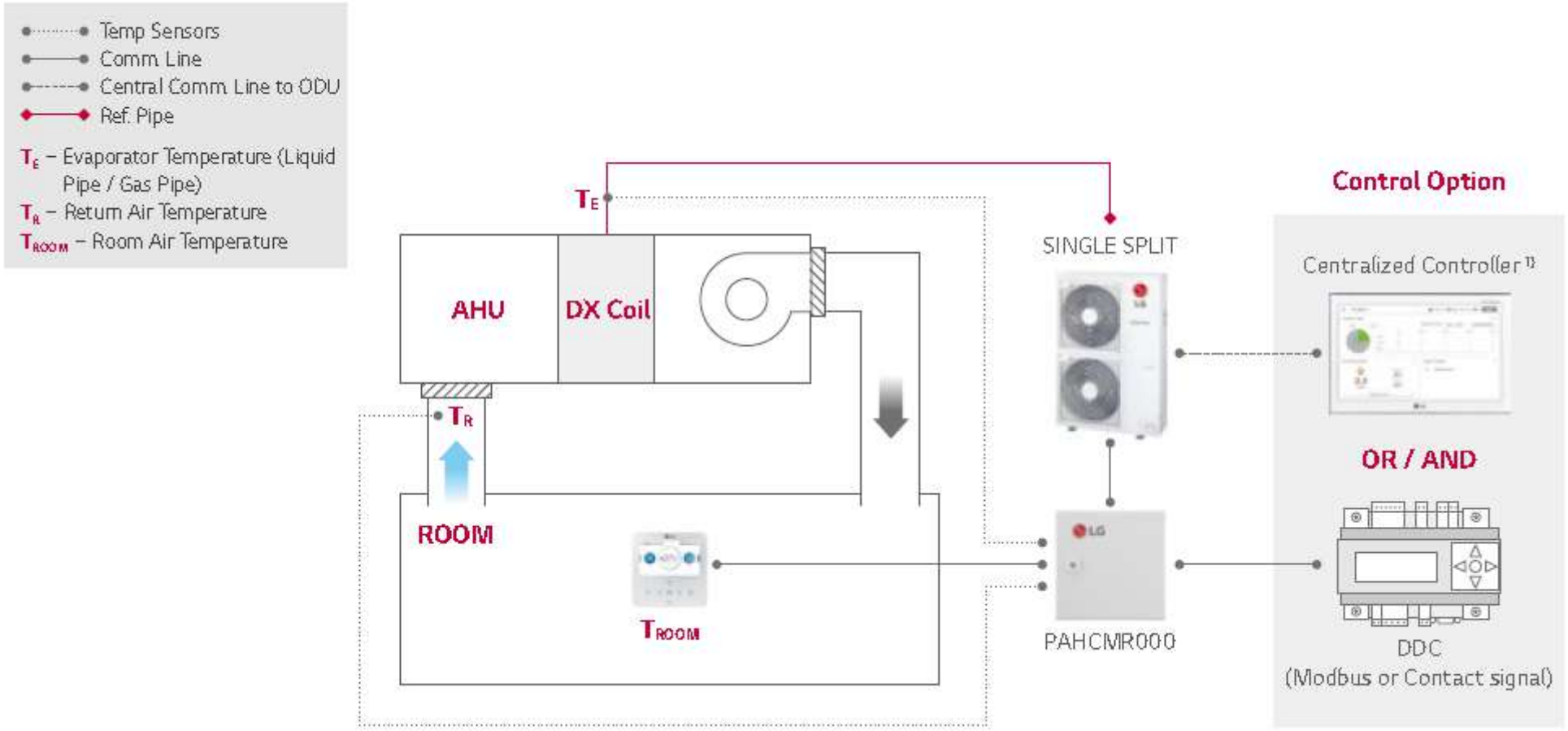


** Model name of communication kit
- RA air temperature control : PAHCMR000
- SA air temperature control : PAHCMS000

AHU Communication Kit

Single split can be connected to AHU using communication kit.

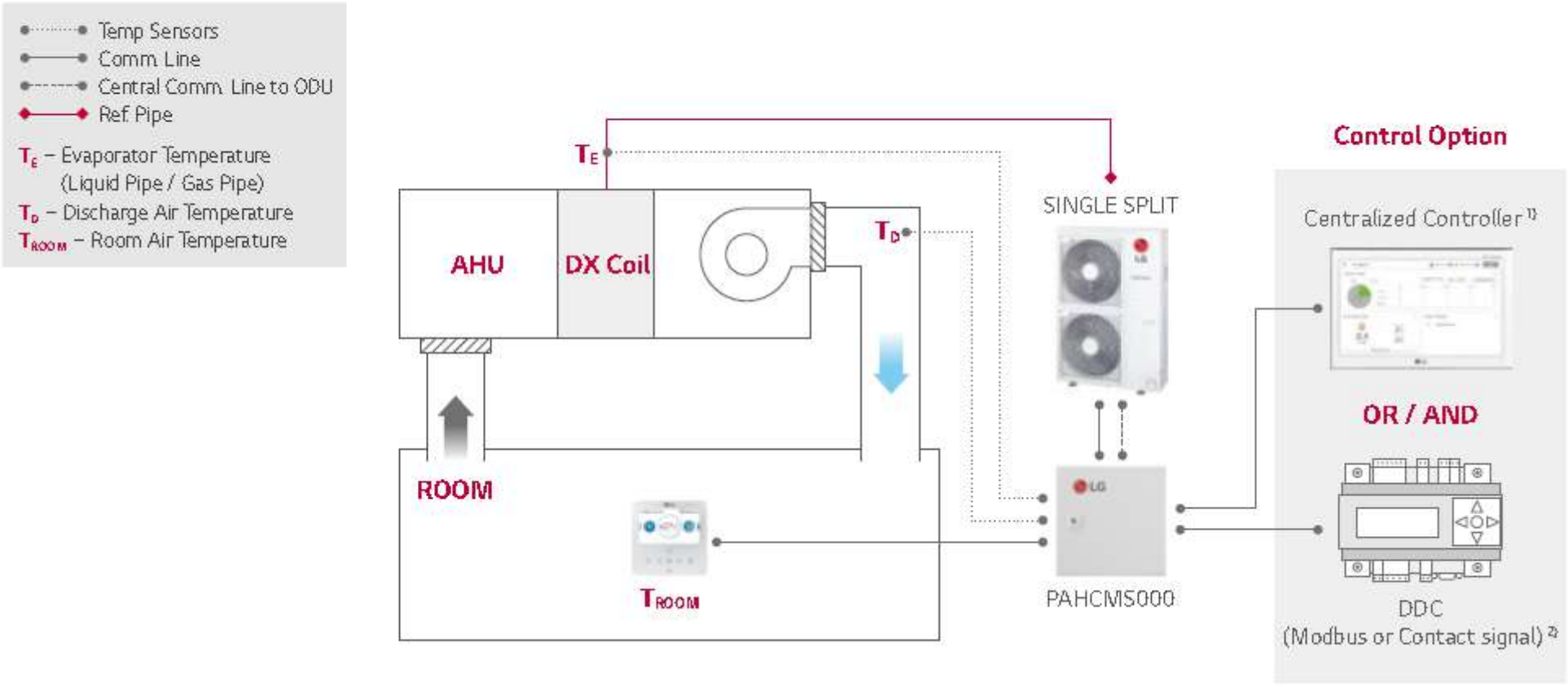
Return/Room Air Temperature Control



AHU Communication Kit

Single split can be connected to AHU using communication kit.

Discharge Air Temperature Control



1) PI485(PMNFP14A1) is required for using centralized controller.
2) In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC.
3) For more detail, please refer to the PDB of AHU Communication Kit.

Segment Application

- Premium Solution for Retail – Ceiling Mounted Cassette
- Customized Solution for Office – Ceiling Mounted Cassette
- Comfort Solution for Residential – Ceiling Concealed Duct
- Optimized Solution for Technical – Wall Mounted

Premium Solution for Retail – Ceiling Cassette

Maximizing business, minimizing cost

Premium Design & Customer Oriented Functions

- Premium interior with brighter(white) panel suit your shop
- Customer oriented functions with intelligent functions (Direct/Indirect Mode)
- Uniform space cooling & heating by power cooling & heating mode

Energy Savings

- Low operation cost by High SEER products
- Adjust evaporating temperature by dual sensing (Humidity + Temperature)
- Various energy saving solutions
  (scheduling, energy monitoring and interlocking)
- Real-time energy monitoring

Ease of Operation and Maintenance

- Convenient control via smartphone
- Intuitive wired remote controller

Customized Solution for Office – Ceiling Cassette

Supporting efficiency with fresh and comfort air

Comfortable Office Environment

- Human oriented air flow (Direct/Indirect/Refresh mode)
- Foot thermal comfort by floor temperature detection
- Powerful performance by power cooling & heating mode
- High ceiling operation such as lobbies and reception areas (Max. 5m)

Energy Savings

- Adjust evaporating temperature by dual sensing
- Low operation cost with High SEER products
- Auto on/off operation by human detection
- LG’s smart central controller provides a variety of energy saving solutions (scheduling, interlocking, peak control and energy navigation)

Ease of Operation and Maintenance

- Convenient control via smartphone
- Easy maintenance by elevation grill
- Convenient diagnosis by black box function

Comfort Solution for Residential – Ceiling Concealed Duct

Creating a comfortable home with low cost

Simple & low cost Installation for Entire House

- Cooling or heating for several rooms with one set of Ceiling Concealed Duct
- Easy control of air volume for each rooms by zone controller accessory
- Flexible installation by ESP* control

Energy Savings

- Low operation cost with High SEER product
- Various energy saving solutions
  (scheduling, energy monitoring and interlocking)

Ease of Operation

- Anytime, anywhere control via smartphone
- Intuitive wired remote controller

* ESP : External Static Pressure

Optimized Solution for Technical – Wall Mounted

Reliable and efficient technical cooling

Reliability

- Continuous cooling operation at -20 ~ 52℃*
- Quick & Reliable operation with temperature & pressure control
- Round-the-clock cooling (24h, 365 days)
- Power cooling mode for peak time
- Duty operation via server room controller

Energy Savings

- Low operation cost by High SEER product
- Real-time energy monitoring

Ease of Operation and Maintenance

- Convenient control via smartphone or centralized control
- Immediate diagnosis via mobile LGMV
- Accurate diagnosis via black box function

* This specification can be different as per each model or combination.

App. Differentiated Specification

LG Single split provide differentiated features(performance/installation/convenience) by each product line.

Items		H-INVERTER	STANDARD	COMPACT	19Y Standard (R32)
		High Performance	Wide commercial applications	Compact & Cost Effective	
Performance	SEER Class	A+++ ~ A+	A++ ~ A+	A++ ~ A	A++ ~ A+
	Cooling Capacity* @48℃	112 %	105 %	88 %	100 %
	Heating Capacity* @-15℃	124 %	107 %	98 %	100 %
	Operation Range (Cooling, DB)	-20 ~ 50 ℃		-10 ~ 48 ℃	-15 ~ 48 ℃
	Operation Range (Heating, WB)	-20 ~ 18 ℃		-15 ~ 18 ℃	-18 ~ 18 ℃
Installation	Max. Pipe Length	50 m		35 m	50 m
	Cooling Capacity* @50m	113 %	109 %	-	100 %
	Drain Pump (cassette)	●	●	●	●
	Drain Pump (duct, suspended)	●	Accessory	Accessory	Accessory
Convenience	Humidity Control (cassette, suspended, console)	●	●	●	●
	Wi-Fi (cassette)	Accessory	Accessory	Accessory	Accessory
	Floor Detection (cassette)	●	N/A	N/A	N/A
	Air purifying (cassette)	Accessory	N/A	N/A	N/A
	Human detection (cassette)	Accessory	Accessory	Accessory	Accessory
Others	Synchro Application	N/A	36k ↑	N/A	36k ↑
	AHU Comm. Kit Application	18k ↑	18k ↑	24k ↑	18k ↑

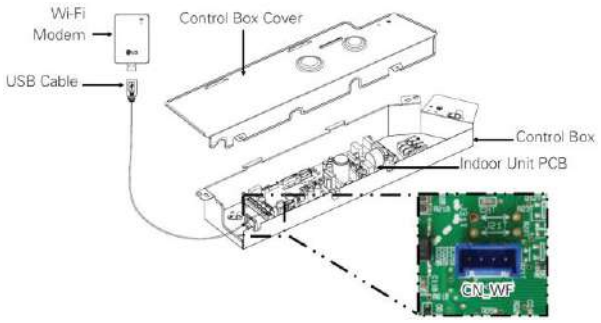
* Based on internal test data for **6.8kW** model.
(compared to 19Y standard model)

※ This specification can be different as per each model or combination.
※ In the case of cassette model, note that the function depends on the application of recommended decoration panel.

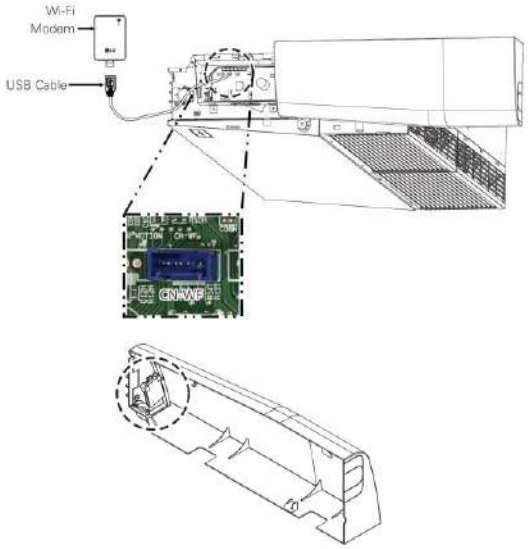
App. Accessory Installation

Wi-Fi Modem (PWFMDD200)

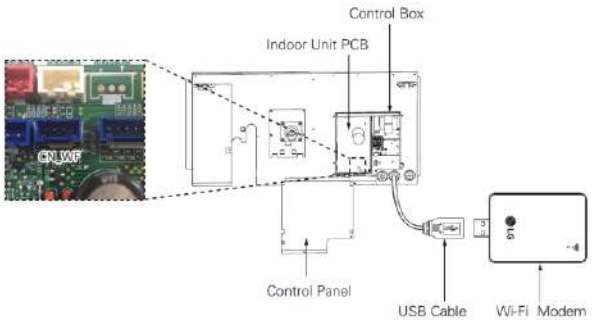
4Way Ceiling Cassette



Ceiling Suspended Unit



Ceiling Concealed Duct

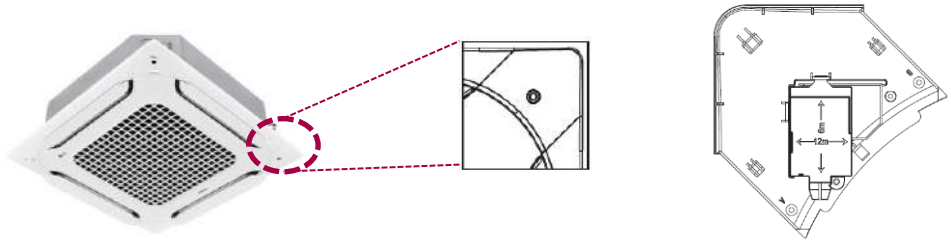


※ Wi-Fi paring setting is possible with RS3 or RS2 wired remote controller. (PREMTB100 / PREMTB10 / PREMTB001 / PREMTBB01)

※ Wi-Fi default panel (PT-AFGW0, PT-AEGW0), Wi-Fi accessory panel (PT-AAGW0)

Human detection sensor (PTVSAA0)

4Way Ceiling Cassette



App. Individual Controller

• B&W : Black & White

Category		Image	Model	Contents
Wired Remote Controller	Premium	`14	PREMTA000 English Portuguese Spanish French PREMTA000A English Italian Russian Chinese PREMTA000B English German Polish Czech	• 5 inch color display • Touch screen • Group control (Max 16 indoor units) • Temp. /Humid. → Humidity sensing
	Standard III	`15	PREMTB100 (White) PREMTBB10 (Black)	• 4.3 inch color display • Touch button • Group control (Max 16 indoor units) • Temp./Humid. → Humidity sensing • 1 digital output available(on/off)
	Standard II		PREMTB001 (White) PREMTBB01 (Black)	• 4.3 inch B&W display • Physical button • Group control (Max 16 indoor units) • 2-remote controller control • Temp. sensing • Schedule function
	Simple		PQRCVCL0QW (White) PQRCHCA0QW (White, for Hotel) PQRCVCL0Q (Black) PQRCHCA0Q (Black, for Hotel)	• 2.6 inch B&W display • Physical button • Group control (Max 16 indoor units) • 2-remote controller control • Temp. sensing • For Hotel: except mode change
Wireless Remote Controller		`14	PQWRHQ0FDB(Heat Pump)	• 2 inch B&W display • Physical button • Temp. sensing

App. Centralized Controller

• B&W : Black & White

Category	Image	Model	Contents
AC Manager 5 Max 8,192 units	`17	PACM5A000 - Integration for multiple ACP and AC Smart	• PC Access Controller • Supports 32 ACP 5 or AC Smart 5 • Supports Chrome(Recommended), Safari, Internet Explorer 11
ACP 5 Max 256 units	`18	PACP5A000 - BACNet IP / Modbus TCP	• PC Access Controller • DC 12 V Adaptor • RS-485 : 6 channels CH1~4 : indoor Units CH5 : LGAP(AHU) or Modbus(AHU, Chiller, ACS I/O) CH6 : Modbus(AHU, Chiller, ACS I/O) • DI 10EA, DO 4EA(DI1 : Emergency stop Only)
AC Smart 5 Max 128 units	`18	PACS5A000 - 10.2 inch Touch LCD - BACNet IP / Modbus TCP	• 10.2 inch color display / Touch screen • DC 12 V adaptor • RS-485 : 2 channels CH1 : LGAP(AHU) or Modbus(AHU, Chiller, ACS I/O) or Indoor Unit CH2 : Indoor unit • DI 2EA, DO 2EA
AC Ez Touch Max 32 units	`16	PACEZA000 -5 inch Touch LCD	• 5 inch color Display / Touch screen • DC 12 V adaptor • RS-485 : 1 channel • DI 1EA(Emergency stop Only)
AC Ez Max 32 units	`11	PQCSZ250S0	• B&W Display & 18 LED • Button control • DC 12 V • RS-485 : 1 channel