

LG AIR SOLUTION SAC HANDBOOK





**LG AIR SOLUTION
SAC HANDBOOK**



Disclaimer

This handbook is an training material for understanding SAC and air solution products by LG Air Solution division.

The contents of this handbook are based on products sold globally and the lineup, specifications, functions, and characteristics are common global items and may differ by region/subsidiary.

All contents of this handbook may be arbitrarily changed anytime due to product or business environment changes.

The contents of this handbook are not intended for sales such as customer consultation or contracts, and we do not take legal responsibility for any discrepancies in the contents.

If you need detailed information about the product, be sure to check the specifications and features of the product actually sold.

This handbook has been prepared according to the following criteria.

- Based on products sold globally
- For product features, based on the latest product currently released (last generation product)
- The lineup is based on the minimum and maximum capacity of all products launched globally (different by region/subsidiary)
- LG Electronics company information is based on the time of preparation

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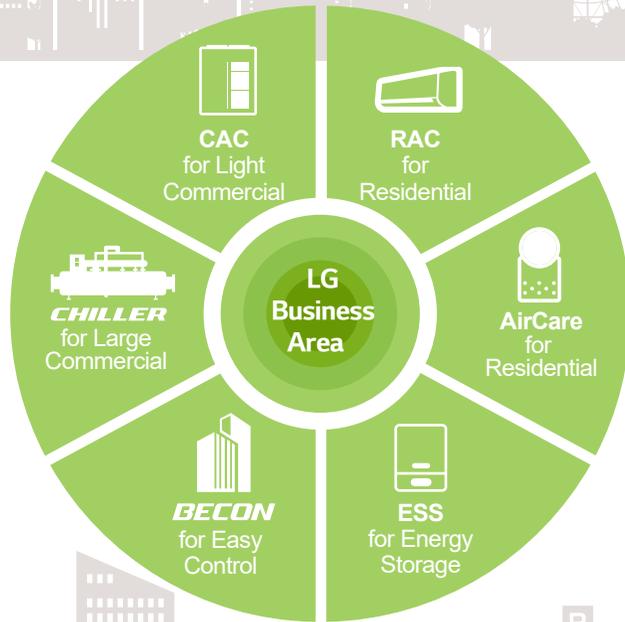
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LG AIR SOLUTION BUSINESS OVERVIEW

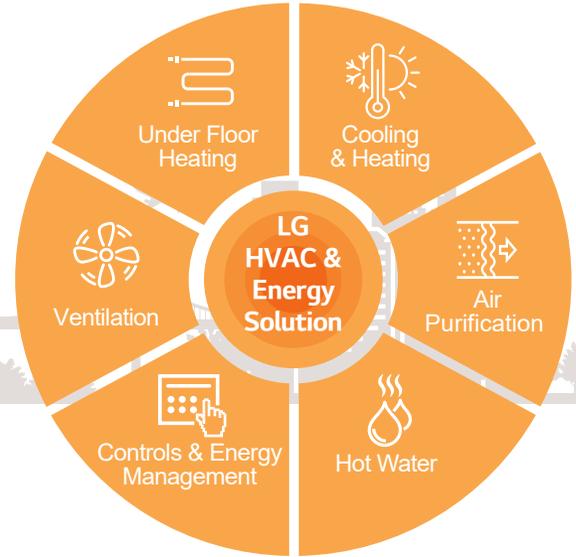
LG provides **Total HVAC & Energy Solutions** from residential and commercial air conditioners to control systems that manage the energy of the entire building.

Ahead of the Expected
with LG HVAC Solutions

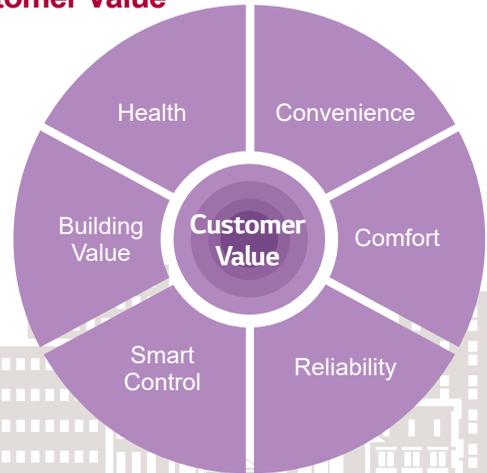
LG Business Area



LG HVAC & Energy Solution

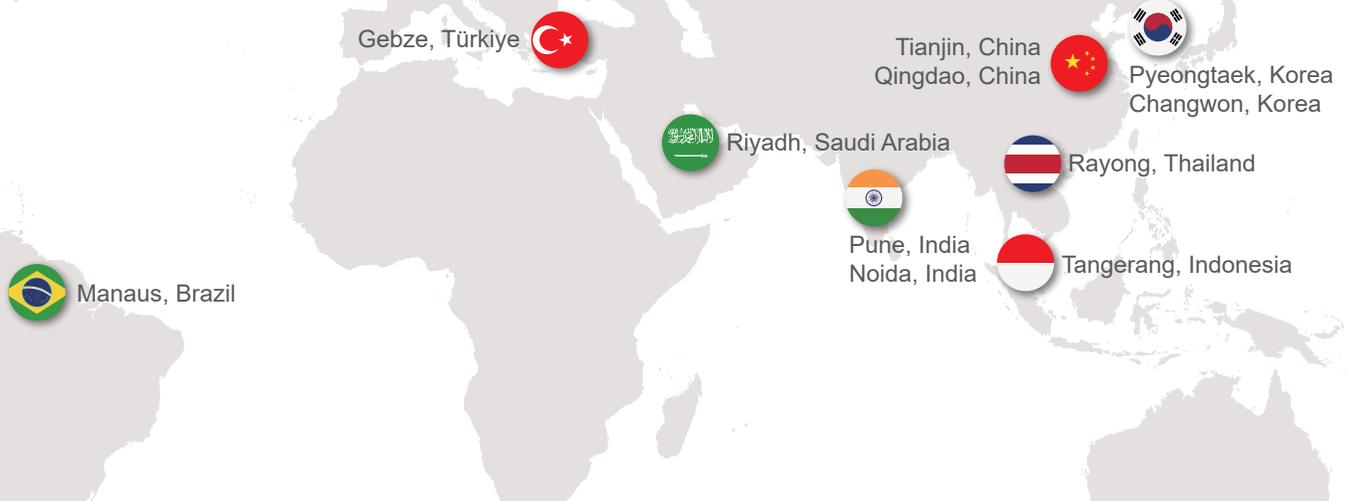


Customer Value



GLOBAL PRODUCTION SITES

Total **11** Sites



No.	Production Site (City, Nation)	Product			Sales Region
		RAC	CAC	Chiller	
1	Changwon, Korea	●	●	○(Inverter Scroll Chiller)	Global
2	Pyeongtaek, Korea	-	-	●	Global
3	Tianjin, China	●	●	-	Global
4	Qingdao, China	-	-	●	Global
5	Pune, India	●	○	-	Asia
6	Noida, India	●	-	-	Asia
7	Tangerang, Indonesia	●	-	-	Indonesia
8	Rayong, Thailand	●	●	-	Asia, North America, Middle East & Africa
9	Riyadh, Saudi Arabia	●	○	-	Middle East & Africa
10	Gebze, Türkiye	●	○*	-	EU, CIS, Middle East & Africa
11	Manaus, Brazil	●	○	-	Brazil

●: All line-up ○: MULTI, SINGLE *Planned in 2023



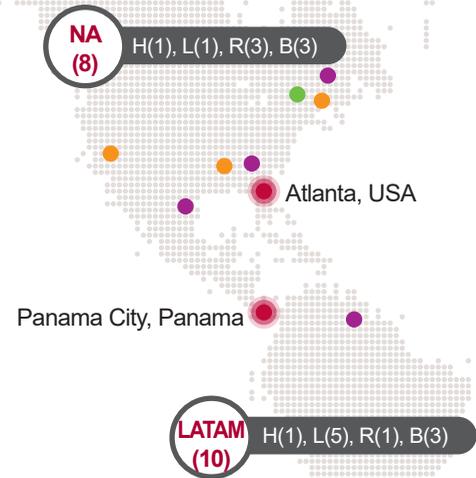
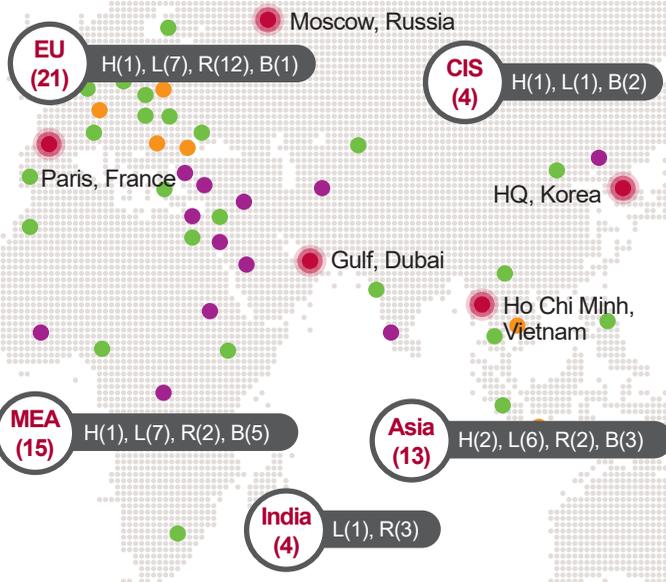
Sales Offices : NA(3), LATAM(7), EU(14), MEA(13),

Asia(9), CIS(4), China(2), India(1)

GLOBAL LG AIR SOLUTION ACADEMIES

Rich with resources and knowhow, the Global Air Conditioning Academies are delivering expert training to LG customers and are helping them to succeed in bringing satisfaction to their customers around the world.

Total 75 sites: ● Hub(7), ● Local(28)
● Regional(23), ● Branch(17)



Academy Curriculum



HVAC Basics



Design



Installation



Service & Maintenance

In Global Academies



Showroom



Lecture



Online Program



Hands-on Training



Seminar & Dealer Trip

LG Global Academies with a systematic training curriculum and diverse training materials provide professional training course in all fields of customer's business.

ENGINEERING TOOL

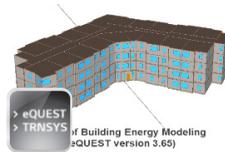
LG provides customers with highly reliable engineering tools and solutions through specialized engineering processes.

Energy Simulation & Design

At the proposal stage, these kinds of tools help to predict energy usage and analyze lifecycle costs more quickly and accurately.

Energy Simulation

General energy analysis tools such as eQUEST and TRNSYS to analyze the energy consumption of air conditioning systems and use them for customer suggestions.



LATS LCC

The economical analysis tool compares system's total lifecycle cost, including maintenance cost CO₂ emissions, payback period, system comparison & diagram, annual & monthly energy consumption and so on.



LATS CAD & LATS ZWCAD(2D)

It is a 2D design program linked with AutoCAD™ and ZWCAD™, which makes 2D drawing design reflection faster and more accurate, such as automatic piping and system check.



LATS Revit (3D)

In conjunction with Autodesk's Revit™ program, we design our systems quickly and accurately for 3D architectural design projects.



LG engineering tools come with a user-friendly interface and smart functions.

Model Selection

At the design stage, these kinds of tools save a lot of working time by improving work efficiency and design accuracy.

LATS HVAC

An integrated model selection program, enabling an accurate and quick selection on the best model suitable for each site.



LATS THERMA V

The model selection tool for AWHP, providing annual energy simulation, cost comparison, payback and CO₂ emission.



Chiller Model Selection Program (MSP)

The model selection program for Chiller products. Model selection of the most suitable models for each site, partial load calculation, reporting and drawing.



LG Energy Lab (Energy Label Generator)

The energy label of a model can be printed out easily and quickly for MULTI, SINGLE, ERV and THERMA V. (for Europe)



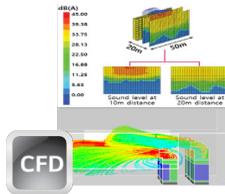
ENGINEERING TOOL

Installation Environment Simulation

By running a simulation before construction, engineers estimate possible issues and find optimal solutions for malfunctions that could occur after installation.

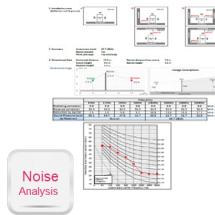
CFD Analysis

Applied in areas of estimating: indoor airflow & temperature, and outdoor airflow distribution.



Noise Analysis

Evaluate the noise level at a specific location, taking into account environmental variables such as noise propagation distance and obstacle characteristics, and provide analysis results to the customer.



System Diagnosis

LGMV & Mobile LGMV

With Mobile LGMV of MULTI V 5, fast and accurate auto test run can be executed, shorten installation hours and increase overall efficiency of the installation processes.



MOBILE APP. & WEBSITE

LG provides not only PC engineering tools but mobile applications for ease of use and convenience. Also LG is operating a B2B Partner portal which has lots of engineering materials for customers.

CAC Partner App.

Check product information, manual search using QR code, and explanations on how to install, use, and maintain the product, such as calculating the amount of refrigerant, on mobile.



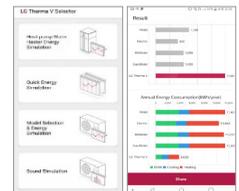
Energy Payback App.

Provides payback period and energy savings information for RAC and CAC models.



THERMA V Selector (In Energy Payback App.)

Provides model selection, annual energy consumption, CO₂ emission, and payback result for THERMA V.



B2B Partner Portal (<http://partner.lge.com>)

Conveniently find a variety of engineering and marketing materials. (Catalogue, video, PDB, troubleshooting guide, manual, CFD analysis examples, etc.)



ENERGY AUDIT

LG provides customized solutions by proposing and building an optimal system through energy diagnosis.

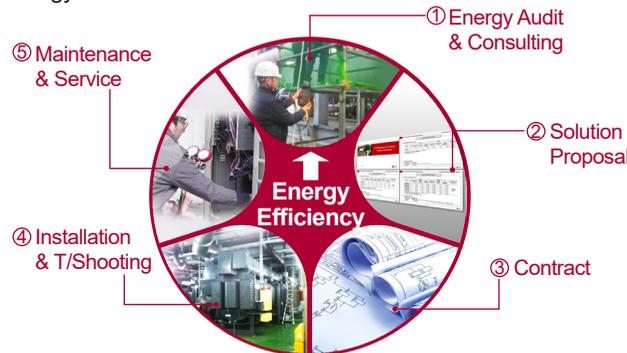
Professional Diagnostic Equipment

LG has a variety of specialized measuring equipment and a rich energy diagnosis experience. With that, LG provides energy consulting and solutions to help customers reduce energy costs. And LG suggests and provides more efficient solutions to suit the situation.



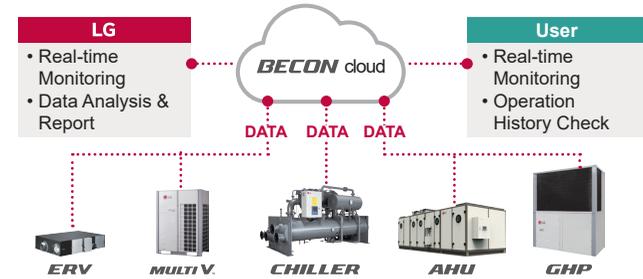
Non-stop Process

By managing the entire energy improvement process from diagnosis & consulting to construction & trouble shooting, LG helps customers to reduce carbon emissions and reduce energy costs.



LG BECON™ cloud

With the LG cloud-based remote system, LG provides differentiated solutions such as real-time monitoring, abnormality diagnosis, real-time care service, and energy management.



Real-time Monitoring and Control

RCS Remote Control System



Real-time Care Service

FMS LG Facility Maintenance System



Smart Energy Saving

EMS Energy Management System for MULTI V



LG MAINTENANCE SERVICE

LG provides services to manage products conveniently through ICT based total HVAC maintenance system. It has been getting customer's satisfaction by maintaining product performance, managing efficiency and prompt responding to issues.

Service Range



LINE UP

- LINE UP

Composition

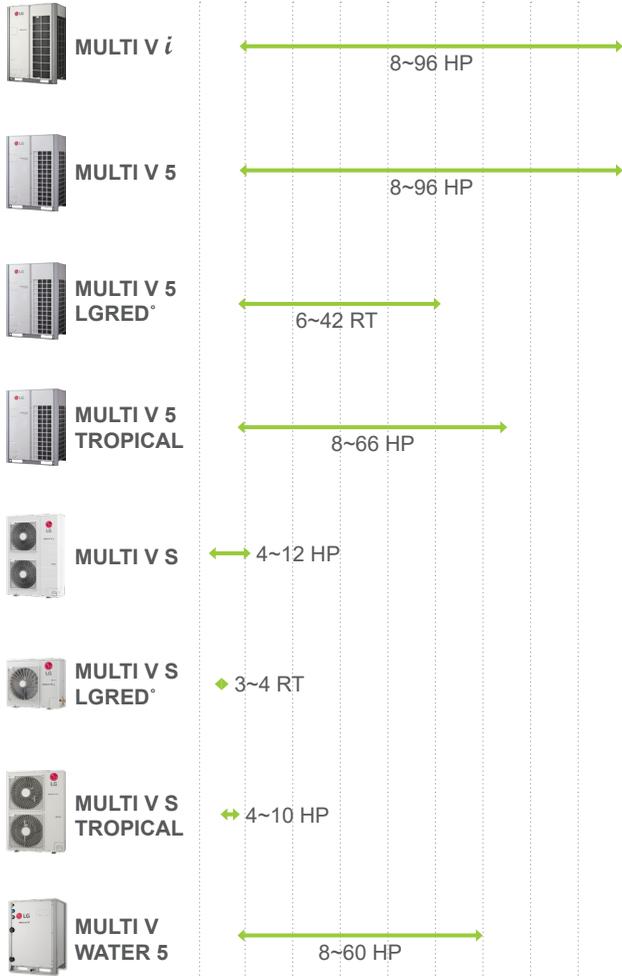
Professional Engineer	Original Spare Part	BECON cloud

Customer Benefit

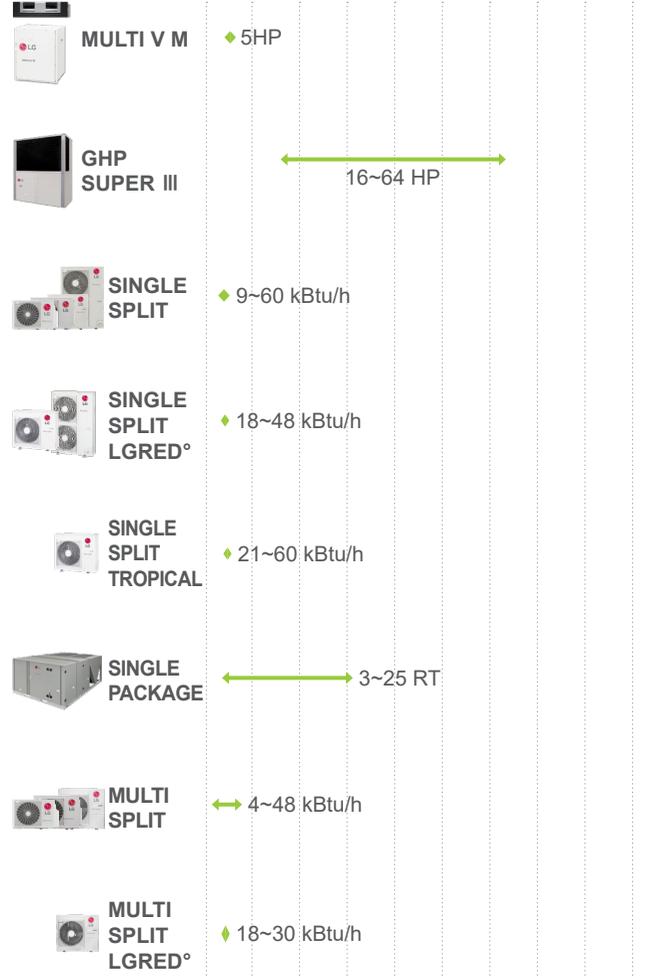
• Maintenance Cost Saving	• Stable Operation
• Long Lifespan	• Emergency Response
• Air Quality Maintenance	• Various Customized Options

CAC / GHP ODU

Capacity(HP)	0	10	20	30	40	50	60	70	80	96
(RT)	0	8	16	24	32	40	48	56	67	80
(kBtu/h)	0	96	191	287	382	478	573	669	764	960
(kW)	0	28	56	84	112	140	168	196	224	281

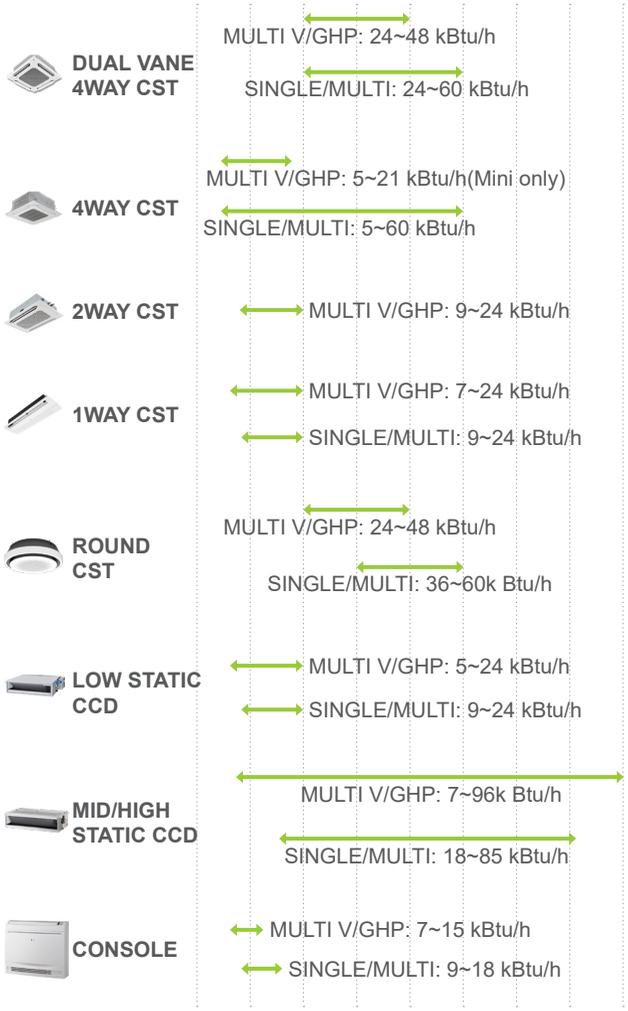


Capacity(HP)	0	10	20	30	40	50	60	70	80	96
(RT)	0	8	16	24	32	40	48	56	67	80
(kBtu/h)	0	96	191	287	382	478	573	669	764	960
(kW)	0	28	56	84	112	140	168	196	224	281

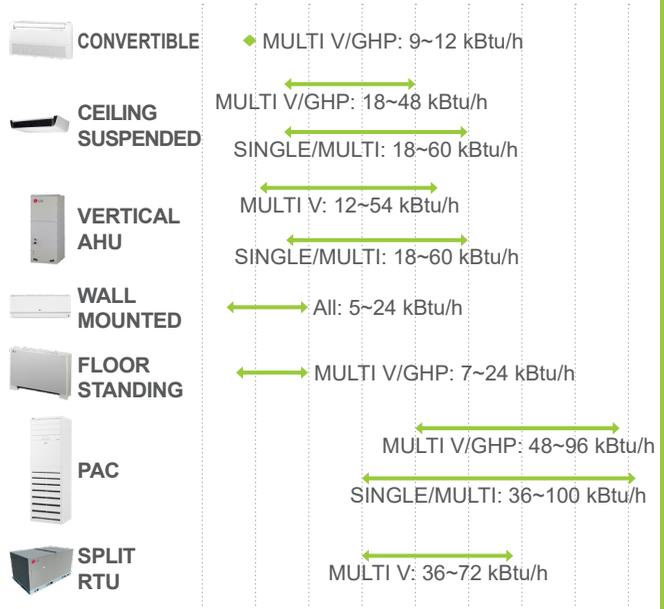


CAC / GHP IDU

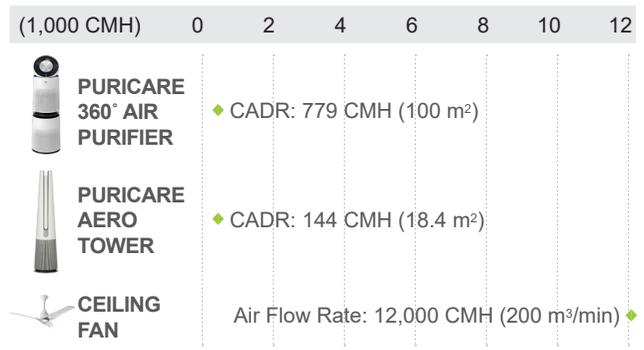
Capacity(HP)	0	1.3	2.5	3.8	5	6.3	7.5	8.8	10
(RT)	0	1	2	3	4	5	6	7	8
(kBtu/h)	0	12	24	36	48	60	72	84	96
(kW)	0	3.5	7	10.5	14	17.5	21	24.5	28



Capacity(HP)	0	1.3	2.5	3.8	5	6.3	7.5	8.8	10
(RT)	0	1	2	3	4	5	6	7	8
(kBtu/h)	0	12	24	36	48	60	72	84	96
(kW)	0	3.5	7	10.5	14	17.5	21	24.5	28



AIRCARE



HEATING

Capacity(HP)	0	5	10	15	20	25	30
(RT)	0	4	8	12	16	20	24
(kBtu/h)	0	48	96	144	191	239	287
(kW)	0	14	28	42	56	70	84

	THERMA V R32 MONOBLOC	↔ 5~16 kW
	THERMA V R32 HYDROSPLIT	◆ 12~16 kW
	THERMA V R32 SPLIT	↔ 5~9 kW
	THERMA V R410A SPLIT	◆ 12~16 kW
	THERMA V (HIGH TEMP.)	◆ 16 kW
	FLOOR STANDING HYDRO KIT (MEDIUM TEMP.)	↔ 4~10 HP
	FLOOR STANDING HYDRO KIT (HIGH TEMP.)	↔ 4~8 HP
	WALL MOUNTED HYDRO KIT	◆ 18~30 kBtu/h

FCU

Capacity(HP)	0	1.3	2.5	3.8	5	6.3	7.5	8.8	10
(RT)	0	1	2	3	4	5	6	7	8
(kBtu/h)	0	12	24	36	48	60	72	84	96
(kW)	0	3.5	7	10.5	14	17.5	21	24.5	28

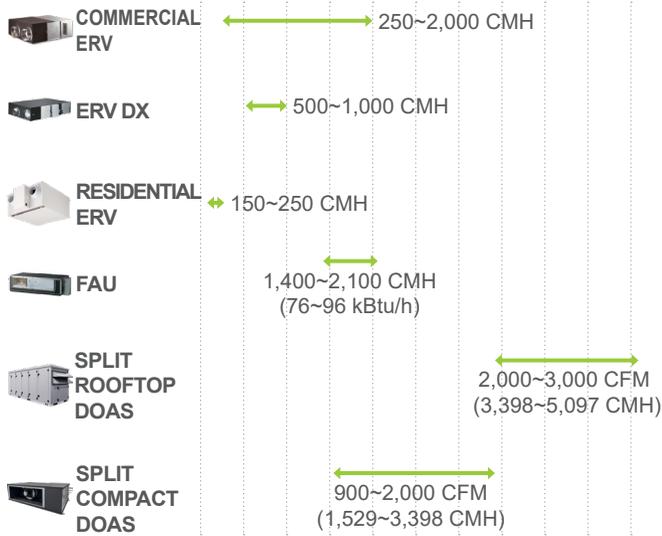
	DUAL VANE 4WAY CST	↔ 4.1~13.0 kW
	2WAY CST	↔ 4.6~5.1 kW
	1WAY CST	↔ 2.4~4.7 kW
	LOW STATIC CCD	↔ 3.9~6.6 kW
	MID/HIGH STATIC CCD	↔ 5.6~14.0 kW
	FLOOR STANDING	↔ 2.9~5.7 kW
	FLOOR STANDING (CONCEALED)	↔ 2.9~5.7 kW

RAC

	WALL MOUNTED	↔ 9~36 kBtu/h
	WINDOW	↔ 5~24 kBtu/h
	PORTABLE	◆ 10 kBtu/h
	HPWH	↔ 200~270 L

VENTILATION

Air Flow (CMH)	0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
(CFM)	0	294	588	883	1,177	1,471	1,766	2,060	2,354	2,649	2,943



ESS

Output Power (kW)	0	50	100	150	200	250
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CHILLER

Capacity(RT)	0	500	1,000	1,500	2,000	2,500	3,000	4,000	5,000
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AHU



The perfect choice for innovative building management

LG BECON HVAC SOLUTION

Innovative building management solution in your hands. Our optimized solutions provide integrated control for customer configuration of various equipment in buildings and intuitive interface to maximize efficiency of operation.



ENERGY SAVING



SMART MANAGEMENT



EASY EXPANDABILITY

CENTRALIZED CONTROL



AC MANAGER 5



ACP 5



AC SMART 5



AC EZ TOUCH



PDI



ACS IO MODULE



MODBUS RTU GATEWAY



CLOUD GATEWAY



BECON BUILDING SOLUTION



BECON controller



BECON manager



BECON energy

INDIVIDUAL CONTROL



DELUX REMOTE CONTROLLER



STANDARD III REMOTE CONTROLLER

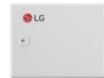


WI-FI MODEM

INTEGRATION DEVICES



DRY CONTACT



AHU COMM. KIT & CONTROL KIT

For more LG Commercial Air Solutions information, please visit our Youtube channel through QR code.





CAC / GHP ODU

- MULTI V
 - GHP SUPER III
 - SINGLE / MULTI
- 

MULTI VTM i

MULTI V *i* is an air-cooled VRF product with AI engine. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to medium-to-large commercial buildings.

Features

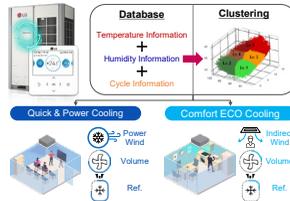


- Air-cooled VRF with AI engine
- Heat Pump/ Heat Recovery
- 8~96 HP; 23~281 kW;
80~960 kBTu/h; 7~80 RT
- R410A
- Cooling, -15~52 °CDB (5~125 °FDB)
Heating, -30~16 °CWB (-22~60 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial

Key USP

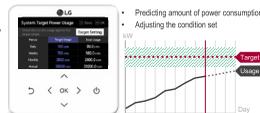
AI Smart Care

MULTI V *i* can control itself according to various situations through deep learning algorithms.



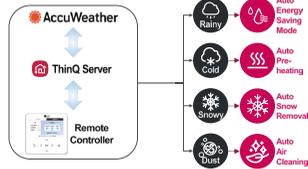
AI Energy Management

MULTI V *i* is able to preset monthly energy usage and consume what has been previously planned.



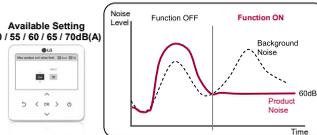
Weather Information Interlocking Control

MULTI V *i* provides more comfortable and convenient condition by checking external weather forecast information.



Noise Target Control

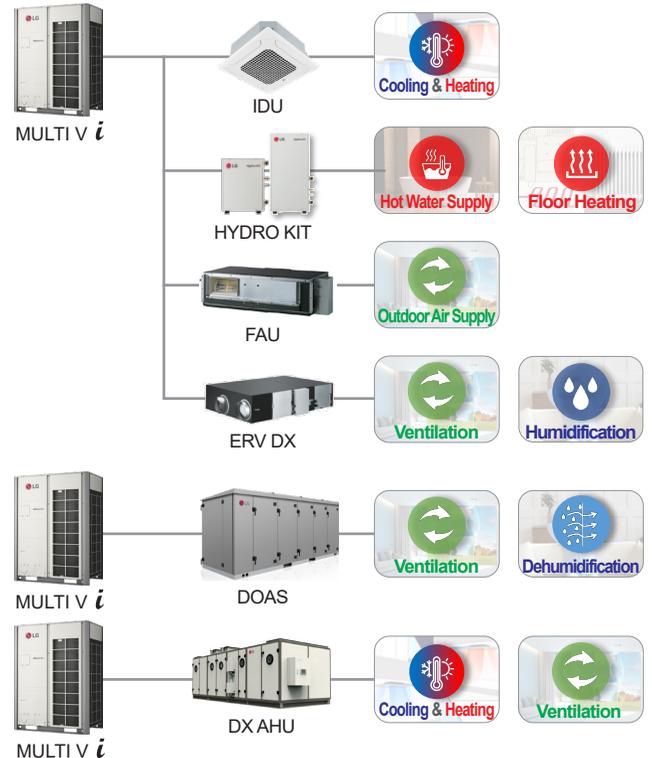
MULTI V *i* can operate with a set noise level which is set by the wired remote controller.



Connectable IDU



Diagram



MULTI V 5

MULTI V 5 is an air-cooled VRF product. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to medium-to-large commercial buildings.

Features



- Air-cooled VRF
- Cooling Only/ Heat Pump/ Heat Recovery
- 8~96 HP; 23~281 kW;
80~960 kBTu/h; 7~80 RT
- R410A
- Cooling, -10~48 °CDB (14~118 °FDB)
Heating, -25~18 °CWB (-13~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial

Key USP

Dual Sensing Control

MULTI V 5 can operate more efficiently and make the room more comfortable by sensing temperature and humidity.



Partial Defrost

With Partial Defrost, MULTI V 5 can continue to operate heating mode while performing a defrost operation.



Smart Oil Management

By minimizing unnecessary oil recovery operation, it reduces energy waste and increases the available heating time.



Black Fin

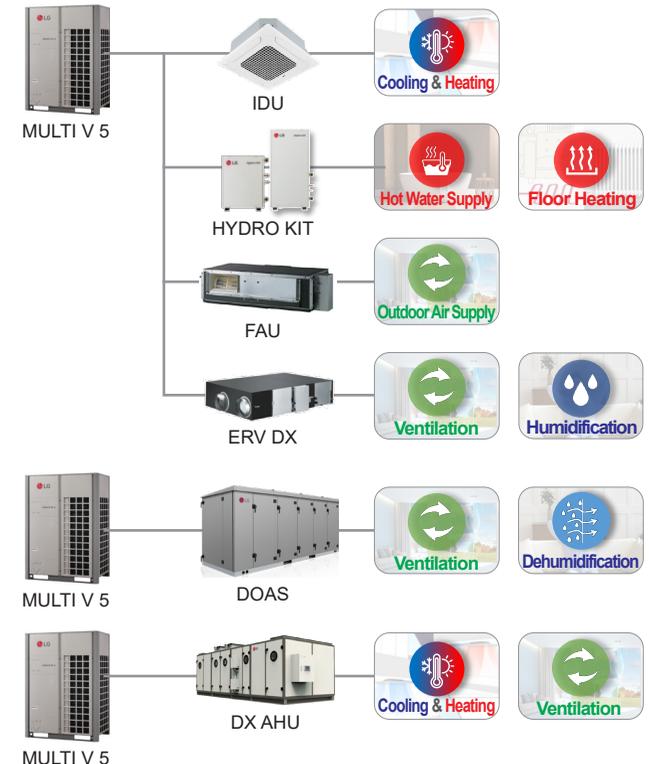
Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



Connectable IDU



Diagram



MULTI V™ 5 LGRED°

MULTI V 5 LGRED° is an air-cooled VRF product for cold climate regions. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to medium-to-large commercial buildings.

Features



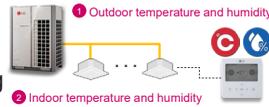
- Air-cooled VRF
- Heat Pump/ Heat Recovery
- 7~50 HP; 21~148 kW; 72~504 kBtu/h; 6~42 RT
- R410A
- Cooling, 5~122 °FDB (-15~50 °CDB)
- Heating, -22~61 °FWB (-30~16 °CWB)
- Connecting multiple IDUs to 1 ODU
- Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial

Key USP

Dual Sensing Control



MULTI V 5 LGRED° can operate more efficiently and make the room more comfortable by sensing temperature and humidity.



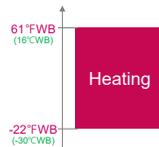
Partial Defrost

With Partial Defrost, MULTI V 5 LGRED° can continue to blow warm air from the indoor unit while performing a defrost operation.



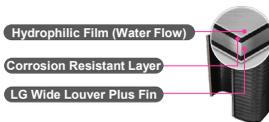
Wide Heating Operation Range

MULTI V 5 LGRED° can operate at temperatures as low as -22 °FWB (-30 °CWB) for heating.



Black Fin

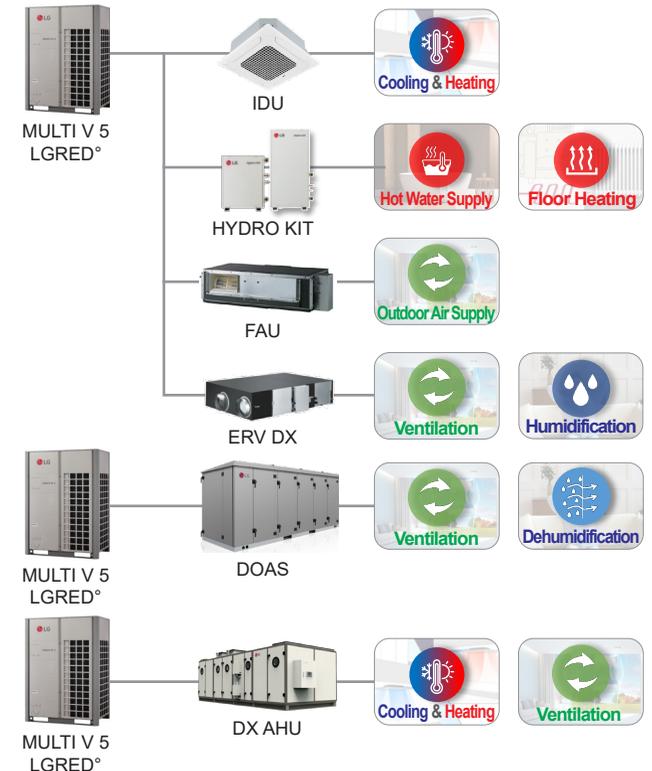
Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



Connectable IDU



Diagram



MULTI V™ 5 TROPICAL

MULTI V 5 TROPICAL is an air-cooled VRF product for tropical areas. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to medium-to-large commercial buildings.

Features

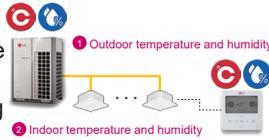


- Air-cooled VRF
- Heat Pump
- 8~66 HP; 23~193 kW;
80~660 kBTu/h; 7~55 RT
- R410A
- Cooling, -5~55 °CDB (23~131 °FDB)
Heating, -25~18 °CWB (-13~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial

Key USP

Dual Sensing Control

MULTI V 5 TROPICAL can operate more efficiently and make the room more comfortable by sensing temperature and humidity.



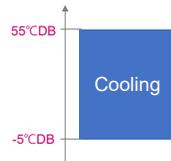
Auto Dust Removal

By changing the fan rotation direction, MULTI V 5 TROPICAL can remove dust from the heat exchanger of outdoor unit.



Wide Cooling Operation Range

MULTI V 5 TROPICAL can operate at temperatures as high as 55 °CDB for cooling.



Black Fin

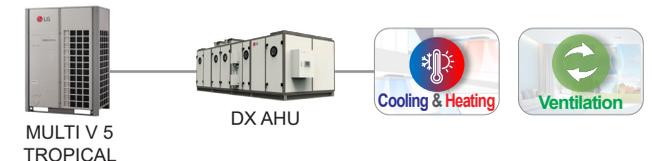
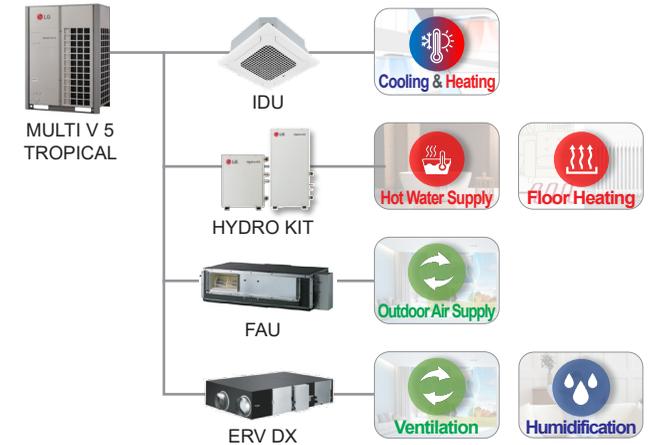
Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



Connectable IDU



Diagram



MULTI V S

MULTI V S is an air-cooled VRF product. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to residential and small-to-medium commercial buildings.

Features

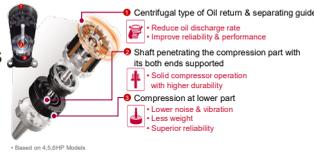


- Air-cooled VRF
- Cooling Only/ Heat Pump/ Heat Recovery
- 4~12 HP; 12~35 kW;
40~120 kBTu/h; 3~10RT
- R410A/ R32
- Cooling, -5~48 °CDB (23~118 °FDB)
Heating, -20~18 °CWB (-4~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 20EA (Ratio 50~130%)
- Residential/ Small-to-Medium Commercial

Key USP

RI Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.



Dual Sensing Control

MULTI V S can operate more efficiently and make the room more comfortable by sensing temperature and humidity.



Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.

- Hydrophilic Film (Water Flow)
- Corrosion Resistant Layer
- LG Wide Louver Plus Fin



LG ThinQ

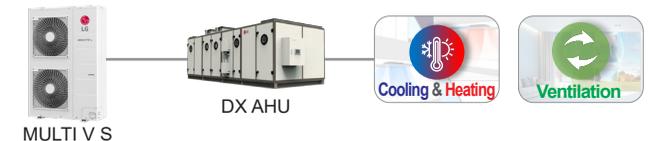
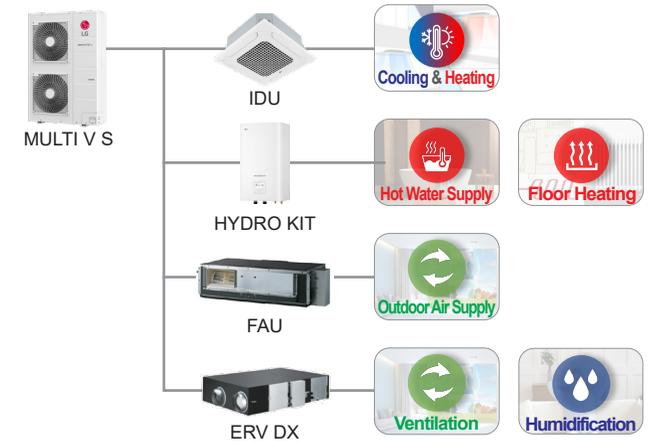
MULTI V S can be controlled anytime and anywhere with a smartphone or AI speaker through LG ThinQ.



Connectable IDU



Diagram



MULTI V S LGRED°

MULTI V S LGRED° is an air-cooled VRF product for cold climate regions. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to residential and small-to-medium commercial buildings.

Features



- Air-cooled VRF
- Heat Pump/ Heat Recovery
- 4~5 HP; 11~14 kW; 36~48 kBTu/h; 3~4 RT
- R410A
- Cooling, 23~112 °FDB (-5~44 °CDB)
- Heating, -13~61 °FWB (-25~16 °CWB)
- Connecting multiple IDUs to 1 ODU
- Max. 8EA (Ratio 50~130%)
- Residential/ Small-to-Medium Commercial

Key USP

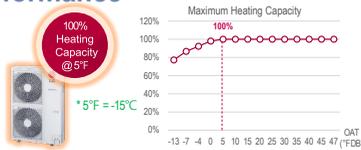
High Efficiency

LG's advanced inverter technology brings high efficiency and performance. The LGRED° line-up is energy star-qualified.

kBTu/h	36	48
Energy Star		
Cold Climate Energy Star		

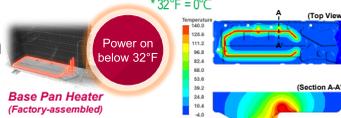
Powerful Heating Performance

The Multi V S LGRED° can produce 100% heating capacity at 5 °FWB (-15 °CWB).



Enhanced Defrosting Performance

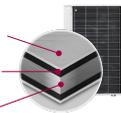
The Base Pan Heater is applied as a special solution for defrosting in extreme winter conditions.



Black Fin

It has the Black Fin for strong protection from corrosive conditions such as salt contamination and air pollution including fumes.

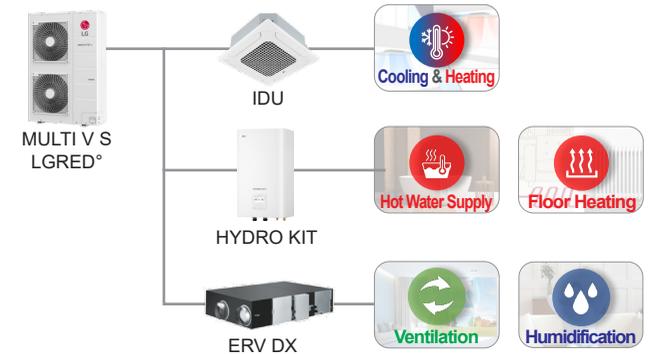
- **Hydrophilic film (Water flow)**
The Hydrophilic coating minimizes moisture buildup on the fin.
- **Corrosion Resistant Layer**
The Black coating provides Strong protection from corrosion
- **LG Wide Louver Plus Fin**



Connectable IDU



Diagram



MULTI V S TROPICAL

MULTI V S TROPICAL is an air-cooled VRF product for tropical regions. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to residential and small-to-medium commercial buildings.

Features

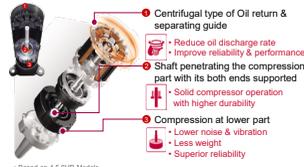


- Air-cooled VRF
- Heat Pump
- 4~10 HP; 12~29 kW;
40~100 kBTu/h; 3~8 RT
- R410A
- Cooling, -5~54 °CDB (23~129 °FDB)
Heating, -20~18 °CWB (-4~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 16EA (Ratio 50~130%)
- Residential/ Small-to-Medium Commercial

Key USP

R1 Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.



Dual Sensing Control

MULTI V S TROPICAL can operate more efficiently and make the room more comfortable by sensing temperature and humidity.



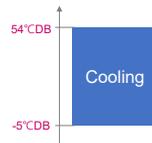
Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



Wide Cooling Operation Range

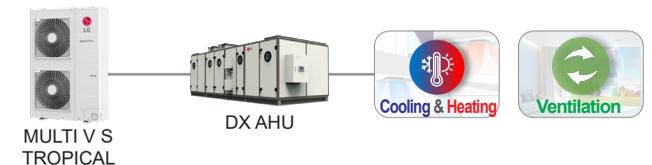
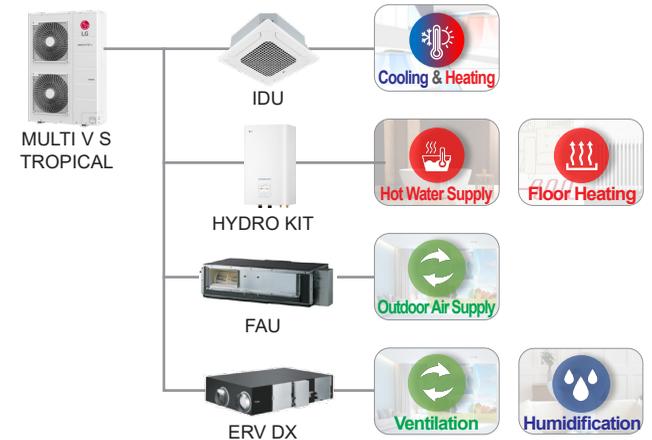
MULTI V S TROPICAL can operate at temperatures as high as 54 °CDB for cooling.



Connectable IDU



Diagram



MULTI V™ WATER 5

MULTI V WATER 5 is a water-cooled VRF product. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to medium-to-large commercial buildings.

Features

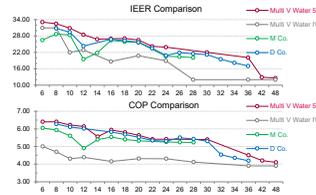
- Water-cooled VRF
- Heat Pump/ Heat Recovery
- 8~60 HP; 23~176 kW; 80~600 kBTu/h; 7~50 RT
- R410A
- Cooling, 15~40 °CDB (59~104 °FDB)
- Heating, 15~40 °CWB (59~104 °FWB)
- Connecting multiple IDUs to 1 ODU
- Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial



Key USP

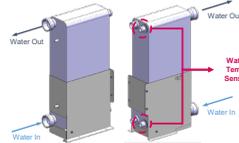
High Efficiency

MULTI V WATER 5 is more efficient than the previous model, and has higher IEER and COP values than other companies' products.



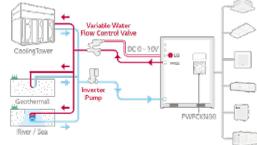
High Reliability

MULTI V WATER 5 can monitor the inlet and outlet temperatures of the water to ensure that the water inside the plate HEX does not freeze.



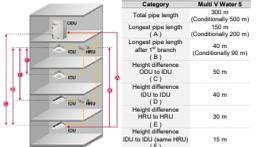
Variable Water Flow Control

With the Variable Water Flow Kit (accessory), the water pump energy can be reduced by controlling the water flow rate.



Flexible Placing of Product

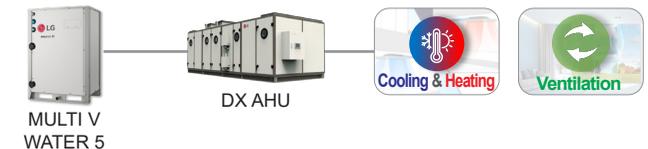
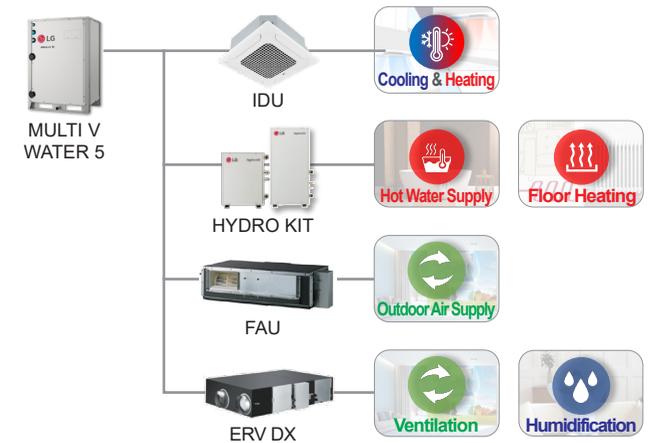
MULTI V WATER 5 can be placed flexibly thanks to the long refrigerant pipe length limit.



Connectable IDU



Diagram



MULTI V™ M

MULTI V M is an air-cooled VRF product in which the heat exchanger and the compressor are two separate modules. It can be connected to multiple indoor units through the main refrigerant pipe, and is mainly applied to small commercial buildings.

Comp. module



HEX module

Features

- Air-cooled VRF
- Heat Pump
- 5 HP; 15 kW; 50 kBtu/h; 4 RT
- R410A
- Cooling, -5~43 °CDB (23~109 °FDB)
Heating, -20~18 °CWB (-4~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 10EA (Ratio 50~130%)
- Small Commercial

Key USP

Installation Space Flexibility

Compressor Module : Installed in any space indoors, not outdoors.

Heat Exchanger Module : Installed in false ceiling space.

Longest Refrigerant Pipe Length between Modules : Up to 30m.



Black Fin

Black fin is applied for strong protection of the heat exchanger from corrosive external conditions.

- Hydrophilic Film (Water Flow)
- Corrosion Resistant Layer
- LG Wide Louver Plus Fin



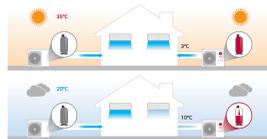
Low Noise Inside

Compressor Module : 45dB(A), quieter than conversation noise level of 50dB(A).



Smart Load Control (SLC)

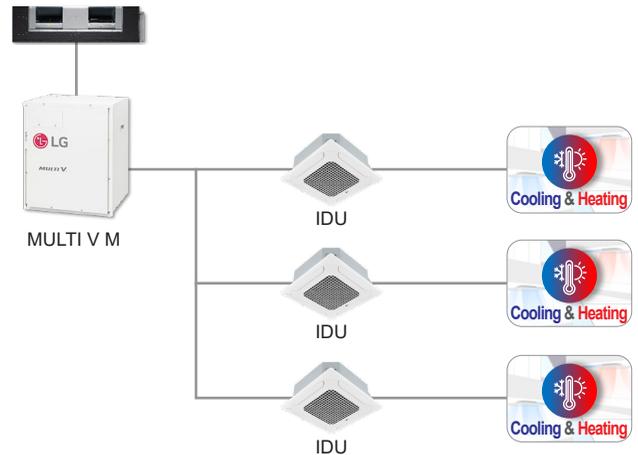
To save operation energy consumption, it automatically controls the refrigerant temperature according to outdoor temperature.



Connectable IDU



Diagram



MULTI V FUNCTION LIST

PRODUCT TYPE	MULTI V i	MULTI V 5 (LGRED [®])	MULTI V 5 TROPICAL
High Static Pressure Compensation	●	●	●
Night Low Noise Operation	●	●	●
Continuous Heating (Partial Defrost)	●	▲	x
Snow Removal & Rapid Defrost	●	●	●
Low Ambient Kit	A	A	A
Auto Dust Removal	●	●	●
Dual Sensing SLC	●	●	●
Factory-assembled Base Pan Heater	x	x	x
Black Fin	●	●	●
Comp. Back-up	●	●	●
Unit Back-up	●	●	●
Variable Water Flow Control Mode	x	x	x
Comfort Cooling	●	●	●
AI Smart Care	●	x	x
AI Energy Target Control	●	x	x
Convenient Energy Check	●	x	x
Noise Target Control	●	x	x
Linear Bypass Cycle	●	x	x

● : Possible / ▲ : Different depending on country, product, etc. /
A : Accessory / x : Impossible

MULTI V S	MULTI V S LGRED [®]	MULTI V S TROPICAL	MULTI V WATER 5	MULTI V M
●	●	●	x	●
●	●	●	x	●
x	x	x	x	x
●	●	●	x	x
A	A	A	x	x
x	x	x	x	x
A	A	A	x	x
x	●	x	x	x
●	●	●	x	●
x	x	x	x	x
x	x	x	●	x
x	x	x	x	x
x	x	x	x	x
x	x	x	x	x
x	x	x	x	x
x	x	x	x	x

GHP SUPER III

The GHP SUPER III is an air-cooled VRF product driven by a gas engine. It uses gas as its main energy source. Multiple indoor units can be connected through the main refrigerant pipe, and it is mainly applied to medium and large commercial buildings.



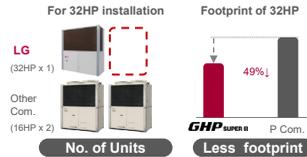
Features

- Air-cooled VRF driven by a gas engine
- Heat Pump
- 16~64 HP; 47~188 kW; 160~640 kBtu/h; 13~53 RT
- R410A
- Cooling, -10~48 °CDB (14~118 °FDB)
- Heating, -20~18 °CWB (-4~64 °FWB)
- Connecting multiple IDUs to 1 ODU
- Max. 64EA (Ratio 50~130%)
- Medium-to-Large Commercial/ Industrial

Key USP

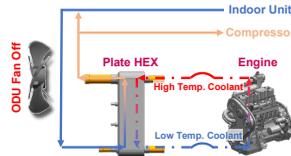
Large Capacity

Single Unit Max. 32HP
Series Max. 64HP



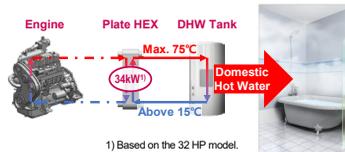
Continuous Heating

GHP can provide heating continuously without defrost operation by using engine coolant in winter.



Free Hot Water

GHP can provide domestic hot water by using engine coolant in cooling mode.



Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.

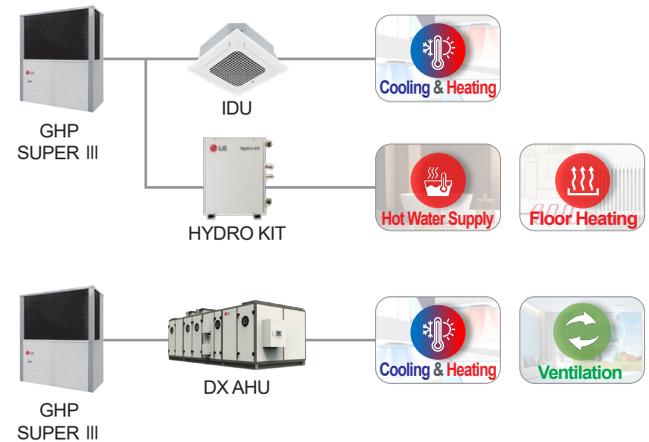
- Hydrophilic Film (Water Flow)
- Corrosion Resistant Layer
- LG Wide Louver Plus Fin



Connectable IDU



Diagram



SINGLE SPLIT

SINGLE SPLIT is an air-cooled product that is connected to an indoor unit on 1:1 ratio, and is mainly applied to residential or small commercial buildings.

Features



- Air-cooled
- Cooling Only/ Heat Pump
- 1~6 HP; 3~18 kW; 9~60 kBtu/h; 1~5RT
- R410A, R32
- Cooling, -15~48 °CDB (5~118 °FDB)
- Heating, -18~18 °CWB (-0.4~64 °FWB)
- Connecting 1 IDU to 1 ODU
- Residential/ Small Commercial

Key USP

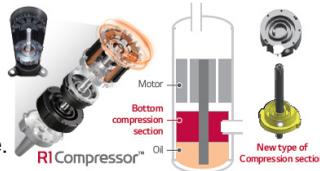
Various Indoor Units

SINGLE SPLIT can be connected to various indoor units.



RI Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.



Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



LG ThinQ

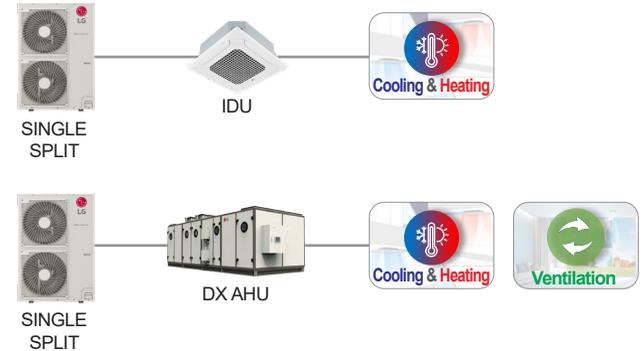
SINGLE SPLIT can be controlled anytime and anywhere with a smartphone or AI speaker through LG ThinQ.



Connectable IDU



Diagram



SINGLE SPLIT LGRED°

SINGLE SPLIT LGRED° is an air-cooled product for cold climate regions. It is connected to an indoor unit with a 1:1 ratio, and is mainly applied to residential and small commercial buildings.

Features

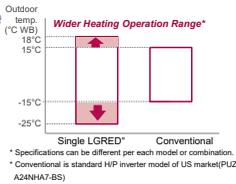
- Air-cooled
- Heat Pump
- 2~5 HP; 5~14 kW; 18~48 kBtu/h; 1~4 RT
- R410A
- Cooling, 5~118 °FDB (-15~48 °CDB)
- Heating, -13~64 °FWB (-25~18 °CWB)
- Connecting 1 IDU to 1 ODU
- Residential/ Small Commercial



Key USP

Powerful Heating Performance

SINGLE SPLIT LGRED° can provide continuous heating at temperatures down to -13 °FWB (-25 °CWB) and 100% heating capacity down to 5 °FWB (-15 °CWB)



R1 Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.

- Assuring Higher Durability
- High Reliability
- Wide operation range
- Lower Vibration
- Improved Performance



High Efficiency

LG's advanced inverter technology brings high efficiency and performance. The LGRED° line-up is energy star-qualified.

kBtu/h	18	24	36	42	48
Energy Star					
Cold Climate Energy Star					

Enhanced Defrosting Performance

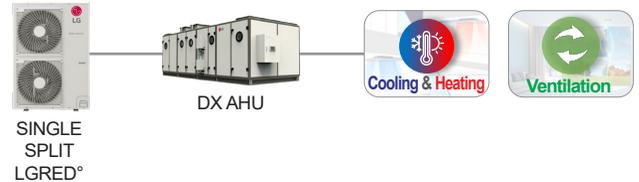
The Base Pan Heater is applied as a special solution for defrosting in extreme winter conditions.



Connectable IDU



Diagram



SINGLE SPLIT TROPICAL

SINGLE SPLIT TROPICAL is an air-cooled product for cold climate regions. It is connected to an indoor unit with a 1:1 ratio, and is mainly applied to residential and small commercial buildings.

Features



- Air-cooled
- Cooling Only/ Heat Pump
- 2~6 HP; 6~18 kW;
21~60 kBtu/h; 2~5 RT
- R410A
- Cooling, 0~54 °CDB (32~129 °FDB)
Heating, -5~18 °CWB (23~64 °FWB)
- Connecting 1 IDU to 1 ODU
- Residential/ Small Commercial

Key USP

Various Indoor Units

SINGLE SPLIT TROPICAL can be connected to various indoor units.



4Way Cassette



Round Cassette



Ceiling Suspended



Ceiling Duct



PAC

Twin Rotary Inverter Compressor

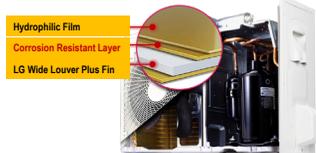
Twin Rotary Inverter Compressor consists of stable and optimized structure with low vibration and low noise characteristics.

- Twin Rotor : **Low Noise & Vibration**
- Surface Coating : **High Abrasion Resistance**
- Flow Optimization : **Reduced Oil Discharge**
Enhanced Oil Collection
- Concentric Motor : **Improved Oil Path Area**
Low Calorific Value



Gold Fin

Gold Fin is applied to protect the heat exchanger from corrosive external conditions.



LG ThinQ

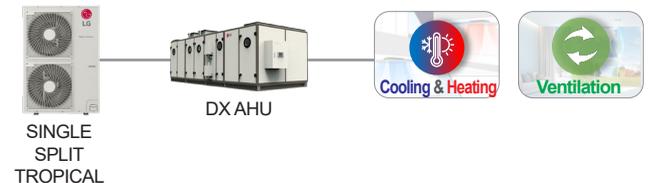
SINGLE SPLIT TROPICAL can be controlled anytime and anywhere with a smartphone or AI speaker through LG ThinQ.



Connectable IDU



Diagram



SINGLE PACKAGE

SINGLE PACKAGE is an air-cooled product that has the outdoor unit and indoor unit packaged in one unit. And it is mainly installed on rooftops of residential and small-to-medium commercial buildings.

Features



- Air-cooled
- Cooling Only/ Heat Pump
- 4~30 HP; 11~88 kW; 36~300 kBtu/h; 3~25 RT
- R410A
- Cooling, -5~48 °CDB (23~118 °FDB)
Heating, -15~18 °CWB (5~64 °FWB)
- Unitary Product (IDU&ODU)
- Residential/ Small-to-Medium Commercial
- Cooling&Heating/ Ventilation with Economizer

Key USP

High Efficiency

SINGLE PACKAGE achieves a high efficiency of IEER 19.0 with inverter technology.



Direct Drive Fan & Motor

The supply air fan is driven directly by the motor, so the ESP can be set easily by a wired remote controller.



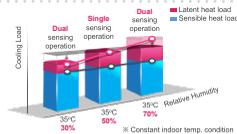
Washable Pre-Filter & 2" Filter

Pre-Filters are applied to extend the lifespan of 2" Filters.



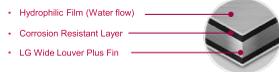
Dual Sensing Control

With the humidity sensor, SINGLE PACKAGE can operate more accurately depending on the load.

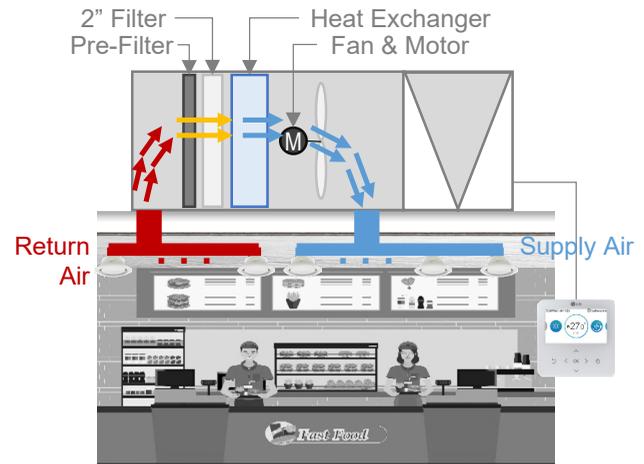


Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.



Diagram



MULTI SPLIT

MULTI SPLIT is an air-cooled product that can be connected to multiple indoor units through multiple refrigerant pipes, and is mainly applied to residential buildings.

Features



- Air-cooled
- Cooling Only/ Heat Pump
- 1~5 HP; 4~14 kW; 14~48 kBtu/h; 1~4 RT
- R410A, R32
- Cooling, -10 ~ 48 °CDB (14~118 °FDB)
Heating, -18 ~ 18 °CWB (-0.4~64 °FWB)
- Connecting multiple IDUs to 1 ODU
Max. 5EA (Ratio 40~150%)
- Residential/ Small Commercial

Key USP

RI Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.

- Assuring Higher Durability
- High Reliability
- Wide operation range
- Lower Vibration
- Improved Performance



High Efficiency

The advanced technologies of LG achieve the lowest energy consumption, especially in cooling, as seen in the SEER class granted according to the ErP regulations.



• Certified by Eurovent
• Based on 4.1 & 5.3 kW

Black Fin

Black Fin is applied for strong protection of the heat exchanger from corrosive external conditions.

- Hydrophilic Film (Water flow)
- Corrosion Resistant Layer
- LG Wide Louver Plus Fin



LG ThinQ

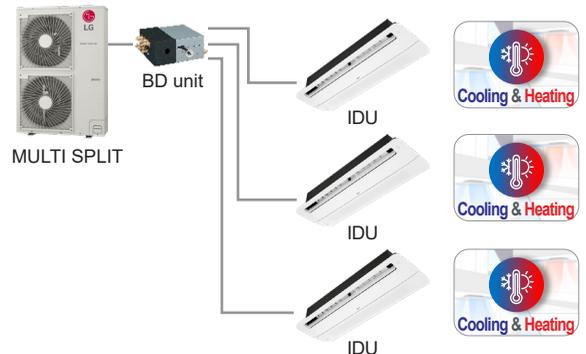
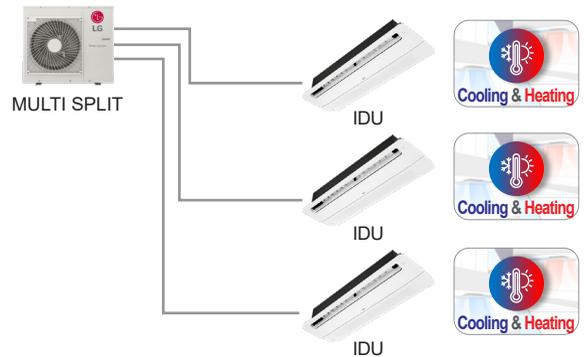
MULTI SPLIT can be controlled anytime and anywhere with a smartphone or AI speaker through LG ThinQ.



Connectable IDU



Diagram



MULTI SPLIT LGRED°

MULTI SPLIT LGRED° is an air-cooled product for cold climate regions. It can be connected to multiple indoor units through multiple refrigerant pipes, and is mainly applied to residential buildings.

Features

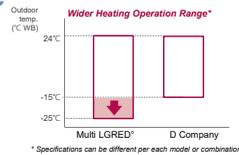


- Air-cooled
- Heat Pump
- 2~3 HP; 5~9 kW; 18~30 kBtu/h; 1~2 RT
- R410A
- Cooling, 14~118 °FDB (-10~48 °CDB)
- Heating, -13~64 °FWB (-25~18 °CWB)
- Connecting multiple IDUs to 1 ODU
- Max. 4EA (Ratio 40~130%)
- Residential/ Small Commercial

Key USP

Powerful Heating Performance

MULTI SPLIT LGRED° can provide continuous heating at temperatures down to -13 °FWB (-25 °CWB) and 100% heating capacity down to 5 °FWB (-15 °CWB)



R1 Compressor™

The R1 Compressor combines a high-efficiency compression method with a simple compression structure.

- Assuring Higher Durability
- High Reliability
- Wide operation range
- Lower Vibration
- Improved Performance



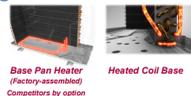
High Efficiency

LG's advanced inverter technology brings high efficiency and performance. Almost all of LGRED° line up models are energy star-qualified.

kBtu/h	18	24	30	36	42	48
Energy Star						
Cold Climate Energy Star						

Enhanced Defrosting Performance

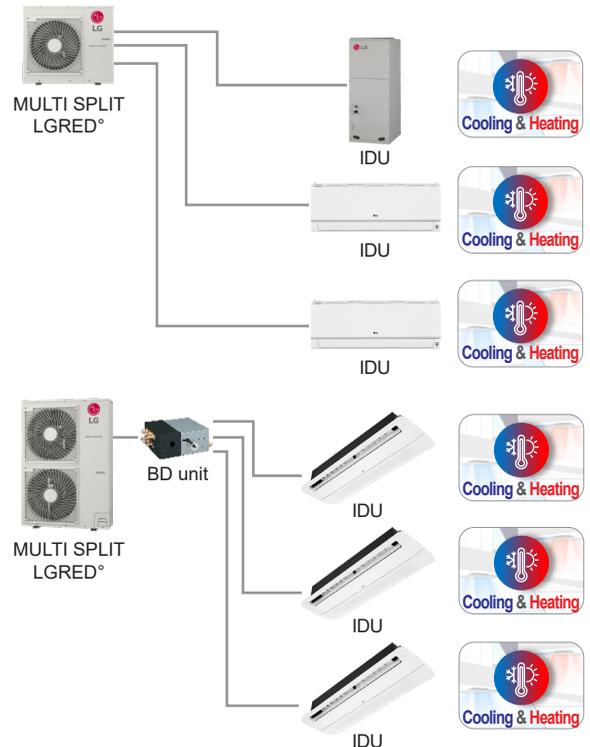
The Base Pan Heater is applied as a special solution for defrosting in extreme winter conditions.



Connectable IDU



Diagram



SINGLE SPLIT FUNCTION LIST

PRODUCT TYPE	SINGLE SPLIT	SINGLE SPLIT LGRED [®]	SINGLE SPLIT TROPICAL
Night Low Noise Operation	●	●	●
Low Ambient Kit	A	A	A
Factory-assembled Base Pan Heater	x	●	x
Black Fin	▲	●	x
Comfort Cooling	●	●	●
Peak Control	▲	▲	x
Test Function	▲	▲	●
Mode Lock (H/P only)	▲	●	x
Forced Operation	▲	●	●
Self Diagnosis	●	●	●

● : Possible / ▲ : Different depending on country, product, etc. /
A : Accessory / x : Impossible

MULTI SPLIT FUNCTION LIST

PRODUCT TYPE	MULTI SPLIT	MULTI SPLIT LGRED [®]
Night Low Noise Operation	●	●
Low Ambient Kit	A	A
Factory-assembled Base Pan Heater	x	●
Black Fin	▲	●
Wiring Error Check	●	●
Peak Control	●	●
Test Function	●	●
Mode Lock (H/P only)	●	●
Forced Operation	●	●
Self Diagnosis	●	●

CAC / GHP IDU

- CASSETTE
- CEILING CONCEALED DUCT
- ETC

DUAL VANE 4WAY CST

DUAL VANE 4WAY CST is a product that is installed on the ceiling. It sends airflow in four directions, and its dual vanes enable it to deliver the airflow for the space more suitably.



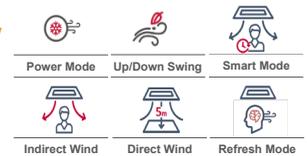
Features

- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP
2.4~4.8 HP; 7~14.1 kW; 24~48 kBtu/h; 2~4 RT
- SINGLE/ MULTI
2.4~6 HP; 7~17.6 kW; 24~60 kBtu/h; 2~5 RT
- 4 Air Supply Outlets
- Auto Vane Swing (Up/ Down)
- 5 Steps of Airflow Rate
- 6 Types of Airflow

Key USP

Various Types of Airflow

6 types of airflow can be set easily to air-condition the indoor space for user comfort.



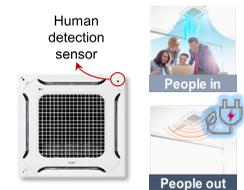
Air Purification

This product can filter out dust particles, odors and bacteria through the air purification kit.



Human Detection

This product can operate or stop by detecting whether a person is present or not.



Floor Detection

This product can detect the floor temperature and make the space warmer.



4WAY CST

4WAY CST is a product that is installed on the ceiling. It sends airflow in four directions and controls the up and down direction of airflow through a single vane.

Features



- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP (Mini Only)
0.5~2.1 HP; 1.5~6.2 kW; 5~21 kBtu/h;
0.4~1.7RT
- SINGLE/ MULTI
0.5~6 HP; 1.5~17.6 kW; 5~60 kBtu/h;
0.4~5 RT
- 4 Air Supply Outlets
- Auto Vane Swing (Up/ Down)
- 5 Steps of Airflow Rate

Key USP

Stylish Panel

With the U-style Panel, it is possible to make the interior space more stylish.



Independent Control of Airflow

Users can independently adjust the angle of the four vanes from 20° to 70° to send the wind in the desired direction.



Air Purification

The indoor air can be cleaned through the air purification kit.



※ The standard III wired remote controller is required and sold separately.

Easy Access

Service engineers can easily check the refrigerant piping and the drain piping by detaching the corner covers.



2WAY CST

2WAY CST is a product that is installed on the ceiling. It sends airflow through two air outlets and controls the up-and-down direction of airflow through a single vane.

Features

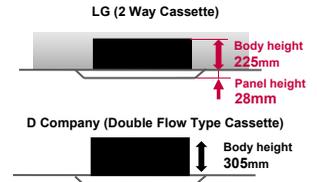


- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP
0.9~2.4 HP; 2.6~7 kW; 9~24 kBtu/h;
0.7~2 RT
- 2 Air Supply Outlets
- Auto Vane Swing (Up/ Down)
- 5 Steps of Airflow Rate

Key USP

Compact Size

The slim and compact design not only saves space, but also reduces installation costs.



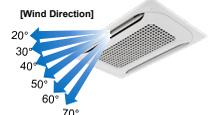
Low Noise

The 3D fan allows the indoor unit to operate quieter for user comfort.



Independent Control of Airflow

The two vanes can be independently controlled in 6 steps from 20° to 70°, allowing users to freely change the wind direction.



1WAY CST

1WAY CST is a product that is installed on the ceiling. It sends airflow through one air outlet and controls the up-and-down direction of airflow through a single vane.

Features



- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP
0.7~2.4 HP; 2.1~7 kW; 7~24 kBtu/h;
0.6~2 RT
- SINGLE/ MULTI
0.9~2.4 HP; 2.6~7 kW; 9~24 kBtu/h;
0.7~2 RT
- 1 Air Supply Outlet
- Auto Vane Swing (Up/ Down/ Left/ Right)
- 5 Steps of Airflow Rate

Key USP

Stylish and Compact Design

1WAY CST not only has a stylish design, but also can give a spacious feeling by allowing a higher false ceiling with its compact height.



Even Airflow & Low Noise

1WAY CST can send airflow evenly by automatically swinging the vane up, down, left and right with low noise.



Air Purification

This product can filter out dust particles, odors and bacteria through the air purification kit.



ROUND CST

ROUND CST is a product that is installed on the ceiling. It sends airflow in 360 degrees, and precise airflow control is achieved through its crystal vanes.



Features

- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP
2.4~4.8 HP; 7~14.1 kW; 24~48 kBtu/h;
2~4 RT
- SINGLE/ MULTI
3.6~6 HP; 10.6~17.6; 36~60 kBtu/h;
3~5 RT
- Round Air Supply Outlet
- Auto Vane Swing (Up/ Down)
- 5 Steps of Airflow Rate

Key USP

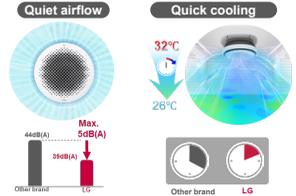
Premium Design

ROUND CST provides an aesthetic design that makes space more luxurious and attractive.



Comfortable Airflow and Quick Cooling

The circular airflow of ROUND CST quickly cools the space with low noise.



Air Purification

This product can filter out dust particles, odors and bacteria through the air purification kit.



Easy Installation

This product can be easily installed thanks to the one-side piping design and the outer control box design.



LOW STATIC CCD

LOW STATIC CCD is a product that is installed in the ceiling and sends airflow into the space through a duct. It is applied when the external static pressure.

Features



- Cooling&Heating
- Installed in the ceiling
- MULTI V/ GHP
0.5~2.4 HP; 1.5~7 kW; 5~24 kBtu/h;
0.4~2 RT
- SINGLE/ MULTI
0.9~2.4 HP; 2.6~7 kW; 9~24 kBtu/h;
0.7~2 RT
- 1 Air Supply Outlet
- 3 Steps of Airflow Rate
- External Static Pressure 0~49 Pa

Key USP

Low Noise

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



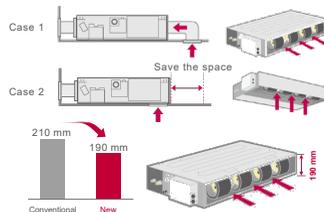
Auto ESP Setting

The installer can easily set the airflow rate according to the external static pressure through the Auto ESP Setting function.



Narrow Space Installation

This product can be installed in a narrow space due to the freedom to choose the inlet position and the minimized height.



MID/HIGH STATIC CCD

MID/HIGH STATIC CCD is a product that is installed in the ceiling and sends airflow into the space through a duct. It is applied when the external static pressure is high.

Features



- Cooling&Heating
- Installed in the ceiling
- MULTI V/ GHP
0.7~9.6 HP; 2.1~28.1 kW; 7~96 kBtu/h;
0.6~8 RT
- SINGLE/ MULTI
1.8~8.5 HP; 5.3~24.9 kW; 18~85 kBtu/h;
1.5~7.1 RT
- 1 Air Supply Outlet
- 3 Steps of Airflow Rate
- External Static Pressure 0~245 Pa

Key USP

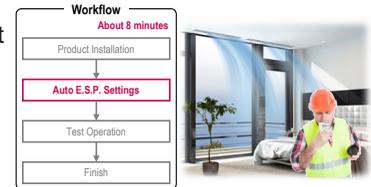
Low Noise

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



Auto ESP Setting

The installer can easily set the airflow rate according to the external static pressure through the Auto ESP Setting function.



Air Purification with UVnano Filter Box

Users can breathe clean air by purifying indoor air with UV-C LED and MERV 13 filter.



CONSOLE

CONSOLE is a product that is installed at the bottom of the wall. This product can send airflow in two directions; downwards and upwards.

Features



- Cooling&Heating
- Installed at the bottom of the wall
- MULTI V/ GHP
0.7~1.5 HP; 2.1~4.4 kW; 7~15 kBtu/h;
0.6~1.2 RT
- SINGLE/ MULTI
0.9~1.8 HP; 2.6~5.3 kW; 9~18 kBtu/h;
0.7~1.5 RT
- 2 Air Supply Outlets
- Auto Vane Swing (Up/ Down)
- 5 Steps of Airflow Rate

Key USP

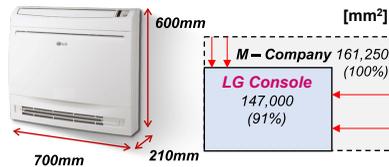
3 Types of Air Flow

CONSOLE has 3 types of airflow which enables it to provide comfortable airflow for customers in cooling and heating operation.



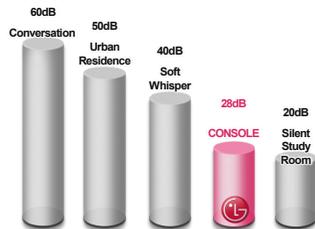
Compact Size

It has a compact size, so it does not occupy a large space.



Low Noise

With an optimal indoor unit design, it reduces noise to 28dB(A) to maintain a quiet and comfortable indoor environment.



CONVERTIBLE

CONVERTIBLE is a product that is installed at the bottom of the wall or on the ceiling. With a single vane, it can control the airflow in the up/down direction.

Features



- Cooling&Heating
- Installed at the bottom of the wall or on the ceiling
- MULTI V/ GHP
0.9~1.2 HP; 2.6~3.5 kW; 9~12 kBtu/h;
0.7~1 RT
- 1 Air Supply Outlet
- Auto Vane Swing (Up/ Down)
- 4 Steps of Airflow Rate

Key USP

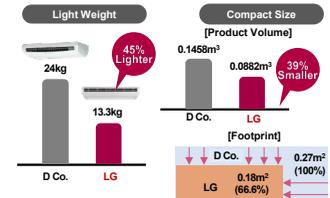
2 Types of Installation

This product can be installed at the bottom of the wall or on the ceiling according to installation environment.

	Wall	Ceiling
Application Scene		
Benefits	<ul style="list-style-type: none"> Prevent Cold Draft Not affected by ceiling height Easy to access and control 	<ul style="list-style-type: none"> Doesn't take up floor space Airflow is not affected by furniture, etc. Airflow reaches far

Light Weight & Compact Size

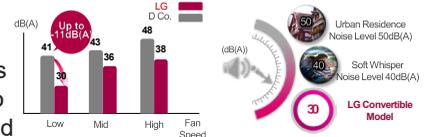
It is easy to install this product thanks to its light weight and compact size.



*D Company : FLQN35EXV1 Model data

Low Noise

The optimal indoor unit design reduces noise to 30dB(A) to maintain a quiet and comfortable indoor environment.



*LG : Multi V indoor unit (3.8kW model, AARN1120VE4) data
D Co. : FLQN35EXV1(3.7kW) model data

*Multi V indoor unit (3.8kW model, AARN1030VE4) data
**Data Source : C8HA(Occupational Safety and Health Administration)'s typical sound level(dB(A))
***Sound pressure level value are measured at Noise Measuring chamber in accordance with I.G. internal standards

CEILING SUSPENDED

CEILING SUSPENDED is a product that is installed on the ceiling. This product sends airflow in one direction, and can send airflow up to 15m away.

Features



- Cooling&Heating
- Installed on the ceiling
- MULTI V/ GHP
1.8~4.8 HP; 5.3~14.1 kW;
18~48 kBtu/h; 1.5~4 RT
- SINGLE/ MULTI
1.8~6 HP; 5.3~17.6 kW;
18~60 kBtu/h; 1.5~5 RT
- 1 Air Supply Outlet
- Auto Vane Swing (Up/ Down/ Left/ Right)
- 4 Steps of Airflow Rate

Key USP

Differentiated Luxury Design

The luxurious design that won the International Design Award makes a luxurious interior.



LG ThinQ

Users can conveniently control this indoor unit with a smartphone through the LG ThinQ.



* Wi-Fi Modem(PWFMDD200) is optional.

Long Distance of Airflow

The ceiling suspended can send airflow up to 15m.



*In case of 54kBtu/h model

Easy Access with Only 2 Screws

Installation and maintenance of the product is easy because only two screws need to be removed from the front.



Only 2 Screws

VERTICAL AHU

VERTICAL AHU can be installed in both vertical and horizontal directions, and is mainly installed in attics or machine rooms. This product sends airflow through a duct, and the airflow rate must be set according to the external static pressure.

Features

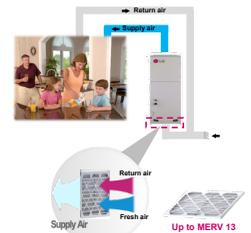


- Cooling&Heating
- Installed in vertical or horizontal direction
Installed in attics or machine rooms
- MULTI V
1.2~5.4 HP; 3.5~15.8 kW; 12~54 kBtu/h;
1~4.5 RT
- SINGLE/ MULTI
1.8~6 HP; 5.3~17.6 kW; 18~60 kBtu/h;
1.5~5 RT
- 1 Air Supply Outlet
- 3 Steps of Airflow Rate
- External Static Pressure 0~249 Pa

Key USP

Clean & Fresh Air Supply

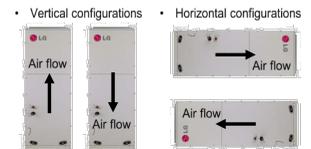
By applying a MERV filter and installing a damper, clean and fresh outdoor air can be supplied to the room.



- Need to tighten and loosen only 2 screws
- Slide structure for easy replacement

Flexible Installation

VERTICAL AHU can be installed in various directions depending on the site conditions.



※ For down-flow, an additional kit is required.
(NJ : PNDFJ0, NK: PNDFK0)

LG ThinQ

Users can conveniently control this indoor unit with a smartphone or AI speaker through the LG ThinQ.



WALL MOUNTED

WALL MOUNTED is a product that is installed on the top of the wall. It sends airflow in one direction and controls the up-and-down direction of the airflow through a single vane.

Features



- Cooling&Heating
- Installed on the top of the wall
- MULTI V/ GHP
0.5~2.4 HP; 1.5~7 kW; 5~24 kBtu/h;
0.4~2 RT
- SINGLE/ MULTI
0.5~2.4 HP; 1.5~7 kW; 5~24 kBtu/h;
0.4~2 RT
- 1 Air Supply Outlet
- Auto Vane Swing (Up/ Down/ Left/ Right)
- 5 Steps of Airflow Rate

Key USP

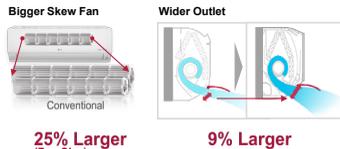
Low Noise

The optimal indoor unit design reduces noise to 26dB(A) to maintain a quiet and comfortable indoor environment.



Powerful Cooling

With a large fan and wide air outlet, LG Wall Mounted can cool down the space more efficiently.



Comfort Airflow

This product can automatically swing the vanes up, down, left and right, so that pleasant wind can be delivered to any spot.



FLOOR STANDING

FLOOR STANDING is a product that sends airflow in one direction and is mainly used under windows to offset loads coming in through windows.

Features



- Cooling&Heating
- Installed on the floor
- MULTI V/ GHP
0.7~2.4 HP; 2.1~7 kW; 7~24 kBtu/h;
0.6~2 RT
- 1 Air Supply Outlet
- 3 Steps of Airflow Rate

Key USP

Prevent Cold Draft

The Floor Standing unit blocks the cold wind coming in from the window, keeping the room warm in winter.



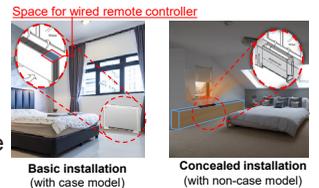
Convenient Installation

This product is easy to install because it does not require more than two workers to install and no ladder is required. In addition, it enables connecting pipes in 3 ways for convenience.



2 Types of Installation

This product can be installed in two ways. Depending on the interior of the room, customers can choose the installation style of this product.



Low Noise

The optimal indoor unit design reduces noise to 35dB(A) to maintain a quiet and comfortable indoor environment.



PAC

PAC is a product that delivers airflow to the front, and can control the direction of the airflow up, down, left and right.

Features

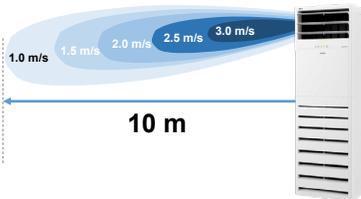


- Cooling&Heating
- Installed on the floor
- MULTI V/ GHP
4.8~9.6 HP; 14.1~28.1 kW; 48~96 kBtu/h;
4~8 RT
- SINGLE/ MULTI
3.6~10 HP; 10.6~29.3 kW; 36~100 kBtu/h;
3~8.3 RT
- 1 Air Supply Outlet
- Auto Vane Swing (Up/ Down/ Left/ Right)
- 4 Steps of Airflow Rate

Key USP

Long Distance of Airflow

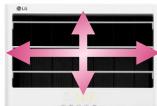
This product can send cooling / heating airflow for long distances.



Wide Range of Airflow

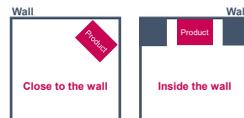
Not only can the airflow be sent far away, but the vane can automatically swing up and down, left and right to send the airflow over a wide space.

Auto Vane Swing
(Up & Down / Left & Right)



Space Saving Installation

The PAC can be placed in less used spots indoors, so the rest of the space can be used freely and more efficiently.



LG ThinQ

Users can control this indoor unit through a smartphone or AI speaker anytime and anywhere.



SPLIT RTU

SPLIT RTU is a product installed on the roof of a building. This product sends airflow through a duct, and the airflow must be set according to the external static pressure. This product must be connected to the MULTI V outdoor unit.

Features

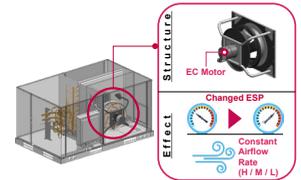


- Cooling&Heating/ Ventilation with Economizer
- Installed on the rooftop
- MULTI V
3.6~7.2 HP; 10.6~22.3 kW; 36~72 kBtu/h;
3~6 RT
- 1 Air Supply Outlet
- External Static Pressure 0~423 Pa

Key USP

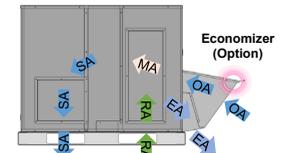
Constant Airflow Rate

This product can always blow a constant air volume when the external static pressure is changed.



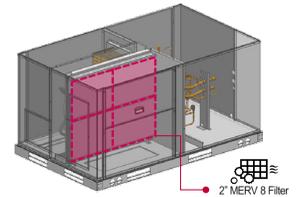
Fresh Outdoor Air Supply

This product can supply fresh outdoor air into the room through the economizer.



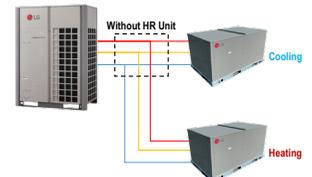
Clean Air Supply

The 2" MERV 8 filter allows clean air to flow into the room.



Factory-installed HR Unit

Since the HR Unit is built into the product, the refrigerant pipe can be directly connected without the need to separately install the HR Unit.



CAC / GHP IDU FUNCTION LIST

PRODUCT TYPE	DUAL VANE 4 WAY CST	4 WAY CST	2 WAY CST
Airflow Steps (fan/cool/heat)	4 / 5 / 4	4 / 5 / 4	4 / 5 / 4
Fan Speed Auto	●	●	●
Power Cool/Heat	●	●	●
Auto Mode	●	●	●
Auto Dry Operation	●	●	●
Sleep Timer	●	●	●
6 Types of Airflow	●	x	x
Air Purifying	A	▲	A
Dust Monitoring	A	A	A
Group Control*	A	A	A
Scheduling*	●	●	●
Two-Thermistor Control*	●	●	●
Human Detection**	A	A	x
Floor Detection**	A	x	x
Wi-Fi Control	A	A	A
High Ceiling Operation*	●	●	●
Auto ESP Settings*	x	x	x
Zone Control*	x	x	x

● : Possible / ▲ : Different depending on country, product, etc. /

A : Accessory / x : Impossible

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

** : These functions require the connection of the Standard III
wired remote controller.

1 WAY CST	ROUND CST	LOW STATIC CCD	MID/HIGH STATIC CCD
4 / 5 / 4	4 / 5 / 4	3 / 3 / 3	3 / 3 / 3
●	●	x	x
●	●	x	x
●	●	●	●
●	●	●	●
●	●	●	●
x	x	x	x
A	x	x	▲
A	x	x	x
A	A	A	A
●	●	●	●
x	x	x	x
x	x	x	x
A	A	A	A
●	●	x	x
x	x	▲	▲
x	x	A	A

CAC / GHP IDU FUNCTION LIST

PRODUCT TYPE	CONSOLE	CONVER-TIBLE	CEILING SUSPENDED
Airflow Steps (fan/cool/heat)	4 / 5 / 5	3 / 4 / 4	3 / 4 / 4
Fan Speed Auto	x	●	●
Power Cool/Heat	●	●	●
Auto Mode	●	●	●
Auto Dry Operation	●	●	●
Sleep Timer	●	●	●
6 Types of Airflow	x	x	x
Air Purifying	x	x	x
Dust Monitoring	x	x	x
Group Control*	A	A	A
Scheduling*	●	●	●
Two-Thermistor Control*	●	●	●
Human Detection**	x	x	x
Floor Detection**	x	x	x
Wi-Fi Control	A	A	A
High Ceiling Operation*	x	●	▲
Auto ESP Settings*	x	x	x
Zone Control*	x	x	x

● : Possible / ▲ : Different depending on country, product, etc. /

A : Accessory / x : Impossible

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

** : These functions require the connection of the Standard III wired remote controller.

VERTICAL AHU	WALL MOUNTED	FLOOR STANDING	PAC	SPLIT RTU
3 / 3 / 3	4 / 5 / 5	3 / 3 / 3	4 / 4 / 4	3 / 3 / 3
x	●	x	x	●
x	●	x	●	x
●	●	●	x	●
●	●	●	x	x
●	●	●	▲	x
x	x	x	x	x
x	▲	x	x	x
x	x	x	x	x
A	A	A	▲	A
●	●	●	●	●
●	●	●	▲	●
x	x	x	x	x
x	x	x	x	x
A	▲	A	x	x
x	x	x	x	x
x	x	x	x	x
x	x	x	x	x



HEATING

- THERMA V
 - HYDRO KIT
- 

THERMA V R32 MONOBLOC

THERMA V R32 MONOBLOC is an AWP product that ODU and IDU are combined in one module. Since it can be installed only by connecting the water pipe without connecting the refrigerant pipe and hydronic components such as water pump are basically included in the product, on-site installation work is minimized and it is suitable for both residential new build and renovation applications.

Features



• Rated Sound Power Level

5/7/9 kW	57 dB(A)
12 kW	60 dB(A)
14/16 kW	61 dB(A)

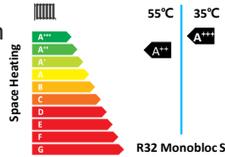
- AWP (Air to water Heat Pump)
- Heating, Cooling, and DHW
- (1Ø) 5~16 kW; 1.5~5.7 HP; 1.4~4.5 RT; 17~54.6 kBTu/h, (3Ø) 12~16 kW; 4.3~5.7 HP; 3.4~4.5 RT; 41~54.6 kBTu/h
- R32 Refrigerant (GWP 675)
- OAT: Heating (-25~35 °CWB), Cooling(5~48 °CDB)
- LWT: Heating (15 ~ 65 °C), Cooling(5~27 V)
- ErP Energy Label A+++ / A++ (@35 °C / 55 °C)
- R1 Compressor (FGI) Black Fin
- Main Certifications:



Key USP

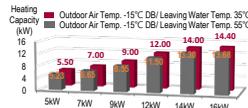
Higher Efficiency

It doesn't only save operating costs with its high-efficiency, but also satisfies the incentive conditions of most European countries by acquiring the ErP Energy Label A+++ / A++.



Excellent Heating Performance

Heating performance in low ambient temp. is enhanced, so 100% heating capacity can be achieved even at -15 °C OAT (35 °C LWT). (90% for 16kW model)



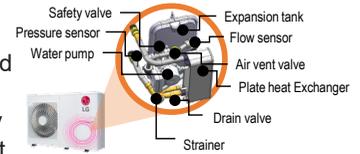
Reduced Noise Level

By applying compressor noise shield, R32 Monobloc S can be installed at min. 4m away from neighboring houses while complying with 35 dB(A) sound pressure.

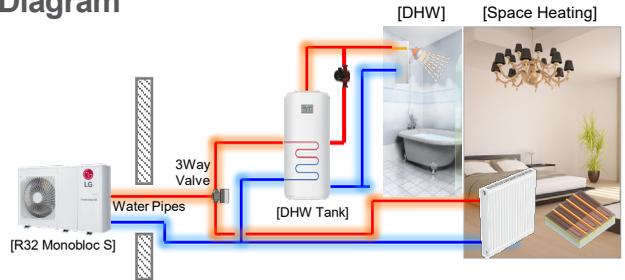


All in One Concept

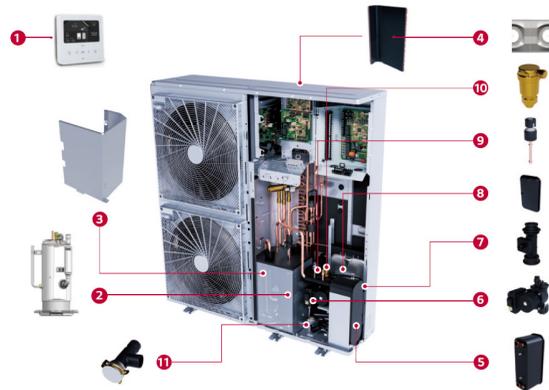
As an all-in-one product where ODU and IDU are combined in one module and hydronic components such as water pump are basically included in it, and refrigerant piping work is no required.



Diagram



Main Components



- Standard III remote controller
- R1 Compressor
- Compressor noise shield
- Black Fin heat exchanger (Ref./ Air)
- Plate type heat exchanger (Ref./ Water)
- Water pump
- Water flow sensor
- Expansion vessel (8l)
- Water pressure sensor
- Air vent valve
- Strainer

THERMA V R32 HYDROSPLIT

THERMA V R32 HYDROSPLIT is an AWP product that IDU and ODU are connected by water piping. It can be connected not only to the Hydro Box type but also to the integrated water tank (IWT) type IDUs, and is suitable for residential renovation projects with 12/14/16kW capacity.

Hydro Box Features



ODU
• Rated Sound Power Level (dB(A))

ODU	12kW: 61 14kW: 62 16kW: 63
IWT	43
Hydro Box	44

- AWP (Air to water Heat Pump)
- Heating, Cooling, and DHW
- (1Ø/ 3Ø) 12~16 kW; 4.3~5.7 HP; 3.4~4.5 RT; 41~54.6 kBTU/h
- Connectable IDU: Hydro Box, IWT
- R32 Refrigerant (GWP 675)
- OAT: Heating (-25~35 °CWB), Cooling(5~48 °CDB)
- LWT: Heating (15~65 °C), Cooling(5~27 °C)
- ErP Energy Label A+++/ A++ (@35 °C/ 55 °C), (IWT) Water Heating A+ (profile L)
- R1 Compressor (FGI)/ Black Fin
- Main Certifications:



Key USP

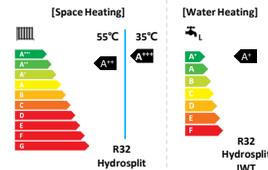
Hydrosplit Concept

Since the refrigerant part exists only in the ODU, no refrigerants flow indoors and installers without F-gas certi. can install the product. Besides, maintenance can be done easily during winter season, as hydronic components are located indoors.



Higher Efficiency

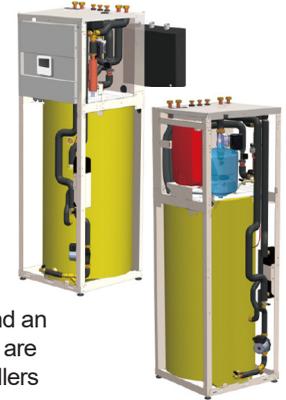
It doesn't only save operating costs with its high-efficiency, but also satisfies the incentive conditions of most European countries by acquiring the ErP Energy Label A+++/ A++. Besides, it obtained the highest grade A+ for water heating efficiency for IWT model.



Key USP (only for IWT)

All in One Solution

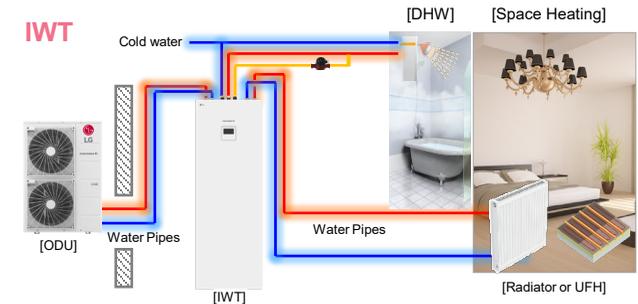
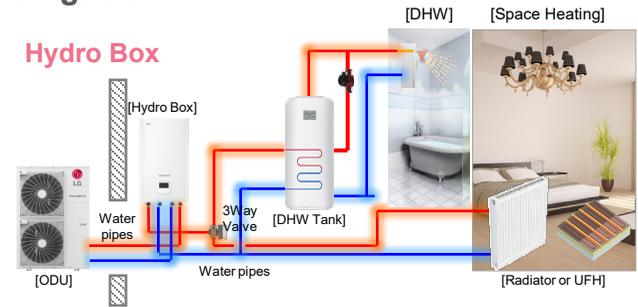
The All-in-one solution isn't only for heating and cooling, but also for DHW supply. IWT products especially have water tank and drain pan included by default, so they can be operated for heating, cooling, and DHW without installing additional accessories.



Insertable Accessory

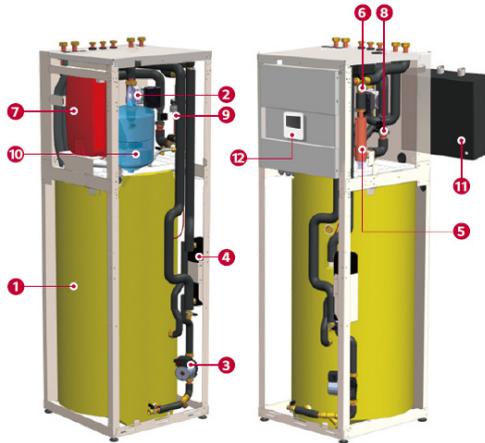
An insertable buffer tank (40L) and an expansion tank for hot water (8L) are supplied as accessories, so installers can easily install them on site.

Diagram



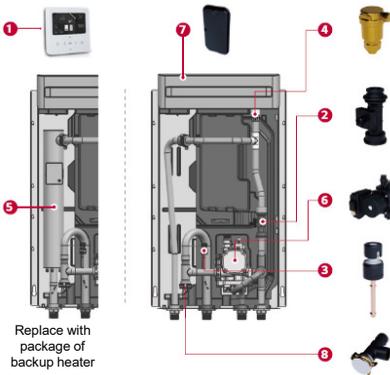
Main Components

IWT



- | | |
|---|---|
| 1 DHW storage tank (200ℓ) | 7 Expansion vessel for heating (12ℓ) |
| 2 Main water pump | 8 Flow sensor |
| 3 Water pump for DHW charging | 9 Water pressure sensor |
| 4 Plate heat exchanger for DHW (water/ DHW) | 10 Expansion vessel for DHW (8ℓ, option) |
| 5 Electric heater (Max. 6kW) | 11 Buffer tank (40ℓ, option) |
| 6 3-way diverting valve | 12 Standard III Remote controller (attached on the front panel) |

Hydro Box



- | |
|--|
| 1 Standard III Remote Controller (attached on the front panel) |
| 2 Flow sensor |
| 3 Water pressure sensor |
| 4 Air vent valve |
| 5 Backup electric heater (6kW, accessory) |
| 6 Water pump |
| 7 Expansion vessel (8L) |
| 8 Strainer |

Replace with package of backup heater

THERMA V R32 SPLIT

THERMA V R32 SPLIT is an AWP product in which the IDU and ODU are connected by refrigerant piping. Since only the refrigerant pipe is connected outdoors and the water pipe is not connected, it is safe from freezing issue due to low ambient temperature even during black out in winter season. As it can be connected not only to the Hydro Box type but also to the integrated water tank (IWT) type IDUs, it is suitable for new build residential applications.

Hydro Box Features



• Rated Sound Power Level

ODU	60 dB(A)
IWT	42 dB(A)
Hydro Box	44 dB(A)

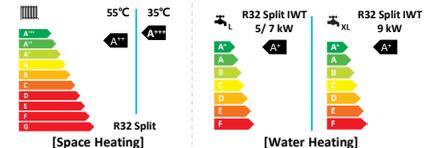
- AWP (Air to water Heat Pump)
- Heating, Cooling, and DHW
- (1Ø) 5~9 kW; 1.5~3.2 HP; 1.4~2.6 RT; 17~31 kBtu/h
- Connectable IDU: Hydro Box, IWT
- R32 Refrigerant (GWP 675)
- OAT: Heating (-25~35 °CWB), Cooling(5~48 °CDB)
- LWT: Heating (15~65 °C), Cooling(5~27 °C)
- ErP Energy Label A+++ / A++ (@35 °C / 55 °C), (IWT) Water Heating A+
- R1 Compressor (FGI)/ Black Fin
- Main Certifications:

Keymark MCS EHPA Eurovent

Key USP

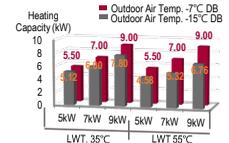
Higher Efficiency

It doesn't only save operating costs with its high-efficiency, but also satisfies the incentive conditions of most European countries by acquiring the ErP Energy Label A+++ / A++. In addition, the water heating efficiency of the IWT combination is more than 133%, making it possible to effectively respond to nZEB regulations.



Excellent Heating Performance

Heating performance in low ambient temp. is enhanced, so 100% heating capacity can be achieved even at -7°C OAT.



Key USP (only for IWT)

All in One Solution

The All-in-one solution isn't only for heating and cooling, but also for DHW supply. IWT products especially have water tank and drain pan included by default, so they can be operated for heating, cooling, and DHW without installing additional accessories.

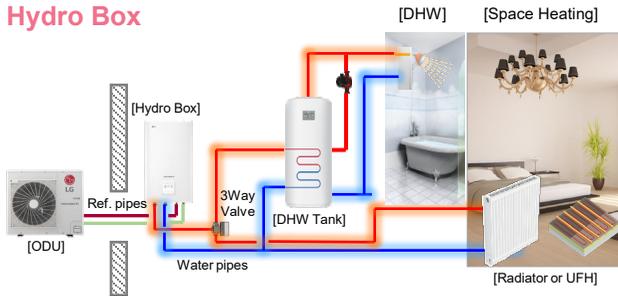
Stainless Steel Tank

With the application of Duplex Stainless Steel, which is resistant to corrosion, there is no need to replace the anode periodically so End User can save maintenance costs.

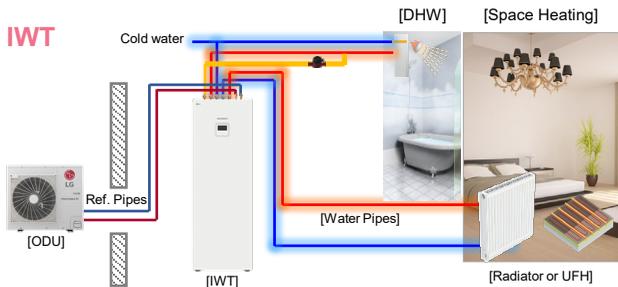


Diagram

Hydro Box

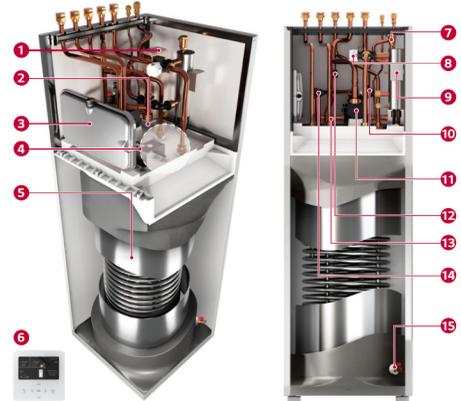


IWT



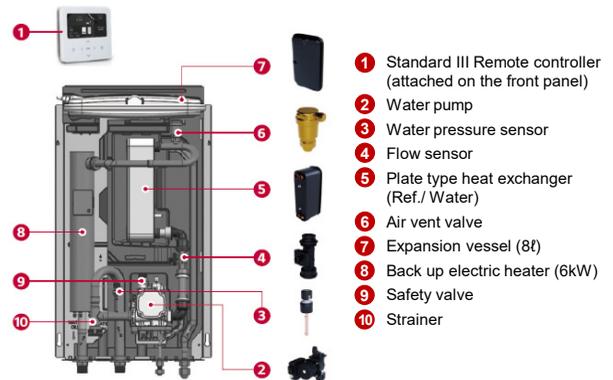
Main Components

IWT



- 1 Plate Heat Exchanger (Ref./ Water)
- 2 Strainer
- 3 Expansion Tank for heating (8L)
- 4 Reserved space for DHW Expansion Tank
- 5 DHW Storage Tank (Stainless Steel, 200L) with internal coil type heat exchanger
- 6 Standard III Remote controller (Attached on front panel)
- 7 Air vent valve
- 8 3 Way diverting valve (DC)
- 9 Electric back-up heater (3kW)
- 10 Water flow sensor
- 11 Main water pump with air vent and safety valve (water circuit, 3bar)
- 12 Water pressure sensor
- 13 Drain valve for water circuit
- 14 Safety valve (DHW tank, 10bar)
- 15 Drain valve for DHW tank

Hydro Box



- 1 Standard III Remote controller (attached on the front panel)
- 2 Water pump
- 3 Water pressure sensor
- 4 Flow sensor
- 5 Plate type heat exchanger (Ref./ Water)
- 6 Air vent valve
- 7 Expansion vessel (8l)
- 8 Back up electric heater (6kW)
- 9 Safety valve
- 10 Strainer

THERMA V R410A SPLIT

THERMA V R410A SPLIT is an AWHP product in which the IDU and ODU are connected by refrigerant piping. Since only the refrigerant pipe is connected outdoors and the water pipe due to low ambient temperature even during black out in winter season. With 12/14/16kW capacity, it is suitable for residential renovation projects.

Hydro Box



Features

- AWHP (Air to water Heat Pump)
- Heating, Cooling, and DHW
- (1Ø,3Ø) 12~16 kW; 4.3~5.7 HP; 3.4~4.5 RT; 41~54.6 kBtu/h
- Connectable IDU: Hydro Box
- R410A Refrigerant
- Operation Range:
OAT: Heating (-25~35 °CWB), Cooling(5~48 °CDB)
LWT: Heating (15~57 °C), Cooling(5~27 °C)
- ErP Energy Label A+++ / A++ (@35 °C / 55 °C)
- R1 Compressor/ Gold Fin
- Main Certifications:

• Rated Sound Power Level (dB(A))

ODU	12kW: 63 14kW: 64 16kW: 65
Hydro Box	44



Key USP

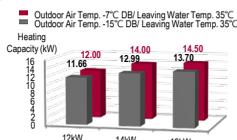
Higher Efficiency

It doesn't only save operating costs with its high-efficiency, but also satisfies the incentive conditions of most European countries by acquiring the ErP Energy Label A+++ / A++.



Excellent Heating Performance

Heating performance in low ambient temp. is enhanced, so 100% heating capacity can be achieved even at -7 °C OAT (35 °C LWT). (91% for 16kW model)



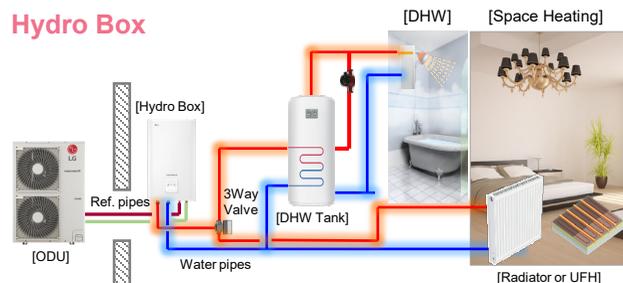
Flexible Installation

Piping length between IDU and ODU can reach up to 50m and the 3 ways for piping connection enable flexible design and easy installation.



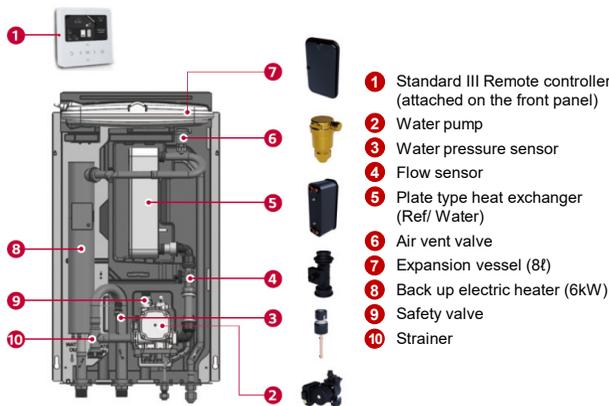
Diagram

Hydro Box

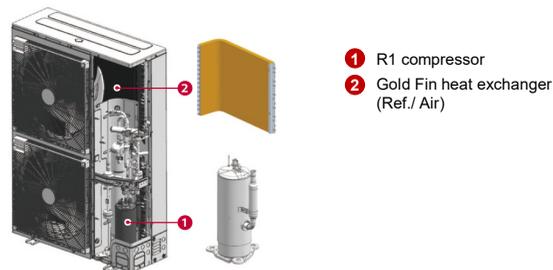


Main Components

Hydro Box



ODU



THERMA V HIGH TEMP.

THERMA V HIGH TEMP. is an AWHP product with 2-stage cascaded cycle using both R410A and R134a refrigerants and it can discharge water with temperature up to 80°C. Since only the refrigerant pipe is connected outdoors and the water pipe is not connected, there are no freezing concerns due to low ambient temperature even in case of blackouts in winter. With a single capacity of 16 kW, it is suitable for residential renovation projects where high-temperature radiators are used.



Features

- AWHP (Air to water Heat Pump)
- Heating and DHW
- (1Ø) 16 kW; 5.7 HP; 4.5 RT; 54.6 kBtu/h
- Connectable IDU: Floor Standing Unit
- R410A Refrigerant + R134a Refrigerant
- Operation Range:
 - OAT: Heating (-25~35 °CWB)
 - LWT: Heating (25~80 °C)
- ErP Energy Label A+/ A+ (@35 °C/ 55 °C)
- R1 Compressor, Black Fin
- Main Certifications:

• Rated Sound Power Level (dB(A))

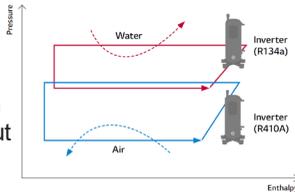
ODU	63
Hydro Box	58 (Fan Off) 63 (Fan On)



Key USP

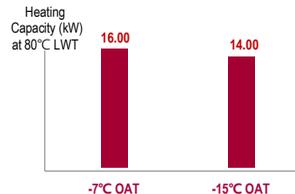
High Temperature Cycle

2-stage cascaded compression technology is applied, so it is possible to discharge water with temperatures up to 80 °C without an auxiliary heater.

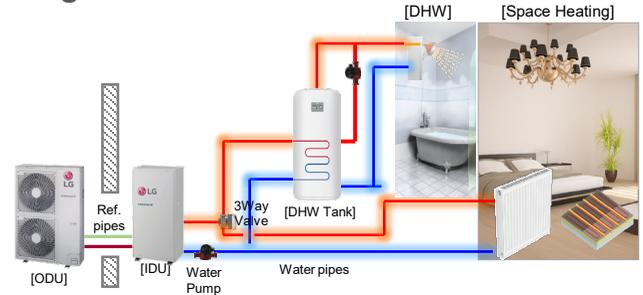


Excellent Heating Performance

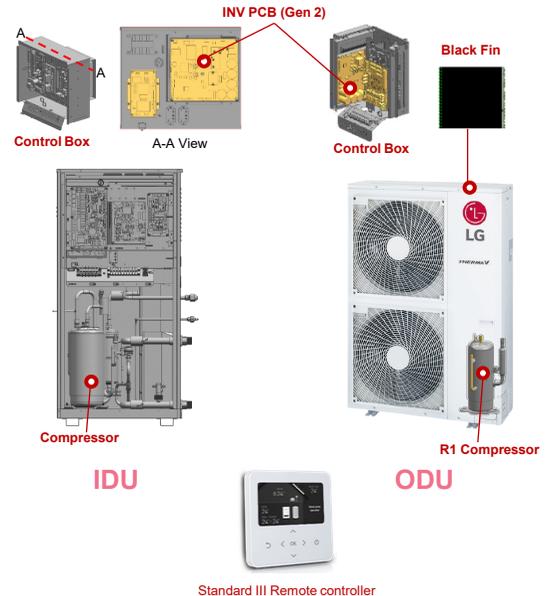
Heating performance in low ambient temp. is enhanced, so 100% heating capacity can be achieved even at -7 °C OAT.



Diagram



Main Components



FLOOR STANDING HYDRO KIT

FLOOR STANDING HYDRO KIT is a floor-standing product used for underfloor heating and hot water supply. This product has medium and high temperature models and must be connected to the MULTI V/ GHP outdoor unit.



Features

- Underfloor Heating/ Hot Water Supply
- Installed on the floor
- MULTI V/ GHP (Medium Temp.)
4~10 HP; 11.7~29.3 kW; 40~100 kBtu/h;
3.3~8.3 RT
- MULTI V (High Temp.)
4~8 HP; 11.7~23.4 kW; 40~80 kBtu/h;
3.3~6.7 RT

Key USP

Hot Water Solution with MULTI V

By connecting with the MULTI V these products can supply hot water. (Medium Temp. Up to 50 °C/ High Temp. Up to 80 °C)



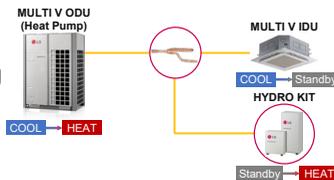
Applications of HYDRO KIT

LG HYDRO KIT can supply hot water for a variety of purposes



Heating Priority

Domestic hot water is always available even during cooling season without mode changes manually.



LG ThinQ

Users can manage hot water in their home, whether at home or on the go.



WALL MOUNTED HYDRO KIT

WALL MOUNTED HYDRO KIT is a wall-mounted product for underfloor heating and hot water supply. This product has a medium temperature model and must be connected to the MULTI V outdoor unit.



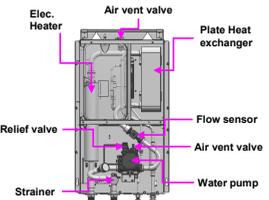
Features

- Underfloor Heating/ Hot Water Supply
- Installed on the wall
- MULTI V (Medium Temp.)
1.8~3 HP; 5.3~8.8 kW; 18~30 kBtu/h;
1.5~2.5 RT

Key USP

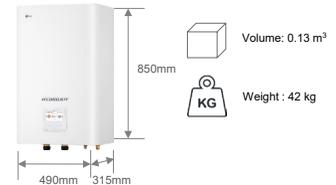
Integrated Water Side Components

Various water side components are integrated into this product which reduces installation cost and time.



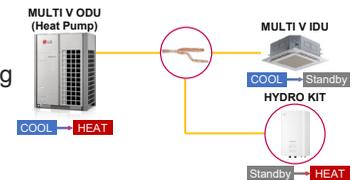
Compact Size

This product is wall-mounted and compact in size, so users don't have to worry about the installation space.



Heating Priority

Domestic hot water is always available even during cooling season without mode changes manually.



LG ThinQ

Users can manage hot water in their home, whether at home or on the go.



HYDRO KIT FUNCTION LIST

PRODUCT TYPE	FLOOR STANDING	WALL MOUNTED
Self Diagnosis	●	●
Group Control	A	A
Scheduling	●	●
Independent Power Module	A	●
Wi-Fi Control	A	A
Water Pump ON / OFF Control	●	●
Water Flow Detection	●	●
Water Circuit Monitoring	x	●
Heating AI	●	●
Heating Priority	●	●
Anti-Condensation on Floor (Cooling)	▲	●
Thermostat Interface (230 V)	●	●
Thermostat Interface (24 V)	▲	●
PHEX Anti-Freezing Control	●	●
Water Pump Forced Operation	●	●
Quick Domestic Hot Water Tank Heating	●	●
Electric Backup Heater Capacity Control	x	●

● : Possible / ▲ : Different depending on country, product, etc. /
A : Accessory / x : Impossible

All types of HYDRO KIT need to connect the Standard III wired remote controller, included with the product by default.

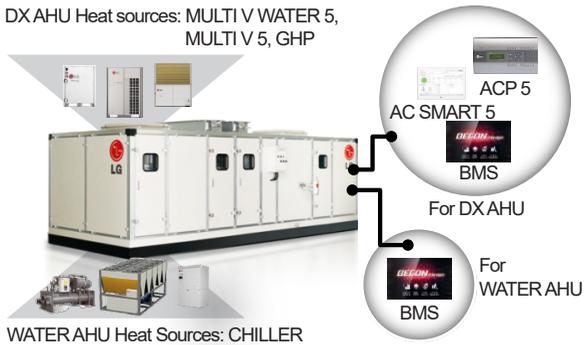
AHU

- WATER / DX AHU
- EEV KIT

AHU

LG AHU is largely divided into DX AHU using outdoor unit and WATER AHU using hot and cold water. For LG DX AHU, outdoor unit and control devices need to be supplied together.

DX AHU Heat sources: MULTI V WATER 5, MULTI V 5, GHP



Key USP

EC FAN

The combination of LG's high-efficiency impeller and EC Motor provides excellent performance and efficiency. Motor efficiency has been improved up to 95%.



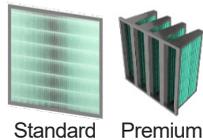
Black-fin coil

Compared to conventional coils, static pressure loss and water pressure loss were reduced by 14.3% and 25.5%, respectively. Heat transfer was improved by 4.3%, and dehumidification amount increased by 6.9%.



V-BANK Filter

Air purification technology with a certified antibacterial (99.9%) and antifungal performance is applied. Compared to the existing medium filter, the pressure loss improved by 25% (Standard), and the collection amount improved by more than 4 times (premium).



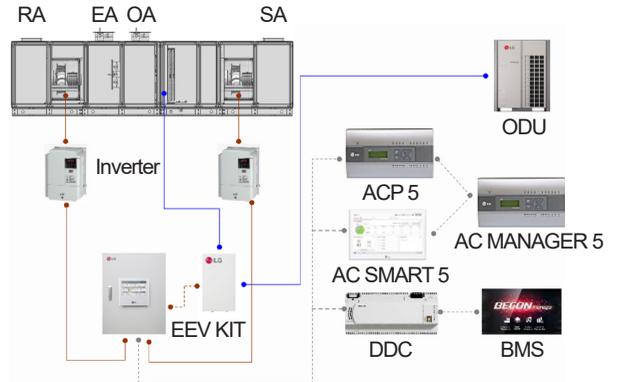
Smart AHU

It has a preemptive management system that diagnoses faults by real time monitoring on fan failure, filter differential pressure, coil freeze and so on.

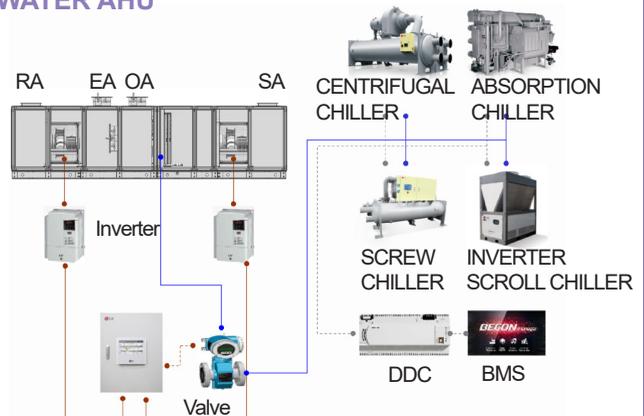


Diagram

DX AHU



WATER AHU



It is based on AHU in Korea.

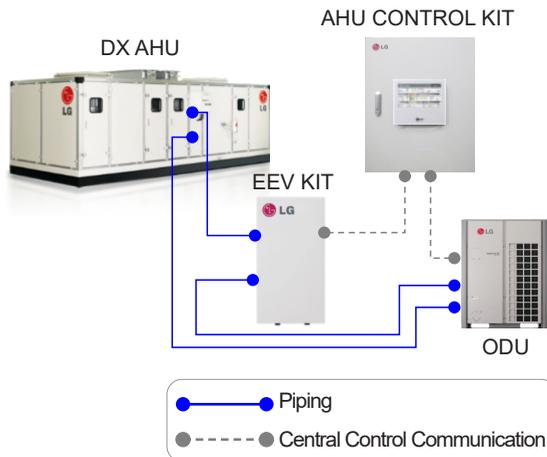
EEV KIT

The EEV KIT that connects the DX AHU and the outdoor unit, has excellent constructability and convenience for maintenance.

Features

Model			PRLK 048A0	PRLK 096A0	PRLK 396A0	PRLK 594A0
Size	W	mm	217	217	349.5	409.5
	D	mm	83	83	180	180
	H	mm	404	404	345.5	345.5
Weight		kg	3.3	3.3	4.5	5.7
Sensor	Pipe temp. sensor	IN	Ø5/5m/black			
		OUT	Ø5/5m/red			
Rated Voltage			DC 12V			
Connectable ODU			2~10 HP	12~20 HP	22~40 HP	42~60 HP

Diagram



VENTILATION

- ERV
- FAU
- DOAS

COMMERCIAL ERV

COMMERCIAL ERV is a ventilation product that supplies fresh outdoor air to the room and at the same time recovers cooling/heating energy through a total heat exchanger.

Features

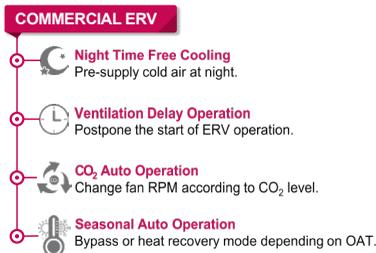


- Ventilation/ Energy Recovery
- Installed in the ceiling
- Ventilation, 250~2,000 CMH (147~1,177 CFM)
- Supply Air/ Return Air/ Outdoor Air/ Exhaust Air
- 3 Steps of Airflow Rate
- External Static Pressure 0~320 Pa

Key USP

Energy Saving

This product can save more HVAC energy than natural ventilation through a variety of features.



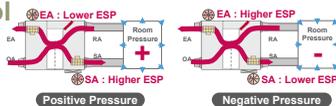
CO₂ Level Monitoring

The CO₂ sensor not only allows users to monitor the indoor CO₂ concentration, but also changes the ventilation volume.



Room Pressure Control

This product can maintain positive or negative room pressure according to settings in the wired remote controller.



Filter Clogging Alarm

The filter clogging alarm is displayed on a wired remote controller when the filter needs to be replaced, depending on the level of contamination.



ERV WITH DX COIL

ERV DX is a ventilation product that can recover cooling/heating energy through a total heat exchanger while supplying fresh outdoor air to the room. In addition, there is a heat exchanger to additionally cool/heat the outdoor air. This product must be connected to the MULTI V outdoor unit.

Features

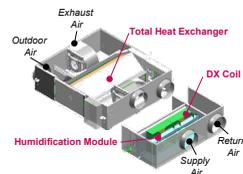


- Cooling&Heating/ Ventilation/ Energy Recovery/ Humidification
- Installed in the ceiling
- Ventilation, 500~1,000 CMH (294~588 CFM)
- MULTI V
1.7~3.1 HP; 4.9~9.1 kW; 16.7~31 kBtu/h; 1.4~2.6 RT
- Supply Air/ Return Air/ Outdoor Air/ Exhaust Air
- 3 Steps of Airflow Rate
- External Static Pressure 0~350 Pa

Key USP

ERV with DX coil

The ERV DX has all the features of the ERV as well as a DX Coil for pre-cooling and pre-heating.



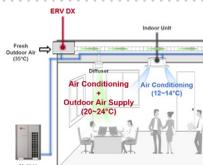
Humidification Module

This product has a humidification module, which can maintain the indoor humidity properly to make a comfortable environment.



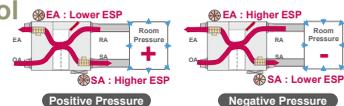
Pre-cooling & Pre-heating

This product pre-cools and pre-heats the outdoor air according to the set temperature to make the room more comfortable and reduce loads.



Room Pressure Control

This product can maintain positive or negative room pressure according to settings in the wired remote controller.



RESIDENTIAL ERV

RESIDENTIAL ERV is a ventilation product that supplies fresh outdoor air to the room and at the same time recovers cooling/heating energy through a total heat exchanger. In addition, UV-C LED is factory-assembled.



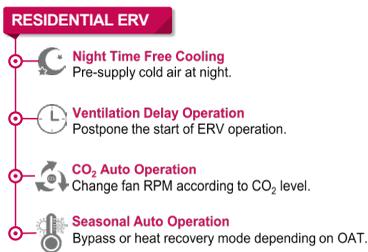
Features

- Ventilation/ Energy Recovery (+ UV-C LED)
- Installed in the ceiling
- Ventilation, 150~250 CMH (88~147 CFM)
- Supply Air/ Return Air/ Outdoor Air/ Exhaust Air
- 3 Steps of Airflow Rate
- External Static Pressure 0~150 Pa

Key USP

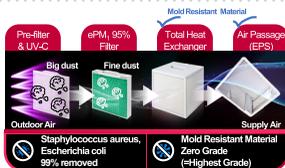
Energy Saving

This product can save more HVAC energy than natural ventilation through a variety of features.



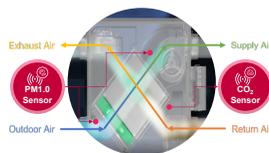
Fresh & Clean Air Supply

This product supplies fresh and clean air to the room by applying pre-filter, UV-C LED, and ePM1 95% filter.



Dust & CO₂ Monitoring

This product is equipped with two PM1.0 sensors and one CO₂ sensor to monitor how fresh and clean is the air being supplied to the room in real time.



Easy Filter Maintenance

The cover can be opened by pressing the one-touch buttons on either side, and the filter can be easily removed by holding the filter handle and pulling it down.



ERV FUNCTION LIST

PRODUCT TYPE	COMMERCIAL ERV	ERV DX	RESIDENTIAL ERV
High Efficiency Filter	A	A	●
UV-C LED	X	X	●
Dust Monitoring	X	X	●
Auto Mode	X	●	X
Auto Dry Operation	X	●	X
Group Control*	A	A	A
Sleep Mode	X	●	●
Scheduling*	●	●	●
Wi-Fi Control	X	X	A
E.S.P. Control*	●	●	●
Fresh Outdoor Air Supply	●	●	●
Total Heat Exchange	●	●	●
Humidification*	X	▲	X
Filter Alarm	●	●	●
CO ₂ Level Monitoring*	●	A	●
Night Time Free Cooling*	●	●	●
Delay Operation*	●	●	●
CO ₂ Auto Operation	●	A	●
Seasonal Auto Operation*	●	●	●

● : Possible / ▲ : Different depending on country, product, etc. / A : Accessory / x : Impossible

* : These functions need to connect the wired remote controller. These functions require the connection of the Standard III wired remote controller.

FAU

FAU is an outdoor air supply product that cools/ heats fresh outdoor air with a heat exchanger and supplies it indoors. This product must be connected to the MULTI V outdoor unit.

Features



- Outdoor Air Supply
- Installed in the ceiling
- OA Supply, 1,400~2,100 CMH (824~1,236 CFM)
- MULTI V
7.6~9.6 HP; 22.3~28.1 kW; 76~96 kBtu/h; 6.3~8 RT
- 1 Air Supply Outlet
- 3 Steps of Airflow Rate
- External Static Pressure 0~245 Pa

Key USP

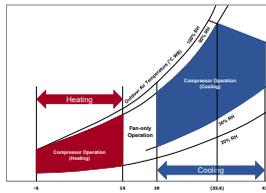
Economic Operation

FAU is cost-effective as it brings in natural outdoor air to lower the cooling and heating loads in spring and autumn.



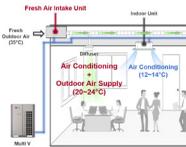
Wide Operation Range

Cooling : OAT 19~43 °CDB
 Heating : OAT -5~15 °CDB
 Fan Mode : OAT 15~19 °CDB



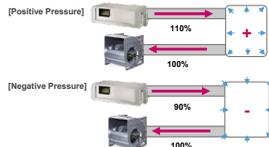
Pre-cooling & Pre-heating

This product pre-cools and pre-heats the outdoor air according to the set temperature to make the room more comfortable and reduce loads.



Room Pressure Control

This product can maintain positive or negative room pressure according to settings in the wired remote controller.



SPLIT ROOFTOP DOAS

SPLIT ROOFTOP DOAS is a ventilation product that supplies fresh outdoor air indoors. This product supplies the fresh outdoor air after recovering heat, cooling/ heating and dehumidifying the air. It must be connected to the MULTI V outdoor unit.

Features

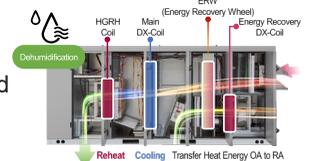


- Cooling&Heating/ Ventilation/ Energy Recovery/ Dehumidification
- Installed on the rooftop
- Ventilation, 2,000~3,000 CFM (3,398~5,097 CMH)
- MULTI V
12.7 HP; 37.2 kW; 127 kBtu/h; 10.6 RT
- Supply Air/ Return Air/ Outdoor Air/ Exhaust Air
- External Static Pressure 0~498 Pa

Key USP

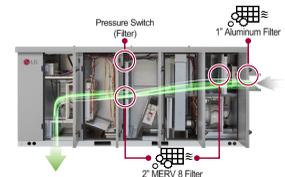
Comfortable Air Supply

Fresh outdoor air is dehumidified and supplied indoors in a well-conditioned state.



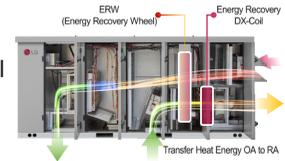
Clean Air Supply

Triple air filtration prevents airborne contaminants from seeping into the building.



Double Energy Recovery

This product recovers heat energy through the energy recovery wheel and energy recovery DX coil, allowing the MULTI V outdoor unit to save energy.



Auto Fan RPM Adjustment

It automatically finds the most suitable airflow value within the static pressure range within 498 Pa without any additional setting.



SPLIT COMPACT DOAS

SPLIT COMPACT DOAS is an outdoor air supply product that supplies fresh outdoor air indoors. This product supplies outdoor the fresh air after cooling/ heating and dehumidifying the air. It must be connected to the MULTI V outdoor unit.

Features

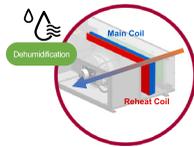


- Cooling & Heating/ Outdoor Air Supply/ Dehumidification
- Installed in the ceiling
- OA Supply, 900~2,000 CFM (1,529~3,398 CMH)
- MULTI V
7~14.3 HP; 20.5~41.9 kW; 70~143 kBtu/h; 5.8~11.9 RT
- 1 Air Supply Outlet
- External Static Pressure 0~448 Pa

Key USP

Comfortable Air Supply

Fresh outdoor air is dehumidified and supplied indoors in a well-conditioned state.



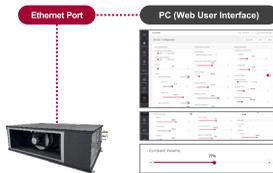
Clean Air Supply

The 2" MERV 8 filter prevents airborne contaminants from seeping into the building.



Easy Set up with Web User Interface

Configuration, operation and monitoring can be easily done by connecting the DOAS unit to the web via an Ethernet port.



Auto Fan RPM Adjustment

It automatically finds the most suitable airflow value within the static pressure range within 498 Pa without any additional setting.



CONTROL

- CENTRALIZED CONTROL
- INDIVIDUAL CONTROL
- INTEGRATION DEVICES
- BMS

AC MANAGER 5

Multiple ACP and AC SMART integration solution to manage multiple sites and up to 8,192 units with a single system.

Features



- Maximum number of IDUs : 8,192 units
- Web Access: PC/ Mobile/ Tablet
- Manage multiple buildings or regions from one place

Key USP

Integrated Management

Administrators can easily and conveniently manage a variety of LG HVAC equipment. Also, it is available to manage many buildings or areas from one place via AC MANAGER 5.



Advanced Accessibility & User Friendly GUI

As an advanced central controller, AC MANAGER 5 offers flexible interface for each user by assessing the device screen and automatically customizing the layout to provide the most optimized interface.



AC SMART 5 / ACP 5

LG AC SMART 5 and ACP 5 are the most suitable central control solution for your office.

AC SMART 5



ACP 5



Features

- Maximum number of IDUs : 128 units (2 DI / 2 DO)
- Web Access/ 10" Touch Screen
- BACnet IP/ Modbus TCP
- Energy monitoring with PDI
- Maximum number of IDUs : 256 units (10 DI / 4 DO)
- Web Access
- BACnet IP/ Modbus TCP
- Energy monitoring with PDI

Key USP

Energy Saving

They can reduce energy costs through energy-saving solutions optimized for various business environments.



IDU Operation Control



Capacity Control

Smart Management

Comfort and convenience are major indicators for the effectiveness of an HVAC control solution.

Easy Interface



Visualized Control



Air Purify



Easy Expandability

They provide standard protocols such as BACnet IP and Modbus TCP, and can be connected to a 3rd party BMS.

Facility Expansion



BMS Compatible



AC EZ TOUCH

Smart management with 5 inch touch screen for small sites.



Features

- Maximum number of IDUs: 64 units
- MULTI V/ ERV/ ERV DX/ HYDRO KIT/ THERMA V

Key USP

PC Access

Users can control each space efficiently through PC access.



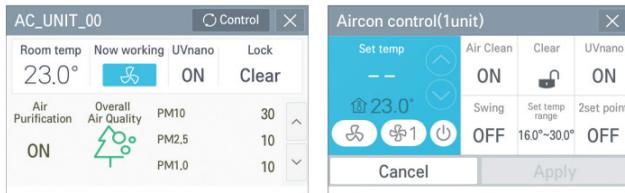
Energy Mode

When using energy mode function, mode changes from cooling to fan and from heating to off are possible. (It is available only for operating indoor unit)



Air Purify Control & Monitoring

Comfort and convenience are major indicators for the effectiveness of an HVAC control solution.



PDI (POWER DISTRIBUTION INDICATOR)

PDI shows distributed power consumption of up to 128 indoor units. Enables overall and indoor power consumption monitoring.

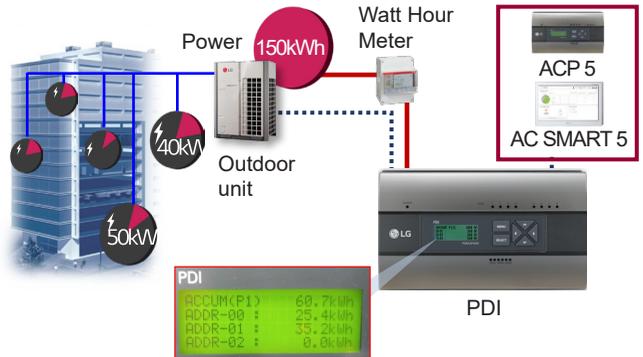


Features

- Overall and indoor power consumption monitoring.
- By connecting LG central control, energy monitoring, energy savings operations and target usage setting functions are enabled.

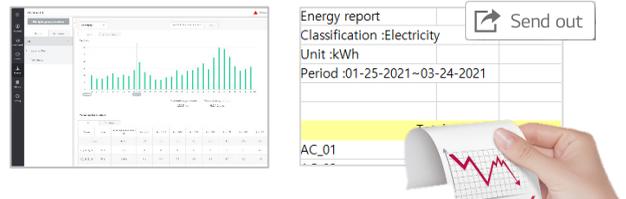
Key USP

Power Consumption Distribution



Energy Monitoring

With LG central control, user can check the power consumption and accumulated power consumption of group/ individual equipment.



ACS IO MODULE

This module can be connected with ACP 5 or AC SMART 5 controller if additional I/O points such as DI/ DO and AI/ AO for 3rd party devices control and monitoring are needed.

Features

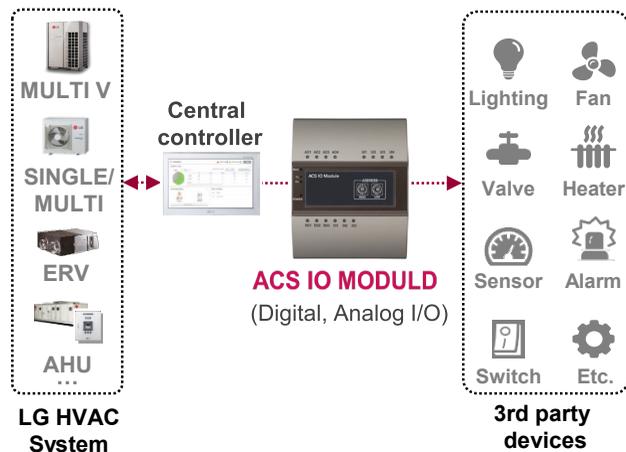


- Interlocking with 3rd party devices and operation scenario with 3rd party devices(with ACS IO MODULE)
- Control coverage expandable (Sensors, Fans, Pumps, Switches ...)
- AC 24V (60Hz/ 500mA)

Key USP

Expandability

LG provides a solution that enables control of 3rd party devices directly or by interlocking with air conditioning units. It can realize simple BMS integration with comfort interface and cost benefits compared to the general BMS. Applicable devices can be expanded using ACS IO MODULE which has digital & analog I/O(input/output).



CLOUD GATEWAY

CLOUD GATEWAY can remotely control up to 16 indoor units through LG ThinQ or can be connected to BECON cloud(TMS).

Features



- Connect to LG ThinQ server and conveniently control/monitor via mobile app.
- 1 CLOUD GATEWAY for one outdoor unit

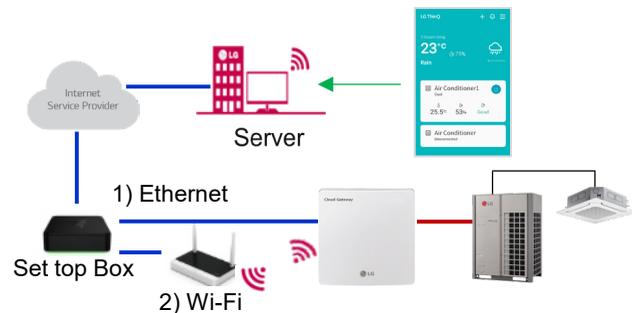
Key USP

Compatibility with All Products

It is compatible with both old and new units due to application of the same connection type with a central controller. More than one indoor unit is able to be connected with a CLOUD GATEWAY. Remote controlling through smartphones is available.

Flexible Connection

Options to choose either LAN or Wi-Fi for a stable connection.



Total Management of LG Products with Simple App.

Via LG ThinQ Application, it can provide easy control and monitoring of the connected indoor units.



MODBUS RTU GATEWAY

Supports connection between LG air conditioner and 3rd party devices using Modbus communication.

Features

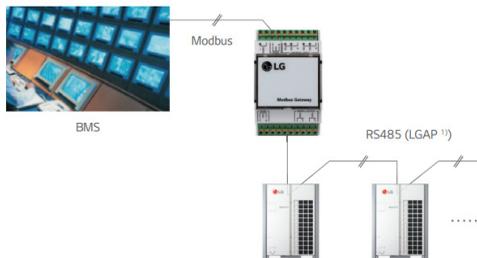


- MODBUS RTU communication with Modbus master controller
- MODBUS RTU slave (RS485)/ 9,600 bps
- Applicable for MULTI V 5, ERV, Heating
- Max. 16 IDUs with single module/ Max. 64 IDUs with 4 modules
- DC 12V (250mA)

Key USP

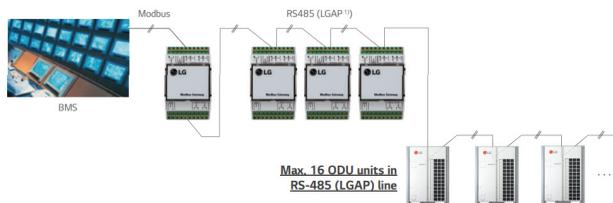
Single Module

Max. 16 indoor units with a single module



Multiple Modules

Max. 64 indoor units with 4 modules in one Modbus communication line.



DELUXE REMOTE CONTROLLER

LG DELUXE REMOTE CONTROLLER provides better customer experience.
(easy to use, energy saving and easy maintenance)

Features



- Installation wizard
- Built-in Wi-Fi with ThinQ capability
- Humidity/ Proximity sensor
- 7-Day scheduling mode
- Home/ Away/ Sleep/ Awake
- Function code search tool FOTA *

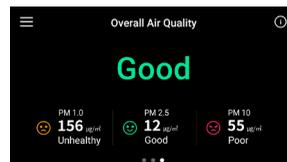
Key USP

Full Touch & Slim Design

LG DELUXE has full touch LCD screen & slim design suitable for the residential application. In addition, user-oriented UX design enhances user convenience.

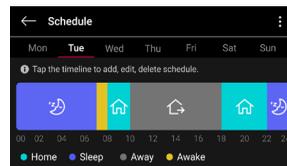
Air Quality Monitoring

LG DELUXE can display air quality status when air purifying device is installed. And it also shows air quality monitoring history by day, week, month and year.

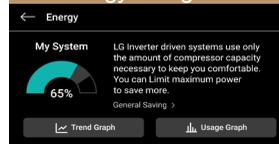


Pre-set Schedule

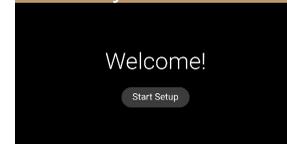
Seven day scheduling with Home/ Away/ Sleep/ Awake modes makes configuration much easier. And seasonal program setting offers more flexibility.



Energy Navigation



Easy Installation



* FOTA (Firmware Over The Air) is a type of technology that receives firmware used in various devices through a wireless network.

STANDARD III REMOTE CONTROLLER

Various indoor units can be easily controlled through the 4.3-inch color screen wired remote controller.

Features



- 4.3" color screen wired remote controller.
- Air conditioning/ heating/ AI/ dehumidification/ ventilation
- Energy monitoring
- Group control Simultaneous control of multiple IDUs with one remote control
- Fine dust concentration display

Key USP

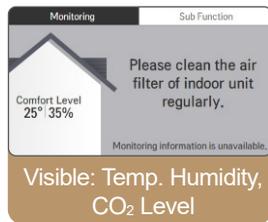
Sleek Design

4.3 inch LCD screen with a luxurious design that matches the interior design well through a simple button layout. Easy for anyone to use.



Healthy Environment

Displays temperature/humidity and CO₂ information for user convenience.



Energy Management

Energy monitoring, and daily/ monthly/ yearly energy usage targets are set and managed.



Wi-Fi MODEM

Control your air conditioner by using the Android or iOS smart phone (ThinQ App.).

Features

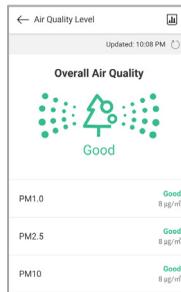


Key USP

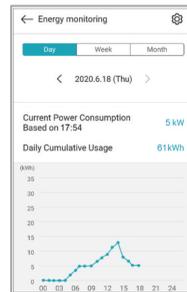
Mobile Remote Control

Wi-Fi MODEM enables users to control indoor units remotely via LG ThinQ.

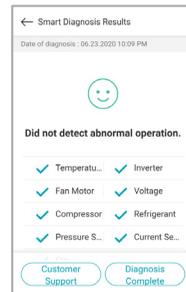
Air Quality Monitoring



Energy Monitoring



Smart Diagnosis for SVC



DRY CONTACT

DRY CONTACT is a product that is controlled using various external contacts.

Features



LG DRY CONTACT is a device connecting between an indoor unit and an external device to control various functions.

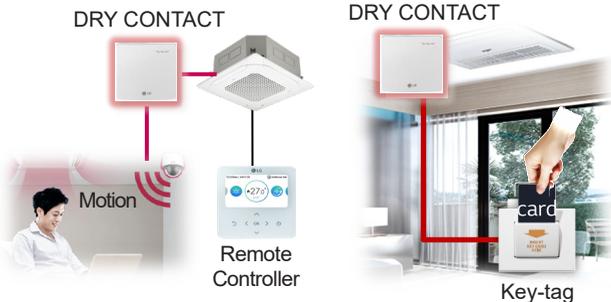
Key USP

Room Control

It provides contact control of indoor units in the room using sensors.

Motion Detect Sensor

Key-tag Sensor



3rd Party Devices Interlock

Hotel room control (external devices) is possible through Modbus communication.



*BMS : Building Management System
*RMS : Room Management System

AHU COMM. KIT

A solution to connect LG's high efficiency system to the DX coil of an air handling unit for maximum energy savings.

Features



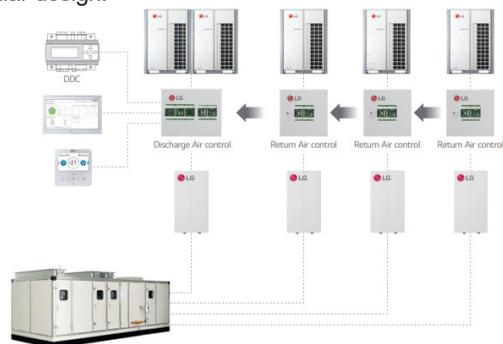
- Diverse options for control (LG individual/central controller and DDC)
- Modbus protocol embedded
- Large capacity EEV KIT, ~168kW
- Wider capacity control range, 10~100%

Key USP

Expandable System Design

LG AHU system can be a suitable solution for various sites due to its application flexibility and wide range of line up with large capacity models.

According to the required capacity, a single or multiple modules combination is possible due to the AHU COMM. KIT modular design.



AHU CONTROL KIT

To control LG's heat source and AHU components.



Features

It controls AHU parts such as fans, dampers, and etc.

BECON controller (BMS DDC)

BECON controller(DDC) is a building direct digital controller. It is an intelligent control device with built-in industrial microprocessors consisting of CPU, memory, communication ports, control point connections that connect to actuators and sensors. It communicates with the central monitoring panel, and monitor and control the environment and machinery in the building.

Features

- Connection with HVAC, Electricity, Lighting, etc.
- LG Equipment specific logic control and monitoring
- Web server embedded for ACS
- Open protocol embedded (BACnet, Modbus)
- Stable networking between server and controllers
- Expandability with max. 30 IO modules
- No additional communication devices for LG system air-conditioner



Key USP

System and Logic Diagnosis

BECON controller can test logics virtually and diagnose the system by itself. It can view the status of the system-Communication, CPU/memory, control point condition, etc.

Expandable Module Structure

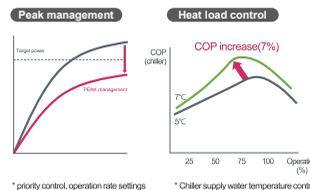
Combination of modular controller, compact controller and expansion modules helps to create an economic design.



Built-in Energy Logics

Since the HVAC energy logics are embedded, BECON controller can reduce building energy consumptions

- Priority control, operation rate settings
- Chiller supply water temperature control, etc



BECON manager (BMS CCMS)

BECON manager is a building central control and monitoring system. Communication with the building controllers allows for the central administrator to monitor and control the operation status of various facilities in the building.

Features

- Various equipment integration and operation: HVAC, Electricity, Lighting, etc.
- Energy management with main heat source equipment
- Separate zone control and schedule operation
- Open protocol embedded (BACnet, Modbus, OPC, etc.)
- Remote control and alarm, SMS, etc.
- Convenient user interface
- Innovative graphic design



Key USP

Integrated Monitor

Check the key contents of each user at a glance. Customized visualization.



Timeline

Compare the control point trend with space info and easily identify the issues accurately.



3D Space Explorer

Easy inter-floor and screen shift function without menu navigation, which facilitates optimized exploration and quick control (Building > Floor > Equipment > Drawing)



Combined Analysis

Cross-search on one screen for all control point to identify all equipment with issues. Fast conditional search, identify results for possible issues, and batch.



BECON energy (BEMS)

BECON energy is a building energy management system. It is a management system that monitors the energy usage of various facilities in the building and controls the facilities in conjunction with the building mechanical equipment, power control system, and energy measurement equipment.

Features



- Management based on the overall building energy status (consumption, storage, and generation)
- Advanced energy estimation based on equipment modeling technique
- Autonomous energy saving logics embedded
- Monitoring of heat source equipment's energy efficiency
- Abnormal energy usage pattern alarm
- User selective energy logic adoption

Key USP

Integrated Monitor

Check the key contents of each user at a glance.
Customized visualization.



Energy Scan

Scan by heat sources, systems, spaces, time, and equipment.
Trend chart with various time.
(minute, hour, day, month, year, etc.)



Diagnosis & Analysis

Find problematic spaces and facilities by sensing abnormal patterns of energy usage based on statistic data by space and time.



Prediction & Control

Energy saving simulation based on energy consumption prediction and one-click operation.



CHILLER

- CENTRIFUGAL
- SCREW
- INVERTER SCROLL
- ABSORPTION
- FCU

2-STAGE CENTRIFUGAL

CENTRIFUGAL CHILLERS are products that use large capacity centrifugal compressors, which can be connected to multiple indoor units through chilled water pipes and applied to large commercial buildings and factories. The system efficiency is improved by 2-stage compression/ expansion cycle and stable operation is possible due to surge control based on machine learning.



DOL: Direct On Line
Y-D: Y-Delta
SS: Soft Starter
VSD: Variable Speed Drive

Features

- Water-cooled (Air-cooled, H/P available)
- 200~3,000 RT; 703~10,549 kW; 250~3,753 HP; 2,400~36,000 kBtu/h (1 Comp. Model)
- 1,500~5,000 RT; 5,274~17,581 kW; 1,877~6,255 HP; 18,000~60,000 kBtu/h (2 Comp. Model)
- 380V~13.8kV(Voltage)
- Starter/ DOL/ Y-D/ Reactor/ SS/ VSD
- Medium-to-Large Commercial/ Industrial
- R-134a
- Modbus/ BACnet/ TCP-IP
- AHRI Certificate

Key USP

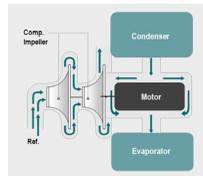
Wide Capacity Range

Wide capacity range that varies from as small as 200RT to as large as 5,000RT.



Semi-Hermetic Motor

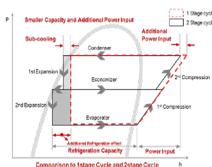
Refrigerant leakage is under 0.1% per year(Open type 1~2%) and Refrigerant-cooled motor(Wiring Temp. under 30 °C) increases motor efficiency. And it doesn't need machine room cooling.



High Efficiency

High COP by applying 2-stage cycle and economizer. And wide operation range with variable diffusers.

Stable operation by liquid level controls for condenser and economizer.



OIL-FREE CENTRIFUGAL

Technology of levitating rotating shaft using magnetic bearings is applied to OIL-FREE CENTRIFUGAL CHILLERS. Components related to oil supply and reclaiming are removed, which leads to reducing maintenance points and service issues. High compressor efficiency can be achieved because there is no oil friction loss on bearings.

Features



- 200~1,100 RT; 703~3,868 kW; 250~1,376 HP; 2,400~13,200 kBtu/h (1 Comp. Model)
- 400~2,200RT; 1,407~7,736 HP; 500~2,752 HP; 4,800~26,400 kBtu/h (2 Comp. Model)
- 380V~560V(Voltage)
- VSD/ Direct-Drive (No Increasing gear)
- On-Line UPS
- DGR (Discharge Gas Recirculation)
- R-134a
- Modbus/ BACnet/ TCP-IP
- AHRI Certificate

Key USP

Wide Capacity Range

A wide lineup that ranges from 200RT to 2,200RT.



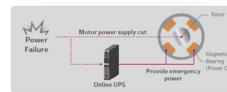
Magnetic Bearing Technology

In-house design and manufacturing. (All competitors: out-sourced)



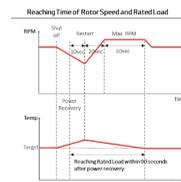
On-Line UPS

Stable power supply to bearings during black-out and protect bearings.



Quick Start

It can reach rated load within 90 seconds after power recovery and buffer tank is not required. Suitable for sites where stable operation is required such as IDC(Internet Data Center).



SCREW

SCREW CHILLER is using screw compressors driving refrigeration cycle through compressed refrigerant in between a pair of rotating screws. Screw is a volumetric compressor and commonly used for low temperature storages and process cooling at factories due to its wide operation range and stable part load operation.

Features

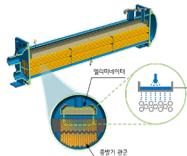
- 80~400 RT; 281~1407 kW; 100~500 HP; 960~4800 kBtu/h (Water-cooled, H/P Optional)
- 80~500 RT; 281~1,758 kW; 100~656 HP; 960~6,000 kBtu/h (Air-cooled)
- Starter/ Y-Delta
- Load Control/ Step/ Stepless
- Power Connection: Multi/ Single
- R-134a
- Modbus/ BACnet/ TCP-IP
- AHRI Certificate



Key USP

Falling Film Evaporator

Saving refrigerant amount and improving heat transfer efficiency for annual energy cost saving.

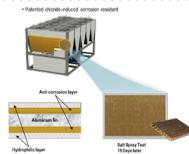


Various Application (Water-cooled)

It is applicable with various products for low temperature (-15 °C), ice-storage, and Heat Pump (55 °C)

Gold-Fin Coating (Air-cooled)

Corrosion resistant for condenser fin (Passed 1,000 hrs Salt spray test)



V-Shape Condenser (Air-cooled)

Improves efficiency due to the increased heat transfer area (10% HEX surface area increase compared to W-shape with the same volume)



AIR-COOLED INVERTER SCROLL

AIR-COOLED INVERTER SCROLL CHILLER is a high energy efficiency system that provides cooling and heating for small & medium sized buildings.

Features

- Air-Cooled Scroll, Heat Pump/ Cooling Only
- Cooling 65~222 kW; 23~79 HP; 18~63 RT; 222~757 kBtu/h
- Heating: 70~246 kW; 25~57 HP; 20~70 RT; 239~840 kBtu/h
- R410A
- Cooling: -15~48 °CDB
- Heating: -30~35 °CDB
- Air Conditioning System, Swimming Pool/ Bath Facility Process Cooling Water, Farm(fruit, veggie, fish, pig)



Key USP

Inverter Technology

It has improved partial load operation and wide operation frequency (Range 30~127 Hz)



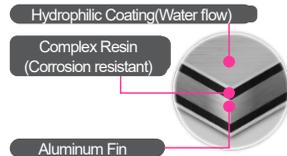
Smart Oil Management

Compressor reliability and efficiency are improved with an oil sensor that allows oil balancing and oil return.



Black Fin

Exclusive "Black Fin" heat exchanger is designed for improved corrosion resistance.



Backup Operation

If one compressor or one cycle has a trouble or needs to be repaired, backup operation helps the whole system to operate continuously.



WATER-COOLED INVERTER SCROLL

It is a water-cooled chiller product. It can be used for heating and cooling of buildings, hot water supply, and process water through the cold/hot water discharged from the product, and is mainly applied in medium-sized to large commercial buildings.



Features

- 23~80 RT; 80~280 kW; 29~100 HP; 276~960 kBtu/h
- R410A
- Cooling: 15~50 °CDB, Outlet Water Temp. 5~25 °C
- Heating: 3~25 °CWB(-10~25 °CWB with antifreeze), Outlet Water Temp. 20~57 °C
- Medium-to-Large Commercial/ Industrial
- Heating & cooling/ Floor heating/ Hot water supply

Key USP

Inverter Compressor

Energy saving with high partial load efficiency.

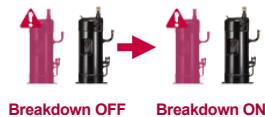


Inverter Comp.

Efficiency

Compressor Backup Operation

Continuous operation even during repairs and inspections due to the backup operation.



Breakdown OFF

Breakdown ON

Variable Flow Logic Imbedded

It is possible to reduce the system operating cost through variable flow operation according to the indoor load.



Inverter Pump

Variable Flow Valve

User-oriented Touch Controller

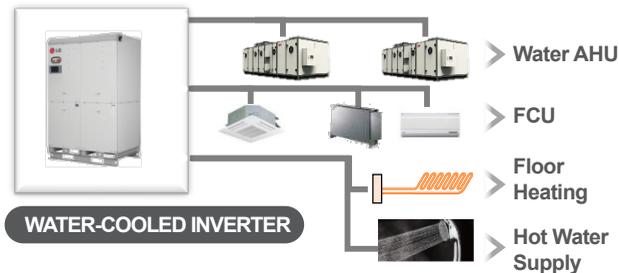
Monitoring, control, and frequency setting are provided for convenient operation.



HMI Controller

It is based on WATER-COOLED INVERTER SCROLL CHILLER in Korea.

Diagram



Application



Office Buildings

Buildings that aim to reduce heating and cooling energy.



Industrial Facilities

Factories and industrial facilities that require cold & hot water supply for the production process.



Gardening Facilities

Gardening facilities that aim to reduce heating and cooling operating costs.



Swimming pool & Bath facilities

Facilities that need stable hot water supply.

ABSORPTION

It is non-electrical and has a different refrigeration cycle from chillers that run compressors electrically. There are direct-fired, steam-driven and hot water-driven types, which are used in areas where electricity rates are relatively high. It is an environment-friendly product using water as a refrigerant and LiBr as an absorber. Purge system may be required due to lower system pressure than ambient.

Features

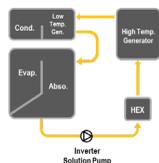


- Direct-fired (LNG/ LPG/ Bio Gas)
- Steam-driven (4~8 bar)
- Hot water-driven (95 °C)
- Refrigerant/ Water, Absorber/ LiBr
- Auto-purge unit
- Modbus/ BACnet/ TCP/IP
- AHRI Certificate

Key USP

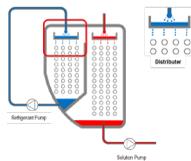
Inverter Absorber Pump

Inverter pump is available due to in-series configuration system (Part load efficiency increased)



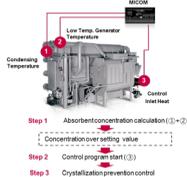
Tray Type Distributor

Unlike competitors that use nozzle type (requires spray pump), LG has the tray-type distributor. So, there is no need for a pump and no risk of nozzle clogging.



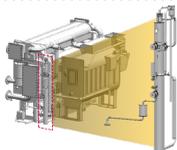
Crystallization Prevention

Control concentration of absorbent (Control heat input, it provides the stable part load operation)



Auto-Purge Unit

It releases non-condensable gas automatically, and prevents cooling capacity decrease and operation cost increase.



FCU (CASSETTE TYPE)

FCU with not only reliable cooling & heating performance but also advanced air purification technology provides a more pleasant and clean indoor environment.

Features



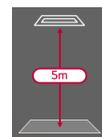
- 2.4~4.7 kW; 0.9~1.7 HP; 0.7~1.3 RT; 8.2~16 kBTu/h (1WAY)*
- 4.6~5.1 kW; 1.6~1.8 HP; 1.3~1.4 RT; 15.7~17.4 kBTu/h (2WAY)*
- 4.1~13.0 kW; 1.46~4.6 HP; 1.2~3.7 RT; 14~44.4 kBTu/h (DUAL VANE 4WAY)*
- Steel cabinet, Steel control box
- BLDC motor
- Ø 7.0 Copper tube heat exchanger, aluminum fin
- Drain pump imbedded (Head 600~800mm)
- On/ Off and variable valve control

* Rated cooling capacity condition based
 - Inlet/ Outlet water temp.: 27 °CDB/ 19 °CWB
 - Inlet/ Outlet water temp.: 7 °C/ 12 °C

Key USP

4Way Dual Vane

The dual vane creates a pleasant and comfortable space by delivering an appropriate airflow for the space. High ceiling winds provide a warm airflow all the way down to the floor.



Variety of Control Configurations

A variety of remote controls and central controllers can be used to configure controls suitable for each site. Modbus communication contacts are provided by default, allowing various external controllers and control configurations.



Air Purification(4WAY, 1WAY)

It cleans the indoor air through powerful 5-step air purification.



Wi-Fi

With LG ThinQ, you can conveniently control the environment anytime and anywhere.



FCU (DUCTED TYPE)

It is used to provide heating and cooling for a wider space, and can be applied to various spaces with its compact size.



Features & USP

- 3.9~6.6 kW (LOW STATIC)*
- 5.6~14.0 kW (MID/HIGH STATIC)*
- BLDC motor
- Ø 7.0 Copper tube heat exchanger, aluminum fin
- Drain pump imbedded (head 700mm)
- Air volume adjustable in response to changes in external static pressure (Standard external static pressure: 6 mmAq)
- Space saving with compact size
- Modbus communication contact point provided
- Wi-Fi control function

* Rated cooling capacity condition based
 - Inlet/ Outlet water temp.: 27 °CDB/ 19 °CWB
 - Inlet/ Outlet water temp.: 7 °C/ 12 °C

FCU (FLOOR STANDING TYPE)

Mainly used for the purpose of preventing cold draft of the outer peripheral and it is suitable for remodeling construction with the compact size.



Features & USP

- 2.9~5.7 kW (Basic, exposed installation)*
- 2.9~5.7 kW (Concealed installation)*
- Ø 7.0 Copper tube heat exchanger, aluminum fin
- Natural drainage
- Space saving by minimizing body width
- Modbus communication contact point provided
- Wi-Fi control function

* Rated cooling capacity condition based
 - Inlet/ Outlet water temp.: 27 °CDB/ 19 °CWB
 - Inlet/ Outlet water temp.: 7 °C/ 12 °C

RAC

- WALL MOUNTED
- WINDOW
- PORTABLE
- HPWH

WALL MOUNTED

WALL MOUNTED is an air-cooled single product. It can be connected to one outdoor unit through the refrigerant pipe, and is mainly applied to residences.



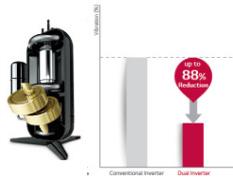
Features

- Air-cooled, Cooling only/ Heat pump
- 1~3.5HP; 2.5~10kW; 9~36kBTU/h; 0.7~3RT
- R410A/ R32
- Cooling 10~54 °CDB
Heating -15~18 °CWB
- Residence/ Light Commercial
- Heating & cooling/ Dehumidification

Key USP

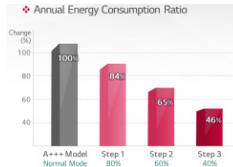
DUAL Compressor

DUAL inverter compressor extended the operation range and improved compressor vibration.



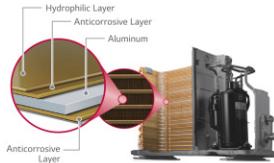
Active Energy Control

The maximum power consumption limit function allows customers to directly control power consumption.



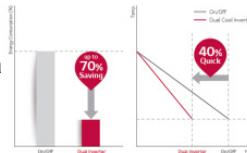
Gold Fin

Exclusive "Gold Fin" heat exchanger is designed for improved corrosion resistance.



High Efficiency & Energy Saving

LG's excellent technology achieves a world class high efficiency with dual inverter compressor.



WINDOW

WINDOW is an air-cooled packaged product. It is a product installed on a window or provision, and is mainly used in residences.



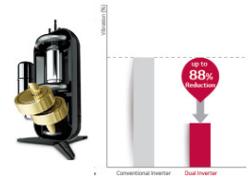
Features

- Air-cooled, Cooling only
- 0.5~2.5HP; 1.5~7.1kW; 5~24kBTU/h; 0.4~2RT
- R410A/ R32
- Cooling 18~48 °CDB
- Residence/ Light Commercial
- Cooling/ Dehumidification

Key USP

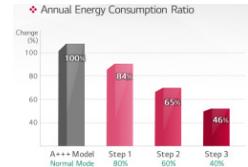
DUAL Compressor

DUAL inverter compressor extended the operation range and improved compressor vibration.



Active Energy Control

The maximum power consumption limit function allows customers to directly control power consumption.



ThinQ™

With the ThinQ™ app, you can control your LG air conditioner, no matter where you are.



High Efficiency & Energy Saving

LG's excellent technology achieves a world class high efficiency with dual inverter compressor.



PORTABLE

PORTABLE is an air-cooled packaged product. There is no need to connect pipes and it is mainly used in residences.



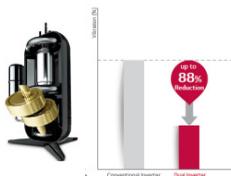
Features

- Air-cooled, Cooling only
- 1HP; 2.9kW; 10kBtu/h; 0.8RT
- R32/ R290
- Cooling 18~32 °CDB
- Residence/ Light Commercial
- Cooling/ Dehumidification

Key USP

DUAL Compressor

DUAL inverter compressor extended the operation range and improved compressor vibration.



Auto Evaporating System

Continuous operation is possible without emptying the water tank by using the condensate automatic drying function.



Easy Storage

Compact size and moving wheel application make it easy to store and move the product during non-use season.



Auto Cleaning

It can be operated hygienically due to the automatic drying of the inside of the air conditioner after cooling.



HPWH

HPWH is an air-cooled packaged product. In order to increase efficiency, an inverter heat pump is used, and if necessary, an electric heater is used to supply fast and economical hot water.



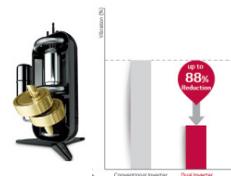
Features

- Air-cooled, Heat pump/ Electric Heater
- 200L/ 270L
- R134a
- Operation Temperature 2~48 °CDB
- Residential
- Supply Hot water

Key USP

DUAL Compressor

DUAL inverter compressor extended the operation range and improved compressor vibration.



Excellent Durability

Enamel coating inside water tank meets Germany Enamel Standard DIN4753 and it provides 10 years of corrosion resistance.



ThinQ™

With the ThinQ™ mobile application, you can control your LG air conditioner, no matter where you are.



20% More Hot Water Supply

Dual inverter compressor enables maximizing the power of heat pump. And it can provide up to 20% more hot water.(Turbo Mode)





AIRCARE

- PURICARE 360°
AIR PURIFIER
 - PURICARE
AERO TOWER
 - CEILING FAN
- 

PURICARE 360° AIR PURIFIER

PURICARE 360 AIR PURIFIER can draw in pollutants from all around at 360 degrees, so it is possible to clean the air evenly and effectively.



Features

- Air Purifier
- Applicable Area : 1,076 ft²/ 100m²
- Booster/ Dual/ Single/ Auto Mode
- Auto/ Low/ Mid/ High/ Turbo (Air flow)
- Power Consumption/ up to 70W
- High Efficiency Dust & Allergen Collection Filter
- Anti-Bacterial / Anti-Viral
- Harmful Gas Care Filter

Key USP

360 Degree Air Purification

With brand-new aerospace-grade fan technology, dust is collected from all around at 360 degrees with a wider clean area.



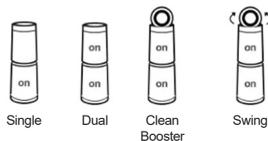
Clean Booster

Clean Booster delivers clean air up to 7.5m away, cleaning air up to 24% faster.



Auto Mode

It is a smart function that automatically changes the operation mode according to the total cleanliness detected by a sensor.



PM 1.0 Sensor

It detects even finer dust particles of less than 1 micrometer in diameter with the PM 1.0 Sensor.



PURICARE AERO TOWER

PURICARE AERO TOWER is a product that can be used by changing the temperature of the purified air to warm or cool according to the user's lifestyle.



Features

- Air Purifier Fan
- Applicable Area : 18.4 m²
- Warm air mode/ Fan mode
- Fan Speed: 10 Steps (Warm), 12 Steps (Cool)
- Power Consumption: 1,500W(Warm), 40W(Cool)
- High-Efficiency Dust Collection/ Harmful Gas Removal Filter with UVnano Technology

Key USP

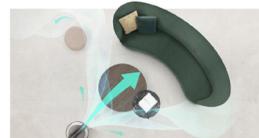
Fast Warm-Up with Clean Air

By adjusting the air volume in 10 steps, the target temperature can be set from 16 to 30°C, raising the room temperature by 5°C in 9 minutes in a space of about 19.2m².



Comfortable Breeze

The fan function, which can adjust the wind speed in 12 steps, sends wind through its wide air outlet of 1.5m and lowers body temperature by 1°C in 280 seconds.



2-Way Air Flow Mode

According to the customer's lifestyle, the air guard sticks out and the clean air blown to the front is changed to be blown up to cover more even more space.



Low Noise

Like the quiet but refreshing wind of nature.



CEILING FAN

CEILING FAN is a product that circulates indoor air to improve heating and cooling operation efficiency and provides comfortable indoor air through airflow circulation.



Features

- Air Flow Rate: 200m³/min
- Fan Speed: 4 Steps
- Power Consumption : 26.3W

Key USP

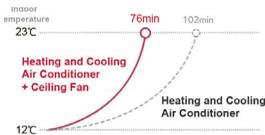
Pleasant Four Seasons

With the large wings rotate slowly and the upper/lower airflow circulation, it provides a comfortable air to the entire indoor space.



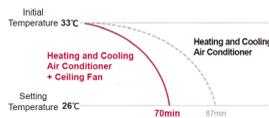
Heating Speed Improvement

When operating in conjunction with the air conditioner, it is possible to reach the target temperature 25% faster and reduce power consumption by 13% .



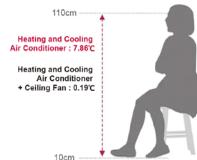
Cooling Speed Improvement

When operating with the A/C, the target temperature is reached 19% faster and the power consumption is reduced by 8% compared to operating the air conditioner alone.



Reduced Temperature Difference

By reducing the temperature difference between the top and bottom by air circulation, the room temperature can be maintained evenly.



ESS

- ESS HOME
- ESS COMMERCIAL

ESS HOME (for EU)

Features



- High Power, Large Capacity
- Three Phase DC-Coupled Type (50Hz)
- 2170 Cylindrical Li-Ion Battery
- PCS Rated AC Power: 8/ 10 kW
- Usable Battery Capacity: 10.7/ 14.2 kWh
- Battery Capacity Combination with Two Packs: 10.7/ 14.2/ 21.4/ 28.5 kWh
- Operation Temp.: -10~45 °C (Charge)
-10~45 °C (Discharge)
- Size (W x D x H, mm) & Weight (kg):
(PCS) 450 x 599 x 210, 34kg
(Battery Pack) 698 x 1,073 x 205, 112/ 138kg

Key USP

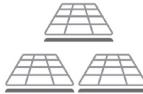
One Brand, One Warranty

LG is a single manufacturer of both the battery and PCS.



Using More Sunlight with 3 MPPTs

With flexible 3 MPPTs, LG ESS HOME 8 & HOME 10 can capture more energy for a multi-angled roof.



Large Storage Capacity

No additional devices are required for expanding usable capacity (10.7/14.2/21.4/28.5kWh).



Compatibility with LG THERMA V

Expertly designed with compatibility in mind. Plug & Play with SG Ready heat pump.



ESS HOME (for US)

Features



- All-In-One (PCS+Battery)
- Single-Phase AC-Coupled Type (60Hz)
- 2170 Cylindrical Li-Ion Battery
- PCS Rated AC Power: 7.5 kW
- Usable Battery Capacity: 14.4 kWh
- Up to four ESS Connections: 30 & 57.6kWh
- Operation Temp.: -10~45 °C (Charge)
-10~45 °C (Discharge)
- Size (W x D x H, mm) & Weight (kg):
(ESS) 698 x 1,260 x 205, 163kg
(SE-Box) 500 x 600 x 178, 25kg

Key USP

Smart Technology for a Smart Home

The integrated battery not only stores energy, but it can also be connected with all your LG home appliances on LG ThinQ



Secure & Sustainable

LG ESS HOME 8 eliminates the need for emergency backup diesel generators with cleaner solar energy. And in case of power outages, it can provide clean battery backup power.



Powerful & Modular

You can connect up to four LG ESS HOME 8 systems to store and supply up to 57.6 kWh of usable energy.



Easy Installation

For installers, the installer app. provided in the 7" touch LCD HMI enables easy set up and testing without the need for additional equipment.



ESS COMMERCIAL (for US)



Features

- ESS PCS for Commercial Building
- Three-Phase AC-Coupled Type (480V, 60Hz)
- Peak Efficiency: 98.4%
- Rated AC Power: 250 kW
- Battery Input Voltage Range: 750~1,000Vdc
- Up to four ESS PCS Operation
- Operation Temp.: -30~50 °C
- IP55
- Size (W x D x H, mm) & Weight (kg): 1,000 x 760 x 1,800, 500kg

Key USP

Robust Design & Reliable System

Wide operation temperature range (-30 to 50 °C), earthquake resistant structure & architecture and totally sealed cabin for protecting electronics against dust & moisture.



Virtually Seamless Back Up Functionality

It has BLACK START function for power backup & safety operation, and Seamless power transfer & system response time (20ms)



User-Friendly HMI/ LCD Touch Panel

It provides a comfortable performance viewer with the 7-inch touch screen. Also, parameter setting & mode control are available.



Compliance & Certification

- UL924, UL1741SA & UL1741SB
- CA Rule 21 Phase 1,2,3
- Hawaiian Rule 14H



HEP

- HEP (HOME ENERGY PACKAGE)

HEP (HOME ENERGY PACKAGE)

LG provides a complete solution for nZEB (nearly zero energy house) by interlocking LG ESS and LG AWHP. With LG HEP, customers can enjoy a comfortable and sustainable home while saving electricity bills.

Changes that we faced

With changes in government policies, environment, economy, and customers' needs, the approach to home energy management also should be changed to be more smart and unique.



Composition

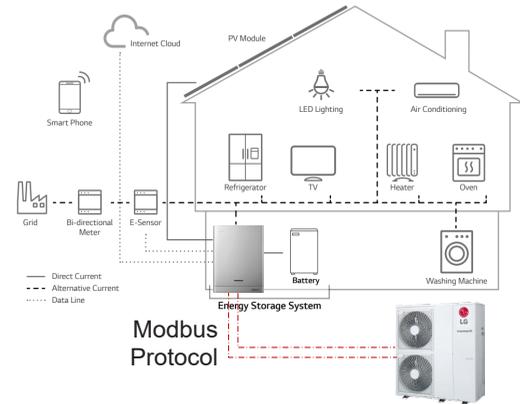


- 1** PV SOLAR MODULE (3rd party)
- 2** ENERGY STORAGE SYSTEM (ESS)
- 3** AIR-TO-WATER HEAT PUMP (AWHP)



Interlocked Operation

LG HEP has a smarter plan for surplus electricity. In addition to the excellence of LG AWHP and ESS each, based on the energy level of ESS, AWHP changes its target temperature. So, the surplus power from PV can be stored as thermal energy (hot water).



Easy Installation

Because it is "Interlock Operation Ready", only 2 wire connection is required between LG PCS and LG AWHP.

Easy Control & Monitoring

Through Modbus Protocol, LG ThinQ easily can monitor the LG AWHP & ESS status.

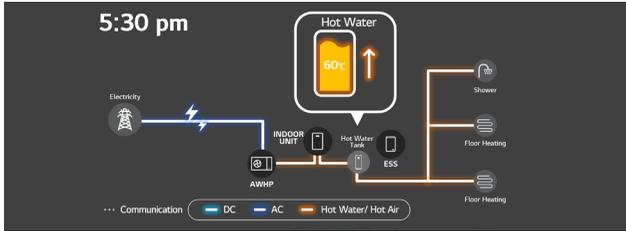


LG's Technical Support for Partners

- Selecting products for installation (ESS/ AWHP)
- Profitability analysis
- Execute energy simulation, consulting and report download

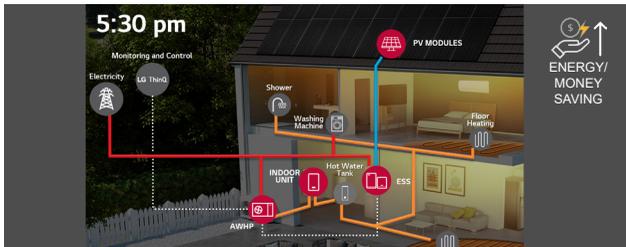
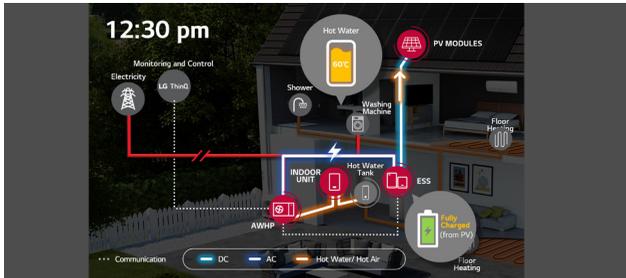


Why LG HEP? <Conventional System>



Conventional system sells the surplus electricity to the grid for FIT. And family members use charged energy when they come back home. So it uses electricity from the grid to heat up the heat pump.

<LG HEP Solution>



With the surplus electricity, LG AWHP can be automatically turned on. This will minimize the use of electricity.

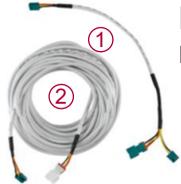
With LG Home Energy Package, the house is ready to provide comfort 'without using extra electricity'.

APPENDIX

- ACCESSORIES
- REFERENCE SITES
- SAC TERMS

GROUP CONTROL WIRE

It is able to control up to 16 units of IDU and ERV with one wired remote controller, so you can save initial cost and enjoy a neat interior.

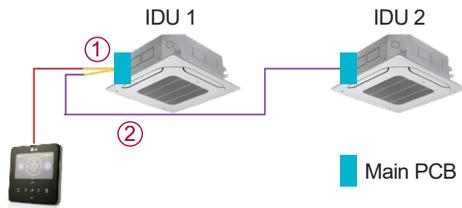


Model Name Applicable Model

PZCWRCG3

- SINGLE SPLIT IDU
- MULTI SPLIT IDU
- MULTI V IDU
- ERV, ERV DX

Installation Scene



MULTI-TENANT POWER MODULE

It is an auxiliary power supply device which Indoor unit's maintain communication and EEV control when main power supply is cut.

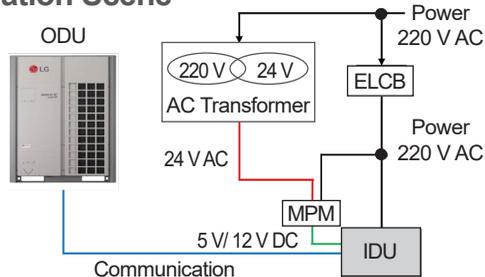


Model Name Applicable Model

PINPMB001

- MULTI V IDU

Installation Scene



REFRIGERANT LEAKAGE DETECTOR

It senses refrigerant leakage and when the refrigerant concentration exceeds over 6,000ppm not only stopping the Indoor unit operation but also giving a alarm using buzzer with DRY CONTACT and an LED sensor.

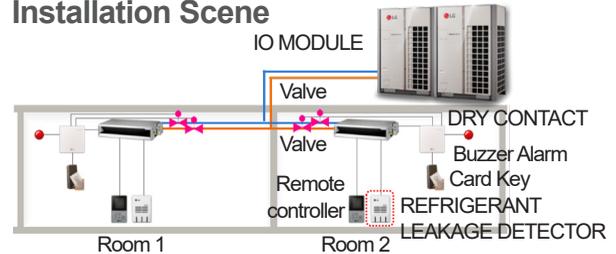


Model Name Applicable Model

PRLDNVS0

- MULTI V i
- MULTI V 5
- MULTI V WATER 5

Installation Scene



ROOM TEMPERATURE SENSOR

It detects the exact room temperature instead of indoor unit's air temperature sensor.

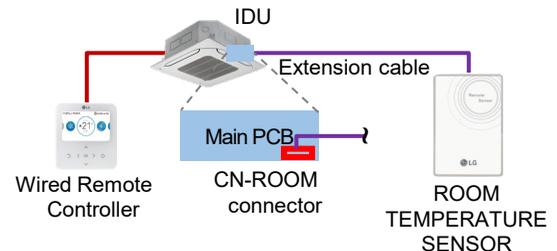


Model Name Applicable Model

PQRSTA0

- All types of IDUs

Installation Scene



VARIABLE WATER FLOW CONTROL KIT

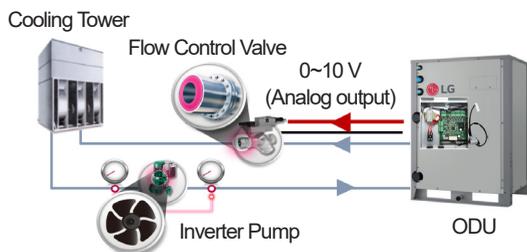
It can be applied to save pump operation power by optimizing water flow rate by interlocking between electric valve and MULTI V WATER 5 operation.



Model Name Applicable Model

PWFCKN000 • MULTI V WATER 5

Installation Scene



LOW AMBIENT KIT for MULTI V i & 5

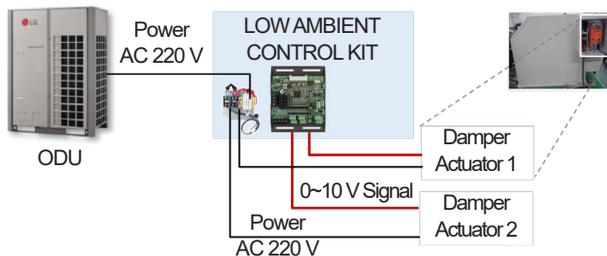
It allows cooling operation down to -25 °C by controlling damper.



Model Name Applicable Model

PRVC2 • MULTI V i
• MULTI V 5

Installation Scene



REFERENCE SITES

Residence



CANADA

Lumina Brentwood
MULTI V 5 1,170HP



SAUDI ARABIA

Roshn Sedra
MULTI V 5 24,303 HP



VIETNAM

VGP Phase II
MULTI SPLIT 11,538 Units



SPAIN

Marina Living 4th Phase
MULTI V S R32 316 HP
THERMA V 56 Units



UAE

1365 Baniyas Villa
MULTI V 5 14,088 HP



AUSTRALIA

Aurora Melbourne Central
MULTI V WATER IV
1,765 HP

For more information, please contact to LG Air solution HQ.

REFERENCE SITES

Government & Corporate Building

**USA**

Oklahoma Veterans
Center
MULTI V 5 448 RT

**LITHUANIA**

Acropolis Building 4
MULTI V 5 938 HP

**CHINA**

济南轨道交通
MULTI V 5 PRO 2,100 HP

**BRAZIL**

Esther Tower
MULTI V WATER 5
4,436 HP

**CHILLE**

Territoria Apoquindo
MULTI V WATER 5
1,086 HP

**IRAQ**

Mosul City Hall
MULTI V 5 TROPICAL
2,966 HP

Hospitality

**USA**

Hilton Oceans 16
MULTI V 5 1,800 RT

**COLOMBIA**

Clinica Puerta de Oro
SINGLE SPLIT 1,600 HP

**KAZAKHSTAN**

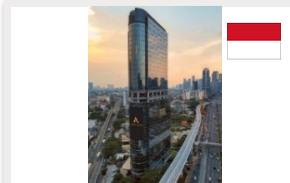
Costa Navarino Bay
MULTI V 5 H/R 1,213 HP

**SAUDI ARABIA**

Formula 1
MULTI V 5 958 HP
SINGLE SPLIT 235 HP

**ISRAEL**

Maccabi Healthcare
Services (Ramat Gan)
MULTI V 5 3,768 HP
MULTI V S 1,176 HP

**INDONESIA**

Mercure Jakarta Gatot
Subroto
MULTI V 5 1,676 HP

REFERENCE SITES

Factory & Power Plant



USA

Harvest Phase 2 Indoor Grow
MULTI V 5 876 RT



POLAND

Zalando Logistic
MULTI V 5 4,508 HP



KAZAKHSTAN

Aktogay Mining Plant
MULTI V 5 1,264 HP



MEXICO

LS Automotive Plant
MULTI V 5 490 HP
MULTI V S 105 HP



HUNGARY

SK Innovation Battery Factory Phase.2
MULTI V 5 1,745 HP



SUDAN

BAPCO
MULTI V 5 1,364 HP

Education



HUNGARY

Hungarian University of Sports Science
MULTI V 5 491 HP
THERMA V 265 kW



PORTUGAL

Nova School of Business & Economics
MULTI V S R32 316 HP
MULTI V 5 796 HP



PERU

SENATI
MULTI V 5 1,290 HP



CHINA

长方半导体照明有限公司
MULTI V 5 1,360 HP



BAHRAIN

Kings School
MULTI V 5 3,174 HP



EGYPT

Galala University
MULTI V 5 13,590 HP

REFERENCE SITES

Retail

**USA**

ALDI
MULTI V 5 876 RT

**SERBIA**

Retail Shops Delhaize
MULTI V 5 838 HP
MULTI V S 577 HP
SINGLE SPLIT 93 HP

**NORTH MACEDONIA**

Skopje East Gate Mall
MULTI V 5 4,028 HP

**EL SALVADOR**

Torre Presidente
MULTI V 5 2,730 HP

**QATAR**

Al Rawabi Hypermarket
MULTI V 5 1,958 HP

**CAMBODIA**

AEON Mall
MULTI V IV 4,500 HP
MULTI V 5 1,500 HP

Public Facility & Special Purpose

**USA**

Inglewood SoFi Stadium
MULTI V 5 & MULTI S
2,760 HP

**EQUATORIAL GUINEA**

BATA International Airport
MULTI V 5 1,862 HP

**INDIA**

Delhi Metro
MULTI V 5 2,572 HP

**BRAZIL**

Estação Pinacoteca
MULTI V 5 408 HP

**QATAR**

New Naval Base
MULTI V 5 9,422 HP

**BANGLADESH**

Mosque of Haji Camp
MULTI V 5 PRO 618HP

SAC TERMS

No.	Terms	Description
1	ACS	Air-conditioning Control System
2	AHRI	Air conditioning, Heating, and Refrigeration Institute
3	AHU	Air Handling Unit
4	AI	Analogue Input
5	AO	Analogue Output
6	ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
7	AWHP	Air to Water Heat Pump
8	BD unit	Branch Distribution unit/ Distributor Box
9	BECON	Building Energy CONTROL
10	BEMS	Building Energy Management System
11	BLDC Motor	BrushLess Direct Current Motor An electric motor powered by a direct current voltage supply and commutated electronically instead of by brushes like in conventional DC motors.
12	BMS	Building Management System
13	Btu/h	BTU = British Thermal Unit $3.412 \text{ kBtu/h} \approx 1 \text{ kW}$
14	CAC	Commercial Air Conditioner
15	CADR	Clean Air Delivery Rate
16	CCD	Ceiling Concealed Duct
17	CCMS	Central Control & Monitoring System
18	CFM	Cubic Feet per Minute (ft ³ /min)
19	CMH	Cubic Meter per Hour, m ³ /h
20	CMM	Cubic Meter per Minute (m ³ /min)
21	COP	Coefficient Of Performance (Unit : W/W) It is usually used to indicate the heating efficiency.
22	CST	Cassette
23	DB	Dry Bulb
24	DDC	Direct Digital Control
25	DGR	Discharge Gas Recirculation
26	DHW	Domestic Hot Water

No.	Terms	Description
27	DI	Digital Input
28	DO	Digital Output
29	DOAS	Dedicated Outdoor Air System
30	DX	Direct Expansion
31	EA	Exhaust Air
32	EC Motor	Electronically Commutated Motor It is a brushless, permanent-magnet motor that incorporates a built-in power inverter to convert AC to DC voltage.
33	EER	Energy Efficiency Ratio (Unit : W/W or Btu/Wh) It is usually used to indicate cooling efficiency.
34	EEV	Electronic Expansion Valve
35	EHP	Electric Heat Pump
36	ErP	Energy-related Products Directive It is designed to improve the efficiency of products that use energy in Europe.
37	ERV	Energy Recovery Ventilation
38	ESP	External Static Pressure
39	ESS	Energy Storage System
40	EUROVENT	Europe's Industry Association for Indoor Climate (HVAC), Process Cooling, and Food Cold Chain Technologies.
41	EWT	Entering Water Temperature
42	FAU	Fresh Air intake Unit
43	FCU	Fan Coil Unit
44	FIT	Feed in Tariff
45	FOTA	Firmware Over The Air
46	GHP	Gas-engine driven Heat Pump
47	GWP	Global Warming Potential
48	HP or H/P	Heat Pump It is an equipment that can manage heat indoors to cool a space in cooling mode and heat it in heating mode.
49	HR or H/R	Heat Recovery It is a product that can cool a space and heat another at the same time.

SAC TERMS

No.	Terms	Description
50	HEPA FILTER	High Efficiency Particulate Air Filter A filter capable of capturing 99.97% of fine particles as small as 0.3 µm
51	HMI	Human Machine Interface
52	HP	Horsepower 1 HP ≈ 2.93 kW
53	HPWH	Heat Pump Water Heater
54	HVAC	Heating, Ventilation, and Air Conditioning (HVAC & R : Heating, Ventilation, Air Conditioning and Refrigeration)
55	IAT	Indoor Air Temperature
56	ICT	Information & Communications Technology
57	IDC	Internet Data Center
58	IDU	Indoor Unit
59	IEER	Integrated Energy Efficiency Ratio (Unit : Btu/Wh) It is used in the United States to represent the integrated cooling efficiency considering the partial load.
60	IO Module	Input / Output Module
61	IWT	Integrated Water Tank
62	LCC	Life Cycle Cost
63	LCD	Liquid Crystal Display
64	LEED	Leadership in Energy and Environmental Design A green building certification program developed by the non-profit U.S. Green Building Council (USGBC).
65	LG BECON	LG Building Energy CONtrol
66	LPM	Liter Per Minute
67	LWT	Leaving Water Temperature
68	MERV	Minimum Efficiency Reporting Values The values report a filter's ability to capture larger particles between 0.3 and 10 µm.
69	MPPT	Maximum Power Point Tracker

No.	Terms	Description
70	nZEB	net Zero Energy Building
71	OA	Outdoor air
72	OAT	Outdoor Air Temperature
73	ODP	Ozone Depletion Potential
74	ODU	Outdoor Unit
75	OPC	Open Platform Communications
76	PDI	Power Distribution Indicator
77	RA	Return Air
78	RAC	Residential Air Conditioner
79	RPM	Revolution Per Minute
80	RT	Refrigeration Ton 1 RT ≈ 3.52 kW (Based on USRT)
81	RTU	Rooftop Unit
82	SA	Supply Air
83	SAC	System Air Conditioner
84	SE box	Smart Energy box When the grid experienced an outage, SE Box can automatically switch the power source from the utility grid to LG ESS HOME.
85	SCOP	Seasonal Coefficient Of Performance (Unit : W/W) It is used to indicate the overall heating efficiency during the heating season.
86	SEER	Seasonal Energy Efficiency Ratio (Unit : W/W or Btu/Wh) It is used to indicate the overall cooling efficiency during the cooling season.
87	SG Ready	Smart Grid Ready
88	TMS	Total Maintenance System (Same as BECON cloud)
89	UI	User Interface
90	UPS	Uninterruptible Power Supply
91	USP	Unique Selling Proposition
92	VRF	Variable Refrigerant Flow
93	VSD	Variable Speed Drive
94	WB	Wet Bulb