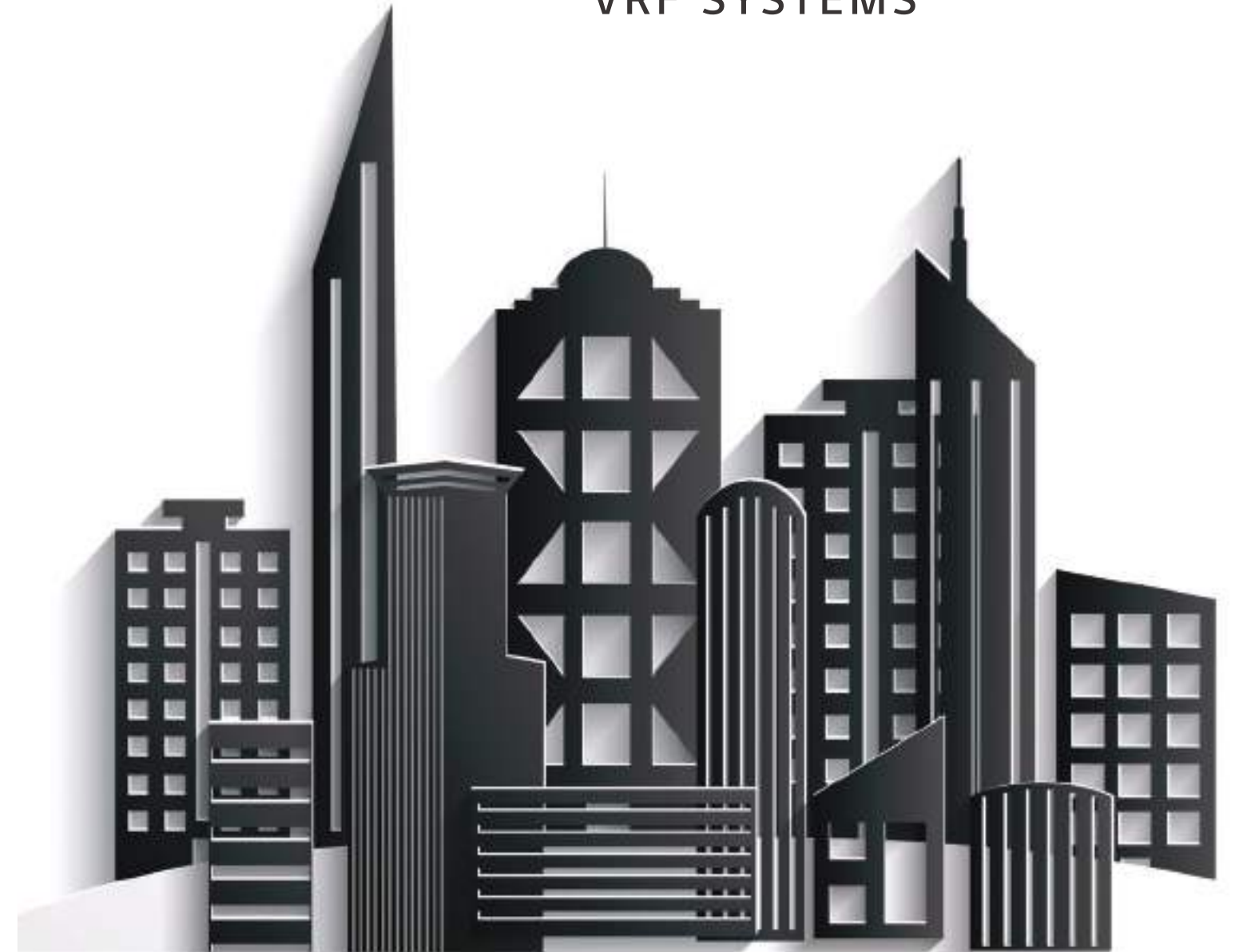




MULTI V™

VRF SYSTEMS



High Energy Efficiency
High Corrosion Resistance
High Reliability

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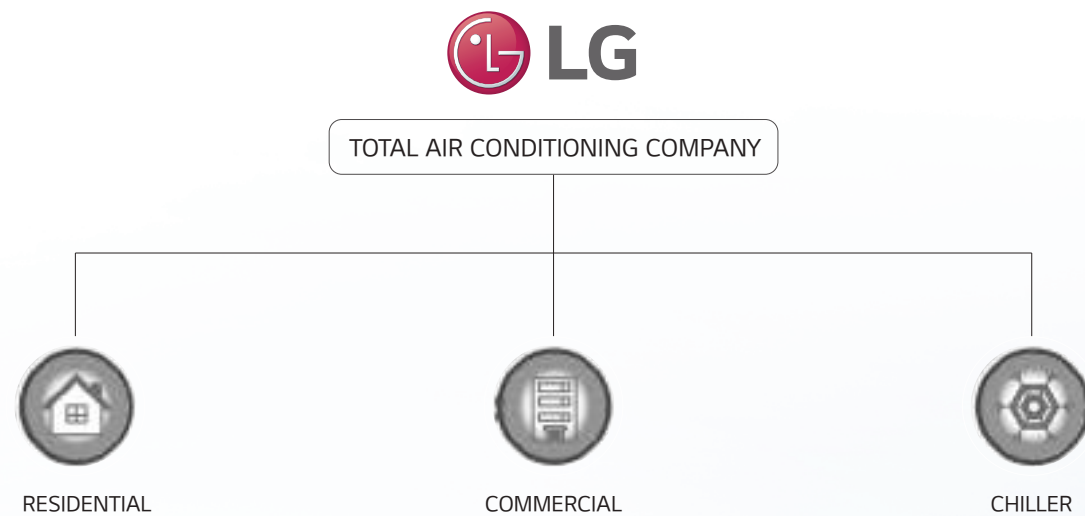


ABOUT LG

Launched in 2009, LG Electronics Air Conditioning & Solution Company (LG AS) provides total solutions in heating, ventilation and air conditioning (HVAC). LG AE's offerings include residential and commercial air conditioners, lighting, home and building management systems.

LG AS was formed as part of the company's strategic plan to expand its business horizons into the B2B sector, reinforcing its presence in the commercial products and solutions business. In 2010, along with aggressive reinforcement of its position in commercial air conditioning, LG established the lighting business to further increase its focus on B2B and on energy efficient business solutions. Based on its great success in the consumer market, the new Air Conditioning and Solution Company allowed LG to enjoy a competitive edge among the commercial heating, ventilation, air conditioning (HVAC) and energy businesses worldwide. LG expects its strength in air conditioners to become a strong driver of growth for the entire company as the industry expands.

Through its relentless efforts in innovation and development, LG AS is continuing to consolidate its leadership as a global HVAC company, with a central focus on eco-friendliness and energy efficiency.

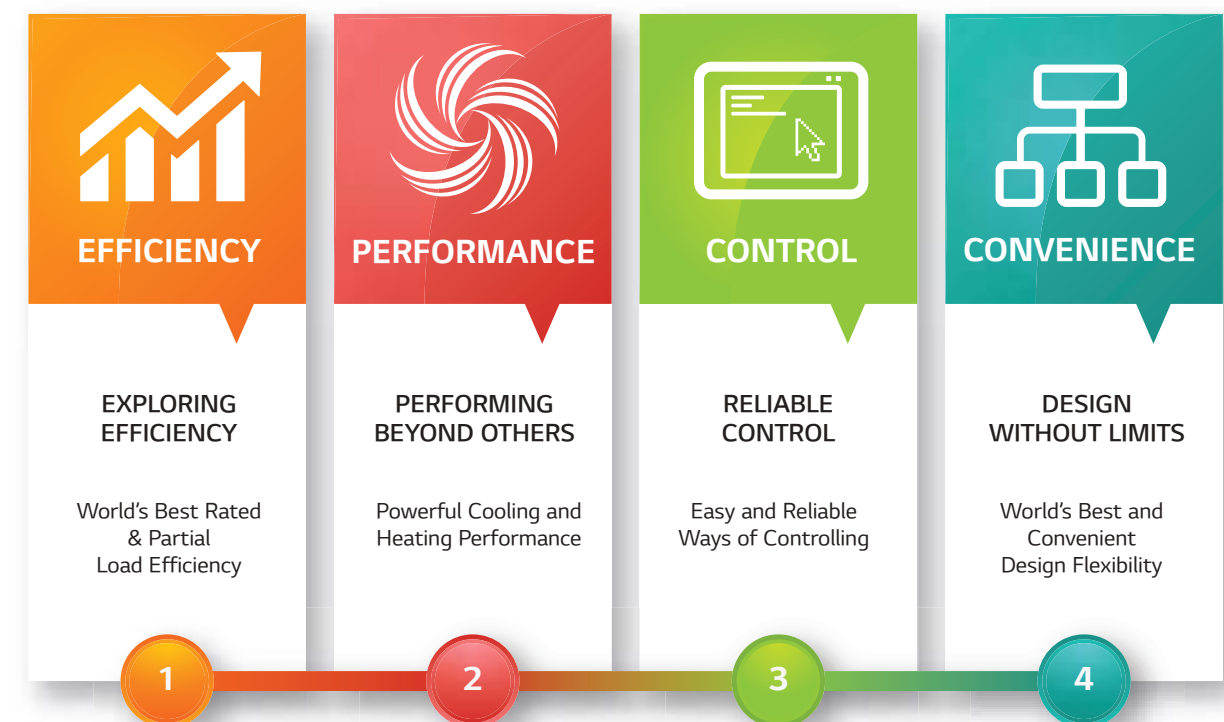


WHAT ARE THE NEW TECHNOLOGIES ALL ABOUT?

"Seasonal efficiency provides a more realistic determination of performance."

The new LG MULTI V technologies strive to meet the demand for high-quality air conditioning solutions with higher rated and partial energy efficiency as well as powerful cooling and heating performance. The new revolutionary and unique features can be categorized in four main performance parameters: Energy Efficiency, Performance, Convenience and Control.

THE BEST HVAC & ENERGY SOLUTION



THE TOTAL HVAC AND ENERGY SOLUTION PROVIDER

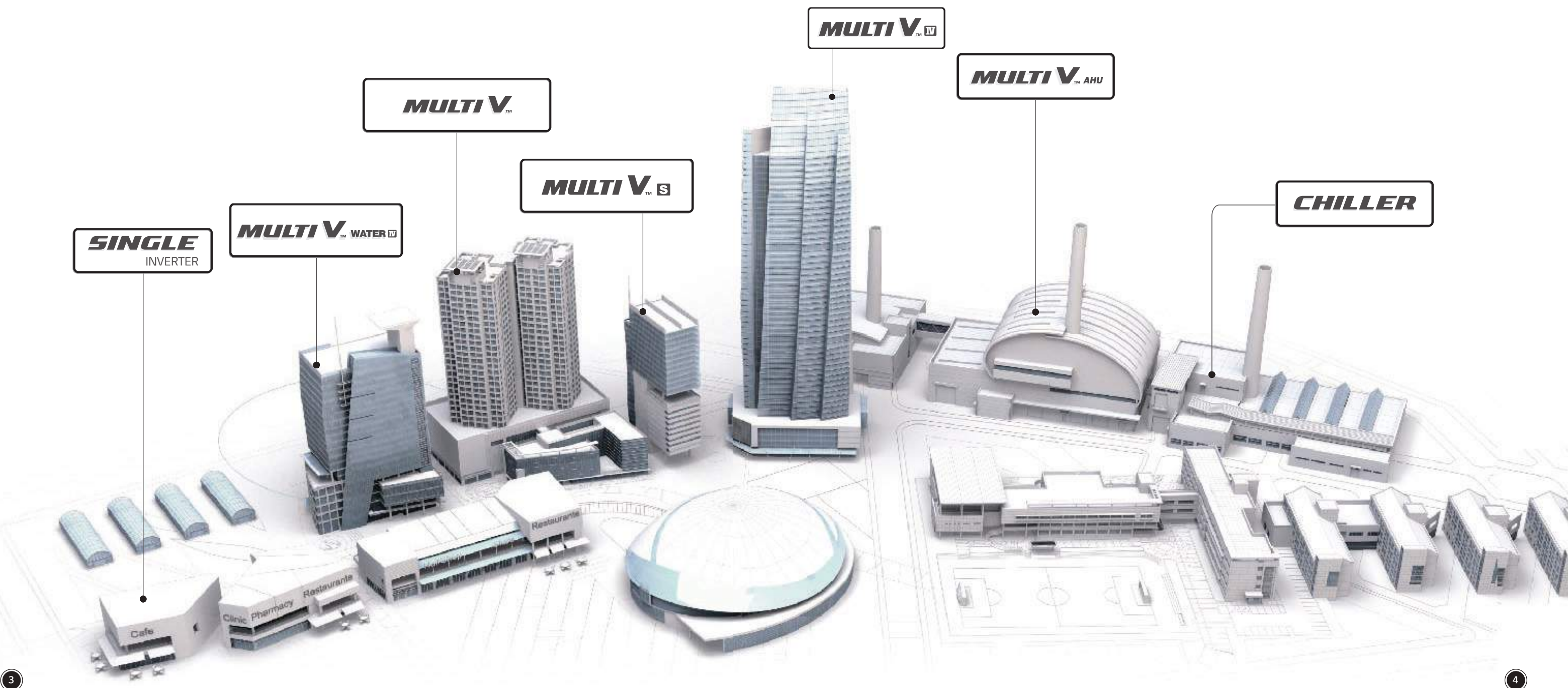
Ever since manufacturing the Korea's first home grown air conditioner in 1968, LG has remained at the forefront of air conditioning innovation. Over the last decade, LG has become one of the world's top-selling manufacturer of residential air conditioners. In 2008, LG became the first company to sell a cumulative total of more than 100 million air conditioners.

Building on its success and technological leadership in the residential air conditioners, LG has ventured into system air conditioning as well. The company's range of high-performance system air conditioning products provides effective temperature control to large-scale buildings and facilities. Over time, LG has evolved into the total HVAC and energy solution provider, investing in new technologies and adding chillers, VRF systems, and building management systems (BMS) into its comprehensive product portfolio.

Along with a wide range of innovative solutions, LG delivers unrivalled customer service. The company produces top-notch air conditioning professionals at its 100 SAC academies worldwide. These centres of excellence provide detailed product workshops and training programs and invaluable hands-on experience. LG also provides useful tools for HVAC system engineers and installers, including its timesaving LG Air Conditioner Technical Solution & LATS CAD software.

Additionally, LG operates several state-of-the-art R&D facilities all across the planet. One such facility is the Energy Lab, an all-purpose built R&D and testing centre in northern France. The scientists and engineers at the Energy Lab study the effects of different environmental conditions on LG's products. This in-depth research and analysis enables LG to tailor its solutions to the specific environmental demands of each individual market.

With 10 manufacturing plants throughout the world, LG produces in excess of 17 million reliable compressors and 16 million HVAC products per year. LG's high quality products are now enjoyed by consumers in over 100 countries



MULTI V DEVELOPMENT PHILOSOPHY

LG's primary goal is to 'vitalize every environment' around the globe – from private residences to commercial buildings and shared community spaces. To make this a reality, the company has developed a comprehensive range of innovative and energy efficient heating, ventilation and air conditioning (HVAC) products. One such product is the advanced MULTI V IV Pro Variable Refrigerant Flow (VRF) air conditioner, which delivers incredible performance and energy efficiency through a number of proprietary LG technologies.

VRF System AC is widely considered to be among the most versatile and powerful system air conditioners available. They provide exceptional comfort, energy efficiency and reliability, and are highly regarded by building managers, business operators and HVAC engineers. The latest model VRF solutions offer a number of other tangible benefits too, including cost effectiveness and easier installation. Thanks to significant advancements in HVAC technology, VRF systems are now able to offer unmatched performance capabilities along with reduced energy consumption.

LG after a thorough Research & Development, has been able to create the new MULTI V IV Pro VRF system which is considered amongst the best in the world.

WHY LG MULTI V IV PRO WILL LEAD THE STANDARD?

LG MULTI V IV Pro, the 4th generation VRF technology, has many improved features namely:

WORLD'S BEST

4TH GENERATION ALL INVERTER COMPRESSOR FREQUENCY RANGE 15-150Hz

BEST INTEGRATED EFFICIENCY (RATED, PARTIAL)

CONTINUOUS COOLING OPERATION

INDOOR-TO-INDOOR VERTICAL DISTANCE (30M)

SMALLER FOOT PRINT

LESS WEIGHT

THE TRUE LEADER OF 4-MULTI V IV PRO

LG's revolutionary technologies help minimize the energy loss that occurs with conventional VRF systems. Especially 4 core technologies - compressor, heat exchanger, refrigerant and oil control - lead to higher efficiency.

INVERTER TECHNOLOGY

With a compressor optimized around the latest inverter technology, the LG Multi V IV Pro system precisely matches the load. This helps prevent constant cycling and results in precise temperature control, superior de-humidification, and optimized efficiency. Occupants stay comfortable while reducing utility costs.

MULTI V IV PRO TECHNOLOGY

This product line is LG's premiere VRF system. Multi V IV Pro is designed to provide the owner the benefits of VRF - lower operational costs, minimal or no duct work to install, tenant comfort with individual zoning, efficiency superior to other technologies — while maintaining architectural integrity. The benefit of zoning for heating or cooling is that it provides a customized of comfort for all occupants.

OUTDOOR UNITS

MULTI V[™] IV^{PRO}

MULTI V[™] S

MULTI V[™] WATER^{IV}

MULTI V[™] AHU

INDOOR UNITS

Wall Mounted

Ceiling Cassettes

Ceiling Concealed Ducts

Fresh Air Intake Units

Hydro Kit

ECO V

ECO V DX

CONTROL SOLUTIONS

Remote Controller

Central Controller









Accessories









MULTI V™ OUTDOOR UNIT LINE-UP

**MULTI V™
PRO**

PRODUCT LINE-UP

Space saving is combination model line-up using 22HP single unit

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44			
Standard (**LLS4)																						
Space Saving (**LLN4)																						
																						UX6

HP	46	48	50	52	54	56	58	60	62	64	68	66	70	72	74	76	78	80	82	84	86	88		
Standard (**LLS4)	 UX6+UX6+UX5				 UX6+UX6+UX6				 UX6+UX6+UX5+UX5				 UX6+UX6+UX5+UX5				 UX6+UX6+UX6+UX6							
Space Saving (**LLN4)									 UX6+UX6+UX6				 UX6+UX6+UX6								 UX6+UX6+UX6+UX6			

MULTI V™ S



5, 6, 14 HP (COOLING ONLY)

1Ø 5, 6 HP

3Ø 14 HP



4, 5, 6, 8, 10, 12 HP (HEAT PUMP)

1Ø 4, 5, 6 HP

3Ø 4, 5, 6, 8, 12 HP

MULTI V™ WATER



10 HP




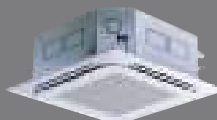





20 HP



30 HP

MULTI V™ INDOOR UNIT LINE-UP

INDOOR LINE-UP

kW			2.2	2.8	3.6	4.5	5.6	7.1	8.2	8.7	10.6	12.3	14.1	15.8	22.4	28.0
Btu / h			7k	9k	12k	15k	18k	24k	28k	30k	36k	42k	48k	54k	76k	96k
WALL MOUNTED UNIT																
CEILING CASSETTE	4 WAY CASSETTE (570*570)															
	4 WAY CASSETTE (840*840)															
	1 WAY CASSETTE															
CEILING CONCEALED DUCT	LOW STATIC															
	HIGH STATIC															
FRESH AIR INTAKE UNIT																

OUTDOOR UNITS

MULTI VTM series

MULTI V series offers significant energy savings, easy installation and connection to many different types of indoor units, making it easy to design.

MULTI VTM **PRO** **IV**

24

MULTI VTM **S**

30

MULTI VTM **WATER IV**

34

MULTI VTM **AHU**

40

EXCEPTIONAL EFFICIENCY

World's First Class Rated Efficiency

LG'S 4TH GENERATION INVERTER COMPRESSOR

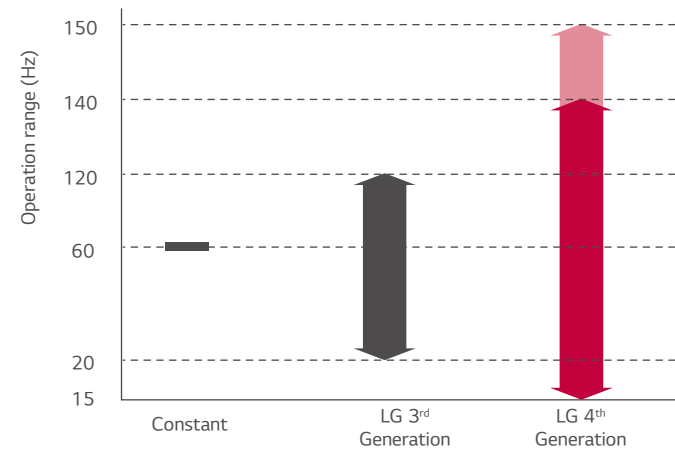
The new High-Side Shell (HSS) scroll inverter compressor and BLDC motor optimized part load efficiency, with 50% reduction in weight and increase in high-frequency operation from 120Hz to 150Hz.

WORLD'S FIRST CLASS RATED EFFICIENCY



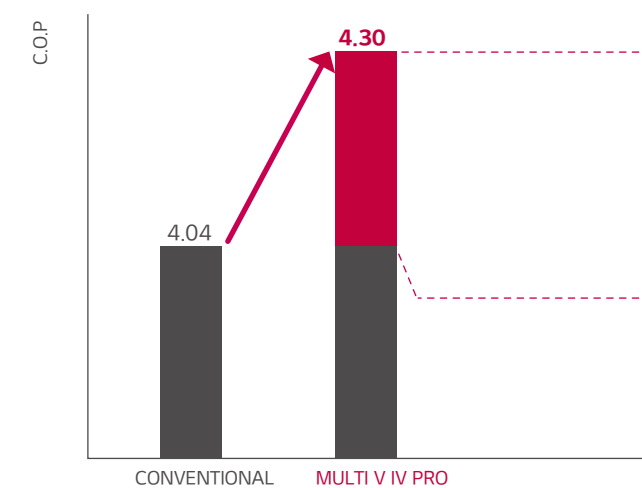
Extended Compressor Speed 150Hz

- Rapid operation response
- Capable of reaching required temperature quickly
- Increases part load efficiency



World's First Class Rated Efficiency

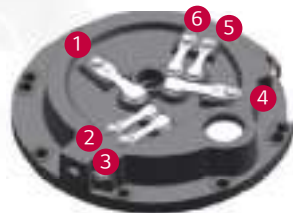
Rated Efficiency



* Comparison between 8HP in cooling mode

6 By-pass Valve

- Compressor reliability is maximized with 6 By-pass Valve
- Prevent compressor damage due to excessively compressed refrigerant more efficiently than 4 by-pass valve



SPACE AND COST SAVING



CORROSION RESISTANCE

LG's proprietary 'Ocean Black Fin' heat exchanger is designed to perform even in extremely corrosive environments. The black coating provides strong protection from corrosion and the hydrophilic coating minimizes moisture buildup on the fin.

✓ Longer Lifespan, Lower Operational Costs

The exceptional durability of the LG Corrosion Resistance prolongs the product's lifespan and significantly lowers the total cost of ownership. It also keeps down operational costs by maintaining high energy efficiency, reducing maintenance costs and virtually providing extended product replacement cycle.

✓ Certified Treatment

LG Corrosion Resistance was thoroughly tested in LG's state-of-the-art lab, and the outstanding quality of the product was verified by the prestigious certification company UL. The independent test demonstrated that the core components of the LG Corrosion Resistance can last up to 27 years.



✓ Pre-Coated in Manufacturing Process

While most manufacturers apply their corrosion-resistant coating to air conditioners after the product is fully assembled, LG individually coats core component before assembly. LG Corrosion Resistance components are fully protected as part of the automated manufacturing process.

EXCEPTIONAL EFFICIENCY

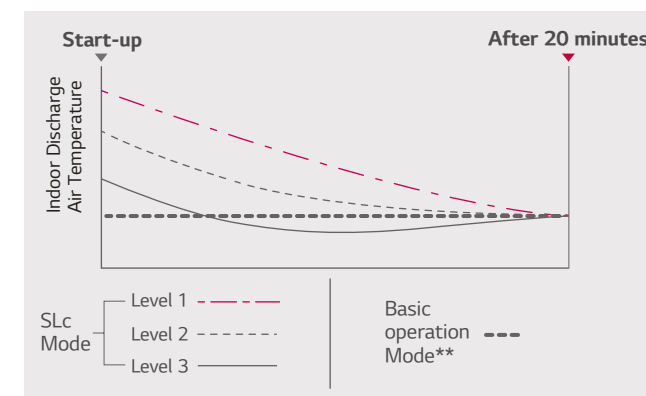
SMART LOAD CONTROL

To save energy, Multi V IV PRO changes indoor discharge air temperature continuously according to load.



Start-up Operation

Operates for 20 minutes after Start-up. 3 levels of SLC Operation can be set to save energy. (if not, can run in Basic Operation mode)



- By setting the SLC mode from Level 1 to Level 3, max. 20% of energy can be saved compared to Basic mode during Start-up operation.
- After 20 minutes, during Auto-reactive Operation, SLC mode saves 32% Energy according to outdoor air temperature.

operation	Mode	Start-up	Auto-reactive (by Outdoor Air Temp.)		
			22°C	30°C	35°C
SLC	Level 1	20%	32%	30%	0%
	Level 2	8%			
	Level 3	0%			
Basic		0%	0%	0%	0%

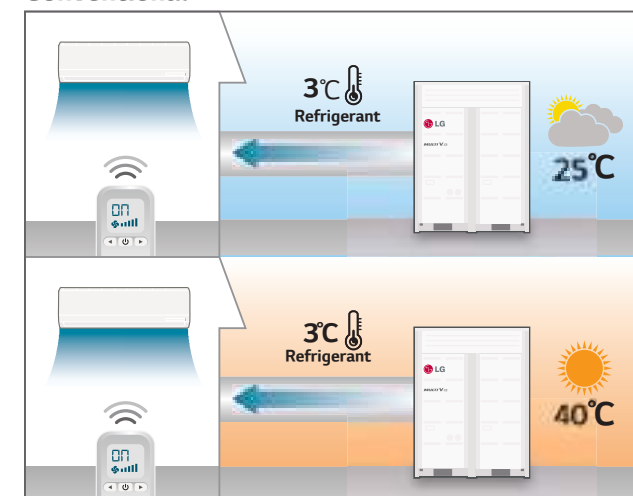
*Energy Saving Ratio: Ratio of energy saved, compared to 100% power consumption for 30 minutes (LG internal test result)

**Basic Operation : Indoor discharge air temperature is constant regardless of variable heat load, so operating efficiency is not relatively high

Auto-reactive Operation

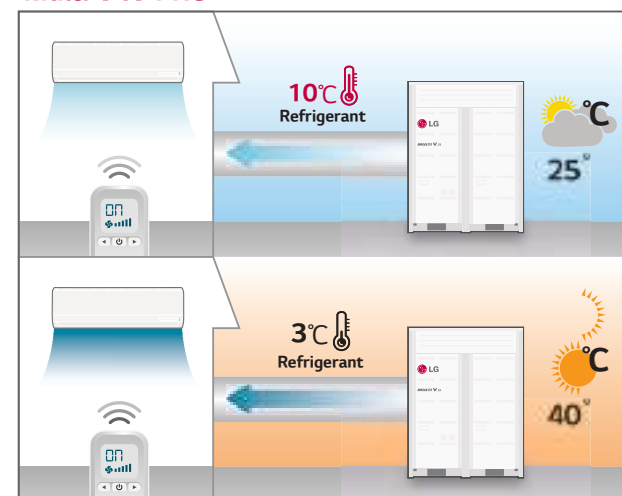
Automatically changes discharge air temperature according to the simultaneous loads. (OAT, IAT & Target temp.)

Conventional



Variable : Indoor Air temperature

Multi V IV PRO



- Variable: Indoor Air temperature, Setting temperature / Outdoor Air temperature
- Accurate operation control considering various circumstances

➡ **energy Saving Upto 32%**

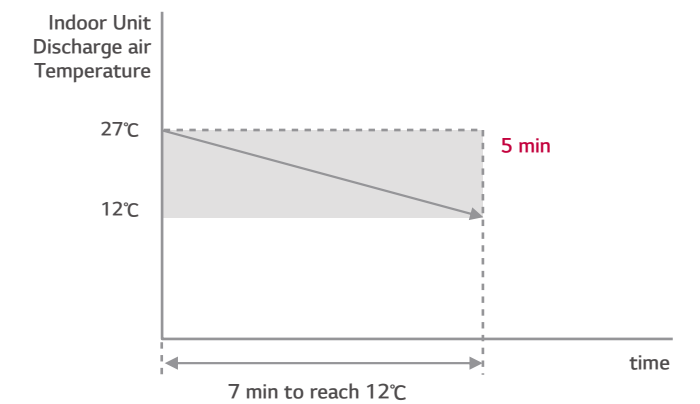
Fast Heating and Cooling via Advanced Inverter (H/P)

In conventional models, inverter compressor and on/off compressor operate one by one, thereby taking too long to reach maximum capacity. Thanks to LG's all inverter compressor system and high performance cycle design, MULTI V IV PRO delivers fast cooling or heating by operating two compressors simultaneously.

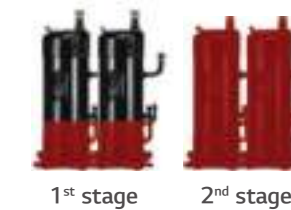
Conventional



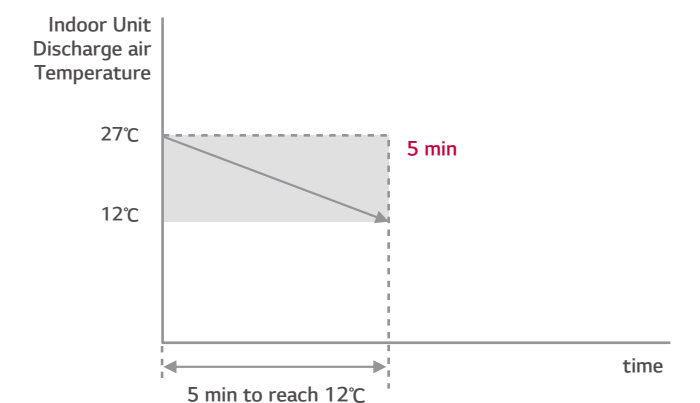
Compressor sequence control



Multi V IV PRO



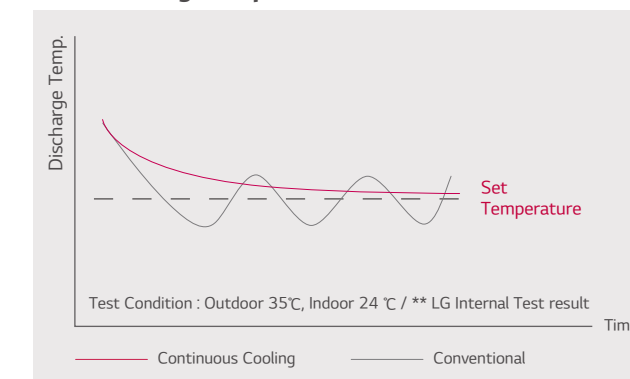
All inverter simultaneous control



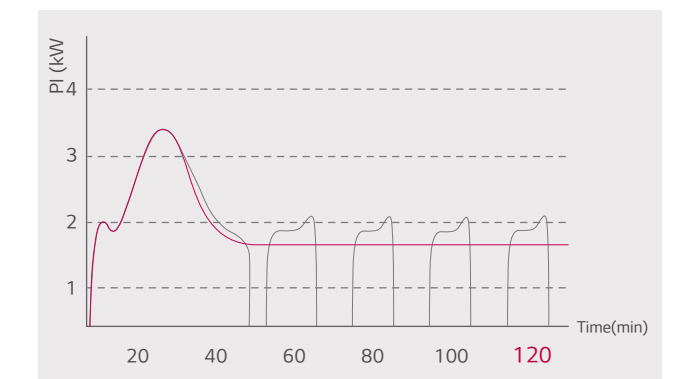
COMFORT COOLING

Without stopping, this function is able to maintain operation at mild cooling mode around the set temperature. You can experience more comfortable indoor environment while saving energy.

Even Cooling Temperature



Increased Thermo-on Time



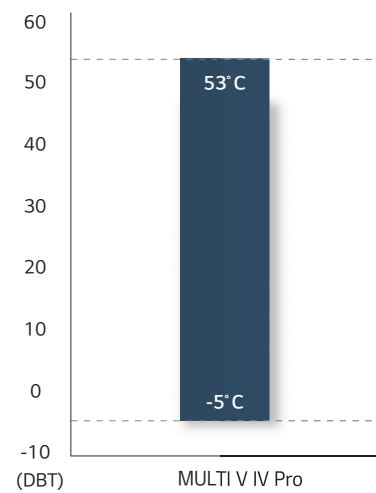
OUTSTANDING PERFORMANCE

Always ahead of the competition and on the leading edge of innovation with powerful heating and unsurpassed cooling performance

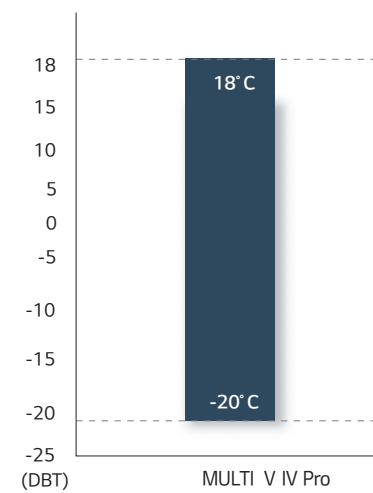
WIDE OPERATION RANGE

The product has more extended continuous cooling operation range and operable range than the existing products, enabling more extensive operation. It has extended the operation range by using more enhanced inverter compressor and control technology.

Cooling



Heating



FAN WITH LESS NOISE AND HIGHER AIR VOLUME

Canon fan is applied with optimized shape of shroud, increasing air volume by 50% CMM and decreasing noise level down by 4dB(A) compared to the previous value.

Canon Fan

Minimized vortex and exfoliation provides high air volume, low noise level and high efficiency.



8-22HP



- 1 Sinusoidal leading edge**
Low noise level with sinusoidal chord distribution (4dB(A) decreased)



- 2 Grooved suction surface**
Exfoliation of surface



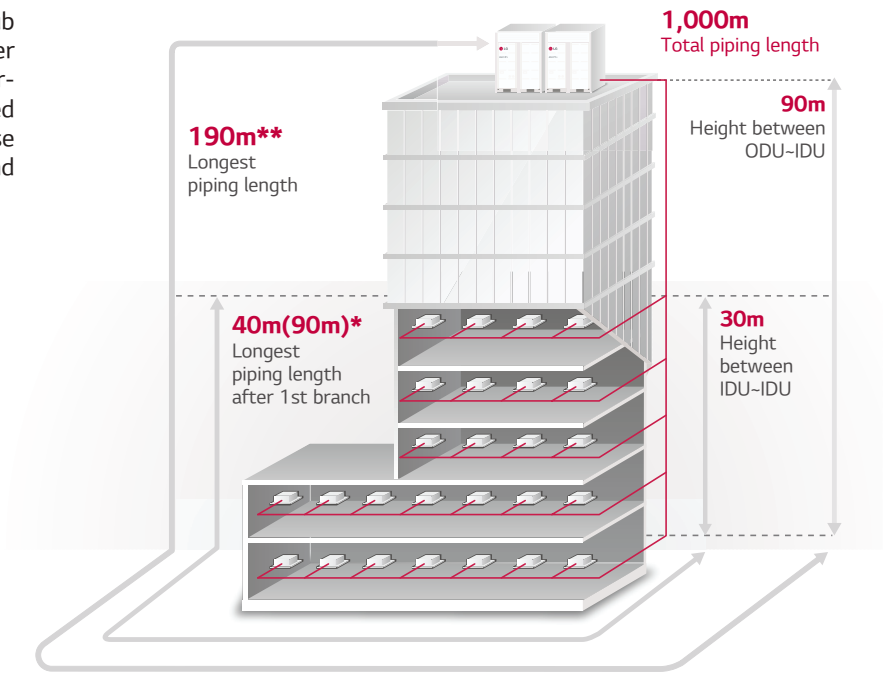
- 3 Tip vortex suppressor**
Winglet technology applied for efficiency

DESIGN WITHOUT LIMITS

Easy design with the most convenient features

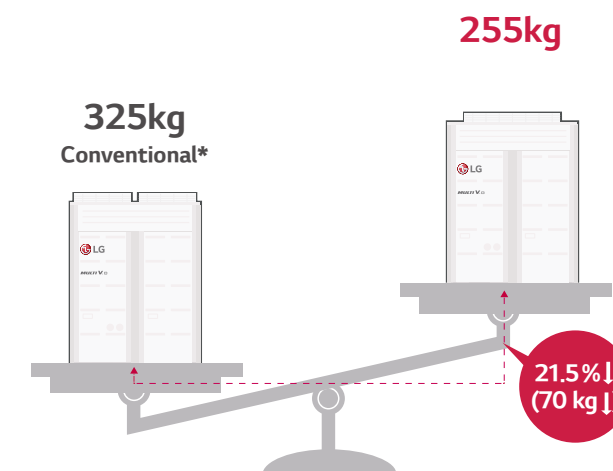
EXPANDED PIPING CAPABILITIES (H/P)

Multi V IV PRO inverter technology and sub cooling control circuit technology allows greater piping length and outstanding elevation differences. A cooling system can be implemented more flexibly in a shop, office and even high-rise building, reducing the designer's work time and providing more efficient design.

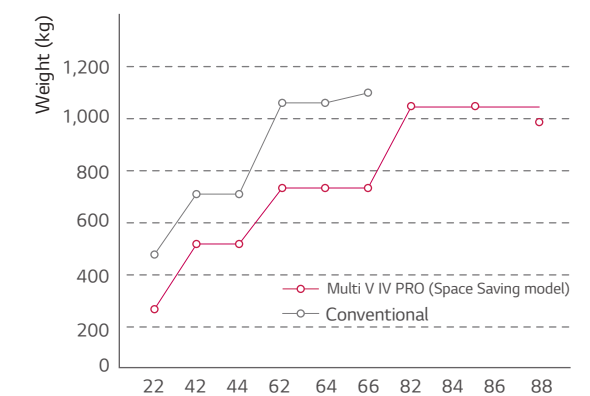


LIGHT WEIGHT

Conventional vs. Multi V IV PRO



21.5 % lighter than Conventional model
Easy transportation and installation available



Multi V IV PRO (Space Saving model) is maximum 46.9% lighter than Conventional model (22HP)

HP

CONVENIENCE

AUTO DUST REMOVAL

This function is able to improve the heat exchange efficiency to maintain clean state on heat exchanger of the outdoor unit (ODU).

Conventional*

- Dust remains on heat exchanger of outdoor unit



Stops for a long time

Normal operation

Auto Dust Removal

- Dust is removed on heat exchanger of outdoor unit by reverse rotation of fan
- With Dip switch setting, 5 min. operation in every 2 hours



Stops for a long time

Dust free operation

Normal operation

ODU E.S.P. (EXTERNAL STATIC PRESSURE) CONTROL

By E.S.P Control, MULTI V IV POR secures the flow rate of ODU, enabling the duct as a discharge fan, or installing at a basement.

Detail of E.S.P. Control

up to 20 Pa



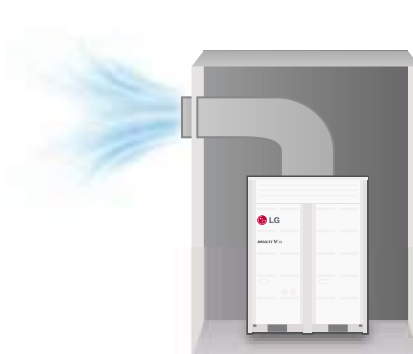
Normal Mode

up to 80 Pa

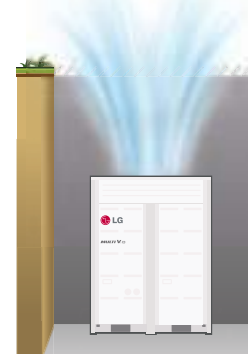


High E.S.P. Mode

Case of E.S.P. Control



In case of using a duct



In case of installation at basement

High E.S.P. Mode

- 3 Steps control (ESP 20~40 Pa / 40~60 Pa / 60~80 Pa)
- Installation can be anywhere like a basement facility room

**Installation condition -. Equivalent Duct length : max. 40 m (Duct Pressure loss : 1 Pa/m)

MULTI VTM IV PRO



8, 10, 12, 14 HP



16, 18, 20, 22 HP

Heat Pump

HP			8	10	12	14	16	18	20	22
Model Name	Combination Unit		JRUN080LLS4	JRUN100LLS4	JRUN120LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4	JRUN220LLN
	Independent Unit		JRUN080LLS4	JRUN100LLS4	JRUN120LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4	JRUN220LLN
Capacity (Rated)	Cooling	kW	22.4	28.0	33.6	39.2	44.8	50.4	56.0	61.6
		kcal/h	19,300	24,100	28,900	33,700	38,500	43,300	48,200	53,000
		Btu/h	76,400	95,900	1,14,700	1,33,800	1,52,900	1,72,000	1,91,100	210,200
	Heating	kW	22.4	28.0	33.6	39.2	44.8	50.4	56.0	61.6
		kcal/h	19,300	24,100	28,900	33,700	38,500	43,300	48,200	53,000
		Btu/h	76,400	95,900	1,14,700	1,33,800	1,52,900	1,72,000	1,91,100	210,200
Casing Color			Warm Gray / Morning Gray							
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin
Compressor	Type		Hermetically Sealed Scroll							
	No. of Compressor		1	1	1	1	1	2	2	2
Fan	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Air Flow Rate	m³/min	210	210	210	210	270	270	270	270
Piping	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)
Connections	Gas	mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Dimensions(W x H x D)		mm	(920 x 1,680 x 760) x 1				(1,240 x 1,680 x 760) x 1			
Net Weight		kg	175 x 1	175 x 1	180 x 1	190 x 1	205 x 1	245 x 1	255 x 1	255 x 1
Sound Pressure Level		dB(A)	58.5	58.5	59.0	60.0	62.0	62.0	62.0	62.0
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control		Electronic Expansion Valve							
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
No. of Outdoor Units			1	1	1	1	1	1	1	1
Number of maximum connectable indoor units			13(20)	16(25)	20(30)	23(35)	26(40)	29(45)	32(50)	35(44)

MULTI V™ IV
PRO


22, 24, 26 HP



28, 30, 32, 34 HP



36, 38, 40 HP

Heat Pump

HP			22	24	26	28	30	32	34	36	38	40	
Model Name	Combination Unit		JRUN220LLS4	JRUN240LLS4	JRUN260LLS4	JRUN280LLS4	JRUN300LLS4	JRUN320LLS4	JRUN340LLS4	JRUN360LLS4	JRUN380LLS4	JRUN400LLS4	
	Independent Unit		JRUN120LLS4	JRUN120LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	
			JRUN100LLS4	JRUN120LLS4	JRUN120LLS4	JRUN120LLS4	JRUN120LLS4	JRUN120LLS4	JRUN120LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4
Capacity (Rated)	Cooling	kW	61.6	67.2	72.8	78.4	84.0	89.6	95.2	100.8	106.4	112.0	
		kcal/h	53,000	57,800	62,600	67,400	72,200	77,100	82,100	86,700	91,500	96,400	
		Btu/h	2,10,600	2,29,400	2,48,500	2,67,600	2,86,700	3,05,800	3,24,900	3,44,000	3,63,100	3,82,200	
	Heating	kW	61.6	67.2	72.8	78.4	84.0	89.6	95.2	100.8	106.4	112.0	
		kcal/h	53,000	57,800	62,600	67,400	72,200	77,100	82,100	86,700	91,500	96,400	
		Btu/h	2,10,600	2,29,400	2,48,500	2,67,600	2,86,700	3,05,800	3,24,900	3,44,000	3,63,100	3,82,200	
Casing Color			Warm Gray / Morning Gray										
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	
Compressor	Type		Hermetically Sealed Scroll										
	No. of Compressor		2	2	2	2	3	3	3	3	4	4	
Fan	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	
	Air Flow Rate	m³/min	210 × 2	210 × 2	210 × 2	270 + 210	270 + 210	270 + 210	270 + 210	270 × 2	270 × 2	270 × 2	
Piping	Liquid	mm(inch)	15.88(5/8)	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	
Connections	Gas	mm(inch)	28.58(1-1/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	
Dimensions(W × H × D)		mm	(920 × 1,680 × 760) × 2	(920 × 1,680 × 760) × 2	(920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 2	
Net Weight		kg	180 × 1 + 175 × 1	180 × 2	190 × 1 + 180 × 1	205 × 1 + 180 × 1	245 × 1 + 180 × 1	255 × 1 + 180 × 1	255 × 1 + 190 × 1	255 × 1 + 205 × 1	255 × 1 + 245 × 1	255 × 2	
Sound Pressure Level		dB(A)	61.8	62.0	62.5	63.8	63.8	63.8	64.1	65.0	65.0	65.0	
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Control		Electronic Expansion Valve										
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	
No. of Outdoor Units			2	2	2	2	2	2	2	2	2	2	
Number of maximum connectable indoor units			35(44)	39(48)	42(52)	45(56)	49(60)	52(64)	55(64)	58(64)	61(64)	64	

MULTI V™ IV
PRO


42, 44 HP



46, 48, 50, 52, 54 HP



56, 58, 60 HP

Heat Pump

HP			42	44	46	48	50	52	54	56	58	60
Model Name	Combination Unit		JRUN420LLS4	JRUN440LLS4	JRUN460LLS4	JRUN480LLS4	JRUN500LLS4	JRUN520LLS4	JRUN540LLS4	JRUN560LLS4	JRUN580LLS4	JRUN600LLS4
	Independent Unit		JRUN180LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4
			JRUN140LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4
			JRUN100LLS4	JRUN100LLS4	JRUN100LLS4	JRUN100LLS4	JRUN100LLS4	JRUN120LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN200LLS4
Capacity (Rated)	Cooling	kW	117.6	123.2	128.8	134.4	140.0	145.6	151.2	156.8	162.4	168.0
		kcal/h	1,01,100	1,06,000	1,10,800	1,15,600	1,20,500	1,25,300	1,30,100	1,34,900	1,39,700	1,44,600
		Btu/h	4,01,700	4,20,800	4,39,900	4,59,000	4,78,100	4,96,900	5,16,000	5,35,100	5,54,200	5,73,300
	Heating	kW	117.6	123.2	128.8	134.4	140.0	145.6	151.2	156.8	162.4	168.0
		kcal/h	1,01,100	1,06,000	1,10,800	1,15,600	1,20,500	1,25,300	1,30,100	1,34,900	1,39,700	1,44,600
		Btu/h	4,01,700	4,20,800	4,39,900	4,59,000	4,78,100	4,96,900	5,16,000	5,35,100	5,54,200	5,73,300
Casing Color			Warm Gray / Morning Gray									
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin
Compressor	Type		Hermetically Sealed Scroll									
	No. of Compressor		4	4	4	5	5	5	5	5	6	6
Fan	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Air Flow Rate	m³/min	270 + 210 x 2	270 + 210 x 2	270 x 2 + 210	270 x 2 + 210	270 x 2 + 210	270 x 2 + 210	270 x 2 + 210	270 x 3	270 x 3	270 x 3
Piping	Liquid	mm(1/2inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Connections	Gas	mm(1/2inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
Dimensions (W x H x D)		mm	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 1 + (920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 3	(1,240 × 1,680 × 760) × 3	(1,240 × 1,680 × 760) × 3
Net Weight		kg	245 × 1 + 190 × 1 + 175 × 1	255 × 1 + 190 × 1 + 175 × 1	255 × 1 + 205 × 1 + 175 × 1	255 × 1 + 245 × 1 + 175 × 1	255 × 2 + 175 × 1	255 × 2 + 180 × 1	255 × 2 + 190 × 1	255 × 2 + 205 × 1	255 × 2 + 245 × 1	255 × 3
Sound Pressure Level		dB(A)	65.2	65.2	65.9	65.9	65.9	66.0	66.2	66.8	66.8	66.8
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control		Electronic Expansion Valve									
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
No. of Outdoor Units			3	3	3	3	3	3	3	3	3	3
Number of maximum connectable indoor units			64	64	64	64	64	64	64	64	64	64

MULTI V™ IV
PRO


62, 64, 68 HP



66, 70, 72 HP



74, 76, 78, 80 HP

Heat Pump

HP			62	64	66	68	70	72	74	76	78	80
Model Name	Combination Unit		JRUN620LLS4	JRUN640LLS4	JRUN660LLS4	JRUN680LLS4	JRUN700LLS4	JRUN720LLS4	JRUN740LLS4	JRUN760LLS4	JRUN780LLS4	JRUN800LLS4
	Independent Unit		JRUN180LLS4	JRUN180LLS4	JRUN180LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4
			JRUN160LLS4	JRUN180LLS4	JRUN180LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4	JRUN200LLS4
			JRUN140LLS4	JRUN140LLS4	JRUN160LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN180LLS4	JRUN180LLS4	JRUN200LLS4	JRUN200LLS4
			JRUN140LLS4	JRUN140LLS4	JRUN140LLS4	JRUN140LLS4	JRUN140LLS4	JRUN140LLS4	JRUN160LLS4	JRUN180LLS4	JRUN180LLS4	JRUN200LLS4
Capacity (Rated)	Cooling	kW	173.6	179.2	184.8	190.4	196.0	201.6	207.2	212.8	218.4	224.0
		kcal/h	1,49,200	1,54,000	1,58,800	1,63,800	1,68,600	1,73,400	1,78,200	1,83,000	1,87,900	1,92,800
		Btu/h	5,92,700	6,11,600	6,30,700	6,49,800	6,68,900	6,88,000	7,07,100	7,26,200	7,45,300	7,64,400
	Heating	kW	173.6	179.2	184.8	190.4	196.0	201.6	207.2	212.8	218.4	224.0
		kcal/h	1,49,200	1,54,000	1,58,800	1,63,800	1,68,600	1,73,400	1,78,200	1,83,000	1,87,900	1,92,800
		Btu/h	5,92,700	6,11,600	6,30,700	6,49,800	6,68,900	6,88,000	7,07,100	7,26,200	7,45,300	7,64,400
Casing Color			Warm Gray / Morning Gray									
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin
Compressor	Type		Hermetically Sealed Scroll									
	No. of Compressor		5	6	6	6	6	7	7	8	8	8
Fan	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Air Flow Rate	m³/min	270 × 2 + 210 × 2	270 × 2 + 210 × 2	270 × 3 + 210	270 × 2 + 210 × 2	270 × 3 + 210	270 × 3 + 210	270 × 4	270 × 4	270 × 4	270 × 4
Piping Connections	Liquid	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	44.5(1-3/4)	44.5(1-3/4)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
Dimensions(W × H × D)		mm	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 3 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 2 + (920 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 3 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 3 + (920 × 1,680 × 760) × 1	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4
Net Weight		kg	245 × 1 + 205 × 1 + 190 × 2	245 × 2 + 190 × 2	245 × 2 + 205 × 1 + 190 × 1	255 × 2 + 190 × 2	255 × 2 + 205 × 1 + 190 × 1	255 × 2 + 245 × 1 + 190 × 1	255 × 2 + 245 × 1 + 205 × 1	255 × 2 + 245 × 2	255 × 3 + 245 × 1	255 × 4
Sound Pressure Level		dB(A)	67.1	67.1	67.6	67.1	67.6	67.6	68.0	68.0	68.0	68.0
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control		Electronic Expansion Valve									
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
No. of Outdoor Units			4	4	4	4	4	4	4	4	4	4
Number of maximum connectable indoor units			64	64	64	64	64	64	64	64	64	64

MULTI V™ IV
PRO


42, 44, 62, 64, 66, 82, 84, 86, 88 HP

Heat Pump (Space Saving)

HP			42	44	62	64	66	82	84	86	88
Model Name	Combination Unit		JRUN420LLN4	JRUN440LLN4	JRUN620LLN4	JRUN640LLN4	JRUN660LLN4	JRUN820LLN4	JRUN840LLN4	JRUN860LLN4	JRUN880LLN4
	Independent Unit		JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4
			JRUN200LLN4	JRUN220LLN4	JRUN200LLN4	JRUN220LLN4	JRUN220LLN4	JRUN200LLN4	JRUN220LLN4	JRUN220LLN4	JRUN220LLN4
					JRUN200LLN4	JRUN200LLN4	JRUN220LLN4	JRUN200LLN4	JRUN200LLN4	JRUN220LLN4	JRUN220LLN4
								JRUN200LLN4	JRUN200LLN4	JRUN200LLN4	JRUN220LLN4
Capacity (Rated)	Cooling	kW	117.6	123.2	173.6	179.2	184.8	229.6	235.2	240.8	246.4
		kcal/h	101,200	106,000	149,400	154,200	159,000	197,600	202,400	207,200	212,000
		Btu/h	401,300	420,400	592,400	611,500	630,600	783,500	802,600	821,700	840,800
	Heating	kW	117.6	123.2	173.6	179.2	184.8	229.6	235.2	240.8	246.4
		kcal/h	101,200	106,000	149,400	154,200	159,000	197,600	202,400	207,200	212,000
		Btu/h	401,300	420,400	592,400	611,500	630,600	783,500	802,600	821,700	840,800
Casing Color			Warm Gray / Morning Gray								
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin	Black fin
Compressor	Type		Hermetically Sealed Scroll								
	No. of Compressor		4	4	6	6	6	8	8	8	8
Fan	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Air Flow Rate	m³/min	270 × 2	270 × 2	270 × 3	270 × 3	270 × 3	270 × 4	270 × 4	270 × 4	270 × 4
Piping Connect-ions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	41.3(1-5/8)	41.3(1-5/8)	44.5(1-3/4)	44.5(1-3/4)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
Dimensions(W × H × D)		mm	(1,240 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 2	(1,240 × 1,680 × 760) × 3	(1,240 × 1,680 × 760) × 3	(1,240 × 1,680 × 760) × 3	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4	(1,240 × 1,680 × 760) × 4
Net Weight		kg	255 × 2	255 × 2	255 × 3	255 × 3	255 × 3	255 × 4	255 × 4	255 × 4	255 × 4
Sound Pressure Level		dB(A)	65.0	65.0	66.8	66.8	66.8	68.0	68.0	68.0	68.0
Refrige-rant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control		Electronic Expansion Valve								
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
No. of Outdoor Units			2	2	3	3	3	4	4	4	4
Number of maximum connectable indoor units			64	64	64	64	64	64	64	64	64

HEATING/COOLING

Note :

- 1. Capacities are based on the following conditions

COOLING	HEATING
Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB	20°C(68°F)DB / 15°C(59°F)WB
Outdoor temp. 35°C(95°F)DB / 24°C(75.2°F)WB	Outdoor temp. 7°C(44.6°F)DB / 6°C(42.8°F)WB
Interconnecting piping length 7.5m	Interconnecting piping length 7.5m
Level difference of zero	Level difference of zero

- 2. Capacities are net capacities
- 3. Due to our policy of innovation, some specifications may be changed without notification
- 4. EEV : Electronic Expansion Valve

CAUTION

- A combination operation over 100% cause to reduce each indoor unit capacity
- Combination Ratio(50~200%)

No. of outdoor Unit	Combination Ratio	
	Standard Model	Space Saving Model
Single Unit	200%	160%
Two Units Combination	160%	120%
Three or more Units Combination	130%	120%

If you want to connect more than 130% combination, please contact us and discuss the requirement like below.

- 1) If the operational capacity of indoor units exceed 130%, then all the indoor units operate under low air flow step mode.
- 2) It is advisable to keep operation range under 130%.
- 3) In case of space saving model connection capacity, please contact us.

MULTI V S

Appropriate for mid-sized offices, shops, and high-end residential spaces.

HIGH COOLING AND HEATING EFFICIENCY

High BLDC inverter compressor is used for optimal load and operation.

COP

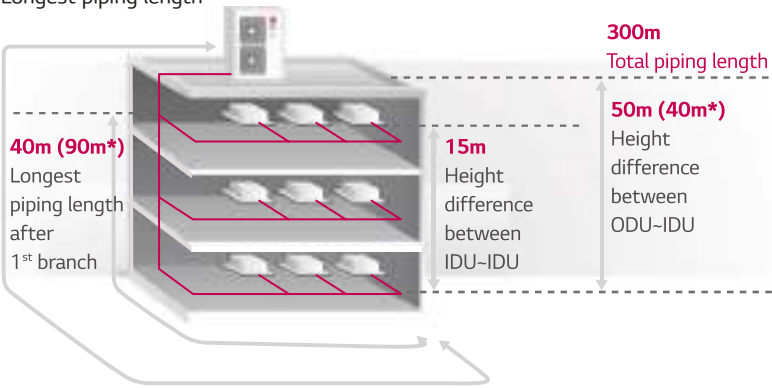
	3Ø, 380-415V	3Ø, 380-415V	1Ø, 220-240V
HP	Heat Pump (Cooling Mode)	Cooling Only	Cooling Only
4	4.32		
5	4.14	4.14	3.76
6	3.91	3.91	4.25
8	3.80		
10	3.95		
12	3.70		
14		3.20	



Long Piping Length

Inverter control technology provides various types of system.

Longest piping length



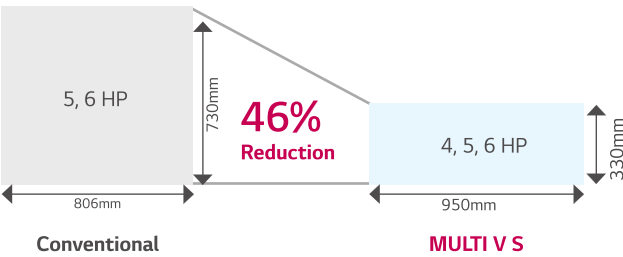
Total piping length	300m
Longest piping length (Equivalent)	150m (175m*)
Longest piping length after 1 st branch	40m (90m*)
Height difference between ODU-IDU	50m (40m*)
Height difference between IDU-IDU	15m

* Conditional application

Compact Size

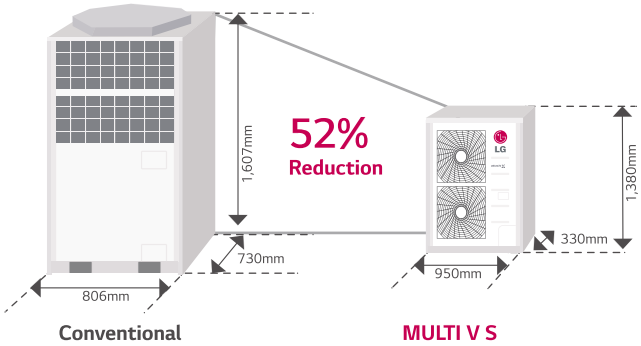
MULTI V S provides the optimal solution for small offices and shops.

Foot print area



Auto-reactive Operation

Volume

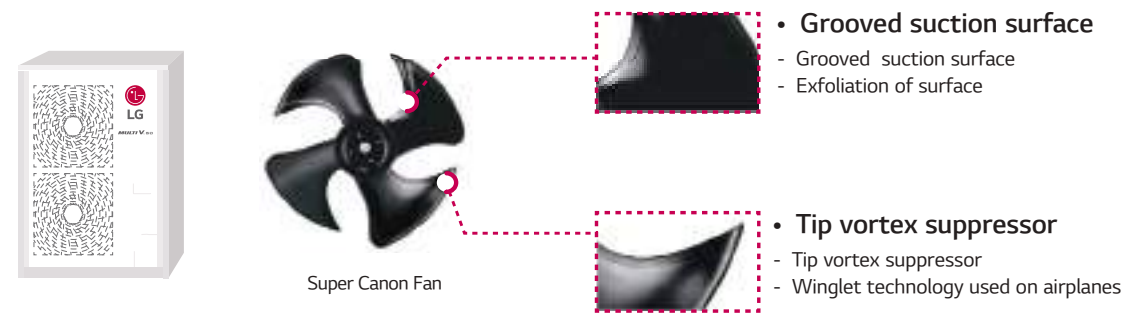


FAN WITH LESS NOISE AND HIGHER AIR VOLUME

Canon fan is applied with optimized shape of shroud, increasing air volume by 50CMM and decreasing noise level down by 4dB(A) compared to the previous value.

Canon Fan Technology

Super canon fan increased the air volume in 50CMM and the noise level is decreased by 4dB(A).



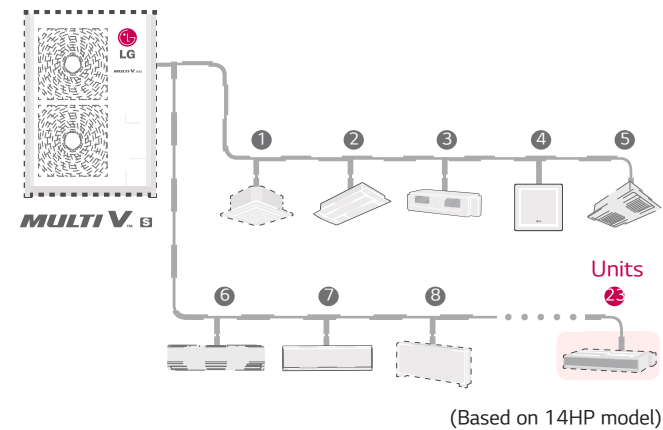
MAX. 23 INDOOR UNITS CONNECTABLE

Maximum of 23 units can be connected to a single outdoor unit with 160% indoor unit combination.
(Based on 14HP)

- Connectable indoor units is up to 23 units maximum.
- Indoor units combination range : 50 ~ 160% *

- 4HP : Max. 6 indoor units
- 5HP : Max. 8 indoor units
- 6HP : Max. 9 indoor units
- 8HP : Max. 13 indoor units
- 10HP : Max. 16 indoor units
- 12HP : Max. 20 indoor units
- 14HP : Max. 23 indoor units

* To Consult LG Team



SELF COOLED CONTROL

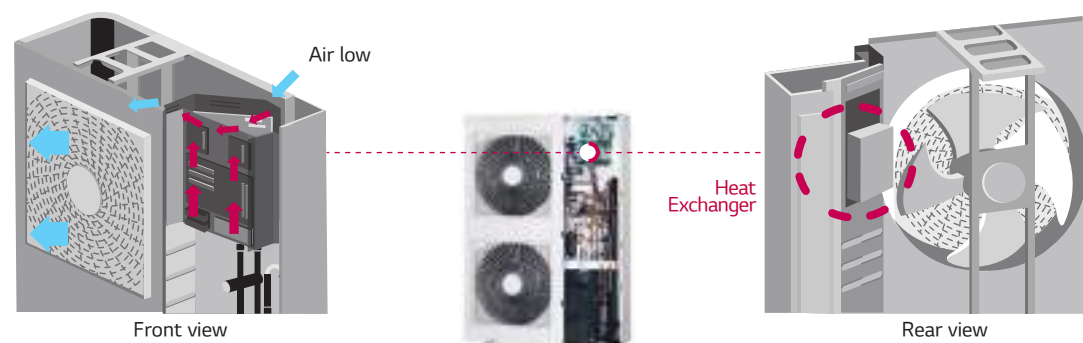
Multi V S has heat exchanger structure and diagonal shape of control box. (Efficiency up to 3%)

Control Box Cooling System

- Feature of control box is diagonal shape, it makes naturally air lowing (directly pulling air back of the fan)
- Reduced heating / cooling efficiency loss

Heat Exchanger Technology

- Heat exchanger structure
- Optimal air low by aluminum heat exchanger on control box

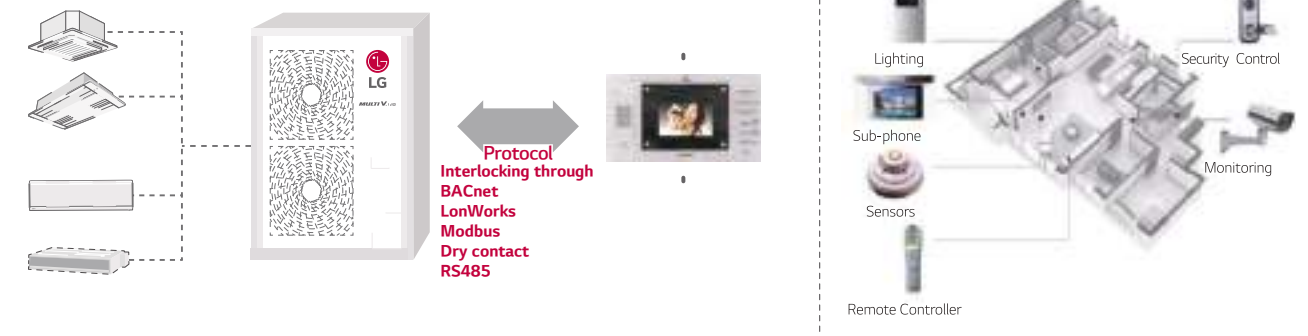


HOME NETWORK

Multi V S can be HN (Home Network) and HA (Home Automation) interlock into a variety of communication methods.

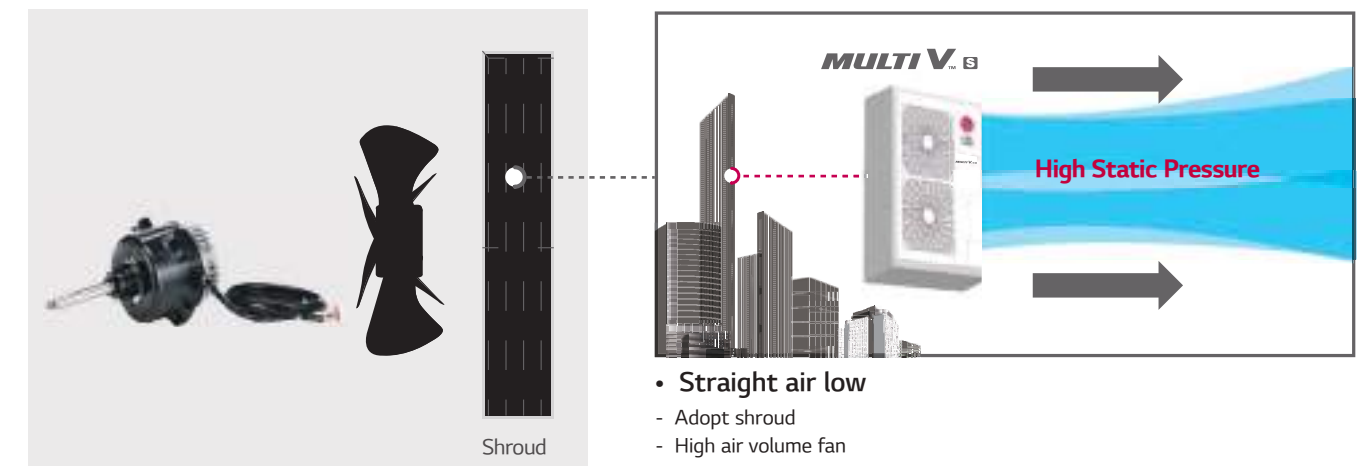
Variety Interlock to Local HN and HA system

- Air condition control
- Remote control service
- Safety management service



HIGH E.S.P. TECHNOLOGY

Static pressure setting on the remote controller makes it easy to adjust the BLDC motor's fan speed, so it enables to maintain the desired air volume and noise level at a minimum—irrespective of external static pressure change due to different installation environment from initial design.



* E.S.P : External Static Pressure



Heat Pump

Specifications			1φ, 220-240V		
Model Name	Combination Unit		ARUN040GSS0	ARUN050GSS0	ARUN060GSS0
Capacity (Rated)	Cooling	kW	12.1	14.0	15.5
	Heating	kW	12.5	16.0	18.0
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Black fin	Black fin	Black fin
Compressor	Type		Hermetic Motor Compressor	Hermetic Motor Compressor	Hermetic Motor Compressor
	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1	4,000 x 1
Fan	Type		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
	Air Flow Rate(High)	m ³ /min	60	110	110
	Discharge	Side / Top	Side	Side	Side
Pipe Connctions	Liquid	mm(inch)	Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm(inch)	Ø 15.88(5/8)	Ø 15.88(5/8)	Ø 19.05(3/4)
Dimensions(W x H x D)			(950 × 834 × 330) x 1	(950 × 1,380 × 330) x 1	(950 × 1,380 × 330) x 1
Net Weight			70 x 1	94 x 1	94 x 1
Sound Pressure Level	Cooling	dB(A)	50	51	52
	Heating	dB(A)	52	53	54
Communication Cable			2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
Power Supply	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	V, Ø, Hz		220-240, 1, 50	220-240, 1, 50	220-240, 1, 50

Specifications			3φ, 380-415V				
Model Name	Combination Unit		ARUN040LSS0	ARUN050LSS0	ARUN060LSS0	JRUN080LSS0	JRUN100LSS0
Capacity (Rated)	Cooling	kW	12.1	14.0	15.5	22.4	28.0
	Heating	kW	12.5	16.0	18.0	25.2	31.5
Casing Color			Warm Gray	Warm Gray	Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Black fin	Black fin	Black fin	Black fin	Black fin
Compressor	Type		Hermetic Motor Compressor	Hermetic Motor Compressor	Hermetic Motor Compressor	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1	4,000 x 1	4,200 x 1	5,300 x 1
Fan	Type		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	Propeller fan	Propeller fan
	Motor Output x Number	W	124 x 2	124 x 2	124 x 2	250 x 2	250 x 2
	Air Flow Rate(High)	m ³ /min	110	110	110	140	190
Pipe Connctions	Liquid	mm(inch)	Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas	mm(inch)	Ø 15.88(5/8)	Ø 15.88(5/8)	Ø 15.88(5/8)	19.05(3/4)	22.2(7/8)
Dimensions(W x H x D)			(950 × 1,380 × 330) x 1	(950 × 1,380 × 330) x 1	(950 × 1,380 × 330) x 1	950 × 1,380 × 330	1,090 × 1,625 × 380
Net Weight			96 x 1	96 x 1	96 x 1	115	144
Sound Pressure Level	Cooling	dB(A)	50	51	52	57	58
	Heating	dB(A)	52	53	54	57	58
Communication Cable			2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
Power Supply	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	V, Ø, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50

Cooling only

Specifications			1φ, 220-240V		3φ, 380-415V
Model Name	Combination Unit		JRUV050GSD0	JRUV060GSD0	JRUV140LSS0
Capacity (Rated)	Cooling	kW	14.5	17.0	38.0
	Heating	kW	-	-	-
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold Fin	Gold Fin	Gold fin
Compressor	Type		Hermetic Motor Compressor	Hermetic Motor Compressor	Hermetically Sealed Scroll
	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1	5,300 x 1
Fan	Type		Axial Flow Fan	Axial Flow Fan	Propeller fan
	Motor Output x Number	W	124.0 x 1	85.4 x 2	250 x 2
	Air Flow Rate(High)	m ³ /min	60	90	190
Pipe Connctions	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)
	Gas	mm(inch)	15.88(5/8)	19.05(3/4)	28.58(1-1/8)
Dimensions(WxHxD)			950 x 834 x 330	950 x 1,170 x 330	1,090 × 1,625 × 380
Net Weight			66	79	157
Sound Pressure Level	Cooling	dB(A)	51	52	63
	Heating	dB(A)	-	-	-
Communication Cable			2C X 1.0~1.5	2C X 1.0~1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
Power Supply	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	V, Ø, Hz		1, 220-240, 50	1, 220-240, 50	380-415, 3, 50

MULTI V™ WATER IV

SUPERIOR EFFICIENCY WITH INTEGRATION OF SMART TECHNOLOGIES

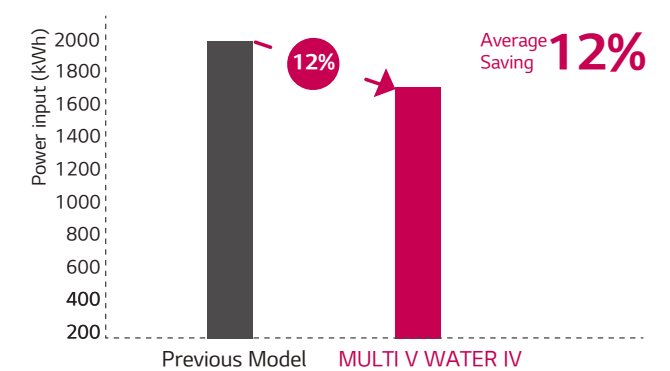
Today's businesses demand highly efficient temperature control solutions, capable of providing optimal energy savings without sacrificing performance. When it comes to cooling and heating a multi-storey or high-rise building, water cooled HVAC systems have become the solution of choice.

Offering several performance enhancements and greater installation versatility, LG's MULTI V WATER IV combines intelligent functions with advanced inverter technology; boosting both energy efficiency and operational range. This superior water cooled system significantly improves return on investment (ROI) with a stellar coefficient of performance (COP) of 5.0 and an equally impressive independent part load value (IPLV) of 7.64.

Along with outstanding energy efficiency, the new solution comes with a range of truly smart features, including optimized cycle composition and smart control. For ease of installation and better economy of space, MULTI V WATER IV is both lighter in weight and smaller in overall size.

ECONOMICAL, HIGHLY EFFICIENT SYSTEM

Adopting a water-based cooling method, this unit ensures better heat exchange performance for high-rise buildings, thus allowing significant electrical-savings.



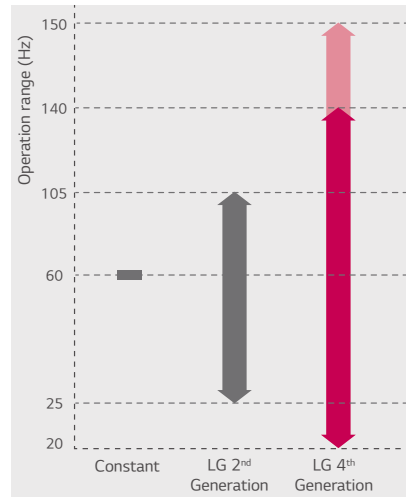
High Efficiency System Regardless of External Conditions

Regardless of outdoor temperature and other environmental conditions, MULTI V WATER IV is the optimal solution for high-rise buildings.

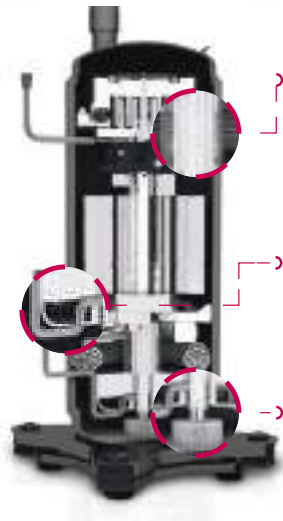


EXCEPTIONAL EFFICIENCY

LG'S 4TH GENERATION INVERTER COMPRESSOR



* Operation available up to 150 Hz dependent upon operating conditions



Extended Compressor Speed 20Hz ~ 150Hz

- Rapid operation response
- Capable of reaching the required temperature quickly
- Enhanced part load efficiency

Hi POR™ (High Pressure Oil Return)

- Eliminates loss in suction gas by returning oil directly to compressor thereby improving
- Compressor efficiency

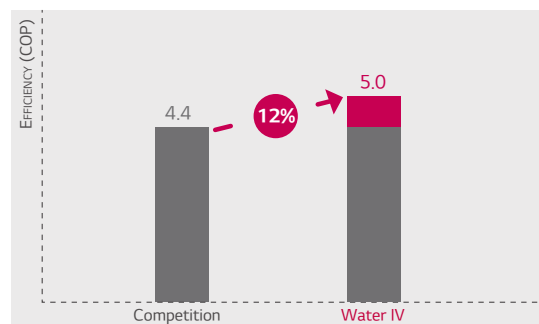
Smart Oil Control

- Oil recovery occurs only when required
- Enhanced compressor reliability & user comfort

WORLD'S FIRST, SEASONAL AND RATED EFFICIENCY

LG is the first company in the world to introduce variable water flow control system for water cooled VRF system. This system reduces energy consumption of circulation pump through embedded control kit.

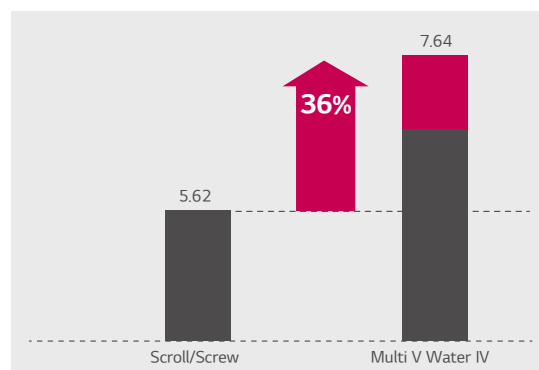
System Rated Efficiency



*Comparison between 10HP in cooling mode

36% HIGHER IPLV* THAN CHILLER

With a fourth generation inverter compressor, the Multi V Water IV boasts of top-class energy efficiency. In IPLV condition (ARI 550 / 590), Multi V Water IV is 36 percent higher than that provided by standard chiller unit.



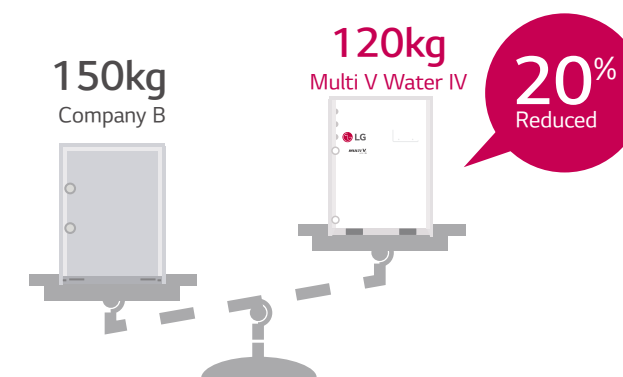
* Water flow rate - 96 LPM, Inlet water temp - 30°C

SMALL SIZE AND LIGHT WEIGHT

Reduced size and lighter weight allows more freedom to choose a location for external unit, it also enhances utilization of indoor space.

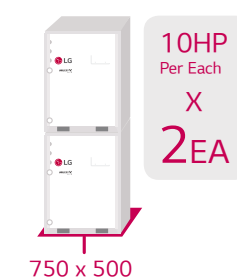
LIGHTWEIGHT AND COMPACT

Easier to transport and install, thanks to 13% reduction in unit size and 20% reduction in overall weight.



The optimal design of the compact, lightweight outdoor unit enables double stacking, which results in 60% savings on installation space.

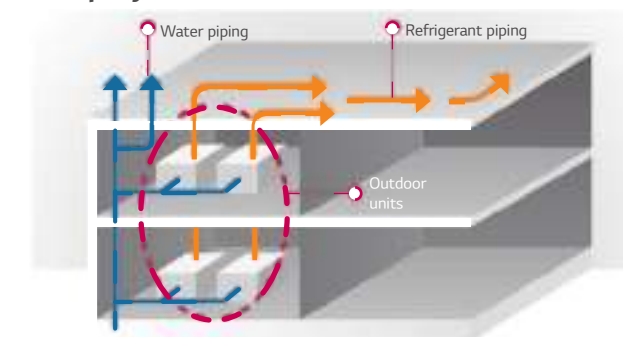
*Double stacking floor area
**20HP Capacity Installation Scene
Multi V Water IV



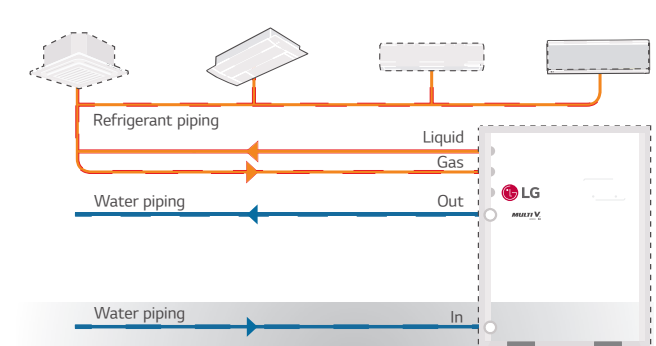
EASY INSTALLATION

Front-side connectable refrigerant and water pipe make installation easier.

Company B



Multi V Water IV



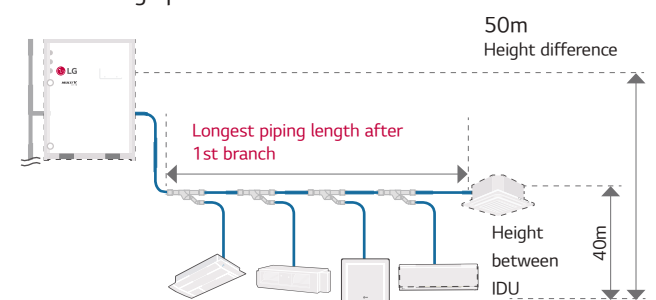
LONGEST PIPING LENGTH

Provides flexible installation up to 300m of total piping length.

As water pipes are not connected to indoor units, users are free from leakage problems.

Total piping length	300m
Actual longest piping length (Equivalent)	150m(175m)
Longest piping length after 1st branch	40m
Height difference between ODU-IDU	50m(40m*)
Height difference between IDU-IDU	40m

*Outdoor unit is lower than indoor unit.
**ODU : Outdoor unit/IDU: Indoor Unit



HIGH RELIABILITY

Stable performance and long life are ensured irrespective of environmental changes, in addition to high-speed cooling and heating.

THE BENEFITS OF SHELL & COIL HEAT EXCHANGE

Shell & Coil type heat exchanger can be removed from the rest of the equipment and washed separately. This resolves the problem of decrease in performance, thereby providing easy maintenance.

Easy Maintenance

- Detachable from the shell & coil

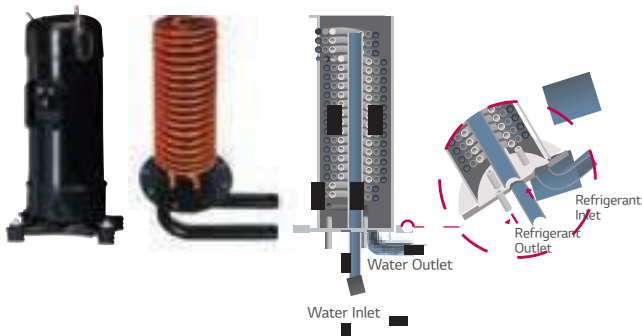
Operation Cost Saving

- Performance improvement after washing treatment

Less Dependence on Water Quality

- Not affected by water quality

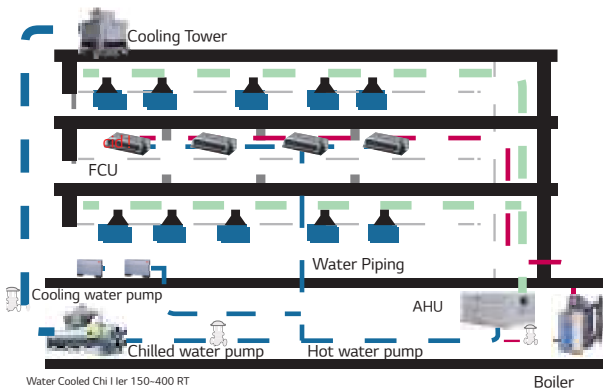
* Please contact local LG office for application availability.



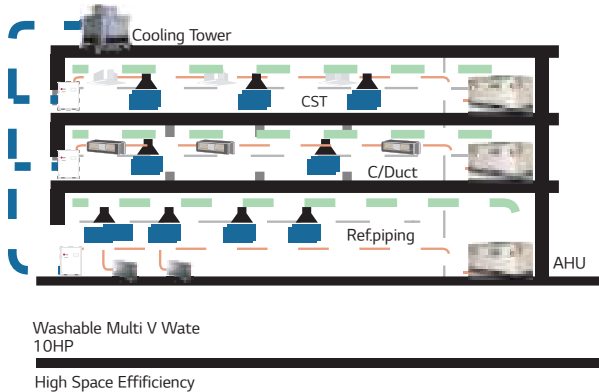
MULTI V WATER SHELL & COIL

Multi V Water Shell & Coil is suitable to install without dependence on water quality. (Connectable with Open type cooling tower) It is the best solution for retrofit projects i.e chiller replacement as piping and other equipment are not required to change.

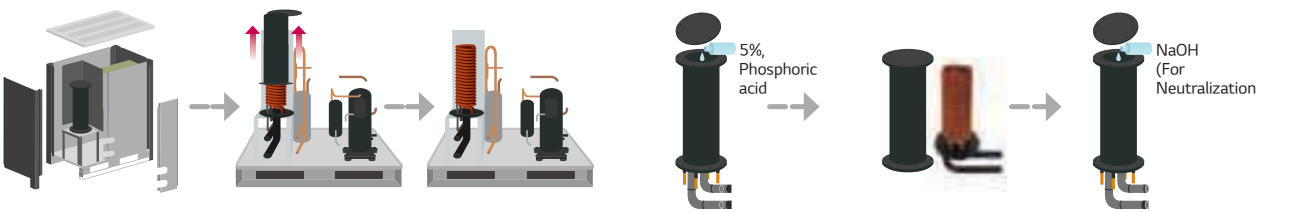
Water Cooled Chiller



Washable Multi V Water



DISASSEMBLY SEQUENCE AND WASHING OF SCHEX



- Remove the upper and side panel.
- Lift case in the vertical direction in order to avoid the damage of the coil.
- Strip the O-ring
- Put 5% Phosphoric acid aqueous solution in the case and close the upper plate.
- After about 1 hour, discharge 5% Phosphoric acid aqueous solution through the drain pipe.
- Scrub the Coil in the horizontal direction with size 6-8mm brush.
- Spray the Water in the horizontal direction for washing of the entire coil.
- Open the upper plate then circulate the water intermixed with NaOH, discharge the water through the drain pipe.

*SPECIFICATIONS



10, 20, 30 HP

Cooling Only

System Capacity		HP	10	20	30
Model Name		Combination Unit	ARWV100LAL4	ARWV200LAL4	ARWV300LAL4
		Independent Unit		ARWV100LAL4	ARWV100LAL4
		Independent Unit		ARWV100LAL4	ARWV100LAL4
		Independent Unit			ARWV100LAL4
Capacity	Cooling	kW	28	56	84
		kcal/h	24,100	48,200	72,200
Input	Cooling	kW	5.6	11.2	16.8
Casing Color			Warm Gray, Morning Gray		
Compressor	Type		Hemetically Sealed Scroll		
	Combination		(Inverter) × 1	(Inverter) × 2	(Inverter) × 3
Heat Exchanger	Type		Copper Coil		
	Maximum Pressure Resistance	kgf/cm ²	45		
	Head Loss	kPa	36.5	36.5 + 36.5	36.5 + 36.5 + 36.5
	Rated Water Flow	LPM	96	96 + 96	96 + 96 + 96
Temp. Range of Circulation Water	Cooling		10° ~ 45°(50° ~ 113°)	10° ~ 45°(50° ~ 113°)	10° ~ 45°(50° ~ 113°)
Refrigerant Connecting Pipes	Liquid	mm(inch)	9.52(3/8)	12.7(1/2)	19.05(3/4)
	Gas	mm(inch)	22.2(7/8)	28.58(1-1/8)	34.9(1-3/8)
Water Connecting Pipes	Inlet	mm	PT25	PT25+PT25	PT25+PT25+PT25
	Outlet	mm	PT25	PT25+PT25	PT25+PT25+PT25
	Drain Outlet	mm	20	20	20
Dimensions(W×H×D)		mm	(755 × 997 × 500) × 1	(755 × 997 × 500) × 2	(755 × 997 × 500) × 3
		inch	(29-23/32 × 39-1/4 × 19-11/16) × 1	(29-23/32 × 39-1/4 × 19-11/16) × 2	(29-23/32 × 39-1/4 × 19-11/16) × 3
Net Weight		kg	120 × 1	120 × 2	120 × 3
		lbs	265 × 1	265 × 2	265 × 3
Transmission Cable(CVV-SB)		mm ²	1.0 ~ 1.5 × 2C		
Refrigerant	Name		R410A		
	Control Device		EEV		
Power Supply		Ø, V, Hz	3, 380 - 415.50		

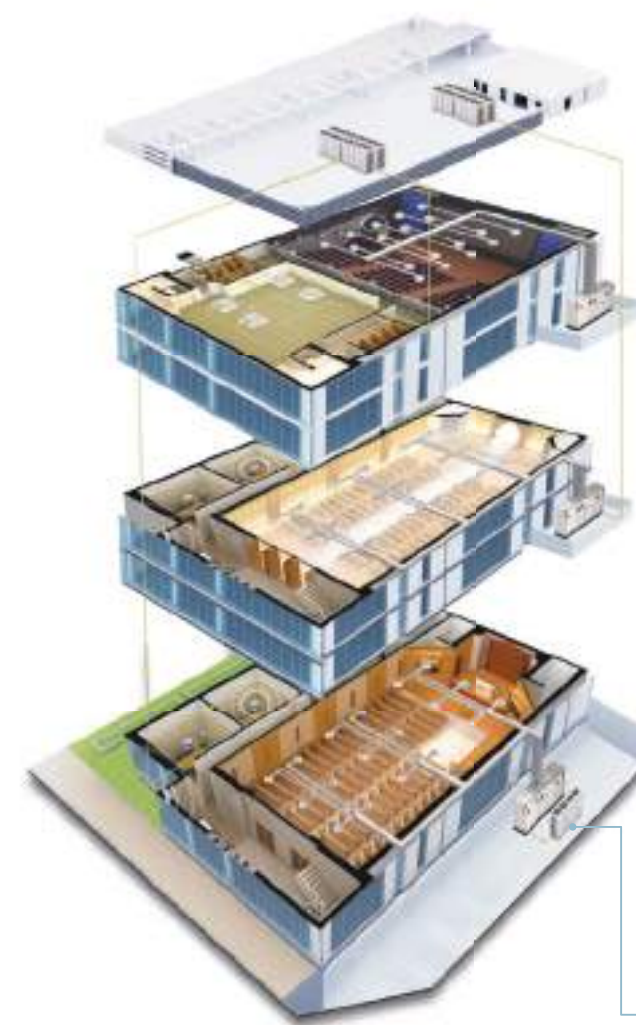
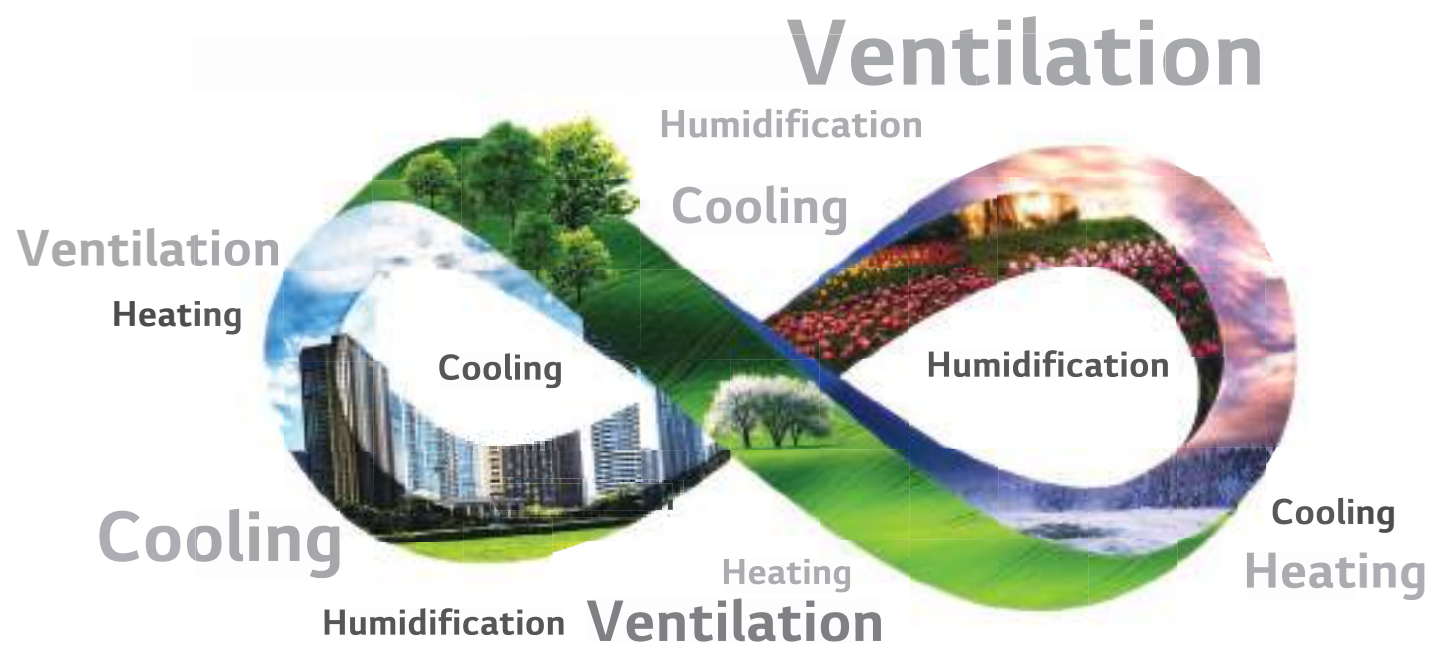
1. Capacities are based on the following conditions

COOLING	HEATING
Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB	Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB
Water inlet temp. 30°C(86°F)	Water inlet temp. 20°C(86°F)
Interconnecting piping length 7.5m	Interconnecting piping length 7.5m
Level difference of zero	Level difference of zero

- 2. Capacities are net capacities
- 3. Due to our policy of innovation, some specifications may be changed without notification
- 4. EEV : Electronic Expansion Valve

MULTI VTM AHU

DX AHU supplies air conditioning with energy saving & control system.



Air Conditioning System for Big Spaces

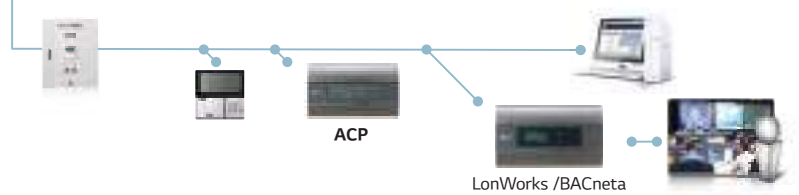
- Greater air volume, high static pressure for big spaces
- Ventilation, Humidification IAQ control

Multi V Interlocking & Energy Saving Solution

- Cooling & Heating is possible by Multi V outdoor unit
- High elevation & long refrigerant piping system
- Energy saving by free cooling
- Highly efficient Inverter system / partial load

ACP & BMS interlocking system

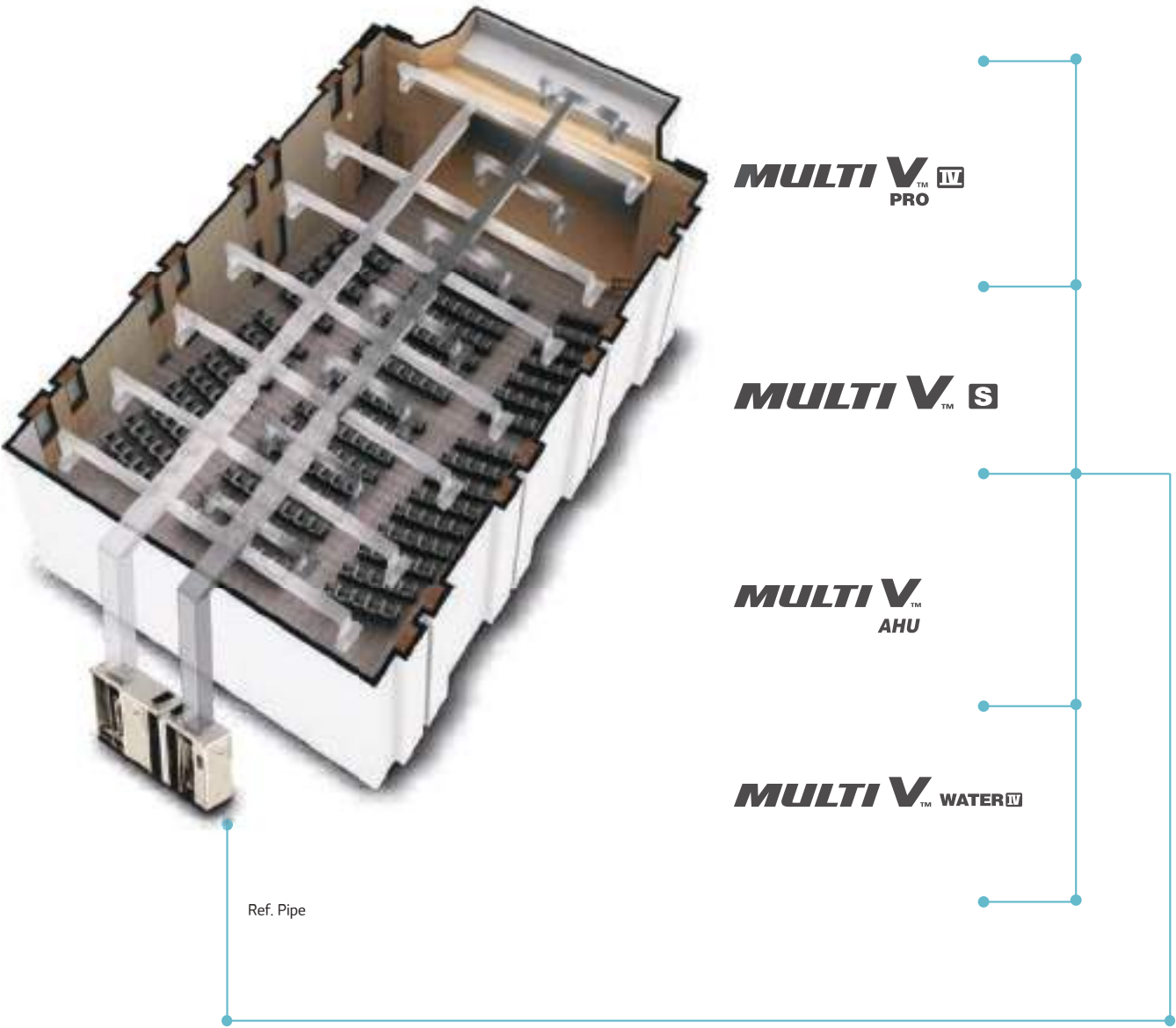
- ACP & AC manager interlocking system
- BMS(BAS) interlocking system



DX AHU System

DX AHU supplies air conditioning with energy saving & control system.

- DX AHU System needs outdoor units
- Refrigerant piping work and duct work only



DX AHU Kit Application



Heat Pump

Category	Small Capacity	Large Capacity	Large Capacity/Damper Control
Capacity	Up to 20HP	8-56HP Set	8-56HP * 8 Sets
Outdoor unit	Multi V IV Pro / Multi V / Multi V S / Multi V / Multi V Water	Multi V IV Pro / Multi V	Multi V IV Pro / Multi V
Composition	Comm. Kit (PAHCMR000 : 1ea) EEV Kit (PRLK048A0 / PRLK096A0 : 1ea) Wired remote controller : 1ea Dry Contact : 1ea (Acc'y)	Comm. Kit (PAHCMR000 : 1ea) Expansion Kit (PATX**AOE : 1ea) Wired remote controller : 1ea (Acc'y) Dry Contact : 1ea (Acc'y)	Control Kit (PRCKD ** E : 1ea) Expansion Kit (PATX ** AOE : No.of ODU) Wired remote controller : 1ea (Default)
Basic running mode	Cooling, Heating, Fan	Cooling, Heating, Fan	Cooling, Heating, Fan
Additional running mode	-	-	Energy saving Humid. / Soft dry Co2 /Smoke control/ Fire alarm/Emergency stop
Fan signal	On / Off Signal	On / Off Signal	On / Off Signal
Control	AC Smart IV / ACP IV / AC Manager IV	AC Smart IV / ACP IV / AC Manager IV	AC Smart IV / ACP IV / AC Manager IV

Cooling

Category	Small Capacity	Large Capacity	Large Capacity/Damper Control
Capacity	up to 20HP	8-56HP Set	8-56HP * 8 Sets
Outdoor unit	Multi V / Multi V IV Pro	Multi V / Multi V IV Pro	Multi V / Multi V IV Pro
Composition	Comm. Kit (PAHCMR000 : 1ea) EEV Kit (PRLK048A0 / PRLK096A0 : 1ea) Wired remote controller : 1ea Dry Contact : 1ea (Acc'y)	Comm. Kit (PAHCMR000 : No. of ODU) Expansion Kit (PATX**AOE : No. of ODU) Wired remote controller : 1ea Dry Contact : 1ea (Acc'y)	Control Kit (PRCKD ** E : 1ea) Expansion Kit (PATX ** AOE : No. of ODU) Wired remote controller : 1ea (Default)
Basic running mode	Cooling, Fan	Cooling, Fan	Cooling, Fan
Additional running mode	-	-	Energy saving Soft dry CO2 Smoke control Fire alarm Emergency stop
Fan signal	On / Off Signal	On / Off Signal	On / Off Signal
Control	AC Smart V / ACP V / AC Manager V	AC Smart V / ACP V / AC Manager V	AC Smart V / ACP V / AC Manager V

INDOOR UNITS

If you need a highly efficient air conditioning system in your building, Multi V is the right choice for you.

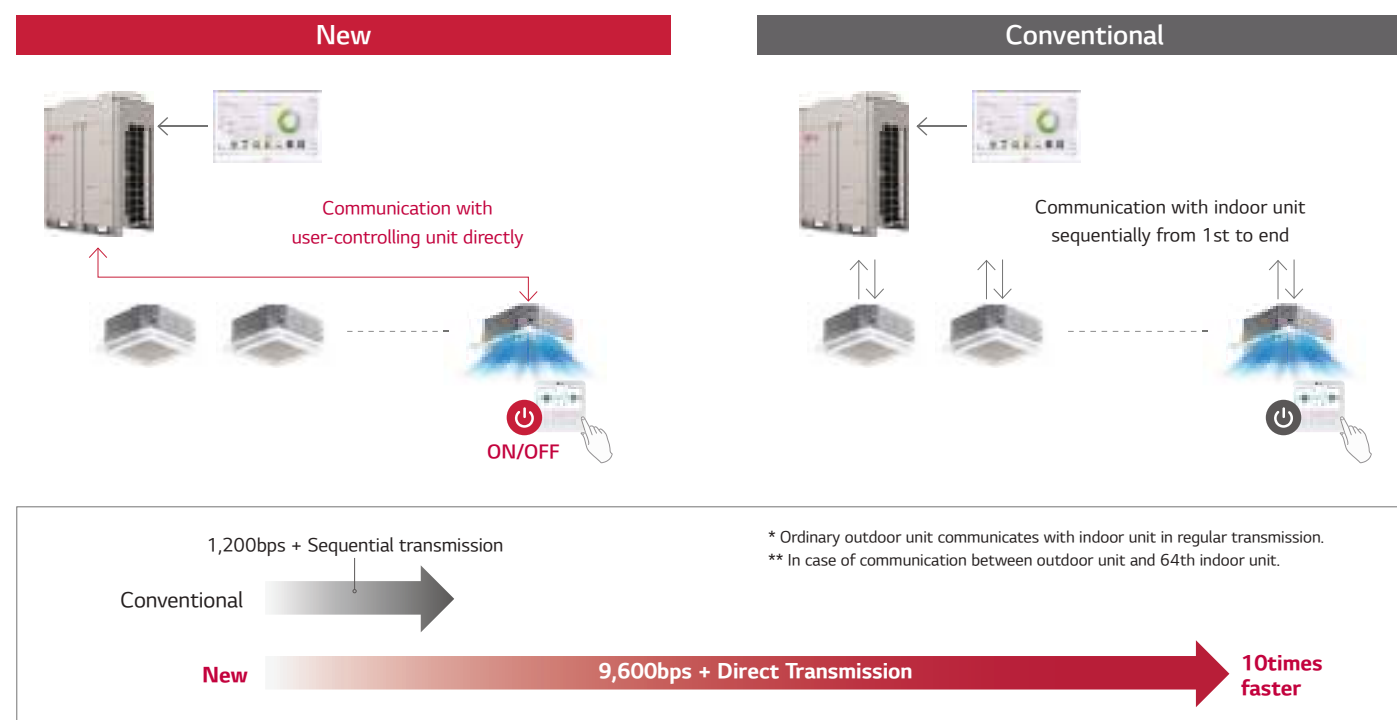
- Wall Mounted
- Ceiling Cassette
- Ceiling Concealed Duct
- Fresh Air Intake Units



COMFORT

QUICK CONTROL

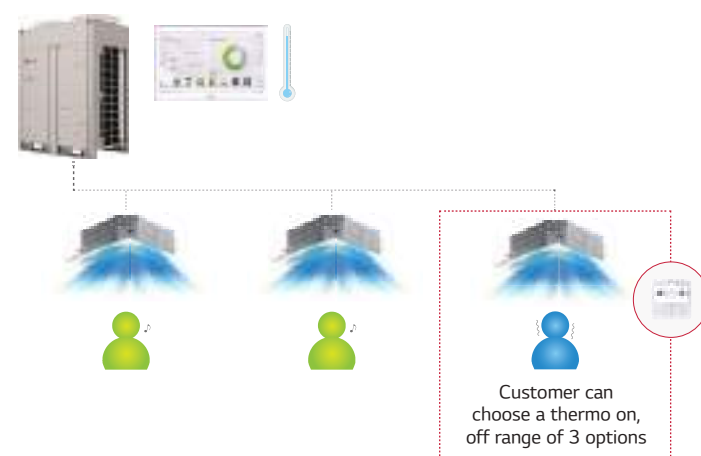
4th Generation indoor unit offers rapid heating and cooling about 10 times faster than conventional unit through change communication mode and speed change.



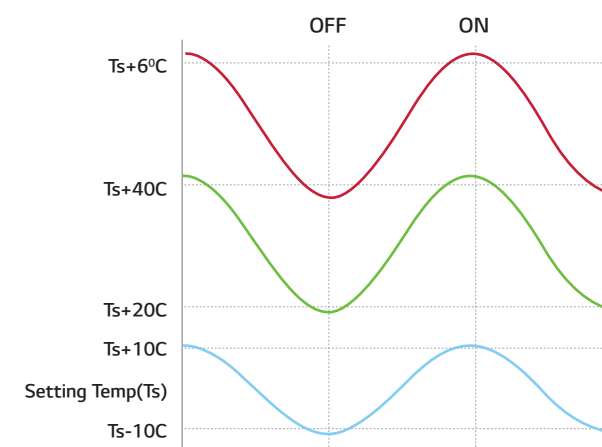
THERMO ON / OFF RANGE SETTING (COOLING)

User can set cooling thermo on / off range with wired remote controller for prevention overcooling and making optimized indoor environment.

Prevention Overcooling

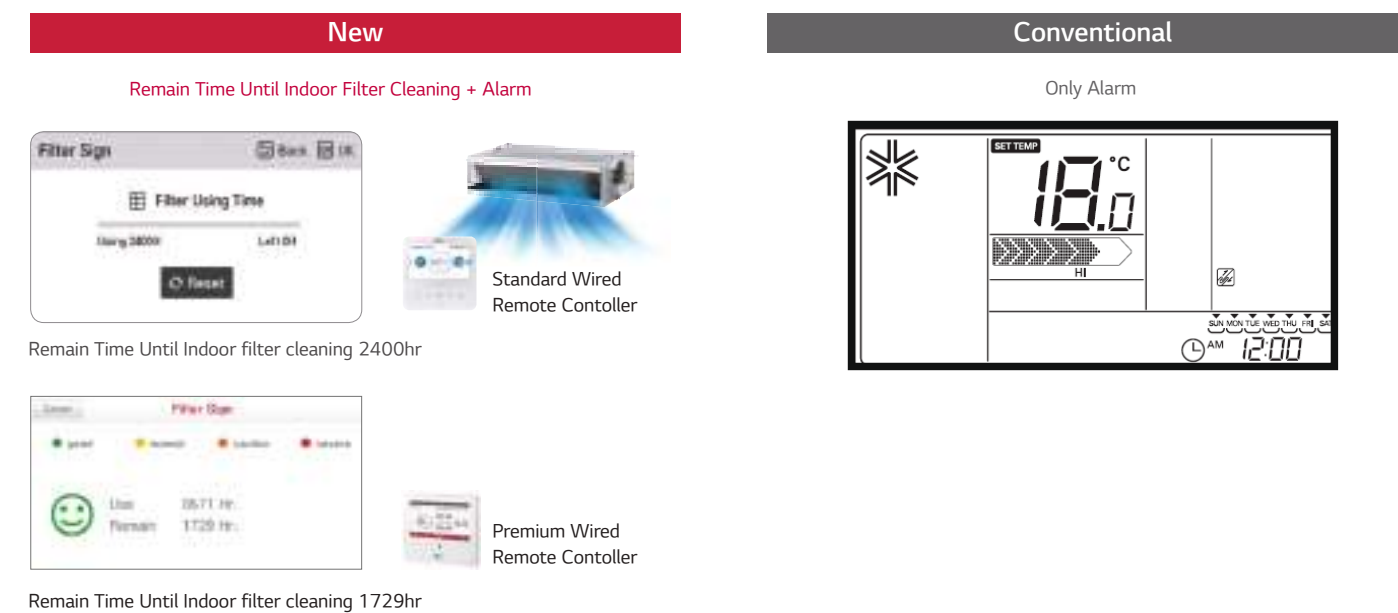


Cooling Thermo On / Off Range



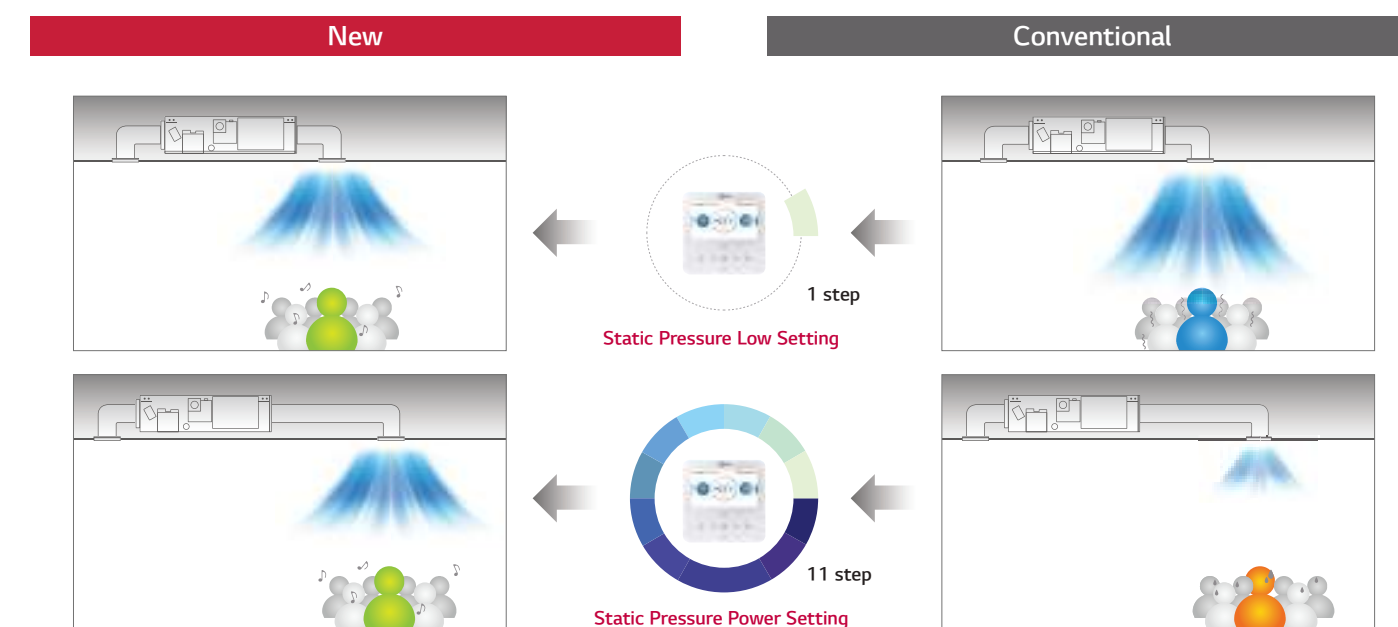
FILTER SIGN (REMAINING TIME)

The alarm is activated when the filter needs to be cleaned, and the time remaining for cleansing is displayed on the screen, which is convenient for users.



STATIC PRESSURE 11 STEP CONTROL (ONLY FOR CEILING CONCEALED DUCT)

Depending on the installation environment, 4 series ceiling concealed duct is controlled the static pressure to 11 steps, for providing comfortable environment suitable for any environment



CONVENIENCE

GROUP CONTROL

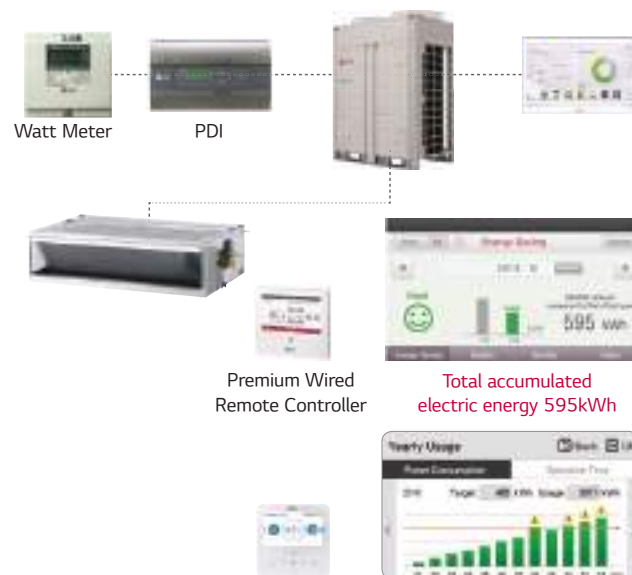
In case of group control, user can control many more functions than conventional system.



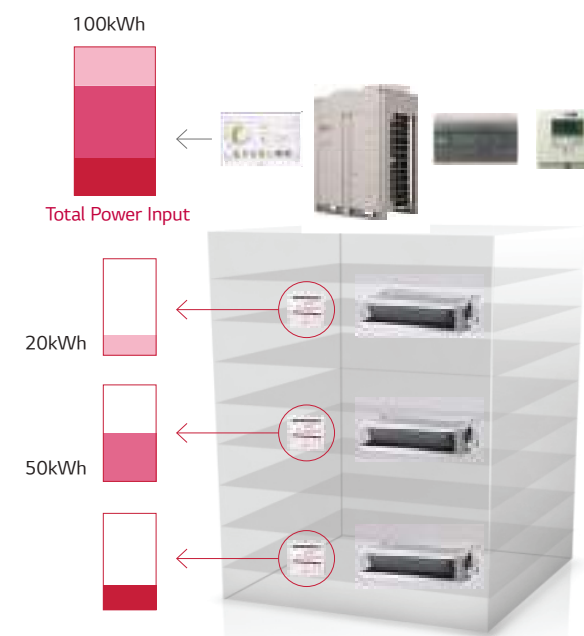
ENERGY MONITORING (ACCUMULATED ELECTRIC ENERGY CHECK)

Accumulated electric energy of the indoor unit can be identified with wired remote control, as well as with the central controller. This function is an advantage for energy management.

Install Scene



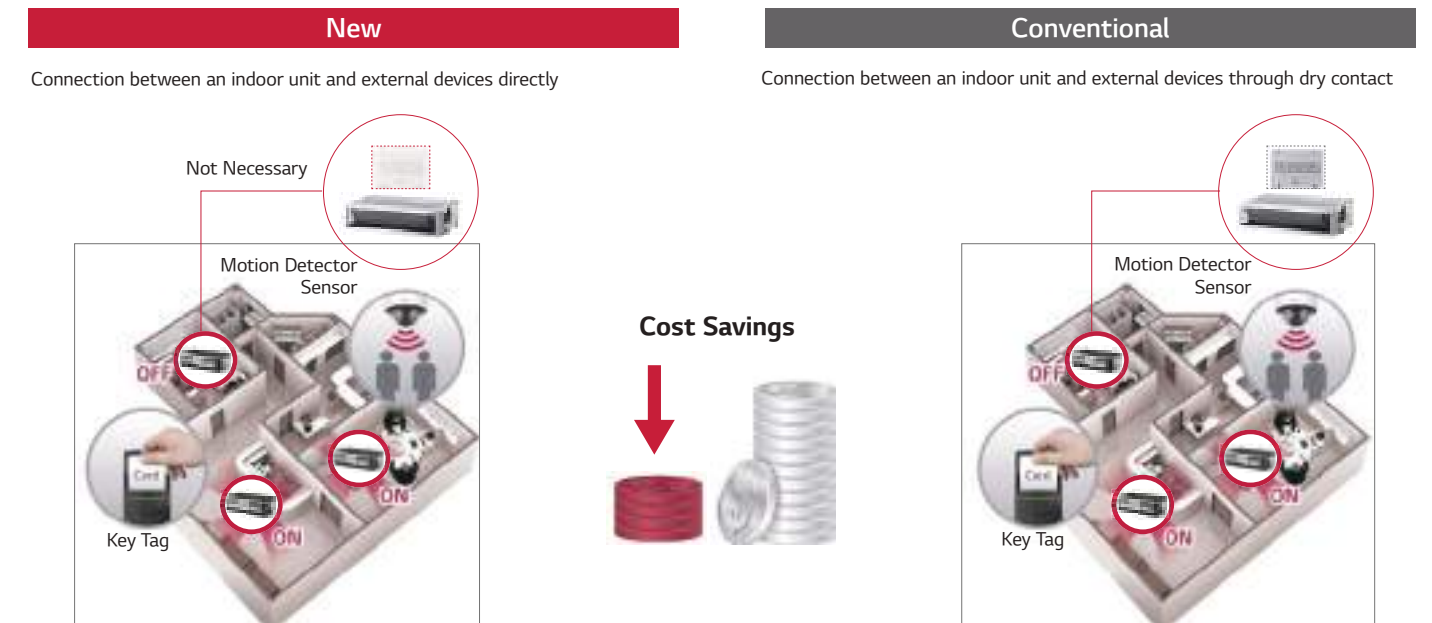
Apply for multi-storey building



* Outdoor unit's accumulated electric energy / using rate of individual indoor unit + indoor unit's accumulated electric energy is displayed in wired remote controller, only when central controller, digital integrating electricity meter and PDI are installed and PDI, outdoor unit and indoor unit are connected with power wire. Only total accumulated electric energy is displayed in standard wired remote controller. In premium wired remote controller, that are displayed into week / month / year.

1 POINT EXTERNAL INPUT (ON / OFF CONTROL)

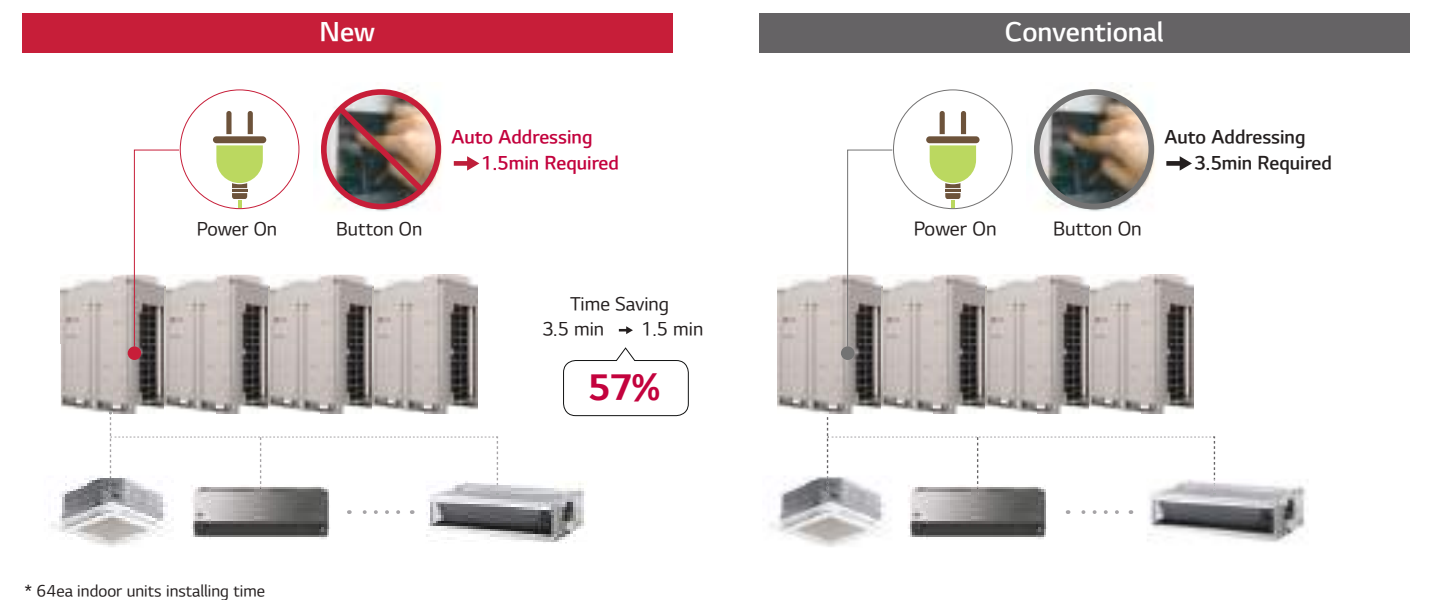
Indoor unit can control external devices without dry contact, so customer can save cost of installation.



* In case of needing more functions beside on / off control, a dry contact is required to be installed.

AUTO ADDRESSING

Addressing time has been reduced up to 1.5min., that needed only power on without any process. Auto addressing takes shorter as 57% as compared to conventional.



* 64ea indoor units installing time

CONVENIENCE

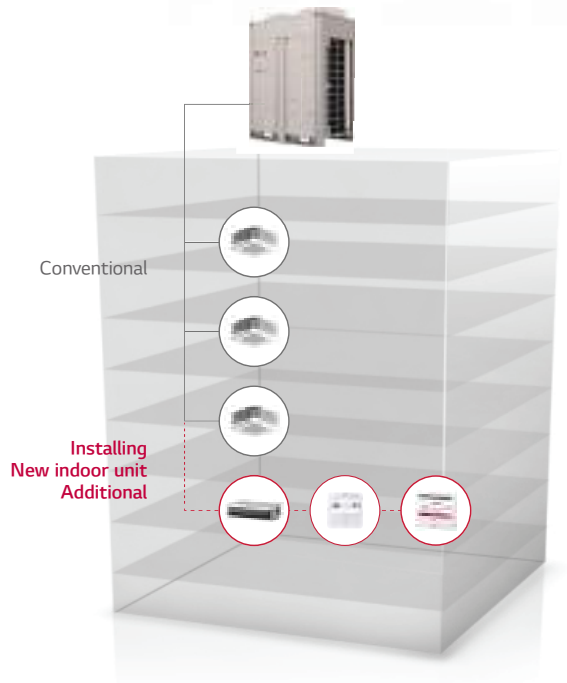
COMPATIBILITY

- Outdoor unit**
- Any MULTI V series outdoor unit can be installed
- Indoor unit**
- Any MULTI V series can be installed

- IWired remote controller**
- Standard III: PREMTB100, PREMTBB10
 - Standard II: PREMTB001, PREMTBB01
 - Premium: PREMTA000, PREMTA000A, PREMTA00B

Implementable Functions

- Static Pressure 11 Step Control
- Cooling thermo on/off range setting
- Filter Sign
- Control the external devices
- Heating test run mode
- Convenient check information



TEST RUN (HEATING)

Test run mode cab be operated cooling mode and heating mode for easy service.

New

Heating and cooling test run mode are available

Conventional

Heating test run mode is unavailable

MODEL INFORMATION MONITORING

User can check indoor unit and outdoor unit's information with wired remote controller so that is convenient for service.

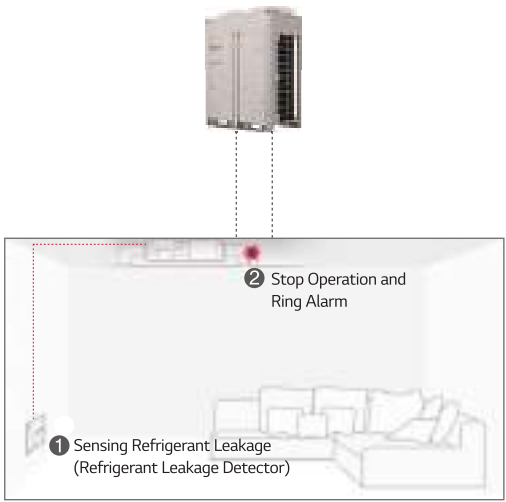
Category	No.	Model							
First number: Outdoor unit	0	MULTI V							
	1	MULTI							
	2	Single							
Category	No.	Model	No.	Model	No.	Model			
Second number: Indoor unit	0	CST	6	Console	A	HYDRO KIT for Medium Temp.			
	1	Duct	7	Single Package	B	HYDRO KIT for High Temp.			
	2	CVT	8	General Ventilation	-	-			
	3	PAC	9	AWHP	-	-			
	4	RAC	-	-	-	-			
Category	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	
Third number: capacity Indoor unit	MULTI V	0	5K	4	15K	8	36K	C	76K
		1	7K	5	15K	9	42K	D	96K
		2	9K	6	24K	A	48K	-	-
		3	12K	7	28K	B	54K	-	-
	MULTI	0	5K	4	12K	8	20K	-	-
		1	7K	5	14K	9	24K	-	-
		2	8K	6	15K	A	30K	-	-
		3	9K	7	18K	B	36K	-	-
	Single	0	9K	4	24K	8	48K	-	-
		1	12K	5	30K	9	60K	-	-
		2	18K	6	36K	-	-	-	-
		3	21K	7	42K	-	-	-	-



REFRIGERANT LEAKAGE DETECTION (OPTION FUNCTION)

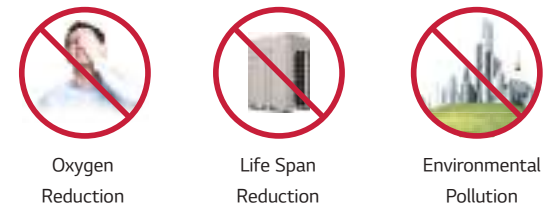
To meet the global refrigerant leakage regulation, LG uses refrigerant leakage detection kit. When the detector senses a refrigerant leakage, it sounds and alarming buzzer and stops operation. It signals the leakage by simultaneously blinking the red and green LED sensor lights.

Refrigerant Leakage Detection

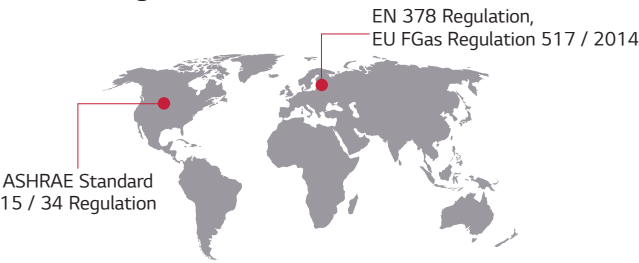


* Refrigerant leakage detector is optional accessory.

In Case of Leak Refrigerant



Global Regulation



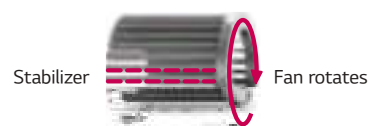
WALL MOUNTED

LOW NOISE LEVEL

The indoor unit operates quietly in sleep mode for peace in bedroom or office. In addition, the outdoor units have reduced vibration and noise, thanks to a super quiet fan and motor.

Conventional

When the fan rotates, the stabilizer and the fan blades are parallel (= the contact of lines)
→ Instantaneous pressure change is great



Skew Fan

When the fan rotates, the stabilizer and the fan blades are not parallel (= the contact of points)
→ Instantaneous pressure change is small.



DEODORISING (TRIPLE FILTER)

The triple filter consists of three special filters that can reduce the side effects caused by some organic compounds including formaldehyde. It has the ability to remove unpleasant odors and can create a more comfortable environment.



1 VOC (Volatile Organic Chemical)

Removes odour and hazardous VOCs that are discharged from household materials made out of chemical substances (carpet, paint, cleaners, furniture, etc.)

2 Formaldehyde filter

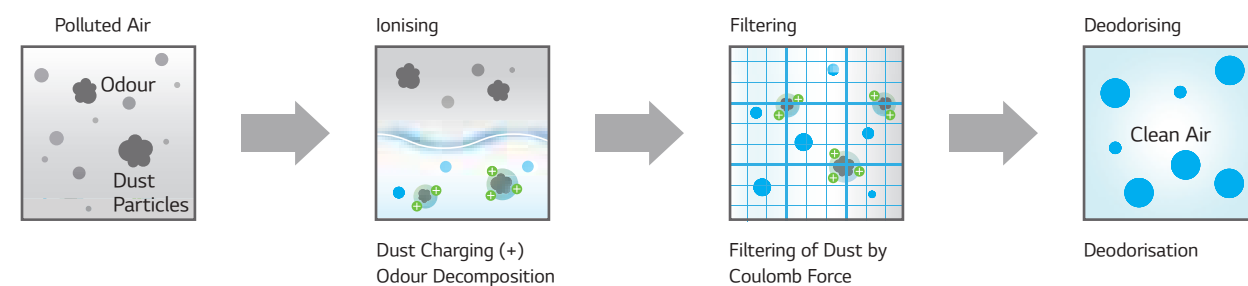
Removes formaldehyde, a leading cause of sick building syndrome, and can prevent dermatitis, vomiting, and pneumonia

3 Common odor filter

Removes ordinary odors that can cause migraines and chronic fatigue syndrome

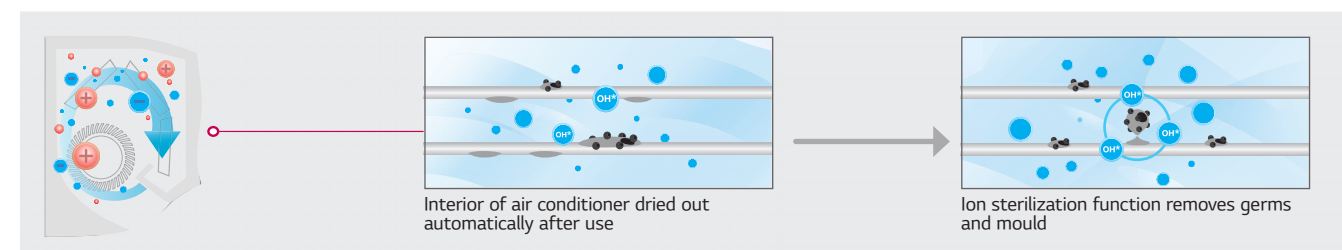
Eliminating (Plasma Filter)

The plasma air purifying system was initially developed by LG not only for reduction of microscopic contaminants and dust, but also for the removal of house mites, small dust particles, and pet fur in order to reduce allergy and asthma symptoms.



Auto Cleaning

A major cause of air conditioner odors is mould and bacteria that can breed in the heat exchanger. The auto clean function dries the wet heat exchanger to prevent mould and bacteria from breeding which can significantly reduce smells and saves the user from the hassle of frequent cleaning.

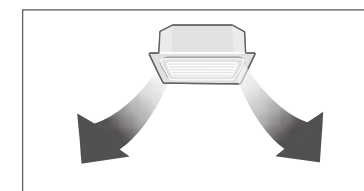


CEILING CASSETTE

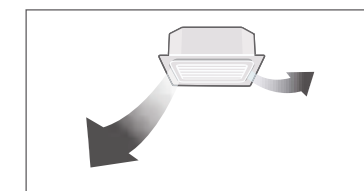
INDEPENDENT VANE CONTROL

It is possible to control each of the 4 vanes individually as the motors are connected separately to each vane.

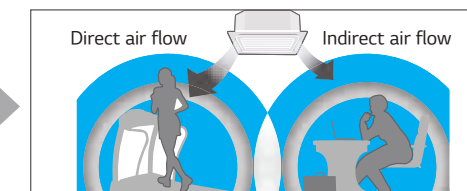
All Vane Operation



Individual Vane Angle Control

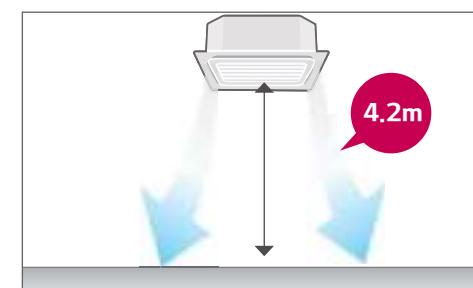


Independent Vane Control



HIGH CEILING MODE

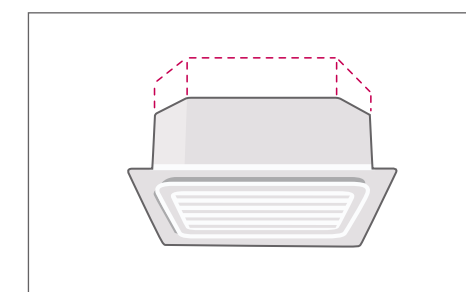
High ceiling mode provides powerful cooling and heating up to 4.2m in height, from ceiling to floor.



COMPACT SIZE

The indoor unit with slim and compact dimensions has reduced the restriction which enables successful installation in various spaces.

	6.0~7.2 kW	8.3~11.0 kW
conventional	218mm	288mm
LG	204mm	246mm

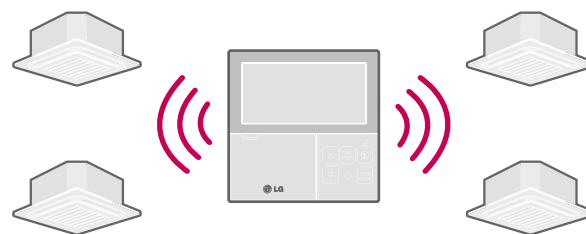
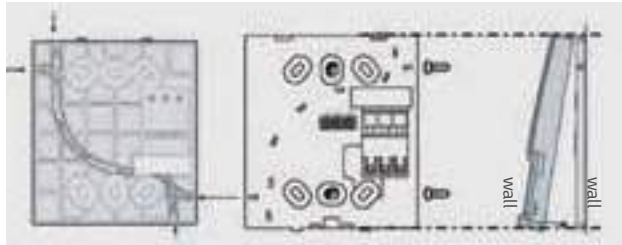


FLEXIBLE CONNECTION

Flexible connection of remote controller

- Group control : 1 remote controller for up to 16 indoor units.
- Second remote control : 2 remote controllers for 1 indoor unit

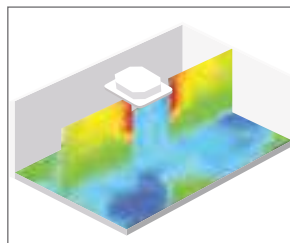
Easy & solid attachment to the wall



SWIRL SWING

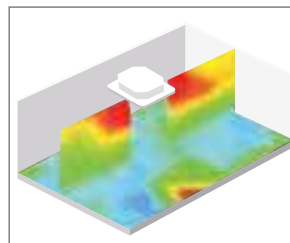
Swirl swing distributes air evenly throughout the room to ensure a more comfortable environment by adjusting the movement of the vane.

Normal air flow



Hanger adjust

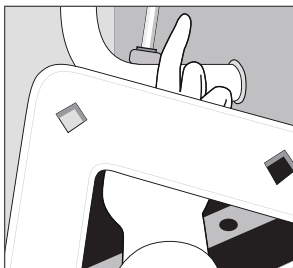
Swirl swing (pleasant air)



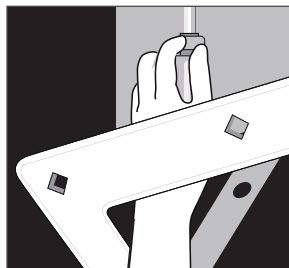
CONVENIENT PANEL INSTALLATION

The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe.

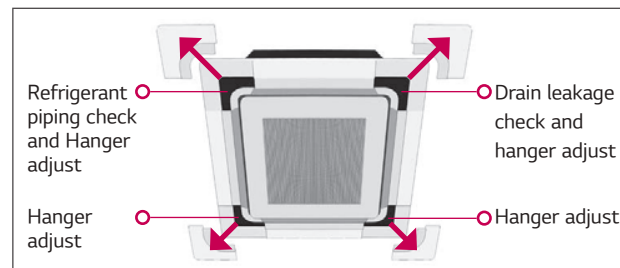
Drain leakage check



Hanger adjust



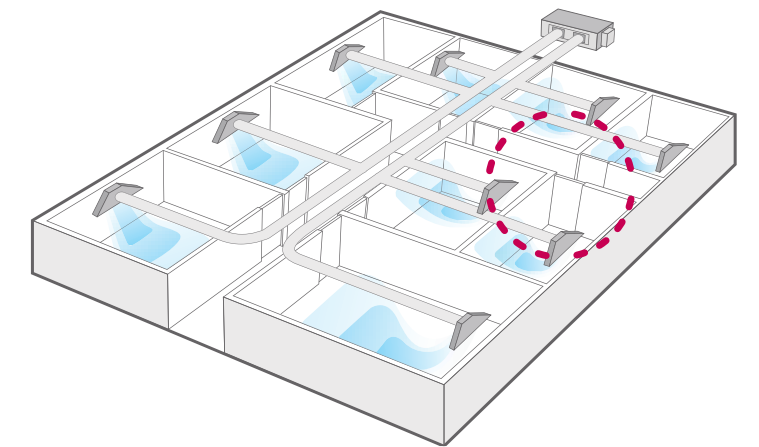
Detachable Corner Design



CEILING CONCEALED DUCT

OPERATION FOR MULTIPLE ROOMS

Using a spiral duct (embedded or flexible type) and stream chamber, it is possible to operate cooling/heating for several rooms simultaneously.

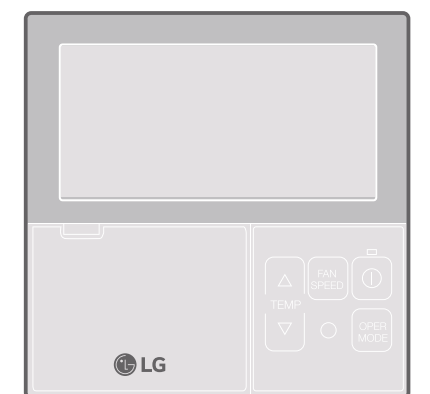
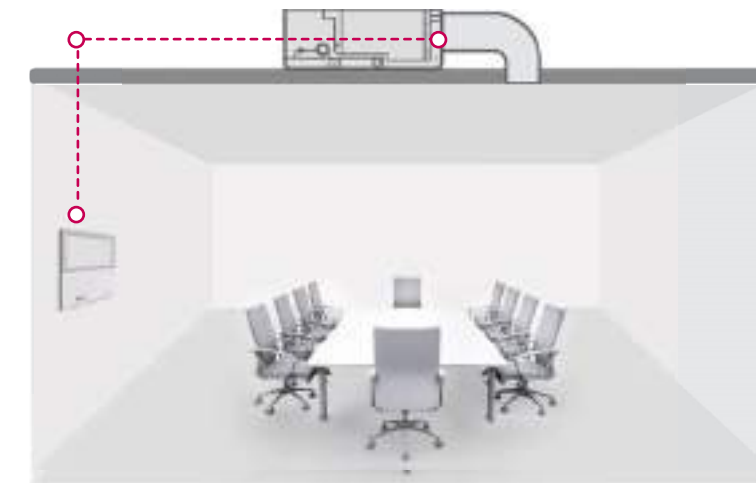


TWO THERMISTORS CONTROL

The indoor temperature can be checked using the thermistors in the remote controller as well as from the indoor unit. There may be a significant difference between ceiling and floor air temperature. Two thermistors can optimize indoor air temperature for a more comfortable environment.

Remote Controller Thermistor

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



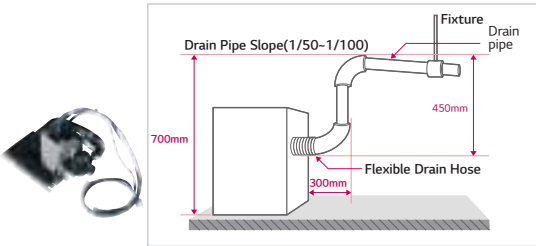
VARIABLE ESP WITH LOW NOISE (LOW STATIC DUCT ONLY)

The ESP of the new low static ducts can be easily controlled by the wired remote controller(0~50Pa). It allows the external static pressure to be finely tuned according to the application. In addition, the noise levels have been reduced, in spite of the increase in the maximum ESP.



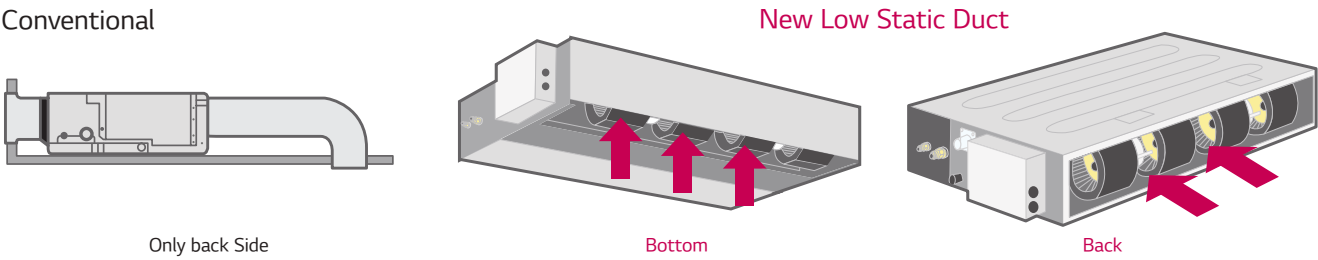
HIGH HEAD DRAIN PUMP

Auxiliary drain pump automatically drains water. A standard drain-head height is possible up to 700mm, creating the ideal solution for perfect water drainage.



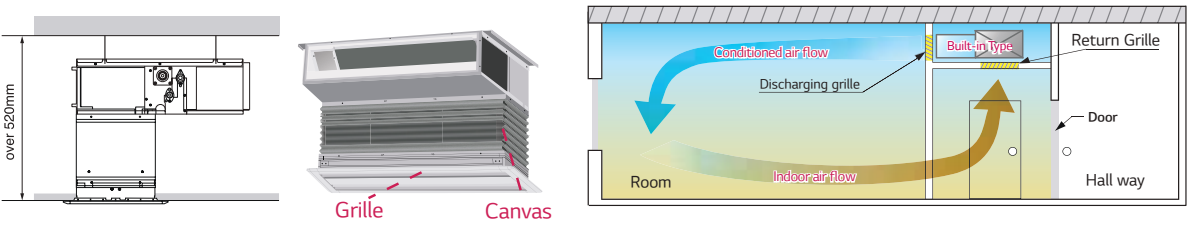
FLEXIBLE INSTALLATION (LOW STATIC DUCT ONLY)

The new low static duct allows you to choose the air intake direction (Back or underneath). Conventional low static duct models only take return air from the back, this means more space is needed for ducting. It is suitable for applications which don't have enough space.



APPLICATION OF BUILT-IN DUCT

Built-in duct has no need of duct space while using suction canvas and grille.



*Product images are for reference only, Actual product may vary.

WALL MOUNTED

JRNU09GSJA4 / JRNU12GSJA4 / JRNU15GSJA4 / JRNU18GSKA4 / JRNU24GSKA4

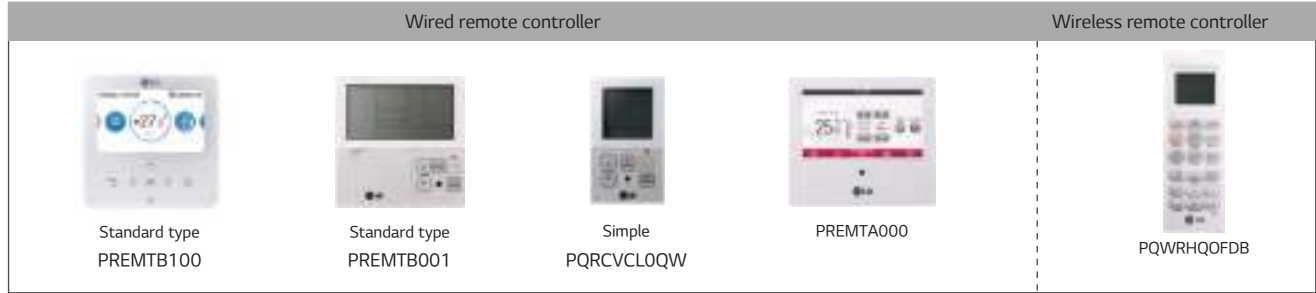


Specifications

Model		Unit	JRNU09GSJA4	JRNU12GSJA4	JRNU15GSJA4	JRNU18GSKA4	JRNU24GSKA4
Cooling Capacity		kW	2.8	3.6	4.5	5.6	7.1
		Btu/h	9,600	12,300	15,400	19,100	24,200
Heating Capacity		kW	3.2	4	5	6.3	7.5
		Btu/h	10,900	13,600	17,100	21,500	25,600
Power Input (H / M / L)		W	13 / 12 / 9	15 / 13 / 11	23 / 18 / 11	32 / 26 / 16	39 / 26 / 16
Dimensions (W x H x D)		mm	837 x 302 x 189	837 x 302 x 189	837 x 302 x 189	998 x 330 x 210	998 x 330 x 210
Pipe Connections	Air Flow Rate (S / H / M / L)	ft³/min	336 / 290 / 247 / 230	442 / 336 / 290 / 230	442 / 371 / 318 / 247	537 / 494 / 424 / 371	636 / 537 / 449 / 371
	Liquid Side	mm(inch)	Ø 6.35 (1/4)	Ø 6.35 (1/4)	Ø 6.35 (1/4)	Ø6.35 (1/4)	Ø9.52(3/8)
	Gas Side	mm(inch)	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø12.7 (1/2)	Ø15.88(5/8)
	Drain(OD/ID)	mm	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)
Weight	Body	kg(lbs)	8.6 (19)	8.6 (19)	8.6 (19)	12.4 (27.3)	12.4 (27.3)
Noise Level (S / H / M / L)		dB(A)	36 / 34 / 32 / 28	39 / 37 / 34 / 30	44 / 42 / 39 / 32	46 / 43 / 38 / 34	48 / 46 / 41 / 34
Power Supply		Ø, V, Hz	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50

* Accessories

Model	JRNU09GSJA4	JRNU12GSJA4	JRNU15GSJA4	JRNU18GSKA4	JRNU24GSKA4
Dry Contact	With Case (1 contact point)		PDRYCB100/PDRYCB000		
	With Case (2contact point)		PDRYCB400		



4 WAY CASSETTE (570X570)

ARNU07GTRA2 / ARNU0GTRA2 / ARNU12GTRA2 /
ARNU15GTQA2 / ARNU18GTQA2



Specifications

Model		Unit	ARNU07GTRA2	ARNU09GTRA2	ARNU12GTRA2	ARNU15GTQA2	ARNU18GTQA2
Capacity	Heating		2.2	2.8	3.6	4.5	5.6
		Btu/h	7,500	9,600	12,300	15,400	19,100
		kW	2.5	3.2	4.0	5.0	6.3
		Btu/h	8,500	10,900	13,600	17,100	21,500
Power Input		30	30	30	30	30	
		30	30	30	30	30	
Power supply		Ø, V, Hz	1, 220 ~ 240, 50				
Dimensions (WxDxH)			570 x 570 x 214			570 x 570 x 256	
			700x700x22				
Weight	Body	kg	13.1	14.2	14.2	15.5	15.5
	Front panel		2.3	2.3	2.3	2.5	2.5
Panel Color					Morning Fog		
Noise level		dBA±3	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	37 / 34 / 32	37/ 35 / 34
Air flow rate	S/H/M/L	CMM	8 / 7.5 / 7 / 6.6	10 / 8 / 7.5 / 7.1	11/8.7 / 8 / 7	12/11 / 10 / 9.3	13.5/11.2 / 11 / 10
Air flow rate	S/H/M/L	CFM	282.4 / 265 / 247 / 212	353 / 283 / 265 / 251	388 / 307 / 283 / 247	430 / 388 / 353 / 328	476 / 396 / 388 / 353
Drain Pump			o	o	o	o	o
Piping			Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)
Connection	Gas	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)
	Drain(OD/ID)	mm	32/25	32/25	32/25	32/25	32/25

* Accessories

Model		ARNU07GTRA2	ARNU09GTRA2	ARNU12GTRA2	ARNU15GTQA2	ARNU18GTQA2
Dry Contact	With Case (1contact point)	PDRYCB100/PDRYCB000				
	With Case (2contact points)	PDRYCB400				
Front Panel		PT-UQC				

Wired remote controller				Wireless remote controller
Standard type PREMTB100	Standard type PREMTB001	Simple PQRCVCLOQW	PREMTA000	PQWRHQOFDB

4 WAY CASSETTE (840X840)

JRNU09GTPA4 / JRNU12GTPA4 / JRNU15GTPA4 /
JRNU18GTPA4 / JRNU24GTPA4 / JRNU30GTPA4 /
JRNU36GTNA4 / JRNU42GTMA4 / JRNU48GTMA4 /
JRNU54GTMA4



Specifications

Model		Unit	JRNU09GTPA4	JRNU12GTPA4	JRNU15GTPA4	JRNU18GTPA4	JRNU24GTPA4	JRNU30GTPA4	JRNU36GTNA4	JRNU42GTMA4	JRNU48GTMA4	JRNU54GTMA4
Cooling Capacity		kW	2.8	3.6	4.5	5.6	7.1	9.0	10.6	12.3	14.1	15.8
		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	36,200	42,000	48,100	54,000
Heating Capacity		kW	3.2	4.0	5.0	6.3	8.0	10.0	11.9	13.8	15.9	18.0
		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	40,600	43,800	51,200	61,400
Power Input (H / M / L)		W	14 / 13 / 12	17 / 15 / 13	24 / 21 / 18	25 / 22 / 19	31 / 26 / 23	40 / 34 / 27	70 / 53 / 43	104 / 75 / 53	120 / 80 / 62	135 / 93 / 70
Dimensions (WxD)	Body	mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
	Panel	mm	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
	Air Flow Rate (S/ H / M / L)	CMM	- / 12 / 11 / 10	- / 13 / 12 / 11	- / 15 / 14 / 12	17/ 16 / 15 / 13	19/ 17 / 15 / 13	26.8/ 24.3 / 22.8 / 19.5	27/ 25 / 21 / 19	33/ 30 / 27 / 24	34/ 31 / 29 / 27	38/ 34 / 32 / 27
		cfm	- / 424 / 388 / 353	- / 459 / 424 / 388	- / 530 / 494 / 424	600/ 565 / 530 / 494	670/ 600 / 529 / 459	950/ 858 / 805 / 688	952/ 883 / 742 / 671	1165/ 1,059 / 954 / 848	1200/ 1,095 / 1,024 / 954	1350/ 1,201 / 1,130 / 953
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø15.88(5/8)	Ø15.88(5/8)	Ø15.88(5/8)	Ø15.88(5/8)	Ø15.88(5/8)	Ø15.88(5/8)
	Drain Pipe (Internal Dia.)	mm(inch)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)
Weight	Body	kg(lbs)	20.8(45.8)	20.8(45.8)	20.8(45.8)	20.8(45.8)	20.8(45.8)	20.8(45.8)	23.5(51.8)	25.6(56.4)	25.6(56.4)	25.6(56.4)
Noise Level (S/ H / M / L)		dB(A)	29 / 27 / 25	31 / 29 / 27	34 / 33 / 29	35 / 34 / 30	36 / 34 / 30	43/ 40 / 36 / 33	43 / 40 / 37	44 / 41 / 38	46 / 43 / 41	53/ 50 / 48 / 44
Power Supply		Ø, V, Hz	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50
Panel Color			Morning fog	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog

* Accessories

Model		JRNU09GTPA4	JRNU12GTPA4	JRNU15GTPA4	JRNU18GTPA4	JRNU24GTPA4	JRNU30GTPA4	JRNU36GTNA4	JRNU42GTMA4	JRNU48GTMA4	JRNU54GTMA4
Dry Contact	With Case (1contact point)	PDRYCB100/PDRYCB000									
	With Case (2contact points)	PDRYCB400									
Front Panel		PT-UMC1									
Ventilation Kit		PTVK410 / PTVK420 / PTVK430									

Wired remote controller				Wireless remote controller
Standard type PREMTB100	Standard type PREMTB001	Simple PQRCVCLOQW	PREMTA000	PQWRHQOFDB

1 WAY CASSETTE

ARNU07GTUA2 ARNU09GTUA2
ARNU12GTUA2 ARNU18GTTA2 ARNU24GTTA2



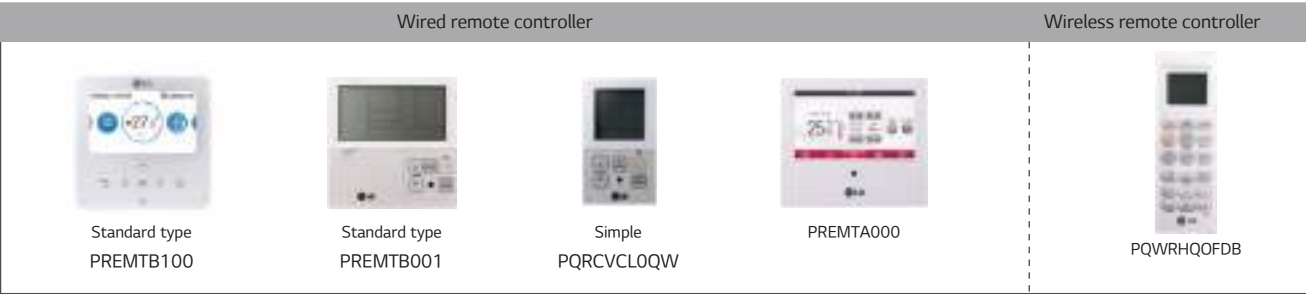
Grill Type

Specifications

Model		Unit	ARNU07GTUA2	ARNU09GTUA2	ARNU12GTUA2	ARNU18GTTA2	ARNU24GTTA2
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1
		Btu/h	7,500	9,600	12,300	19,100	24,200
	Heating	kW	2.5	3.2	4.0	6.3	7.1
		Btu/h	8,500	10,900	13,600	21,500	24,200
Power Input	Cooling	W	40	40	40	70	70
	Heating	W	40	40	40	70	70
Power Supply		Ø, V, Hz	1, 220~240, 50		1, 220~240, 50		1, 220~240, 50
Dimensions (WxDxH)	Body	mm	860x450x132		1180x450x132		1180x450x132
	Front Panel	mm	1100x500x34		1420x500x34		1420x500x34
Weight	Body	kg	14.7	14.7	14.7	18.7	18.7
	Front Panel	kg	1.5	1.5	1.5	1.5	1.5
Panel Color			Morning Fog		Morning Fog		Morning Fog
Noise level	H/M/L	dB(A)±3	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36
Air flow rate	H/M/L	CMM	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2	10 / 9.2 / 8.2	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
Air flow rate	H/M/L	CFM	289 / 258 / 226	325 / 304 / 289	353 / 325 / 289	515 / 427 / 385	575 / 469 / 406
Drain Pump			o	o	o	o	o
Piping Connection	Liquid	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø9.52(3/8)
	Gas	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø15.8(5/8)
	Drain(OD/ID)	mm	32/25	32/25	32/25	32/25	32/25

* Accessories

Model		ARNU07GTUA2	ARNU09GTUA2	ARNU12GTUA2	ARNU18GTTA2	ARNU24GTTA2
Dry Contact	With Case (1contact point)	PDRYCB100/PDRYCB000				
	With Case (2contact point)	PDRYCB400				
Front Panel		PT-UUC			PT-UTC	



LOW STATIC DUCT

JRNU12GB1G3 / JRNU18GB2G3 / JRNU24GB2G3

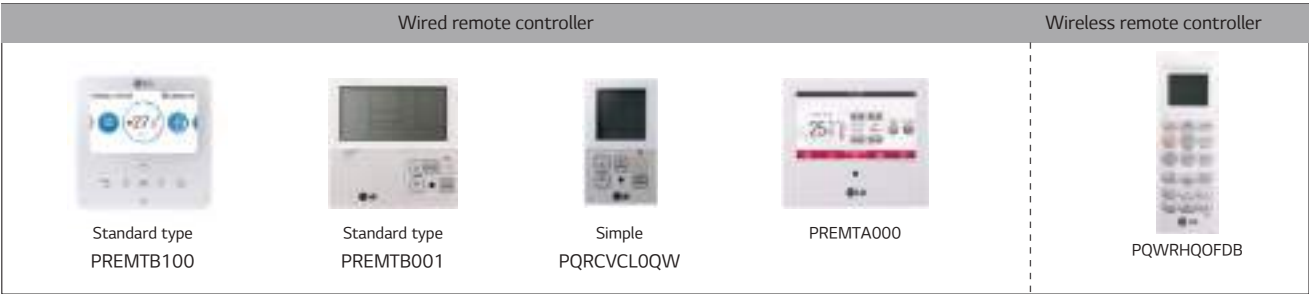


Specifications

Model		Unit	JRNU12GB1G3	JRNU18GB2G3	JRNU24GB2G3
Capacity	Cooling	kW	3.6	5.6	7.1
		Btu/h	12,300	19,100	24,200
	Heating	kW	4.0	6.3	8.0
		Btu/h	13,600	21,500	27,300
Power Input	Cooling	W	30	80	80
	Heating	W	30	80	80
Power supply		Ø, V, Hz			
Dimensions(WxDxH)		mm	820x575x190	1100x575x190	
Weight		kg	21	26	26
Noise level	H/M/L	±	33 / 30 / 29	40 / 37 / 34	43 / 40 / 37
E.S.P range		mmAq			
Air flow rate	S/H/M/L	CMM	11.5 / 10.5 / 9.5 / 8.5	19 / 16 / 14 / 12	21 / 19 / 17 / 15
Air flow rate	S/H/M/L	CFM	406 / 371 / 335 / 300	671 / 565 / 494 / 424	741 / 671 / 600 / 530
Piping Connection	Liquid	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø9.52(3/8)
	Gas	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø15.88(5/8)
	Drain(OD/ID)	mm	32/25.4	32/25.4	32/25.4

* Accessories

Model		JRNU12GB1G3	JRNU18GB2G3	JRNU24GB2G3
Dry Contact	With Case (1contact point)	PDRYCB100/PDRYCB000		
	With Case (2contact point)	PDRYCB400		
I.R KIT		PWLVRVNO00		
Drain Pump		Inbuilt		



HIGH STATIC DUCT

ARNU07GBHA2 / ARNU09GBHA2 / ARNU12GBHA2 /
ARNU15GBHA2 / ARNU18GBHA2 / ARNU24GBHA2



Specifications

Model		Unit	ARNU07GBHA2	ARNU09GBHA2	ARNU12GBHA2	ARNU15GBHA2	ARNU18GBHA2	ARNU24GBHA2
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W	150	150	150	150	150	150
	Heating	W	150	150	150	150	150	150
Power supply		Ø, V, Hz	1, 220-240, 50					
Dimensions(WxDxH)		mm	882x450x260					
Weight		kg	26	26	26	26	26.5	26.5
Noise level	H/M/L	dB(A)±3	26 / 25 / 23	26 / 25 / 23	27 / 26 / 23	28 / 27 / 25	30/ 29 / 26	33 / 31 / 28
E.S.P range	Standard	mmAq	4-8	4-8	4-8	4-8	4-8	4-8
	High		6-12	6-12	6-12	6-12	6-12	6-12
Air flow rate	S/H/M/L	CMM	8.1 / 6.5 / 5.8 / 5.4	9.6 / 8.1 / 6.5 / 5.8	11.3 / 9.6 / 8.1/ 6.5	13 / 11.3 / 9.6 / 6.5	16 / 13 / 11.3 / 9.6	19 / 16 / 14.4 / 13
Air flow rate	S/H/M/L	CFM	286/230/205/191	339/286/230 / 205	399/339/286/230	459/399/339/230	565/459/399/339	671/565/509/459
Piping	Liquid	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	Ø9.52(3/8)
Connection	Gas	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	Ø15.88(5/8)
	Drain(OD/ID)	mm	32/25	32/25	32/25	32/25	32/25	32/25

* Accessories

Model		ARNU07GBHA2	ARNU09GBHA2	ARNU12GBHA2	ARNU15GBHA2	ARNU18GBHA2	ARNU24GBHA2
Dry Contact	With Case (1contact point)	PDRYCB100/PDRYCB000					
	With Case (2contact point)	PDRYCB400					
Drain Pump		Inbuilt					

Wired remote controller				Wireless remote controller
Standard type PREMTB100	Standard type PREMTB001	Simple PQRVCLOQW	PREMTA000	PQWRHQOFDB

HIGH STATIC DUCT

JRNU28GBGA4 / JRNU36GBGA4 / JRNU42GBGA4 /
JRNU48GBGA4 / JRNU54GBRA4 / JRNU76GB8A4 /
JRNU96GB8A4



Specifications

Model		Unit	JRNU28GBGA4	JRNU36GBGA4	JRNU42GBGA4	JRNU48GBGA4	JRNU54GBRA4	JRNU76GB8A4	JRNU96GB8A4
Cooling Capacity		kW	8.2	10.6	12.3	14.1	15.8	22.4	28
		Btu/h	28,000	36,200	42,000	48,100	54,000	76,400	95,900
Heating Capacity		kW	9.2	11.9	13.8	15.9	18	25.2	31.5
		Btu/h	31,500	40,600	43,800	54,200	61,400	86,000	107,500
Power Input (H / M / L)		W	220 / 189 / 151	235 / 204 / 176	267 / 250 / 235	279 / 242 / 204	490 / 425 / 320	765 / 500 / 500	800 / 750 / 750
Dimensions (WxHxD)	Body	mm	1,182 x 298 x 450	1,182 x 298 x 450	1,182 x 298 x 450	1,182 x 298 x 450	1,230 x 380 x 590	1,562 x 460 x 688	1,562 x 460 x 688
	Air Flow Rate (S/ H / M / L) (high Mode-Factory Set)	CMM	28.5 / 25.9 / 24.1 / 21.8	34.5 / 32.3 / 29 / 25.3	37.5 / 34.5 / 32.3 / 30.7	40 / 34.6 / 31.8 / 27.9	54.5 / 51.0 / 44.8 / 50.0	64 / 60.0 / 50.0 / 50.0	76 / 72.0 / 64.0 / 64.0
		cfm	1005 / 915 / 851 / 770	1217 / 1,141 / 1,024 / 894	1323 / 1,218 / 1,141 / 1,084	1412 / 1,222 / 1,123 / 986	1923 / 1,801 / 1,582 / 1,434	2260 / 2,119 / 1,766 / 1,766	2684 / 2542 / 2,260 / 2,260
	External static pressure (High)	mmAq(Pa)	8-14	8-14	8-12	8-12	10-20	12-25	12-25
	External static pressure (Standard)	mmAq(Pa)	5-10	5-10	5-10	5-10	5-14	12-25	12-25
	Pipe Connections	Liquid Side	mm(inch)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)	Ø9.52(3/8)
Gas Side		mm(inch)	Ø15.88(5/8)	Ø19.05(3/4)	Ø19.05(3/4)	Ø19.05(3/4)	Ø15.88(5/8)	Ø19.05(3/4)	Ø22.2(7/8)
Drain Pipe(Internal Dia.)		mm(inch)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)	25(1)
Net Weight	Body	kg(lbs)	38(83.8)	38(83.8)	38(83.8)	38(83.8)	53(117)	87(192)	87(192)
Noise Level (H / M / L)		dB(A)	33 / 31 / 28	33 / 31 / 28	36 / 33 / 30	41 / 38 / 37	39 / 37 / 35	45 / 41 / 40	47 / 42 / 41
Power Supply		Ø, V, Hz	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50	1, 220-240, 50

* Accessories

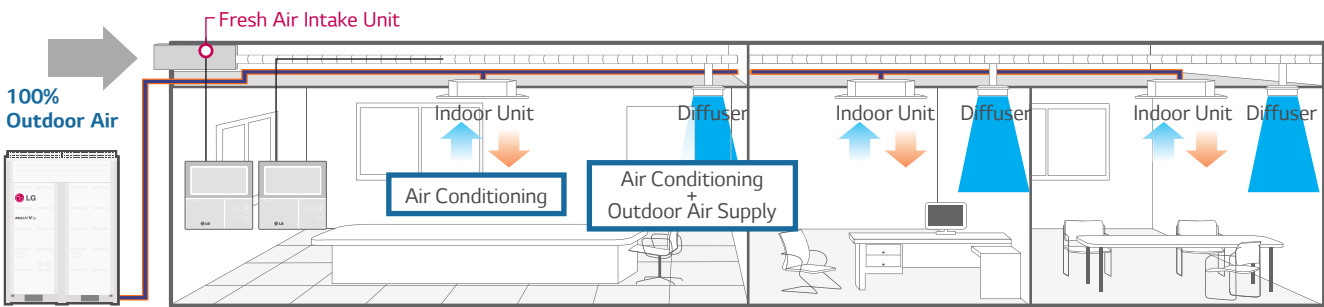
Model		JRNU28GBGA4	JRNU36GBGA4	JRNU42GBGA4	JRNU48GBGA4	JRNU54GBRA4	JRNU76GB8A4	JRNU96GB8A4
Dry Contact	With Case (1contact point)	PDRYCB1 00/PDRYCB000						
	With Case (2 contact point)	PDRYCB400						
Drain Pump		Inbuilt						

Wired remote controller				Wireless remote controller
Standard type PREMTB100	Standard type PREMTB001	Simple PQRVCLOQW	PREMTA000	PQWRHQOFDB

FRESH AIR INTAKE UNIT

FRESH OUTDOOR AIR SUPPLY

The LG Fresh Air Intake Unit (FAU) is the alternative solution for ventilation, which supplies the fresh outdoor air indoors while being able to cool and heat the air inside simultaneously. It means that the indoor space can have positive air pressure consistently, which can block cold, hot or contaminated air from outside.

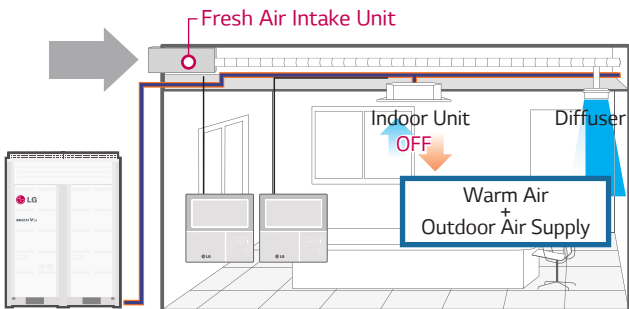


MULTI V IV Outdoor unit

ECONOMIC OPERATION

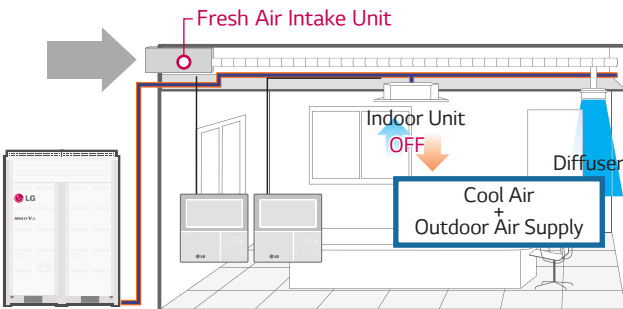
Using the free cooling and heating can help save cost by blowing the natural outdoor air inside when the season changes.

Spring Season



MULTI V IV Outdoor unit

Autumn Season

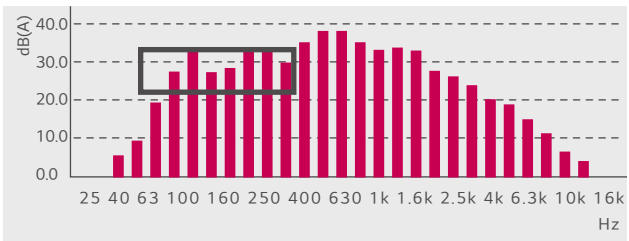


MULTI V IV Outdoor unit

BLDC FAN MOTOR

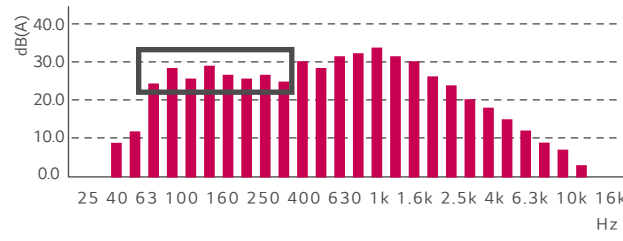
It can reduce noise at low frequencies.

AC Tap Motor



*Product images are for reference only, Actual product may vary.

BLDC motor



FRESH AIR INTAKE UNIT

ARNU76GB8Z2 ARNU96GB8Z2



Specifications

Item		Unit	ARNU76GB8Z2	ARNU96GB8Z2V
Cooling Capacity		kW	22.4	28
		kcal/h	19,300	24,100
		Btu/h	76,400	95,900
Heating		kW	21.4	26.7
		kcal/h	18,410	23,000
		Btu/h	73,080	91,360
Casing			Galvanized Steel Plate	Galvanized Steel Plate
Dimension (WxDxH)	Body	mm	1,562 x 688 x 460	1,562 x 688 x 460
		inch	61.5 x 27.1 x 18.1	61.5 x 27.1 x 18.1
Coil	Rows x Columns x FPI		3 x 20 x 19	3 x 20 x 19
	Face Area	m ²	0.59	0.59
Fan	Type		Sirocco Fan	Sirocco Fan
	Motor Output x Number	W	375x1	375x1
	Running Current	A	1.36	2.15
	Air Flow Rate	CMM	23.7/13.2/13.2	35.7/23.7/23.7
	(High Mode-factory set)	CFM	837/446/446	1,261/837/837
	External Static Pressure	mmAq (Pa)	22	22
Drive			Direct	Direct
Motor Type			BLDC	BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating
Sound Absorbing Material Control			Foamed polystyrene	Foamed polystyrene
Air Filter			Long Life Filter	Long Life Filter
Safety Device			Fuse	Fuse
Pipe	Liauide Side	mm (inch)	ø9.52(3/8)	ø9.52(3/8)
Connections	Gas Side	mm (inch)	ø19.05(3/4)	ø22.2(7/8)
	Drain(ID)	mm	25	25
Net Weight		kg (lbs)	73(161)	73(161)
Noise Level(SoundPress, 1.5m, H/M/L)		dBA±3	49/47/47	50/48/48
Power Supply		ø, V, Hz	1, 220~240, 50	1, 220~240, 50
Refrigerant Control			EEV	EEV
Power Cable		mm ²	CV1.5 x 3C	CV1.5 x 3C
Transmission Cable		mm ² (VCTF SB)	1.0~1.5 x 2C	1.0~1.5 x 2C

Notes:

1. Capacities are based on the following conditions:

Cooling: Indoor/Outdoor temp. 33°C (91.4°F) DB / 28°C (82.4°F)WB

Interconnecting Piping Length : 7.5m

Level Difference of Zero

Heating: Indoor temp. 0°C (32°F) DB / 28°C (26.78°F)WB

Interconnecting Piping Length : 7.5m

Level Difference of Zero

2. Capacities are net capacities

3. Noise Level is under standard mode (For actual High Mode (Factory set) condition,

Noise Level may exceed the standard level by 1.5dB A)

4. Due to our policy of innovation some specifications may be changed without prior notification

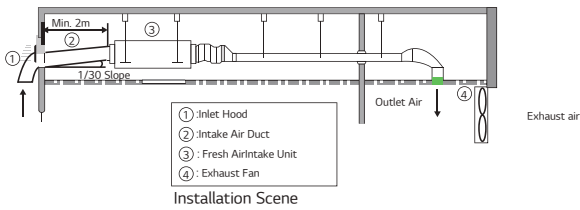
CAUTION

1. Operation range (Cooling : 5°C ~ 43°C, Heating : -5°C ~ 43°C)

2. Installation of exhaust fan is recommended for a sealed room.

3. Indoor Unit Connection

No	Connection Condition	Combination
1	Fresh Air Intake Units only are connected with outdoor units	1) The total capacity of Fresh Air Intake Unit should be 50~100% of outdoor unit. 2) The max quantity of Fresh Air Intake is 2 units.
2	Mixture connection with general indoor unit and Fresh Air Intake Unit	1) The total capacity of indoor units (standard indoor unit + Fresh Air Intake Unit) should be 50~100% of outdoor unit. 2) The total capacity of Fresh Air Intake Unit should be less than 30% of the outdoor units.



ERV WITH DX COIL

ENERGY RECOVERY VENTILATOR

ERV WITH DX COIL is an energy efficient ventilation system, which provides fresh air and removes contaminants effectively.

—• ERV WITH DX COIL

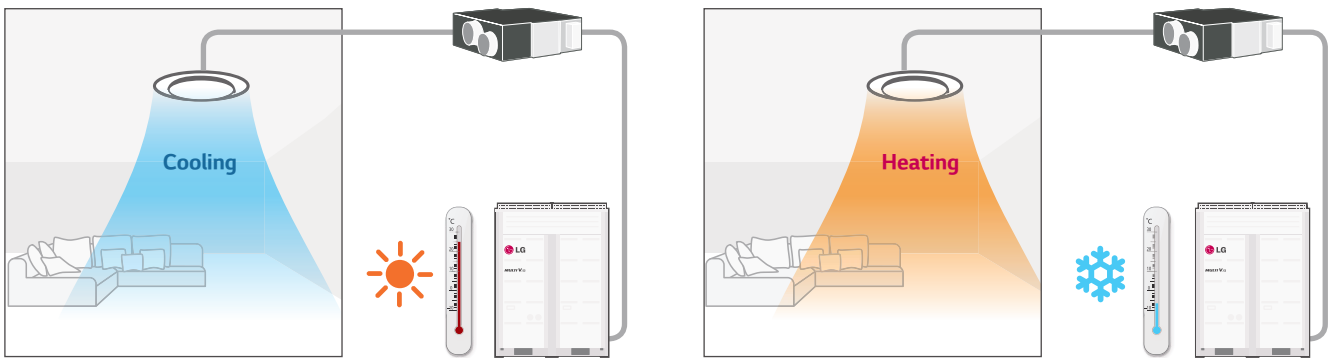


ERV WITH DX COIL

Energy Recovery Ventilator with DX Coil

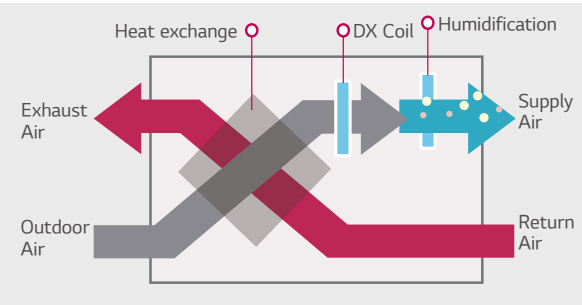
PROVIDING COOL & WARM FRESH AIR

ERV WITH DX COIL has some innovative air conditioning funtions. During the summer, it can transform outdoor warm air into cool air for indoors, and it can prevent cold drafts during the winter by supplying warm air.



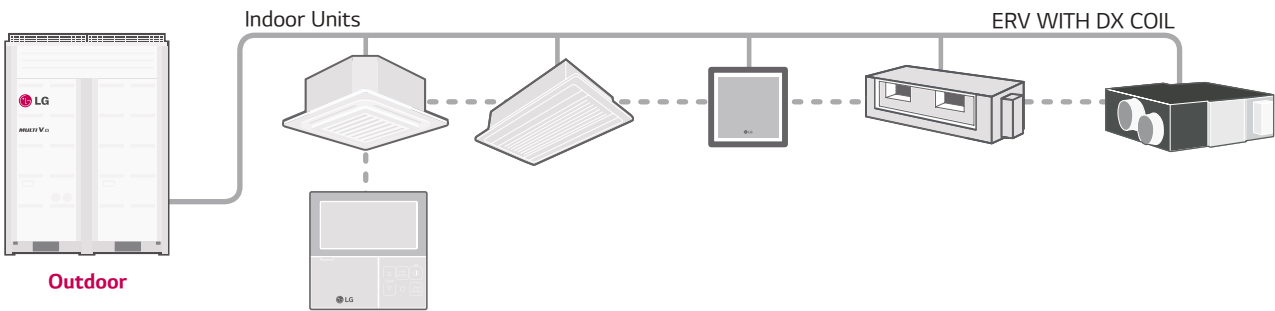
TOTAL AIR CONDITIONING SOLUTION

ERV WITH DX COIL can be used as a Total Air Conditioning Solution. It can control condition of incoming air with the DX coil and humidifier for making a comfortable indoor environment. In the summer, ERV WITH DX COIL controls the indoor air by cooling and dehumidifying incoming air. In winter, it can provide warm air by heating and humidifying the incoming air.



INTERLOCKING WITH MULTI V

ERV WITH DX COIL can be interlocked with MULTI V. It can be controlled individually by a wired remote controller connected to MULTI V indoor units.



LZ-H050GXN4 LZ-H080GXN4 LZ-H100GXN4

N-Without Humidifier



Model		LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Fresh Air Conditioning Load	Cooling	kW	4.93	7.46
	Heating	kW	6.73	9.80
Temperature Exchange Efficiency	SH/H/L	%	86/86/87	80/80/81
	Cooling (SH/H/L)	%	61/61/63	50/50/53
Enthalpy Exchange Efficiency	Heating (SH/H/L)	%	76/76/77	64/64/66
	Heat Exchange Mode (SH/H/L)	CMH	500/500/440	800/800/640
Air Flow Rate	Bypass Mode (SH/H/L)	CMH	500/500/440	800/800/640
	External Static Pressure (SH/H/L)	Pa	180/150/110	170/120/80
Fan	System		-	
	Amount	kg/h	-	
Humidifier	Feed Water Pressure	Mpa	-	
	Heat Exchange Mode	dB(A)	39/37/35	41/38/36
Noise Level	Bypass Mode	dB(A)	39/37/35	41/38/36
	Refrigerant		R410A	
Power Supply		øV/Hz	1 / 220 ~240 / 50, 60	
	Power Input (Normal)	Heat Exchange Mode (SH/H/L)	kW	0.25/0.20/0.15
Nominal Running Current (RLA)	Bypass Mode (SH/H/L)	kW	0.25/0.20/0.15	0.42/0.35/0.25
	Heat Exchange Mode (SH/H/L)	A	1.5/1.3/1.0	2.5/2.0/1.5
Dimensions	Bypass Mode (SH/H/L)	A	1.5/1.3/1.0	2.5/2.0/1.5
	WxDxH	mm	1,667x365x1,140	
Net Weight	Liquid	mm	ø6.35	
	Gas	mm	ø12.7	
Pipe Connection	Water	mm	-	
	Drain	mm	ø25.4	
Connection Duct Diameter		mm	ø250	
	Remote Controller		Refer to the below Wired Remote Controller Table	
Dry Contact	Simple (1 Contact Point with Case)		PDRYCB000	
	2 Contact Point		PDRYCB400	
Filters (Optional)	For Thermostat (On/Off / Mode / Fan Speed)		PDRYCB300	
	Modbus Communication		PDRYCB500	
Mode	Mode	-	AHRT100H0	
	Qty	EA	2	
Type	Type	-	F7	
	Size (W x H x D)	mm	520 x 192 x 25	

Note :
1. eco V Mode - Enthalpy Heat Recovery Ventilation mode
2. Noise level :
- The operating conditions are assumed to be standard.
- Sound measured at 1.5m below the center the body.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.

Wired Remote Controller	
Standard Type	
Standard type PREMTB001	

Hydro Kit

NEXT GEN VRF AIR CONDITIONING
WITH WATER HEATING.

ONE PRODUCT THAT GIVES YOU BOTH.

LG Hydro Kit is a total HVAC solution that is applied to water heating, domestic hot water supply as well as air-conditioning by connecting various heat pump outdoor units.



Hydro Kit

ECO-FRIENDLY, HIGH-EFFICIENCY, ENERGY SAVING, RECOVERY-BASED HEATING SYSTEM

Control more than just the temperature with our Eco-Friendly Heat Pump.

THE HYDRO KIT

New Hydro Kit is a high efficient total solution for floor heating and cooling and hot water supply. This energy saving heating system takes advantage of ambient air temperatures and residual heat from other areas of the building through air-to-water heat exchange to produce domestic hot water for various applications. Ideal for providing hot water supply to commercial buildings in an energy-efficient way, the Hydro Kit has minimized energy costs as compared to a boiler, while achieving a considerable reduction of CO₂ emissions.



Hot Water
Heating



Domestic
Hot Water Supply



Floor Heating
with Hot Water



Floor Cooling
with Cold Water



Cold
Water Cooling

LG presents a solution that will satisfy your buildings water heating needs, raising temperatures without adding to the bottom line.

ECO-FRIENDLY WITH LOWER CO₂ EMISSIONS

Compared to fossil-fuel boiler systems, the Hydro Kit emits far less CO₂. Providing sustainable operation for space heating and domestic hot water using ambient air, a renewable energy source, the Hydro Kit has achieved a considerable reduction of CO₂ emissions using as little as 30% of that of a gas boiler. Thanks to the refrigerant used, (R-410A) that has a Zero Ozone Depleting Potential (ODP), LG contributes to ozone protection.

ENERGY SAVINGS HIGH-EFFICIENCY COMPRESSOR

Because our systems extract thermal energy from the ambient air or residual heat from cooling operations, they are far more energy efficient than comparable boiler systems. The Hydro Kit advanced heat pump technology and high-efficiency compressor can optimize operations according to heating loads to increase reliability, reduce noise levels and save energy while achieving flow temperatures up to 80°C. The heat pump works much more efficiently and conserves more energy than a traditional heating system based on fossil fuels or electricity to reduce running costs and carbon emissions. It also avoids the inconvenience of installing gas boilers and meters as well as their related maintenance costs, all while attaining a significantly higher Coefficient of Performance (COP) when compared to boiler.

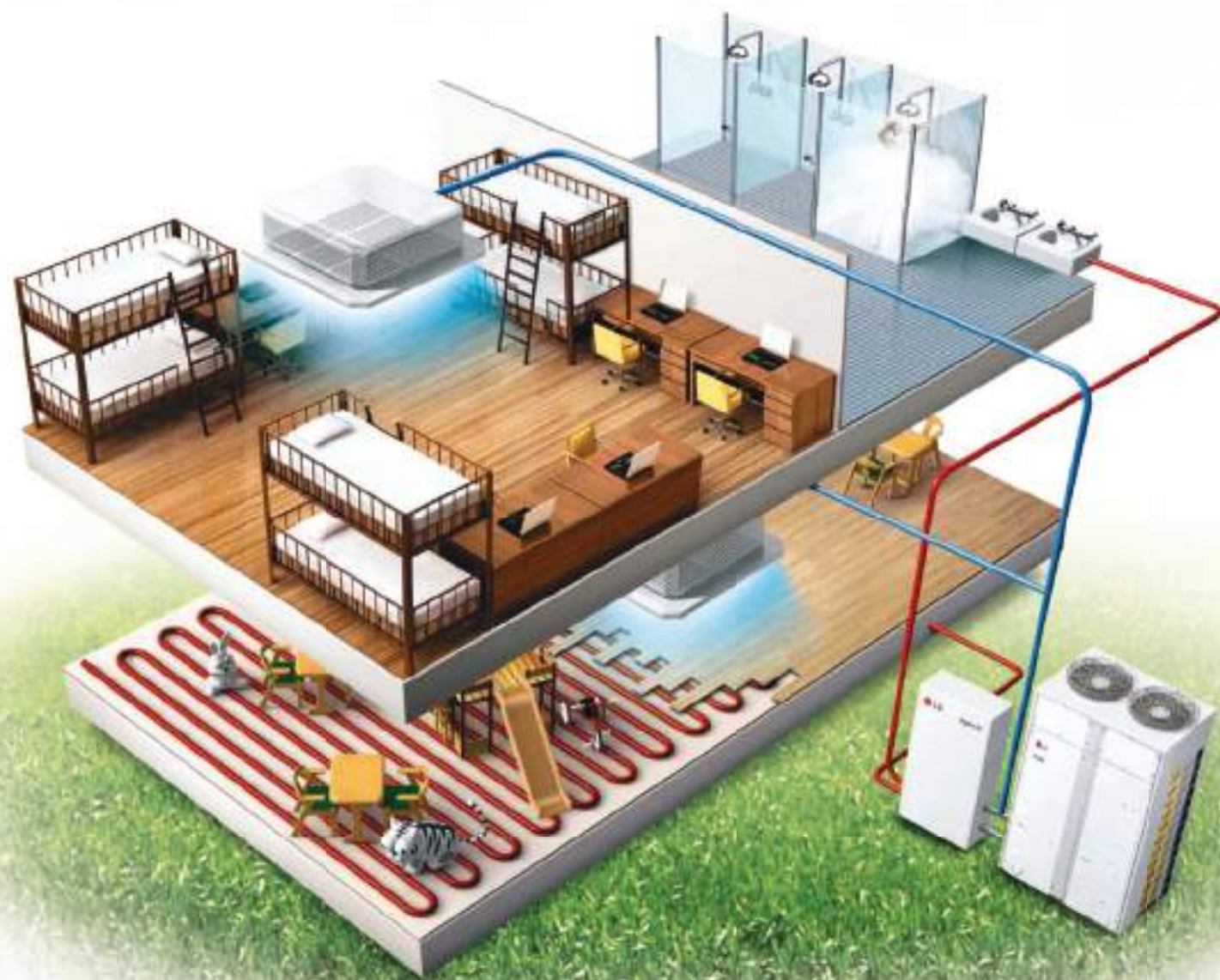
[A heat pumps efficiency is measured in COP (Coefficient of Performance) for heating and EER (Energy Efficiency Ratio) for cooling.]

LG MULTI V Hydro Kit achieves **COP of up to 4.2(with MULTI V WATER II)**, meaning one unit of consumed energy yields 4 units of heated or cooled energy.

RECOVERY HEATING SYSTEM TO GRAB HOT WATER FROM THE AIR

The heat pump contained in the Hydro Kit works by extracting heat from ambient air and upgrading it to heat a building or provide domestic hot water, which means that heat can be recovered and reused. This ensures less energy wastage. The heat recovery aspect of the Hydro Kit goes beyond to make use of wasted heat, extracted from other areas of the building requiring cooling. This allows the heat gathered from within a buildings infrastructure to be collected and stored, ready for use as hot water or heating. Taking full advantage of this, the Hydro Kit recovers and reuses the heat, which ensures less energy wastage resulting in greater energy efficiency, reduced running costs and a reduction in carbon emissions.

Tapping into renewable energy sources, that's LG smart!



HYDRO KIT FOR MULTI V - A COMPLETE HVAC SOLUTION

Combining efficiency and total comfort, the addition of an LG Hydro Kit to an LG Multi V system provides a total heating and cooling solution for a range of applications. Providing hot water supply to these applications is done by adding a booster unit to the existing air conditioning systems. The easy to install compact modular structure becomes an all-in-one global solution for heating, cooling, ventilation and sanitary hot water.

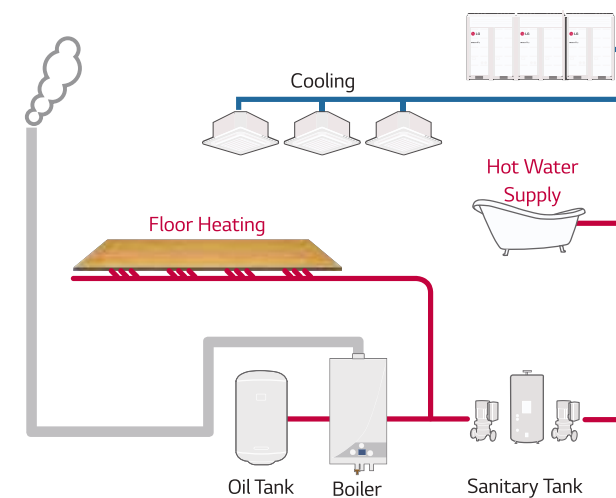
By linking the LG Hydro Kit and LG Multi V, excess heat can be successfully re-used for the generation and storage of domestic hot water as well as for heating, via underfloor circuits, fan coil units and radiators. The energy savings appear any time during the year when a room needs to be cooled down. Typically, during summer, the system will use heat extracted from the indoor units to produce sanitary hot water.

LG is environmentally minded for a comfortable environment.

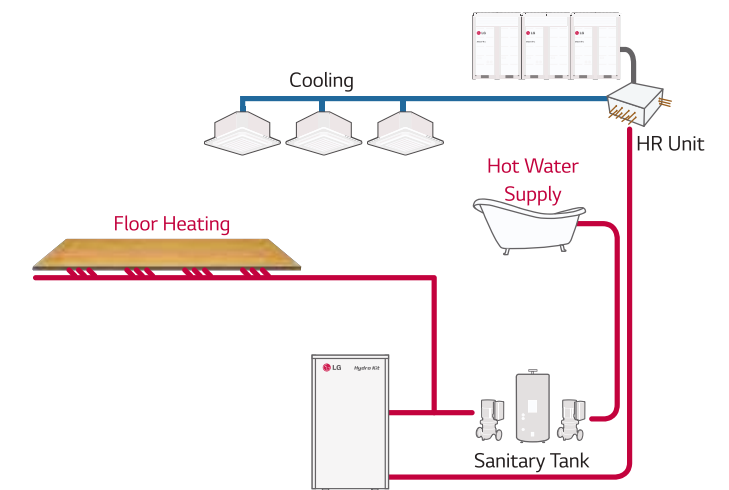
HYDRO KIT CONCEPT

Hydro Kit is an eco-friendly and high efficiency Hot Water Solution. This total HVAC solution is available for air conditioning, floor heating, radiators and sanitary hot water supply. All these functions, utilizing a variety of MULTI V outdoor units minimize energy costs and CO₂ emissions compared to boiler system.

BOILER



HYDRO KIT



ECO-FRIENDLY GREEN ENERGY SOLUTION

Green energy solution through the reduction of CO₂ emissions.

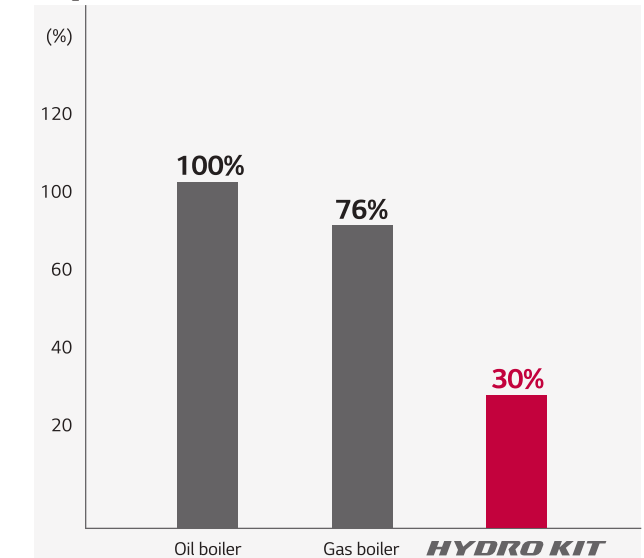
Conventional System



HYDRO KIT



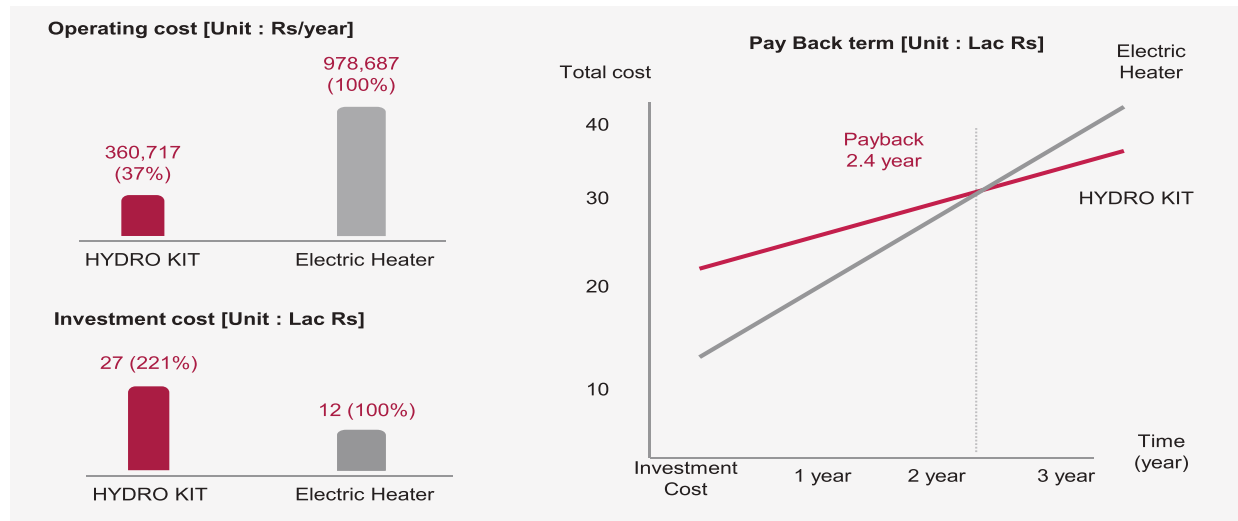
CO₂ emissions



SAVING COST THROUGH HIGH EFFICIENCY

- 63% saving on yearly operating cost as compared to electric heater
- 2.4 yrs pay back period for hotel application (water requirement 4000 litres per day)

Economic analysis

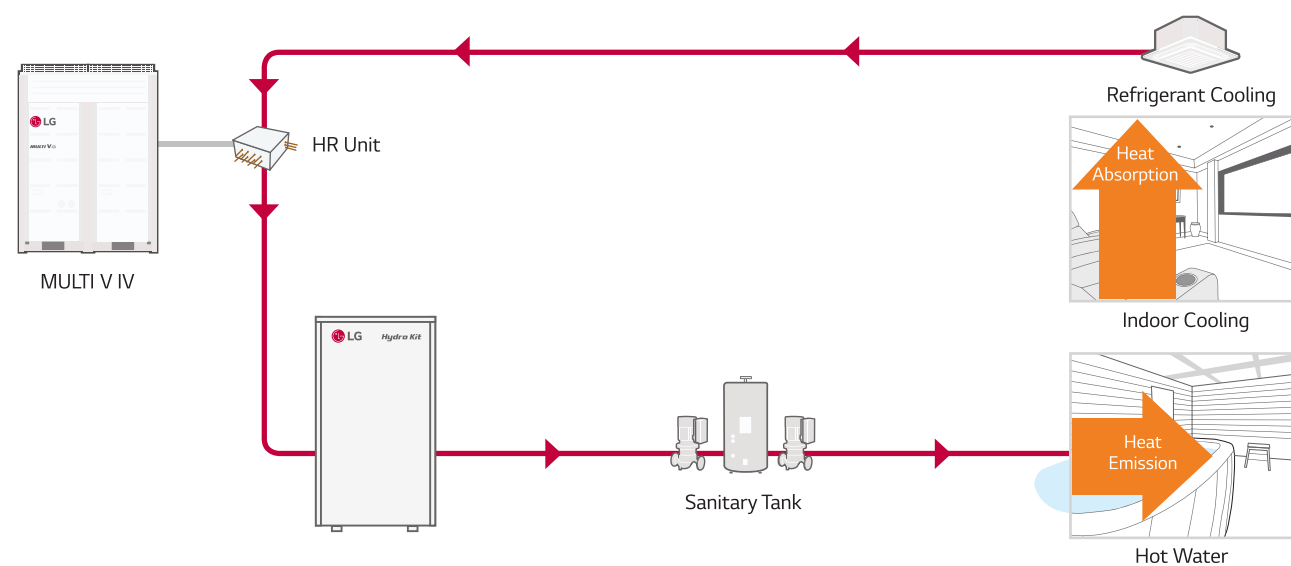


Analysis condition

- Cost information :
 - Electricity cost : 10 Rs per kWh
- Efficiency :
 - HYDRO KIT : COP 2.3
 - Electric heater : 85%
- Water requirement :
 - 4000 liters per day

ENERGY SAVING THROUGH MULTI V IV*

Energy costs can be minimized by reusing the wasted heat from indoor units.



HIGH TEMPERATURE CONCEPT OF HYDRO KIT

Provides high temperature up to 80°C with dual inverter cascade cycle, applicable for buildings that require large amount of hot water supply.

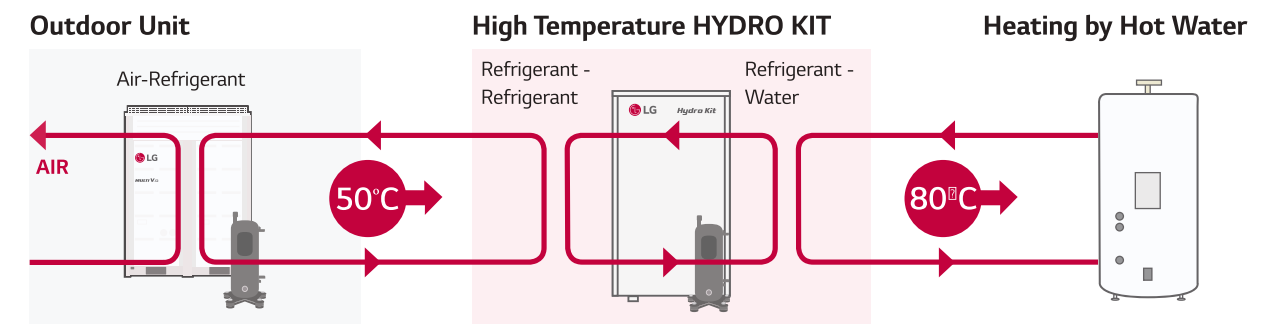
Dual Inverter Cascade Cycle Technology

- Max 55% improved capacity compared to mid-temp. of HYDRO KIT
- Max 20% reduced heating operating cost compared to mid-temp. of HYDRO KIT
- Cascade R41 OA to R134A BLDC compressor technology

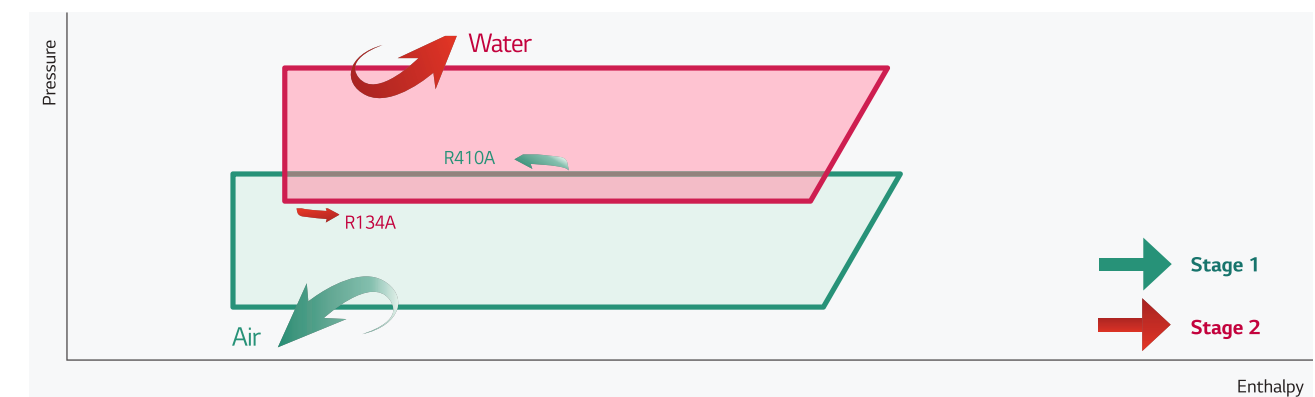
High Volume of Hot Water

- Compared to lower temperature, storing high temperature water in a sanitary tank increases the quantity of mixed water available for the user.

HIGH TEMPERATURE OF HYDRO KIT CYCLE DIAGRAM



High Temperature Technology



VARIOUS APPLICATIONS

Applicable to a variety of facilities including hospitals, residence and resorts that need floor heating and domestic hot water supply.



Dormitory



Residential



Fitness



Hospital



Factory



Restaurant



Office



Hotel

HOT WATER SOLUTION SPECIFICATION

HYDRO KIT

ARNH04GK2A4/ ARNH10GK2A4



Type				Low Temp.	Low Temp.
Model				ARNH04GK2A4	ARNH10GK2A4
Power Supply			Ø / V / Hz	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60
Capacity (Rated)	Cooling		kW	12.3	28.0
	Heating		kW	13.8	31.5
Power Input	Cooling	Normal	kW	0.01	0.01
	Heating	Normal	kW	0.01	0.01
Water Outlet Temperature	Cooling	Min	°C	5°C	5°C
	Heating	Max	°C	50°C	50°C
Casing				Painted Steel Plate	Painted Steel Plate
Dimensions	Body	W x H x D	mm	520 × 631 × 330	520 × 631 × 330
			inch	20-15 / 32 x 24-27 / 32 x13	20-15 / 32 x 24-27 / 32 x13
Net Weight			kg (lbs)	30.5 (67)	35.0 (77.2)
Heat Exchanger	Refrigerant to Water	Type		Brazed Plate HEX	Brazed Plate HEX
		Rated Water Flow	L/min	39.6	92.0
		Head Loss	kPa	41.0	69.0
	Refrigerant to Refrigerant	Type		-	-
Compressor		Type		-	-
Piping Connections	Water Side	Inlet	inch	Male PT 1	Male PT 1
		Outlet	inch	Male PT 1	Male PT 1
	Refrigerant Side	Liquid Side	mm (inch)	9.52 (3/8)	9.52 (3/8)
		Gas Side	mm (inch)	15.88 (5/8)	22.2 (7/8)
Drain Piping Connection			mm (inch)	Male PT 1	Male PT 1
Sound Pressure Level	Cooling		dB (A)	26	26
	Heating		dB (A)	26	26
Refrigerant	Refrigerant to Refrigerant	Refrigerant Type		-	-
		Control		-	-
	Refrigerant to Water	Refrigerant Type		R410A	R410A
		Precharged Amount	kg (lbs)	-	-
			Control	EEV	EEV
Operation Range	Connected to Heat Pump	Cooling	°C (DB)	10°C ~ 43°C	10°C ~ 43°C
		Heating	°C (DB)	-20°C ~ 35°C	-20°C ~ 35°C
	Connected to Heat Recovery	Cooling	°C (DB)	10°C ~ 43°C	10°C ~ 43°C
		Heating	°C (DB)	-20°C ~ 43°C	-20°C ~ 43°C
Combination Ratio	Only Hydrokit	Min ~ Max	%	50 ~ 100	50 ~ 100
	Hydrokit + Standard IDUs	Min ~ Max	%	50 ~ 130	50 ~ 130

* This product contains Fluorinated Greenhouse Gases. (R410A)

Note : 1. Capacities are based on the following conditions :

- Cooling : Indoor 27°C (80.6°F) DB / 19° C (66.2°F) WB, Outdoor 35°C (95°F) DB / 24°C (75.2°F) WB, Water Inlet 23°C (73.4°F) / Outlet 18°C (64.4°F)
- Heating : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB, Water Inlet 30°C (86°F) / Outlet 35°C (95°F)

2. Piping Length : Interconnected Pipe Length = 7.5m

3. Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

4. MULTI V S 4HP (ARUN040GSS0, ARUN040LSS0) cannot be connected to Hydro Kit.

5. MULTI V Water S cannot be connected to Hydro Kit.

6. Anti freezing liquid should be added under 10°C (outdoor temp.) during cooling mode.

ARNH04GK3A4/ ARNH08GK3A4



Type				High Temp.		High Temp.	
Model				ARNH04GK3A4		ARNH08GK3A4	
Power Supply				Ø / V / Hz		1 / 220-240 / 50 1 / 220 / 60	
Capacity (Rated)	Cooling		kW	-		-	
	Heating		kW	13.8		25.2	
Power Input	Cooling	Nomal	kW	-		-	
	Heating	Nomal	kW	2.3		5.0	
Water Outlet Temperature	Cooling	Min	°C	-		-	
	Heating	Max	°C	80°C		80°C	
Casing				Painted Steel Plate		Painted Steel Plate	
Dimensions	Body	W x H x D	mm	520 × 1,080 × 330		520 × 1,080 × 330	
			inch	20-15 / 32 × 42-17 / 32 x13		20-15 / 32 × 42-17 / 32 x13	
Net Weight			kg (lbs)	88.0 (194.0)		94.0 (207.2)	
Heat Exchanger	Refrigerant to Water	Type		Brazed Plate HEX		Brazed Plate HEX	
		Rated Water Flow	L/min	19.8		36.0	
		Head Loss	kPa	5.0		20.0	
	Refrigerant to Refrigerant	Type		Brazed Plate HEX		Brazed Plate HEX	
Compressor		Type		Twin Rotary Inverter		Twin Rotary Inverter	
Piping Connections	Water Side	Inlet	inch	Male PT 1		Male PT 1	
		Outlet	inch	Male PT 1		Male PT 1	
	Refrigerant Side	Liquid Side	mm (inch)	9.52 (3/8)		9.52 (3/8)	
		Gas Side	mm (inch)	15.88 (5/8)		19.05 (3/4)	
Drain Piping Connection			mm (inch)	Male PT 1		Male PT 1	
Sound Pressure Level	Cooling		dB (A)	-		-	
	Heating		dB (A)	43		43	
Refrigerant	Refrigerant to Refrigerant	Refrigerant Type		R410A		R410A	
		Control		EEV		EEV	
	Refrigerant to Water	Refrigerant Type		R134A		R134A	
		Precharged Amount	kg (lbs)	2.3(5.1)		3.0(6.6)	
Operation Range	Connected to Heat Pump	Cooling	°C (DB)	-		-	
		Heating	°C (DB)	-20°C ~ 35°C		-20°C ~ 35°C	
	Connctected to Heat Recovery	Cooling	°C (DB)	-		-	
		Heating	°C (DB)	-20°C ~ 43°C		-20°C ~ 43°C	
Combination Ratio	Only Hydrokit	Min ~ Max	%	50 ~ 100		50 ~ 100	
	Hydrokit + Standard IDUs	Min ~ Max	%	50 ~ 130		50 ~ 130	

* This product contains Fluorinated Greenhouse Gases. (R410A, R134A)
Note : 1. Capacities are based on the following conditions :
- Heating : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB, Water Inlet 55°C (131°F) / Outlet 65°C (149°F)
2. Piping Length : Interconnected Pipe Length = 7.5m
3. Difference Limit of Elevation (Outdoor - Indoor Unit) is Zero.
4. MULTI V S 4HP (ARUN040GSS0, ARUN040LSS0) cannot be connected to Hydro Kit.
5. MULTI V Water S cannot be connected to Hydro Kit.



"LG HVAC CONTROL SOLUTIONS"

A system that understands installer and users, both.

LG HVAC Control Solutions

Vertical Solution

Customized solution for building operation type

HVAC Solution

Specialized HVAC control and energy management

Building Solution

Management various building equipments and energy consumption

LG "EQUIPMENT CONTROL + ENERGY MANAGEMENT" SOLUTION

- Build up a single naming combining with various LG SAC control system and energy management system

INDIVIDUAL CONTROL SOLUTION



SYSTEM INTEGRATION DEVICE

STANDARD III WIRED REMOTE CONTROLLER

4.3 inch Color screen with a modern design



PREMTB100 (White)

FEATURES¹⁾

The Optimized Controller in MULTI V 5

- Humidity sensor embedded
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting

New Modern Design & Easy interface

- Seamless design / Touch button
- 4.3 inch Color LCD / Intuitive GUI

External Device On/Off

- Customized Interlocking control with indoor status

2 Set Points control²⁾

Multi Language support

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

Model Name	PREMTB100
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting*	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification / Comfort Cooling
Auto Swing	•
Vane Control (Louver direction)	•
E.S.P (External Static Pressure)**	•
Reservation	Simple / Sleep / On & Off timer / Weekly / Yearly / Holiday
Time Display	•
Electric Failure Compensation	•
Lock	All / On & Off / Mode / Set temperature range
Filter Sign	• (Remain time + Alarm)
Energy Management	Check Energy Usage*** / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data
Operation Status LED	•
Indoor Temperature Display	•
Indoor Humidity Display	•
Display	4.3 inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	120 x 120 x 16
Black light for Screen saver	•
Home Leave	2 set points control

*It might not be indicated or operated at the partial product

** This function is available for certain indoor unit type

*** LG centralized controller(available from AC Ez Touch or higher model) with PDI (PQNUD1S40 / PPWRDB000) installation is required for this function

1) Indoor unit needs to have functions requested by the controller

2) 2 set points control works normally with MULT V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly

STANDARD WIRED REMOTE CONTROLLER

Providing easy control of one or a group of indoor units to various applications.

Features

Category	PREMTB001
Operating mode	On/Off / Fan speed / Mode / Temp.
Max. no. of indoor units	16 indoor units
On / Off LED	●
Room temp.	●
Fan / Plasma / Swirl / Heater	●
Vane control(Louver direction) / Auto swing / Fan auto	●
E.S.P function	●
Reservation	On/Off / Weekly / Simple / Sleep / Holiday
Timer function	●
Child lock	●
Electric failure compensation	Max 3 hours
Wireless remocon receiver	●
Main/Sub setting of indoor units (For override function)	●
2 Controllers to 1 indoor unit	●
Group and central control at the same time	●
Ventilation mode setting	●
Rapid ventilation	●
Power saving ventilation	●
Size(mm)	120 x 121 x 16
Backlight Unit	●

Refer to each model PDB for applicable models.



PREMTB001
(White)

PREMIUM WIRED REMOTE CONTROLLER

5 inch full touch screen with a premium design

Features

Model Name	PREMTA000
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	●
Vane Control (Louver direction)	●
E.S.P (External Static Pressure)	●
Reservation	Simple / Sleep / On / Off / Weekly / Yearly / Holiday
Time Display	●
Electric Failure Compensation	●
Child Lock	●
Filter sign	● (Remain time + Alarm)
Energy Management	Check Energy Usage* / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data
Operation Status LED	●
Indoor Temperature Display	●
Wireless Remote Controller Receiver	●**
Display	5 inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	137 x 121 x 16.5
Backlight	●
Home Leave	2 set points control

* Centralized control(PQCSW421E0A/PACS4B000/PQCPC22N0/PACP4B000/PQNFB17C0/PLNWKB000) and PDI(PQNUD1S40/PPWRDB000) s should be installed for this function

** For ceiling type duct

¹⁾ Indoor unit should have functions requested by the controller



PREMTA000

SIMPLE WIRED REMOTE CONTROLLER

A simple way to control office or hotel systems in a compact design.



PQRCVCLOQW

Features

Category	PQRCVCLOQW
Operation mode	On/Off / Fan speed / Mode / Temp.
Room temp	●
Child lock	●
Mode change	Cooling / Heating / Fan / Dehumidify / Auto
Back Light	●

● Refer to each model PDB for applicable models.

Simple

- PQRCVCLOQW (White)

WIRELESS REMOTE CONTROLLER

Wireless control to operate air conditioners more conveniently.

Features

Category	PQWRHQOFDB
Operating mode	On/Off / Fan speed / Mode / Temp
Room temperature checking	●
Chaos swing / Jet cool	●
On/Off timer	●
Sleep mode auto	●
Main / Sub setting of indoor units (For override function)	●

● Applicable for MULTI V series.

● Refer to each model PDB for applicable models.



PQWRHQOFDB

Model Name & Applicable Models

Model	Type	CST, SRAC, CVT, Duct*, Floor Standing
PQWRHQOFDB	H/P	●

● Combination with other remote controllers for various indoor units.

* All Duct products can be controlled through wireless remote controller when wired remote controller is installed.




CENTRALIZED CONTROL SOLUTION

CENTRALIZED CONTROL SOLUTION

LINE-UP

AC Ez Touch




NEW!

AC Smart 5




AC Ez




NEW!






ACP 5



AC Manager 5



CENTRAL CONTROLLER LINE UP

Model Name	PQCSZ250S0	PACEZA000	PACS5A000	PACP5A000	PACM5A000
					
Maximum number of units	32	64	128	256	8,192
Individual / Group Control	•	•	•	•	•
Individual Controller Lock	•	•	•	•	•
Error Check	•	•	•	•	•
Slave Mode (Interlocking with higher level controller)	•	•	•	-	-
Schedule	Weekly	Yearly	Yearly	Yearly	Yearly
Remote Access	-	By client S/W	Web	Web	Web
Emergency Stop & Alarm Display	-	•	•	•	•
Power Consumption Monitoring (with PDI)	-	•	•	•	•
Auto Changeover / Setback	-	•	•	•	•
Temperature Limit	-	•	•	•	•
Operation Time Limit	-	-	•	•	•
Visual Navigation	-	-	•	•	•
Operation Trend	-	-	•	•	•
Interlock Control	-	-	•	•	•
Virtual Group Control	-	-	•	•	•
ODU Capacity Control*	-	-	•	•	•
Energy Navigation (with PDI)	-	-	•	•	•
ACS IO Module Interlocking	-	-	•	•	•
<div>NEW!</div> BMS Integration (BACnet, Modbus protocol)	-	-	• (PACS5A000 only)	• (PACP5A000 only)	-
<div>NEW!</div> IPv6 Support	-	•	• (PACS5A000 only)	• (PACP5A000 only)	-

* This function is available for certain product

CENTRALIZED CONTROL SOLUTION

AC SMART 5

All-in-One solution for BMS integration up to 128 units via BACnet and Modbus protocol as well as its own smart management function with touch screen interface

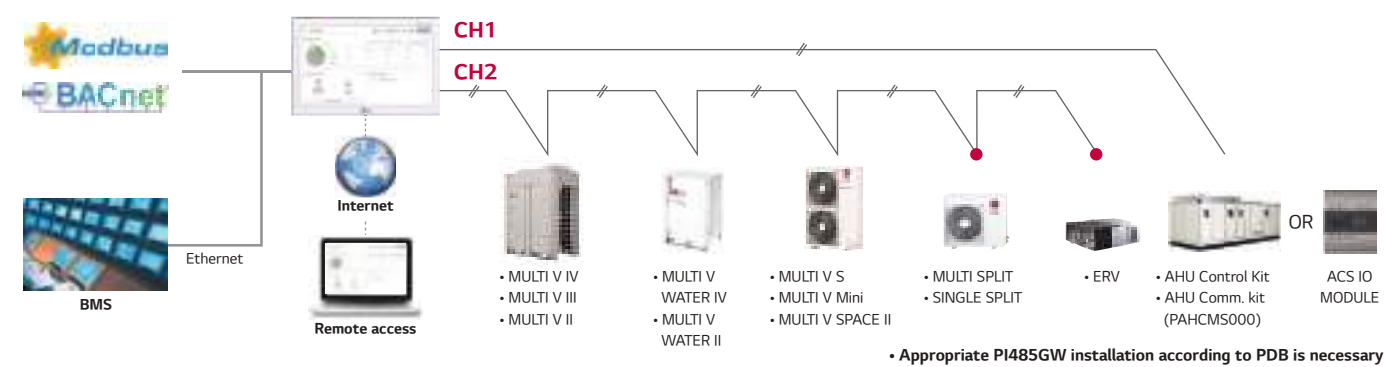


FEATURES

Model Name	PACS5A000
Size (W x H x D, mm)	253.2 x 167.7 x 28.9
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V / AHU kit / LG Chiller ¹⁾
Maximum number of units	128
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Advanced Function Setting and Display ²⁾	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO ₂ Level display (for ERV/ERV DX) / Night Time Free Cooling (for ERV/ERV DX)
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Operation Trend	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 9
External IO Port	DI 2 / DO 2
BMS Integration ³⁾	BACnet IP / Modbus TCP
IPv6 Support	•

1) Chiller Option Kit(PCHLLN000) is required 2) It is only available in some products 3) For the detail point list, please refer to the installation manual

INSTALLATION SCENE



FEATURES



BMS Integration

Without additional device, AC Smart 5 provides BACnet/IP and Modbus TCP/IP interface for BMS(Building Management System) integration as well as its own management function.



Energy Management

Energy navigation function allows air conditioners operation to be managed under the monthly plan of energy usage. By analyzing present energy consumption and comparing with the plan, overuse of system operational costs can be prevented.

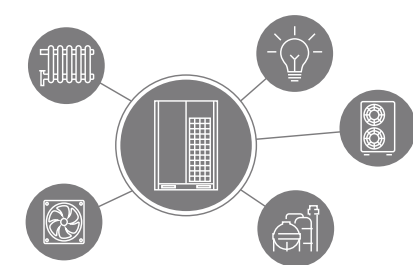
Advanced Network Accessibility

AC Smart 5 reflects the state of the art of network technology trend. IPv6(Internet Protocol version 6), which is the most recent version of the Internet Protocol, provides accessibility to the IPv6 compatible network environment. HTML5 makes the web access to AC Smart 5 easier and look good on all devices, especially for mobile.



Visualized Control

Visual navigation enables controlling and monitoring the unit on floor plan view for the intuitive management.



Device Interlock

Building Facility can be interlocked with LG HVAC system on the automated control logic.



Operation Trend

Unit's operation status change in the past can be traced to help establishing reasonable operation plan of the site.

CENTRALIZED CONTROL SOLUTION

AC EZ TOUCH

Smart management with 5 inch touch screen for small site



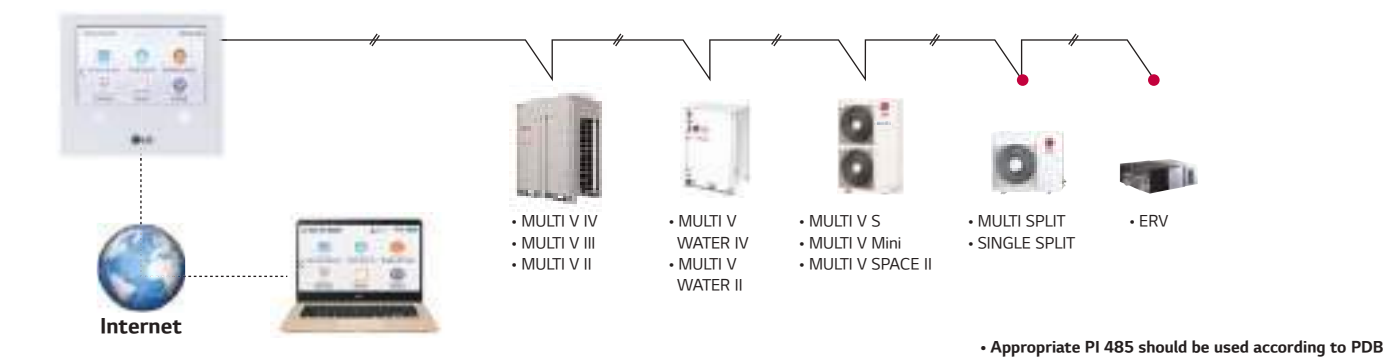
PACEZA000

FEATURES

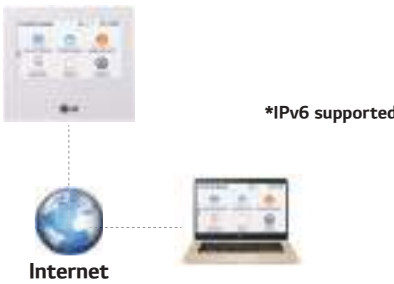
Model Name	PACEZA000
Size (W x H x D, mm)	137 x 121 x 25
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V
Maximum number of units	64
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly / Monthly / Yearly / Exception day
Remote Access	By client S/W
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation History	Error
ODU Low Noise ¹⁾	•
Daylight Saving Time	•
External IO Port	DI 1
IPv6 Support	•

1) It is only available in some products

INSTALLATION SCENE



FEATURES



PC Access

Users can control each space efficiently through PC access.



Energy Mode

When using energy mode function, operation mode changes from cooling to fan or heating to off mode by force.
(It is available only air conditioner and 'on' mode indoor unit)



Alarm Indicator

It works when there are some errors or it's time to change the filter. Users can respond immediately according to alarm indicator therefore HVAC system is monitored consistently.

Name	Used(kWh)	Accumulated(kWh)
Group1	130	3021
Group2	130	6186
Group3	130	4257
Group4	120	7014

Energy Statistics (with PDI)

Statistics of operational status (time, power consumption) are provided to help make intelligent system operation decisions.



Schedule

Schedule control allows user to set the events in advance to maximize system performance. Also, by blocking unnecessary operation, it prevents a waste of energy.



Group / Individual Control

According to the situation, it can be controlled by group or each indoor unit. It is useful to monitor or control for the best fit of request.

CENTRALIZED CONTROL SOLUTION

AC EZ

Easy to manage up to 32 indoor unit, including ERV with simple interface

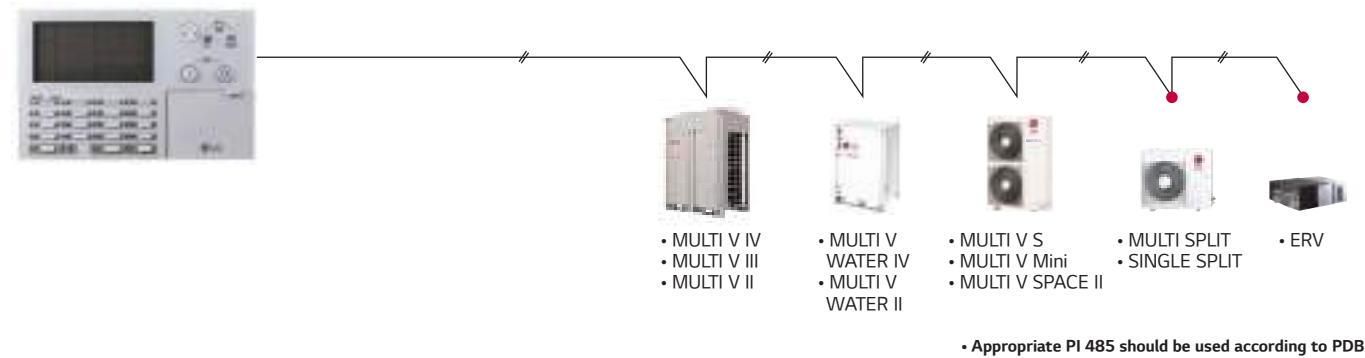


PQCSZ250S0

FEATURES

Model Name	PQCSZ250S0
Size (W x H x D, mm)	190 x 120 x 20
Interfaceable Products	MULTI V / ERV / ERV DX
Display	LED / LCD Display
Power	DC 12V
Maximum number of units	32
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	All
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly

INSTALLATION SCENE



CENTRALIZED CONTROL SOLUTION

ACP 5

Advanced solution for BMS integration up to 256 units via BACnet and Modbus protocol as well as its own smart management function with web server interface



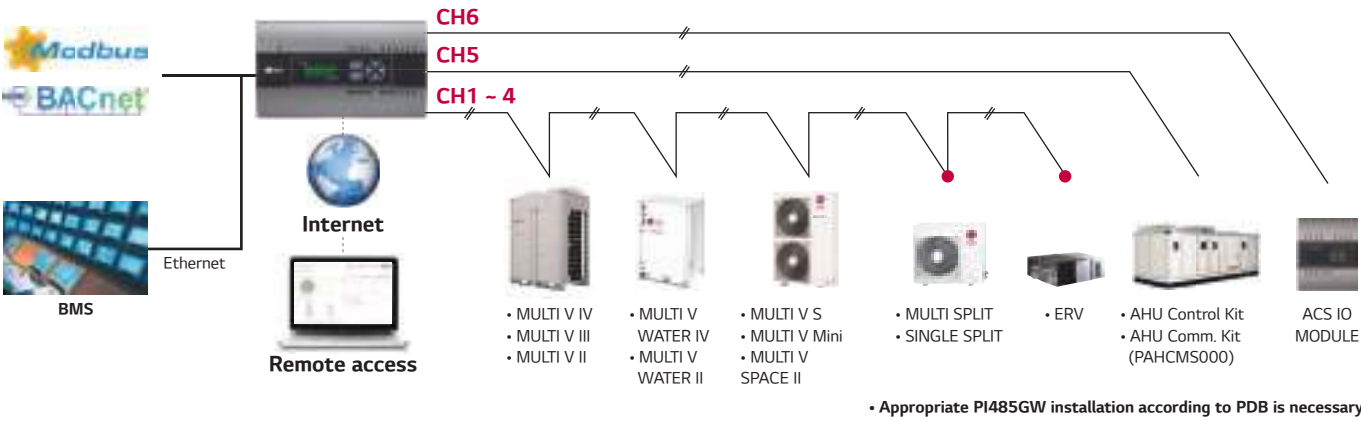
PACP5A000

FEATURES

Model Name	PACP5A000
Size (W x H x D, mm)	270 x 155 x 65
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V / AHU kit / LG Chiller ¹⁾
Maximum number of units	256
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Advanced Function Setting and Display ²⁾	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO ₂ Level display (for ERV/ERV DX) / Night Time Free Cooling (for ERV/ERV DX)
Error Check	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Operation Trend	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 16
External IO Port	DI 10 / DO 4
BMS Integration ³⁾	BACnet IP / Modbus TCP
IPv6 Support	•

1) Chiller Option Kit (PCHLLN000) is required 2) It is only available in some products 3) For the detail point list, please refer to the installation manual

INSTALLATION SCENE



BNU-BN BMS GATEWAY LONWORKS®

PLNWKB000

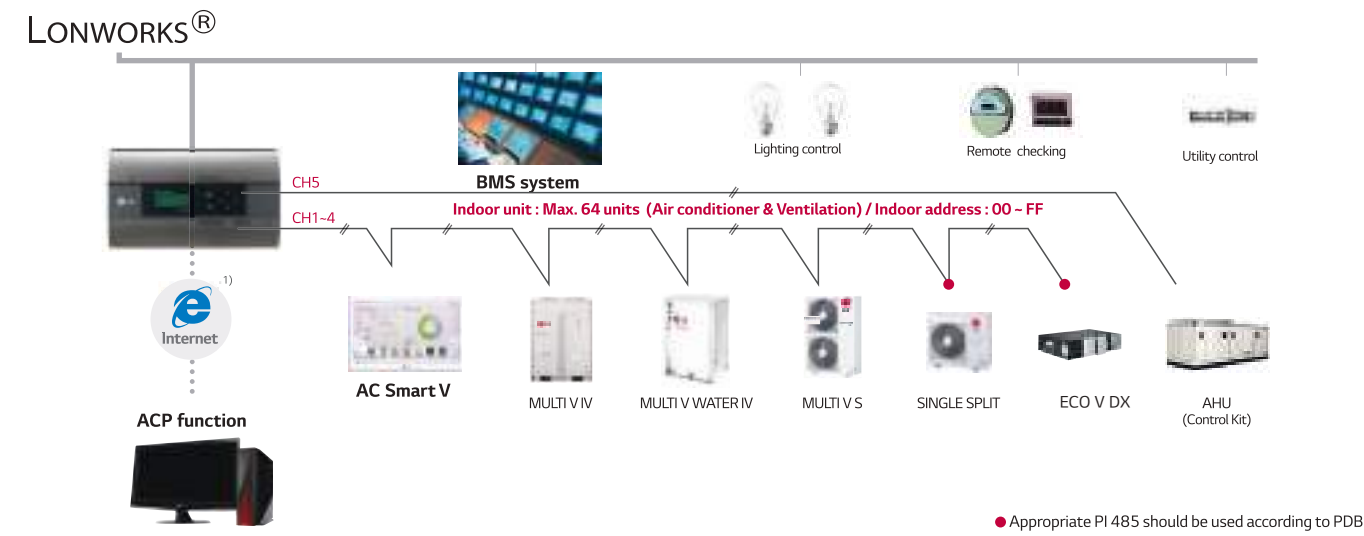


FEATURE

- Process ability
 - EHP Type : 64 units (Indoor / ECO V / Hydro Kit / THERMA V)
 - AHU Control kit : Maximum 16 units
- Connect to use Lonworks® protocol and LG air conditioner protocol.
- Self installation verification function using internet (Web server included)
 - Setting gateway
 - Diagnosis of communication status on LG Air-conditioner network
- It offers ACP (Advanced Control Platform) function (Central controller) which allows the customer to efficiently control various types of equipment from the customer's own PC.

Controlling	Monitoring Items
On/Off Command	On/Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Status
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
-	Accumulator Power Distribution Status
Upper Limit Temperature Setting	Upper Limit Temperature Status
Low Limit Temperature Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
Peak Operation Ratio Setting	Peak Operation Ratio Status
All On / Off Setting	-
-	Total Accumulate Power Status

COMBINATION



¹⁾ Assignment of public IP address is required to access central controller through internet.

PI 485

PI 485 converts the air conditioner's protocol to the RS485 protocol for the central controller.

PMNFP14A1
PHNFP14A0



FEATURE



- Model name : PMNFP14A1
- Power : Single phase AC 220V 50/60Hz
- 1 for each outdoor unit (max 64 indoor units)
- SCAC(standard and H-inverter)
 - MULTI
 - AWHP



- Model name : PHNFP14A0
- Power : Connected with the indoor units
- 1 for each unit
- ECO V

* MULTI V IV & series don't need any other PI 485 because MULTI V IV & series have PI 485 in its outdoor unit PCB.


ACS IO MODULE (ACS INPUT/OUTPUT MODULE)

The module can be connected with ACS IV central control if additional control points are needed other than not only DI/DO but also AI/AO port of ACS IV central control unit. ACS IV can control 3rd party device as pump, security, lighting and so on through DI/O and AI/O

FEATURE

Model Name		PEXPMB000	
Linkable Products		AC Smart IV	
		ACPIV	
		AC Manager IV	
Communication	CAN	1	
	RS-485	1	
I/O	DI	3	
	DO	3	
	UI	4	
	AO	4	

Interface Type		Min.	Max.
Analog Input	NTC 10k	0.68kΩ	177kΩ
	PT 1000	803kΩ	1573kΩ
	Ni 1000	871.7kΩ	1675.2kΩ
	DC (Voltage)	0V	10V
	DC (Current)	0mA	20mA
Analog Output	-	0V	10V
Digital Input	Binary Input (Dry Contact)	-	-
Digital Output	Normal open	-	30VAC / 30VDC, 2A



New
PEXPMB000

	ACP Smart 5	ACP 5	AC Manager 5
Number of Indoor Units	64~128	128~256	8,192
Max. I/O Points	130	224	1,260
Maximum Number of Node	9	16	-

SYSTEM INTEGRATION DEVICE

PDI (POWER DISTRIBUTION INDICATOR)

PDI shows distributed power consumption of up to 128 indoor units



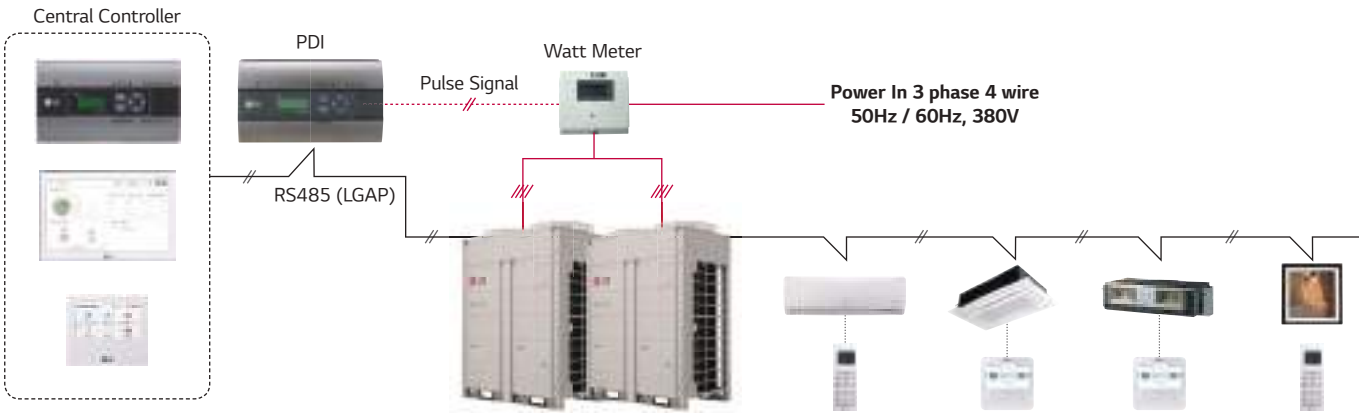
Premium
PQNUD1S40 (8 port)

Standard
PPWRDB000 (2 port)

FEATURES

Model Name	PQNUD1S40	PPWRDB000
Size (W x H x D, mm)	270 x 155 x 65	
Interfaceable Products	Air conditioner, ERV DX	
Maximum Number of Power Meters	8	2
Maximum Number of Units	128	
Data Backup When Power Outage	•	
Power Input	PDI : AC 24V, Transformer : AC 220V	

INSTALLATION SCENE



* Power cable and type could be different from this scene depending on the Outdoor unit's specification
* Measured power consumption could be different between PDI and Watt meter
* Applicable Central Controller : ACP series (IV/5/BACnet/Lonworks), AC Smart series(IV/5/BACnet), AC Ez Touch
Combination : we recommend you to connect separated watt meter for Outdoor units to have correct power distribution value

DRY CONTACT

Connection between an indoor unit and external devices to control various functions

New

PDRYCB000

New

PDRYCB400



FEATURES

Model Name	PDRYCB000	PDRYCB400
Contact Point	1 Contact Point	2 Contact Point
Power Input	AC 220V	From Indoor Unit
Voltage / Non Voltage Input	-	●
On / Off Control	●	●
Lock / Unlock	-	●
Thermo Off	-	●
Energy Saving	-	●
Temperature Setting	-	●
Error Monitoring	●	●
Operation Monitoring	●	●
Size (W x H, mm)	120 x 120	120 x 120

* Refer to each models PDB for applicable models.
* PDRYCB000(with case) / PQDSA(without case)
* Maximum operation AC : 3A
* 4th generation indoor unit has 1 contact point function for on/off control.
But in case of using more function of Dry Contact besides on/off control, Dry Contact is needed.

New

PDRYCB300



FEATURES

Model Name	PDRYCB300
Contact Point	8 Contact Point
On / Off Control	●
Mode Control	● (Cool, Heat, Fan)
Fan Speed Setting	● (Low, Middle, High)
Thermo Off	●
Error Monitoring	●
Operation Monitoring	●
Rotary Switch 1	Operating Set Temperature Selection
Rotary Switch 2	Operating Logic Selection
Size (W x H, mm)	120 x 120

PDRYCB500



FEATURES

Function

- MODBUS communicate with MODBUS master controller

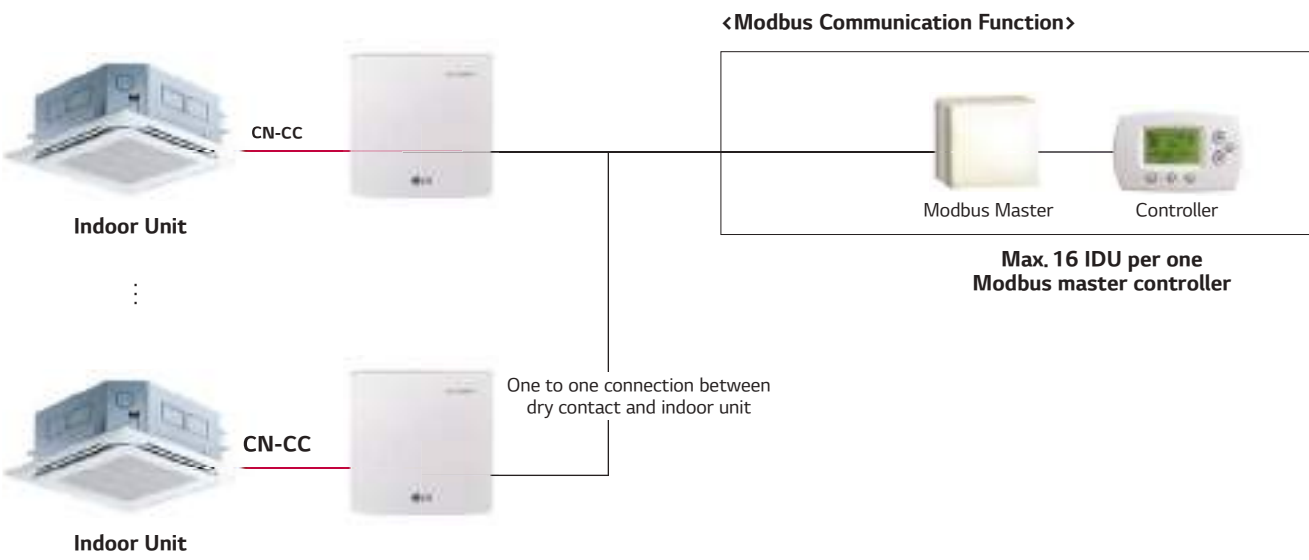
- Max. 16 IDUs can be connected with one MODBUS master controller
- MODBUS RTU slave / 2 wire RS485 / 9,600bps

- Size (W x H x D) : 120mm x 120mm x 36.5mm

MEMORY MAP

Register	Name	Range	Notes
00001	Operation	0 ... 1	0 : Stop, 1 : Run
30003	Indoor temperature	100 ... 400	Degrees C x 10
30100	Error alarm	0 ... 1	0 : No Error, 1 : Error
40001	Set run mode	0 ... 4	0 : Cooling, 1 : Dry, 2 : Fan, 3 : AI, 4 : Heating
40002	Set temperature	180 ... 300	Degrees C x 10
40015	Set fan speed	1 ... 3	1 : Low, 2 : Middle, 3 : High

INSTALLATION SCENE



* Please contact out regional office to check the compatibility with 3rd party room controller

IO MODULE (ODU DRY CONTACT)

External device interface module for system air conditioner

PVDSMN000



FEATURES

- **Function**
 - Demand control
 - Low noise operation
 - Output outdoor or indoor unit operation status
 - Output error status
- **Description**

IO Module is communication interface module for connection between MULTI V IV and external IO (Input / Output Module) devices

Note : IO Module is not compatible for MULTI V III

MOST APPLIED

- MULTI V IV, MULTI V WATER IV, MULTI V S

Wiring

1) Dry Contact Input Part

- Input_1,2,3 : Demand control by contact input(3 Step)
- Input_LNO : Low Noise Operation
- Priority Setting

Using priority setting contact signal the priority of command.
(Capacity control for external command from DDC vs. peak control by LG Central controller.)

 - Close : Central controller has priority to external signal
 - Open : External signal has priority to central controller(default setting)

2) Analog Input Part (AI : DC 0 ~ 10V)

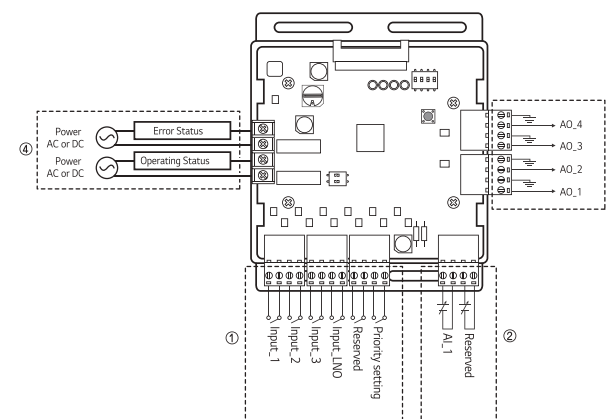
- AI_1 : Demand control by analog input (10 Step)

3) Analog Output Part(AO : DC 0 ~ 10V, Max 20 mA)

- Low ambient operation(AO_1~3)
- IO Module communication error display

4) Digital Output (DO : 250VAC, Max 1A)

- Output error status
- Output operation status



AI : Analog Input (DC0~10V)
AO : Analog Output (DC0~10V, Max 20mA)
Input_LNO : Low Noise Operation

INDIVIDUAL CONTROL SOLUTION

LG Wi-Fi MODEM

Control LG air conditioners via using the internet devices as Android or iOS bases smartphones



PWFMDD200

FEATURES

- Access LG air conditioner anytime and from anywhere with Wi-Fi equipped device
- LG's exclusive Home Appliances control app(SmartThinQ) is available
- Simple operation for various functions

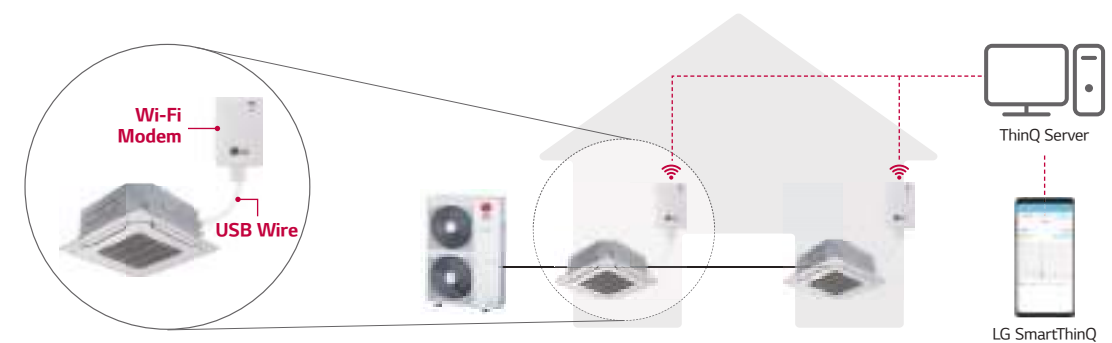
- | | | |
|-----------------------------------|------------------------------|--------------------------------------|
| - On/Off | - Operation Mode | - Current/Set Temperature |
| - Fan Speed | - Vane Control ²⁾ | - Reservation (Sleep, Weekly On/Off) |
| - Energy Monitoring ¹⁾ | - Filter Management | - Error check |

Model Name	PWFMDD200
Size (W x H x D, mm)	48 x 68 x 14
Interfaceable Products	Multi V Indoor unit ³⁾
Connection Type	Indoor unit 1:1
Communication Frequency	2.4 GHz
Wireless Standards	IEEE 802.11b/g/n
Mobile Application	LG SmartThinQ (Android v4.1(Jellybean) or higher, iPhone iOS 9.0 or higher)
Optional Extension Cable	PWYREW000 (10m extension)

- * Functionality may be different according to each IDU model
- * User interface of application shall be revised for its design and contents improvement
- * Application is optimized for smartphone use, so it may not be well functioning with tablet devices
- 1) LG Centralized controller and PDI installation is required for this function
- 2) Vane Control may not be possible according to the type of Indoor unit
- 3) For the compatibility with Indoor unit, please contact regional office



OVERVIEW



- * Search "LG SmartThinQ" on Google market or Appstore then download the app.
- * Internet service with Wi-Fi connection has to be available

SYSTEM INTEGRATION DEVICE

MODBUS RTU GATEWAY

Providing Modbus RTU connection between LG Air conditioners and BMS



PMBUSB00A

FEATURES

• **Function**

- MODBUS RTU communication with MODBUS master controller
- Applicable for MULTI V
- Max. 16 IDUs with single module / Max. 64 IDUs with 4 modules

- MODBUS RTU slave (RS485) / 9,600 bps
- Size (W*H*D) : 53.6 x 89.7 x 60.7
- Power : DC 12V

• **Modbus Memory Map***

Register	Read	Write	Description	Notes
00001	•	•	Operation	0 : Off / 1 : On
00002	•	•	Total Lock	0 : Unlock / 1 : Lock
00005	•	•	Auto Swing	0 : Manual / 1 : Auto
00006	•	•	Operation Mode Lock	0 : Unlock / 1 : Lock
00007	•	•	Fan Speed Lock	0 : Unlock / 1 : Lock
00008	•	•	Set Temperature Lock	0 : Unlock / 1 : Lock
10001	•	-	Error Alarm	0 : Normal / 1 : Error
10002	•	-	Thermo On / Off	0 : Thermo Off / 1 : Thermo On
30001	•	-	Error Code	0 ~ 255
30002	•	-	Pipe In Temperature	Degrees C x 10
30003	•	-	Pipe Out Temperature	Degrees C x 10
30004	•	-	Room Temperature	Degrees C x 10
40001	•	•	Operation Mode	0 : Cooling / 1 : Dry / 2 : Fan / 3 : Auto / 4 : Heating
40002	•	•	Set Temperature	Degrees C x 10
40003	•	•	Fan Speed	1 : Low / 2 : Medium / 3 : High / 4 : Auto

INSTALLATION SCENE

• **Single module**

Max. 16 indoor units with a single module

• **Multiple module**

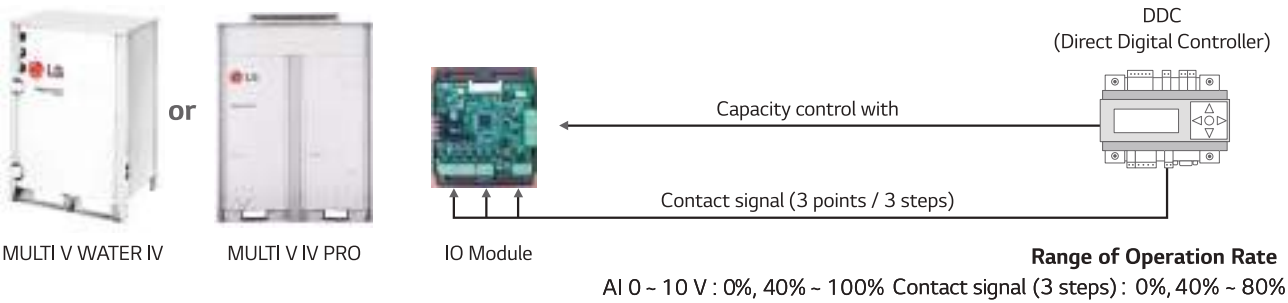
Max. 64 indoor units with 4 modules in one Modbus communication line

Max. 16 outdoor units in one RS485(LGAP) line

COMBINATION

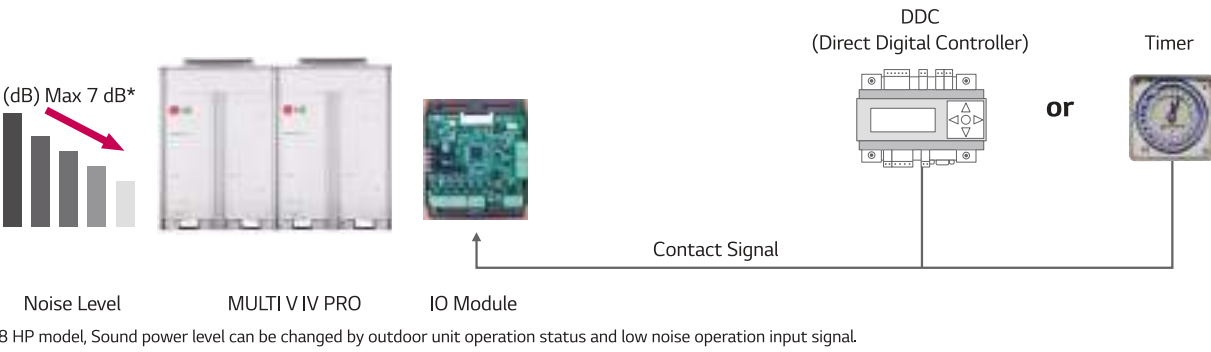
DEMAND CONTROL

Provides variable setting for demand control according to input method to reduce power consumption. This function supports 2 types of input signal : AI(0~10V, 10Step) and contact signal(3 Step).



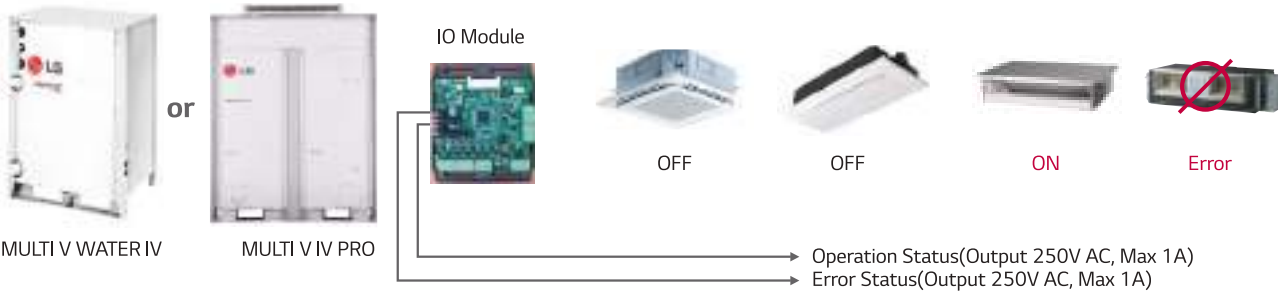
LOW NOISE OPERATION

To reduce noise level , control outdoor unit's fan speed by dry contact input.



OUTPUT OPERATION AND ERROR STATUS

This function displays outdoor or indoor unit's operation and error status. Depends on dip switch setting, either outdoor or indoor unit operation status is reflected through output signal. Additionally, either outside or indoor unit has an error, IO Module display error signal by another replay.

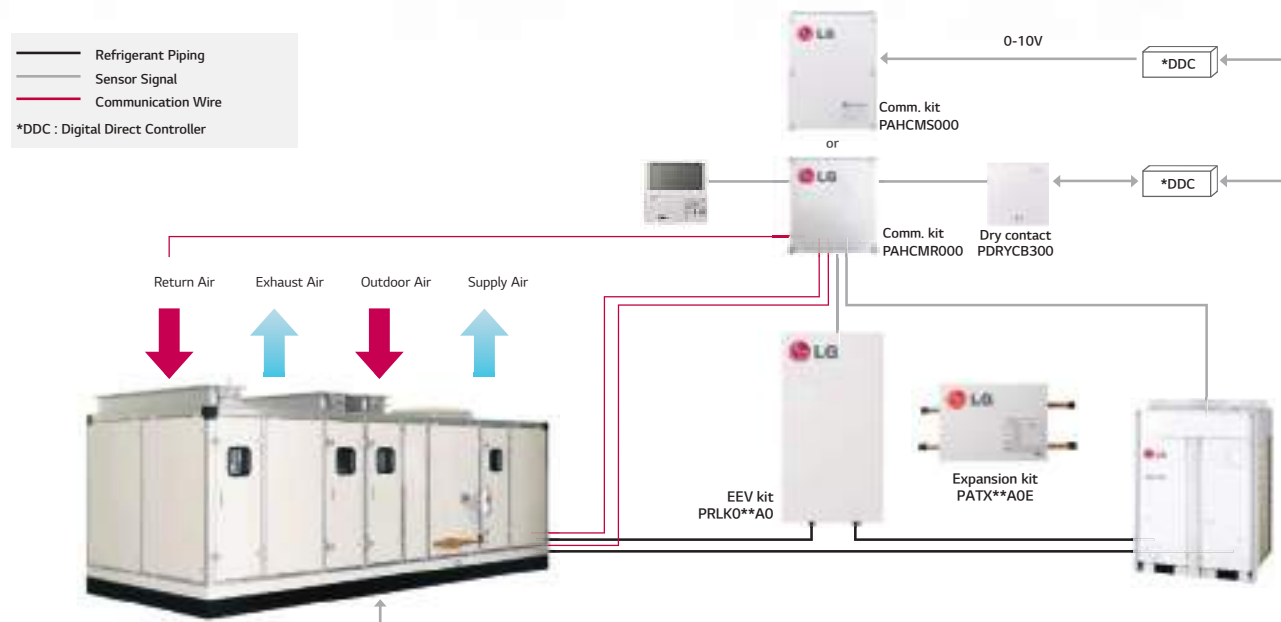


LG SYSTEM AIR CONDITIONER APP.



- Recommended device**
- Android phone (ver. 4.04 or Higher)
 - Apple iPhone (iOS6 or Higher)
- Services**
- Control / Monitoring
 - Additional Service (To be available in some countries)

MULTI V APPLICATION (STANDALONE)



Y BRANCH AND HEADER BRANCH

For refrigerant distribution of indoor units

MULTI V™

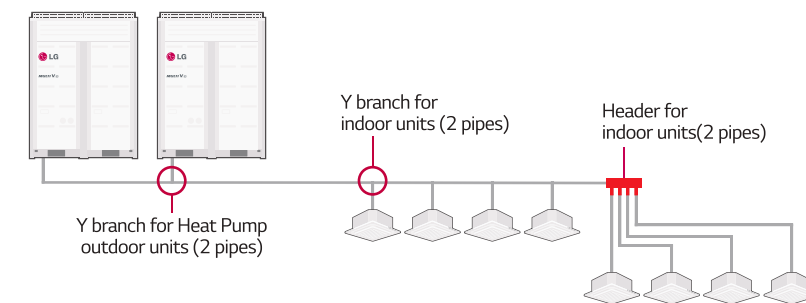


FEATURES

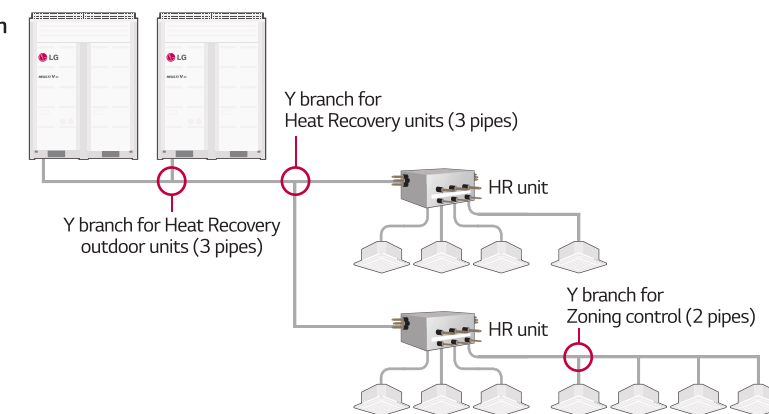
- Various Y Branch pipe of different capacities make MULTI V installation much easier
- Y Branch and header branch for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

PIPING DIAGRAM

Heat Pump system

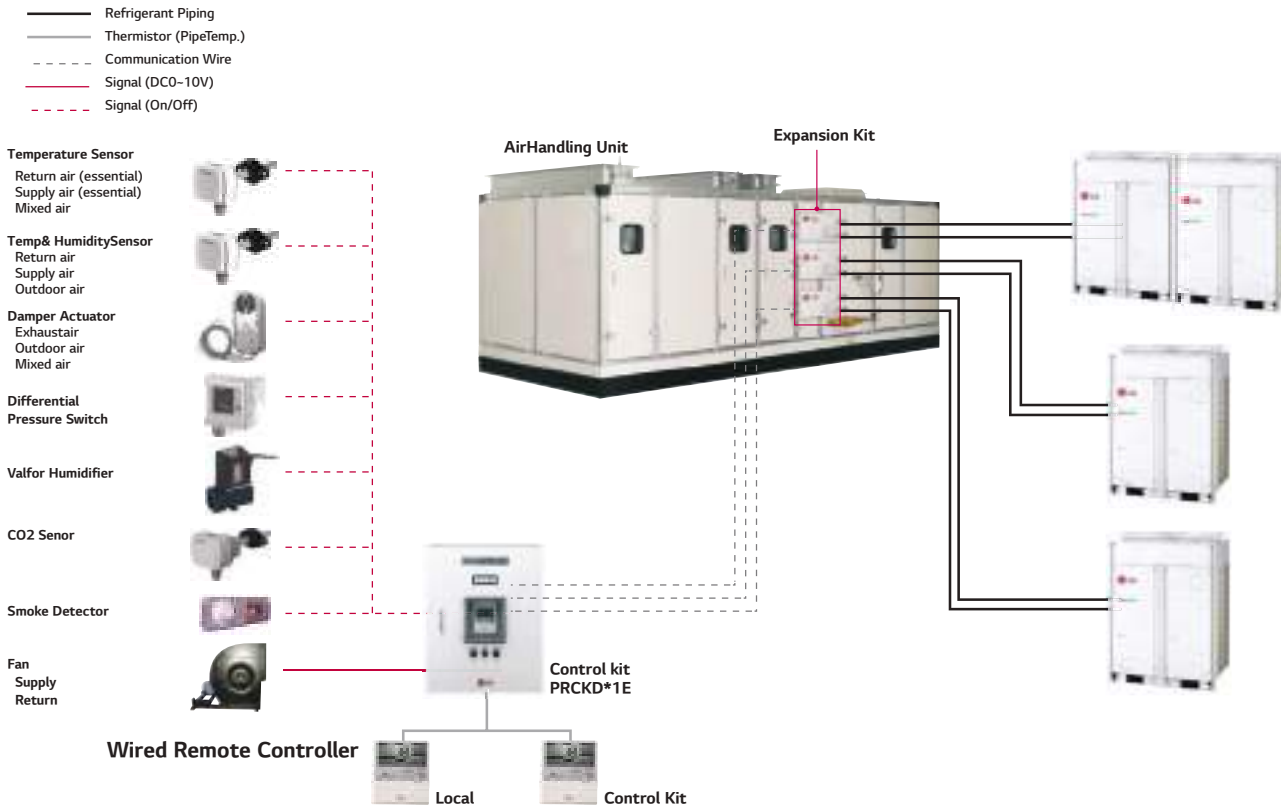


Heat Recovery system



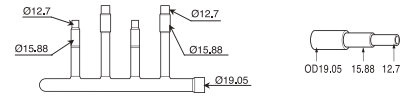
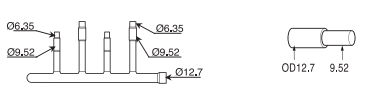

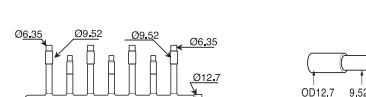
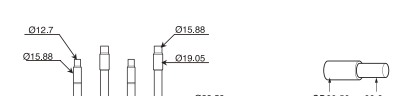
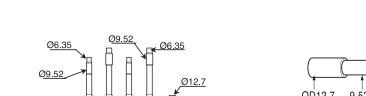
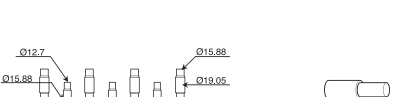
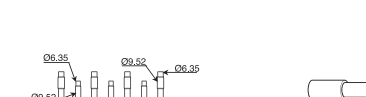
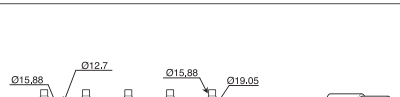
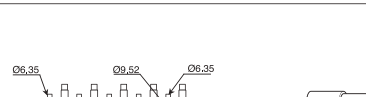
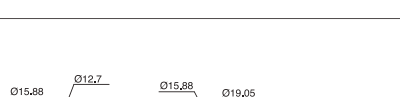
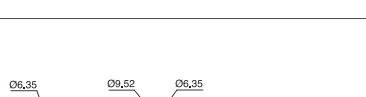
MODELS APPLIED

- MULTI V IV PRO
- MULTI V S
- MULTI V WATER IV
- MULTI V AHU



PIPING ACCESSORIES

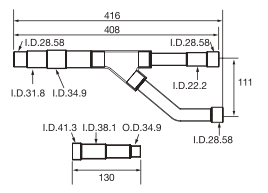
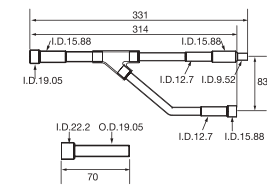
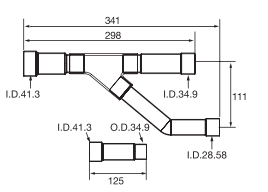
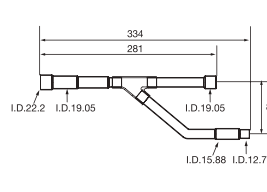
[Header Branch]
• R410A

(Unit : mm)		
Model Name	Gas Pipe	Liquid Pipe
4 Branch / ARBL054		
7 Branch / ARBL057		
4 Branch / ARBL104		
7 Branch / ARBL107		
10 Branch / ARBL1010		
10 Branch / ARBL2010		

Y BRANCH AND HEADER BRANCH

Y Branch pipe for connection of outdoor units

[Heat Pump]
• R410A / MULTI V IV PRO, MULTI V WATER IV

(Unit : mm)		
2 Outdoor Units		
Model Name	Low Pressure Gas pipe	Liquid pipe
ARCNN21		
3 Outdoor Units		
Model Name	Low Pressure Gas pipe	Liquid pipe
ARCNN31		
4 Outdoor Units		
Model Name	Low Pressure Gas pipe	Liquid pipe
ARCNN41	