

# LG SMART INVERTER

## COMMERCIAL AIR CONDITIONERS



### LG Electronics

<http://www.lg.com/global/business>  
<http://partner.lge.com/global>  
<http://blog.lghvacstory.com/>

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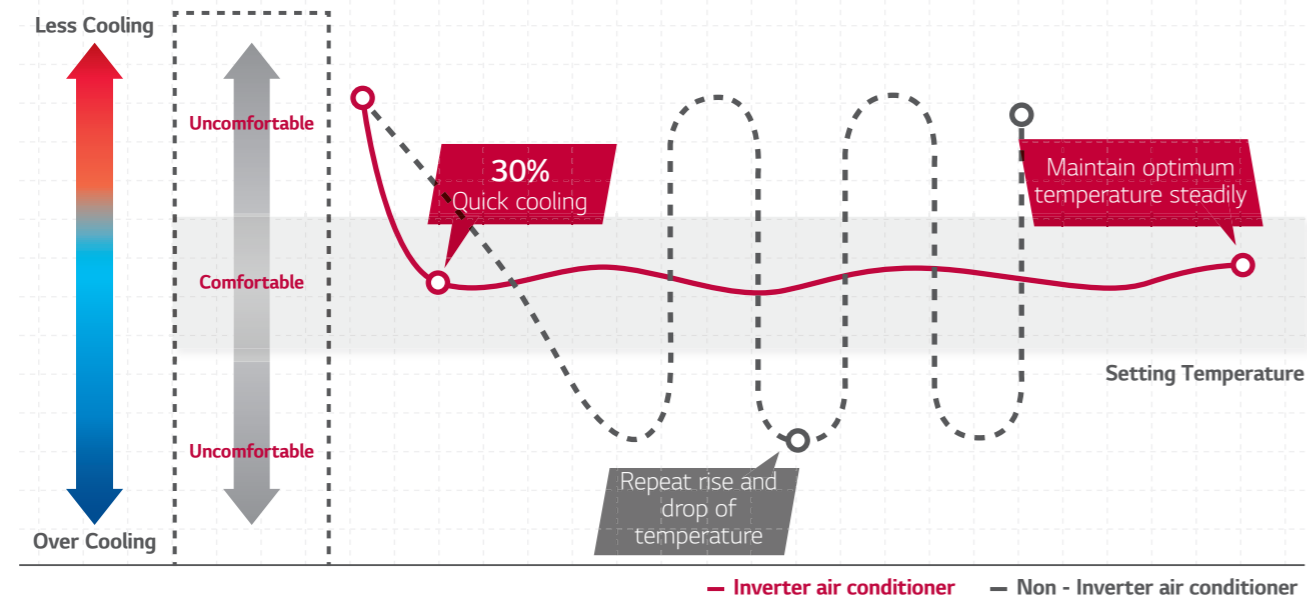
- Ceiling Mounted Cassette
- Ceiling Concealed Duct
- Ceiling Suspended Unit
- Floor Standing Unit
- Single Package

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# WHAT IS INVERTER?

Traditional compressors normally cease operation once the set temperature has been reached, then start again when the room gets warmer. This results in inefficient energy usage that increases energy bills. LG's Smart Inverter Single Split air conditioners on the other hand, operate much more efficiently, slowly decreasing and increasing output depending on the temperature outside and inside. This ultimately improves energy efficiency, as the air conditioner is able to control operational capacity.

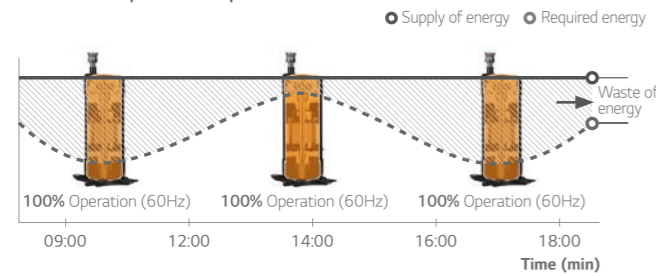
## The Advantages of Inverter Control



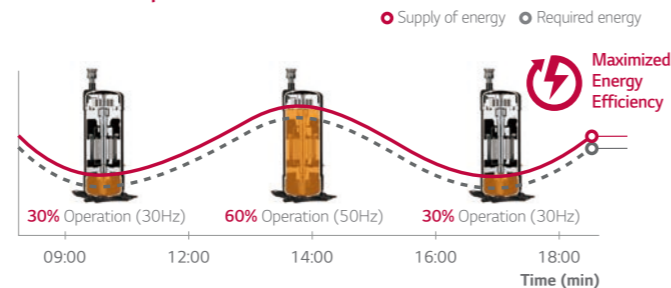
## Benefit of Inverter compressor

Inverter compressor maximizes energy efficiency, by adjusting energy supply as required.

### Constant Speed Compressor

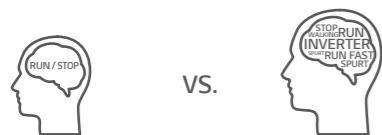


### Inverter Compressor



### Brain

Non inverter running at constant-speed has only two choices ; RUN or STOP. It runs at single speed without judging the ambient conditions. In contrast, Inverter operating at variable speed, can adjust its pace in the most efficient way.



vs.



Constant Compressor

Inverter Compressor

### Dimmable lamp

Constant speed runs only ON/OFF operation, while variable speed adjusts its frequency upon external conditions, just like dimmable lighting can be controlled its brightness by ambient light.

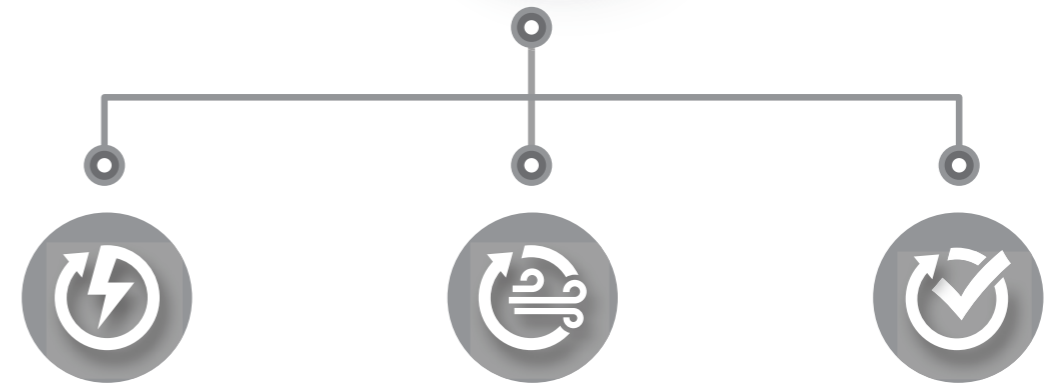
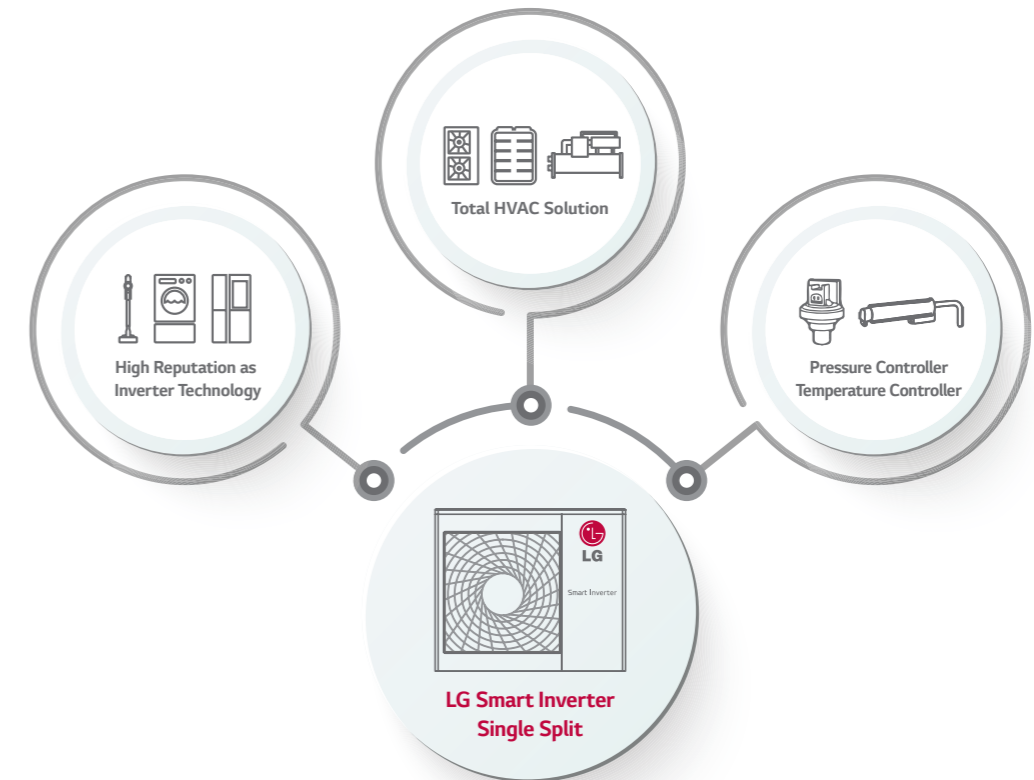


Constant Compressor

Inverter Compressor

# WHY LG SMART INVERTER?

LG Inverter technology is applied to various electronics including refrigerators and washing machines which continuously receive global attention. Their best quality is the excellent level of technology provided by LG, a reputable electronic provider. LG is also known for its comprehensive HVAC provider while continuing innovation in technology. LG's latest Smart Inverter Single Split solutions are all equipped with the company's advanced Smart Inverter technology.



Energy Saving

More Efficient 40%

Comfort

30% Quick Cooling

Reliability

Wide Operation Range  
-15°C ~ 54°C

※ Different from the model

# HIGH / STANDARD SMART INVERTER SINGLE SPLIT

- Ceiling Mounted Cassette
- Ceiling Concealed Duct
- Ceiling Suspended Unit
- Floor Standing Unit
- Single Package






# HIGH SMART INVERTER SINGLE SPLIT Line-Up

## COOLING ONLY

CEILING CASSETTE						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	ATNQ18GPLT1	ATNQ24GPLT1	ATNQ30GPLT1	ATNQ36GNLT1	ATNQ48GMLT1	ATNQ54GMLT1
Outdoor Model Name	ATUQ18GPLT1	ATUQ24GPLT1	ATUQ30GPLT1	ATUQ36GNLT1	ATUQ48GMLT1	ATUQ54GMLT1

CEILING CONCEALED DUCT (MIDDLE STATIC)						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	ABNQ18GM1T1	ABNQ24GM1T1	ABNQ30GM1T1	ABNQ36GM3T1	ABNQ48GM3T1	ABNQ54GM3T1
Outdoor Model Name	ABUQ18GM1T1	ABUQ24GM1T1	ABUQ30GM1T1	ABUQ36GM3T1	ABUQ48GM3T1	ABUQ54GM3T1







CEILING SUSPENDED						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	AVNQ18GM1T1	AVNQ24GM1T1	AVNQ30GM1T1	AVNQ36GM2T1	AVNQ48GM2T1	AVNQ54GM2T1
Outdoor Model Name	AVUQ18GM1T1	AVUQ24GM1T1	AVUQ30GM1T1	AVUQ36GM2T1	AVUQ48GM2T1	AVUQ54GM2T1




SINGLE PACKAGE				
Capacity (RT)	3, 4, 5 RT	6.5, 7.5 RT	10, 12.5 RT	15, 17.5, 20, 25 RT
Single Package				
Model Name	AK-Q036GH50 AK-Q048GH50 AK-Q060GH50	AK-Q0788C01 AK-Q0908C01	AK-Q1208C01 AK-Q1508C01	AK-Q1808C01 AK-Q2108C01 AK-Q2408C01 AK-Q3008C01

## HEAT PUMP

CEILING CASSETTE						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	ATNW18GPLT1	ATNW24GPLT1	ATNW30GPLT1	ATNW36GNLT1	ATNW48GMLT1	ATNW54GMLT1
Outdoor Model Name	ATUW18GPLT1	ATUW24GPLT1	ATUW30GPLT1	ATUW36GNLT1	ATUW48GMLT1	ATUW54GMLT1

CEILING CONCEALED DUCT (MIDDLE STATIC)						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	ABNW18GM1T1	ABNW24GM1T1	ABNW30GM1T1	ABNW36GM3T1	ABNW48GM3T1	ABNW54GM3T1
Outdoor Model Name	ABUW18GM1T1	ABUW24GM1T1	ABUW30GM1T1	ABUW36GM3T1	ABUW48GM3T1	ABUW54GM3T1

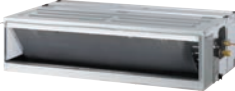



CEILING SUSPENDED						
						
<b>kBtu / kW</b>	<b>18 / 5.3</b>	<b>24 / 7.0</b>	<b>30 / 8.8</b>	<b>36 / 10.0</b>	<b>48 / 13.5</b>	<b>54 / 15.8</b>
Indoor Model Name	AVNW18GM1T1	AVNW24GM1T1	AVNW30GM1T1	AVNW36GM2T1	AVNW48GM2T1	AVNW54GM2T1
Outdoor Model Name	AVUW18GM1T1	AVUW24GM1T1	AVUW30GM1T1	AVUW36GM2T1	AVUW48GM2T1	AVUW54GM2T1




FLOOR STANDING				
				
<b>kBtu / kW</b>			<b>36 / 10.0</b>	<b>48 / 13.5</b>
Indoor Model Name			APNW36GT3S1	APNW50GT3E0 /APNW50LT3E0
Outdoor Model Name			APUW36GT3S1	APUW50GT3E0 /APUW50LT3E0

# STANDARD SMART INVERTER SINGLE SPLIT Line-up




## HEAT PUMP (1Phase, 220 - 240V / 50Hz)

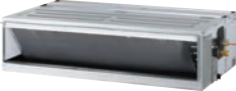


CEILING CASSETTE						
						
kBtu / kW	18 / 5.3	24 / 7.0	30 / 8.8	36 / 10.0	48 / 13.5	54 / 15.8
Indoor Model Name	ATNW18GPLS1	ATNW24GPLS1	ATNW30GPLS1	ATNW36GMLS1	ATNW48GMLS1	ATNW54GMLS1
Outdoor Model Name	ATUW18GPLS1	ATUW24GPLS1	ATUW30GPLS1	ATUW36GMLS1	ATUW48GMLS1	ATUW54GMLS1



CEILING CONCEALED DUCT (MIDDLE STATIC)						
						
kBtu / kW	18 / 5.3	24 / 7.0	30 / 8.8	36 / 10.0	48 / 13.5	54 / 15.8
Indoor Model Name	ABNW18GM1S1	ABNW24GM1S1	ABNW30GM1S1	ABNW36GM2S1	ABNW48GM3S1	ABNW54GM3S1
Outdoor Model Name	ABUW18GM1S1	ABUW24GM1S1	ABUW30GM1S1	ABUW36GM2S1	ABUW48GM3S1	ABUW54GM3S1

FLOOR STANDING						
						
kBtu / kW				36 / 10.0	48 / 13.5	
Indoor Model Name				APUW36GT3S1	APUW48GT3S1	
Outdoor Model Name				APNW36GT3S1	APNW48GT3S1	

## HEAT PUMP (3Phase, 380 - 410V / 50Hz)

CEILING CASSETTE						
						
kBtu / kW					48 / 13.5	54 / 15.8
Indoor Model Name					ATNW48LMLS2	ATNW54LMLS2
Outdoor Model Name					ATUW48LMLS2	ATUW54LMLS2

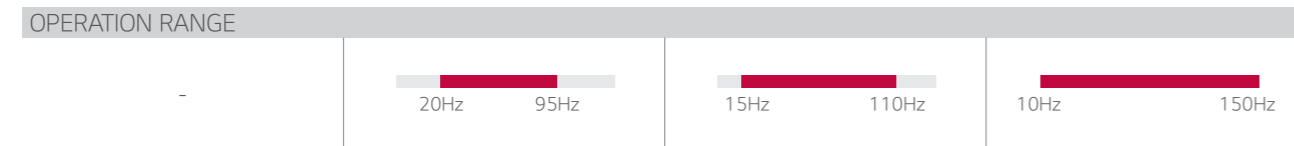
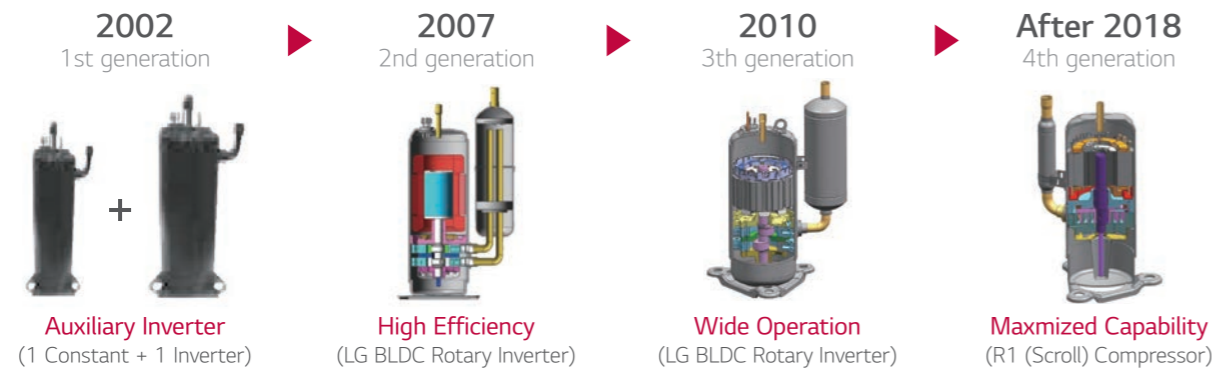
CEILING CONCEALED DUCT (MIDDLE STATIC)						
						
kBtu / kW						
Indoor Model Name					ABNW50LM3S1	ABNW60LM3S1
Outdoor Model Name					ABUW50LM3S1	ABUW60LM3S1

FLOOR STANDING						
						
kBtu / kW					48 / 13.5	
Indoor Model Name					APNW48LT3S1	
Outdoor Model Name					APUW48LT3S1	

# The Evolution of LG Technology

## INVERTER COMPRESSOR

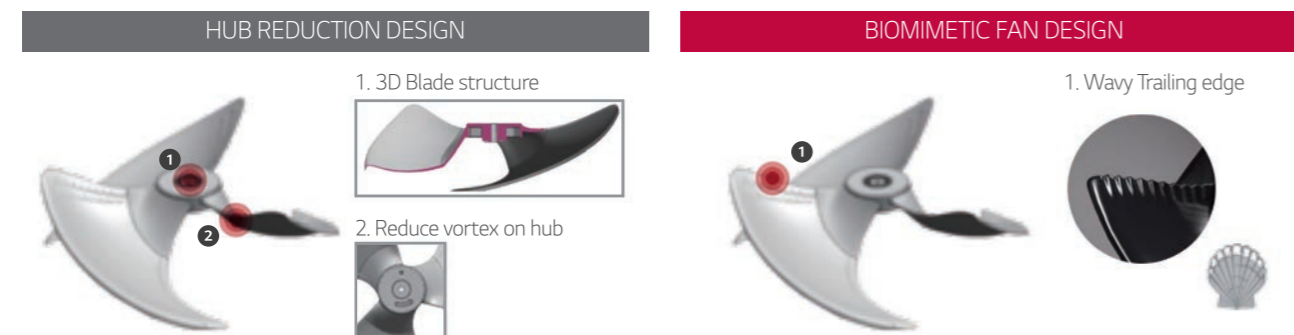
High-efficiency inverter compressor developed for generations



\* All the contents in this material is based on LG single split model.

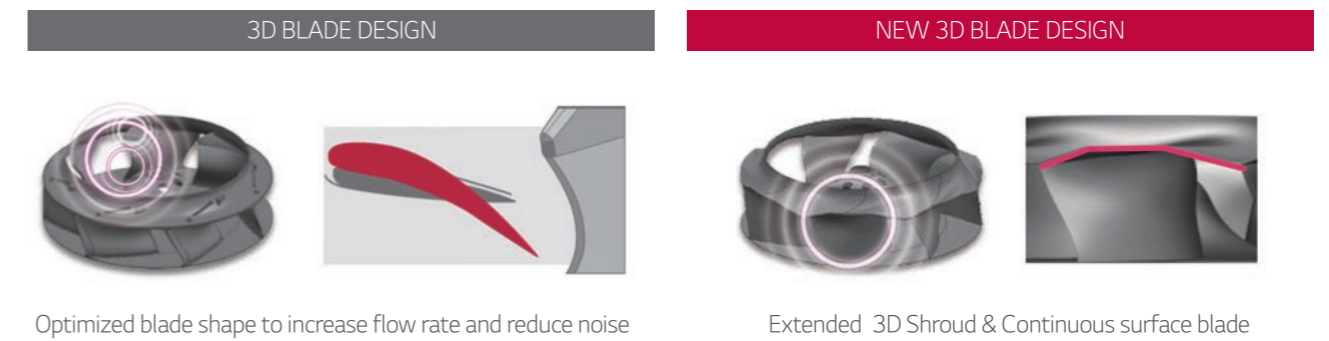
## FAN (OUTDOOR)

Increased the air flow rate and reduced the noise of outdoor unit by the design to reduce vortex.



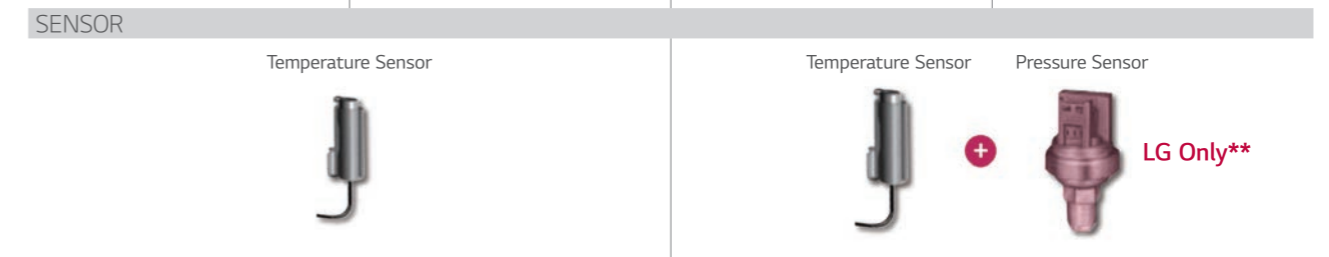
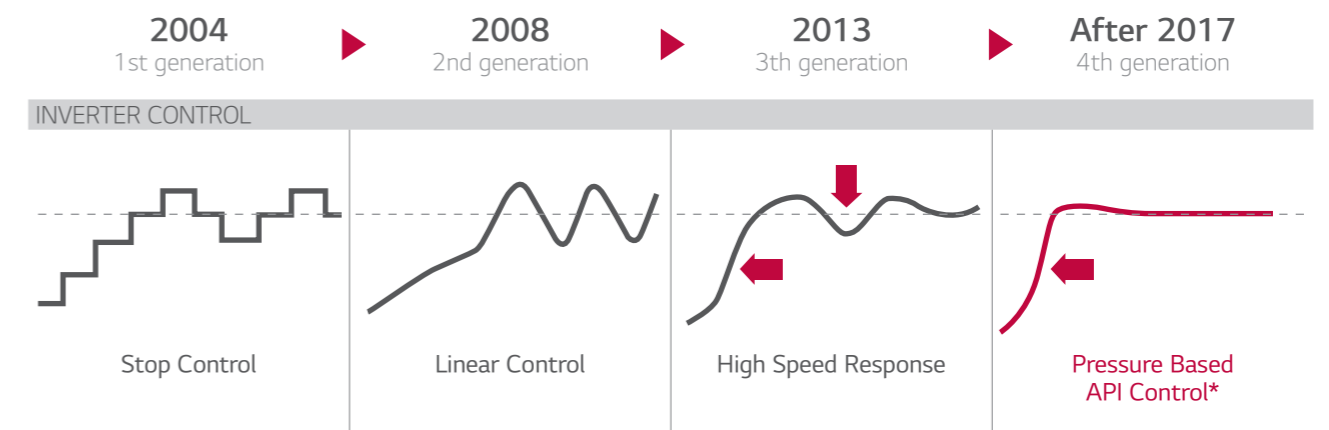
## FAN (INDOOR)

Quiet and powerful indoor unit fan through years of fluid dynamic design and manufacturing knowhow



## INVERTER CONTROL

Smart sensors make quick and precise cooling possible. (Same sensor with Multi V)



BENEFIT

\* API Control : Adaptive Propotional Intergrated control.  
\*\* Application status of pressure sensor

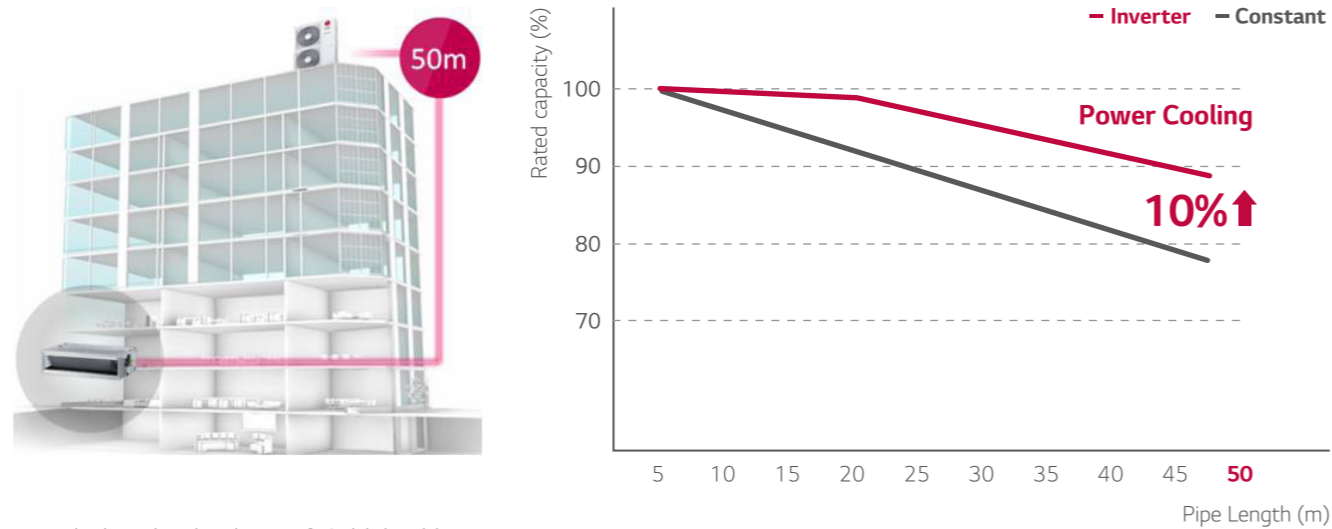
	Competitors	LG
Pressure sensor	X	O

**30%**  
Quick Cooling  
(By direct detection of refrigerant)

# LG Smart Technology

## POWER COOLING AT THE LONG PIPE

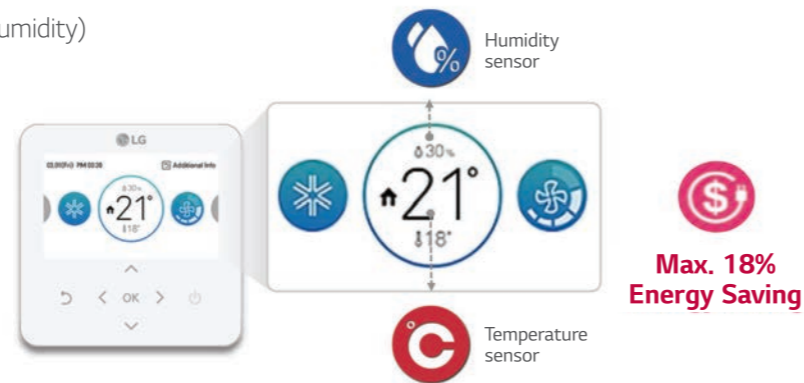
It has capacity of 10% higher more than constant model at the 50m pipe length.



※ The data is based on the PDB of LG global model.  
 ※ Test condition (Temperature) : 27 / 35 °C (Indoor / Outdoor)

## COMFORT COOLING WITH HUMIDITY SENSOR

LG new model can provide better comfort and save energy with dual sensing. (Temperature + Humidity)



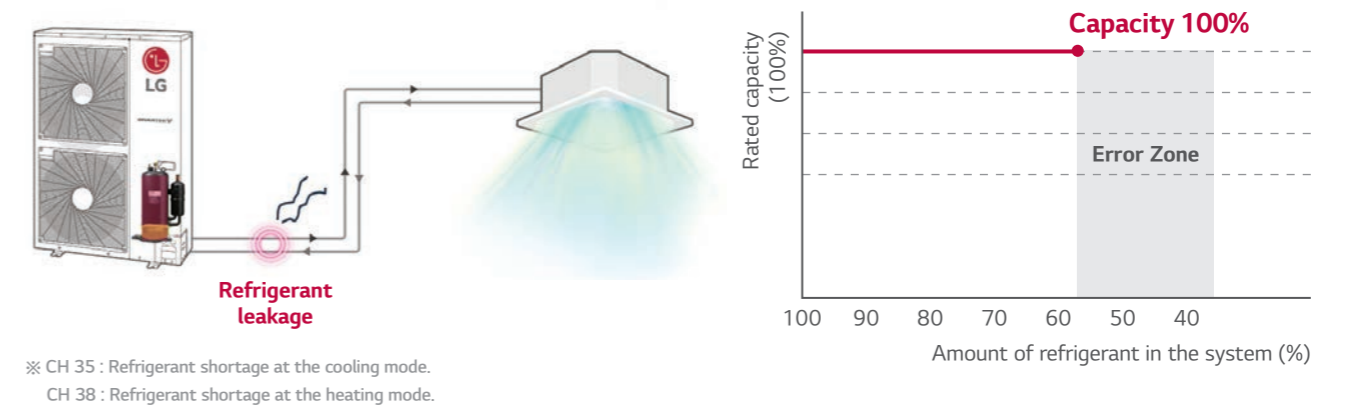
Comfort Cooling is a function that changes evaporation temperature according to temperature & humidity.



1) Evaporation Temperature  
 ※ Comfort cooling is only applied to Cassette & Suspended unit

## DETECTION OF REFRIGERANT SHORTAGE

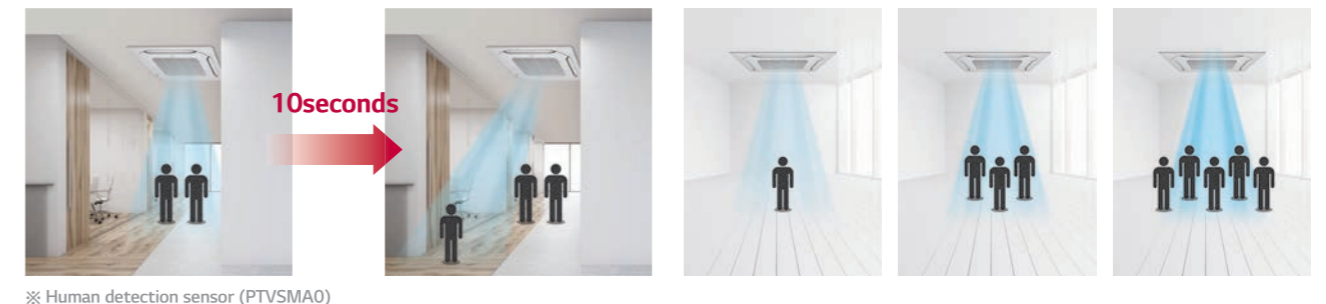
LG product detect the refrigerant level continuously and judge if the refrigerant is shortage. If the amount of refrigerant is about 60% in the system, We can check the error display of remote controller and running will be stopped.



## HUMAN DETECTION

**Direction control based on human motion**  
 Air flow direction is controlled automatically by motion sensor that detects the activity of people every 10seconds.

**Compressor control based on real load**  
 Discharge temperature is controlled by the number of occupancy.



## BLACK BOX FOR EMERGENCY

Quick Service can be done because operation data can be saved before system failure.

**Without Black box function**  
 Check many failure causes and error codes in person  
 ↓  
 Take much service time and undergo trial and error

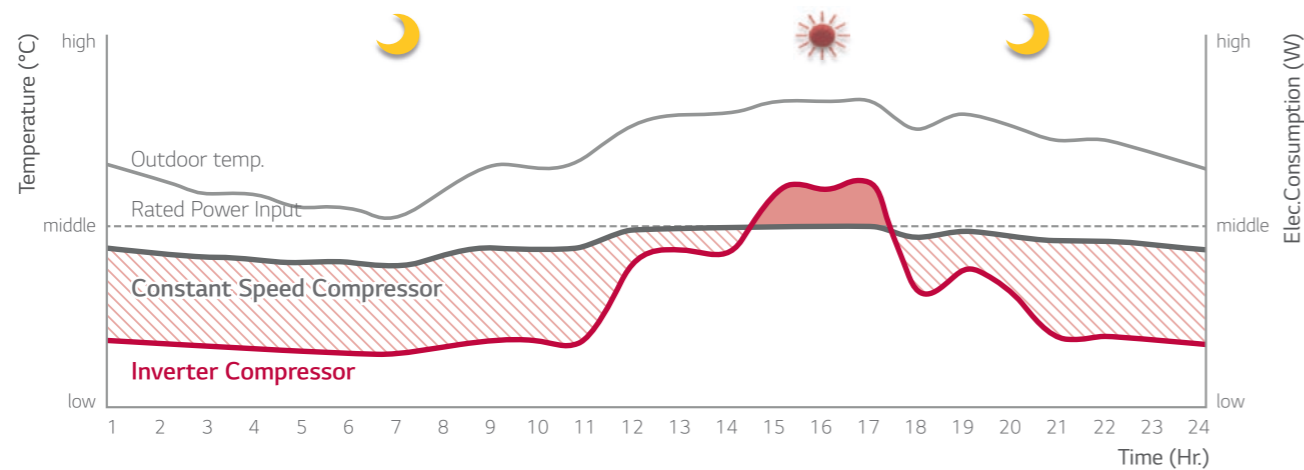
**With Black box function**  
 Search for the failure cause conveniently using recorded data  
 ↓  
 Save service time and diagnose product more accurately





# Energy Saving

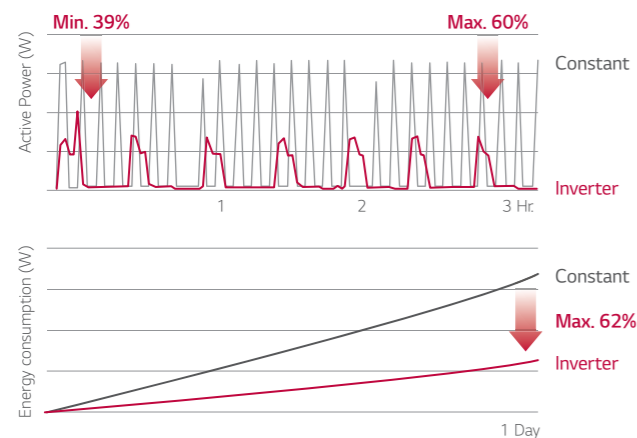
## BENEFIT OF PARTIAL LOAD PERFORMANCE



## BENEFIT OF PARTIAL LOAD PERFORMANCE

Energy consumption are expected to decline by 62% compared to constant speed.

### Floor Standing 5HP (LG Constant vs LG Inverter)



#### [Test result for a day]

- Floor Standing (48 kBtu/h): Inverter: 12,700 W / Constant: 33,300 W  
- Ceiling Cassette (36 kBtu/h): Inverter: 8,200 W / Constant: 16,400 W

#### [Conditions]

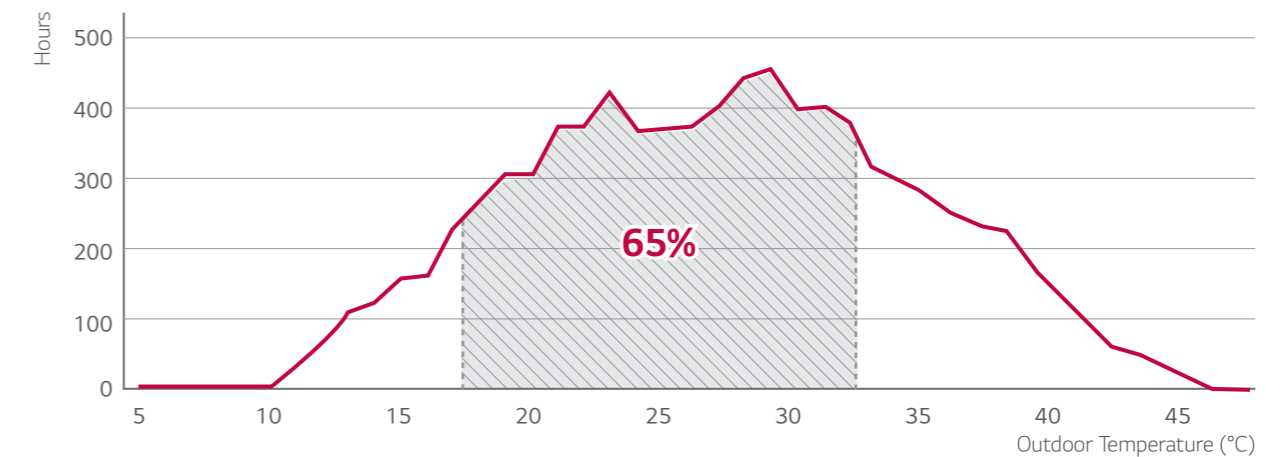
- Setting temperature: 24 °C  
- Operating time: 24 hours (May 23th-24th 2018)  
- Location: University Indonesia

※ This result can be different depending on actual environment

## EER VS SEER

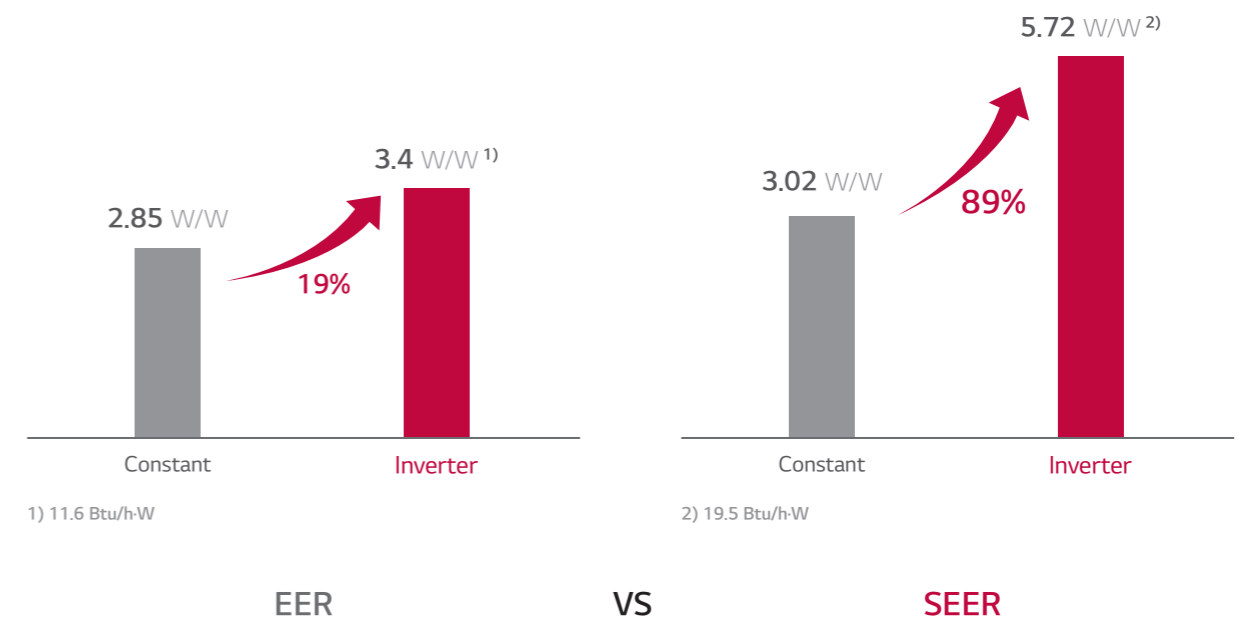
Performance and efficiency in partial load conditions are more representative parameter for the evaluation of system energy consumption per year than rated efficiency.

### Weather Profile



※ Weather data source: EnergyPlus weather data, <https://energyplus.net/weather/source> (Abu Dhabi)

The difference of EER is around 19%, but the difference of SEER is much bigger. This means that inverter air conditioner saves a lot of annual operation cost comparing constant speed air conditioner.



※ EER: Indoor Temp. 27°C (DB) / 19°C (WB), Outdoor Temp. 35°C (DB) / 24°C (WB)

※ SEER (seasonal energy efficiency ratio): ANSI/AHRI STANDARD 210/240

- Indoor Temp. 26.7 °C (DB) / 19.4°C (WB)

- Outdoor Temp. 35 °C / 30.6 °C / 27.8 °C / 19.4 °C (DB)

\* LG internal simulated data

※ Model: 4 Way Cassette (48 kBtu/h)

※ This result can be different depending on actual environment.

# Comfort

## QUICK COOLING

At the same condition, the inverter reaches the set temperature about 30% faster than the constant speed.

SMART SENSORS



Temperature Sensor

+



Pressure Sensor

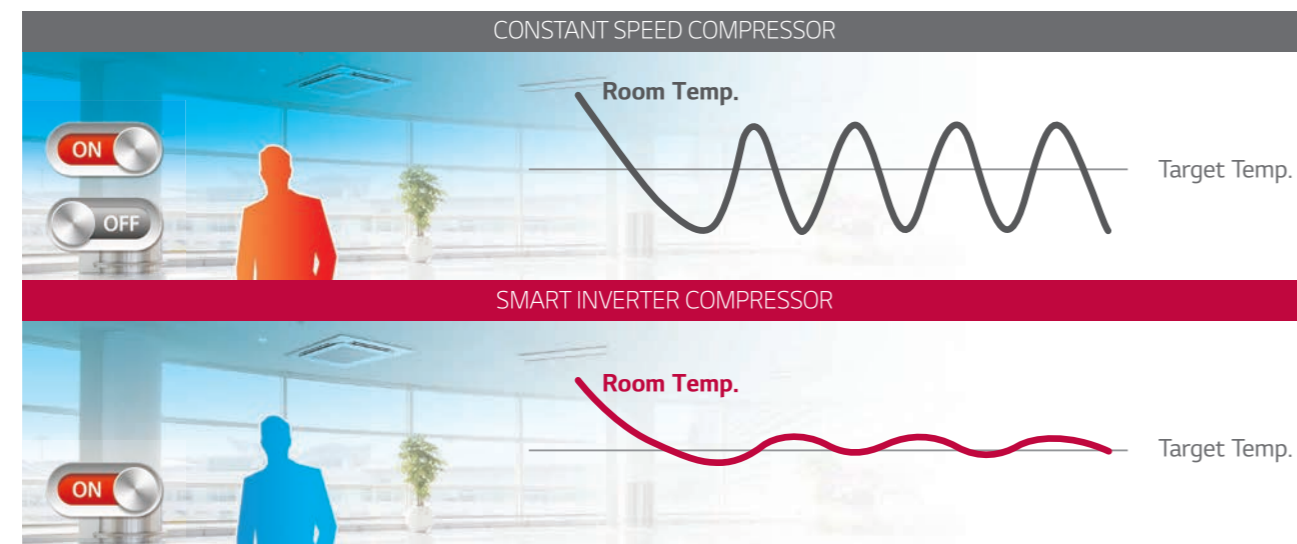
Sensing and ready for operation

Quick and reliable operation



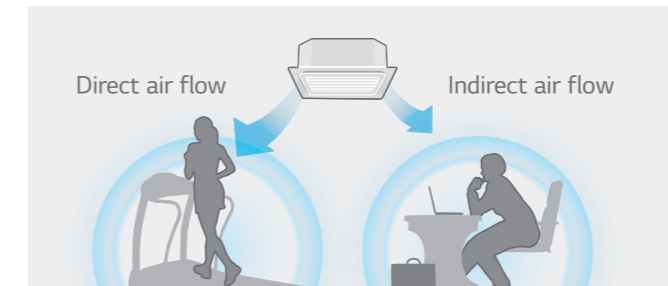
## API CONTROL

The constant model has energy consumption due to on-off repetition and it causes discomfort. API control\* automatically shorten the target arrival time according to the desired temperature difference



\* API Control : Adaptive Proportional Intergrated control.

## INDEPENDENT CONTROL OF AIRFLOW




The independent vane operation feature uses separate motors, making it possible to control all four vanes independently. If you use a human detection sensor, it make you more comfortable

## OPTIMUM COOLING


When indoor temperature reaches near to the target temperature, LG Smart Inverter adjusts its discharge air temperature to prevent the indoor from being overcooled.

CONSTANT SPEED COMPRESSOR

SMART INVERTER COMPRESSOR



12°C



15°C  
- Adjust  
12°C

Set Temperature


20°C

## LOW NOISE


Inverter makes lower noise than constant speed due to adjustable frequency according to the load.

CONSTANT SPEED COMPRESSOR

SMART INVERTER COMPRESSOR



56 dB(A)



47 dB(A)

# Reliability

## REVOLUTIONARY SCROLL COMPRESSOR

R1 Compressor

**Shaft-through Structure & Support both ends of shaft**  
- Solid compressor operation assuring higher durability

**Extended Operation Range (max 150Hz)**  
- Higher Heating Performance

**Centrifugal oil return & Oil separating guide for oil discharge reduction**  
- Higher Energy Efficiency (\*SEER 20% ↑)

**Bottom Compression & Simple Structure**  
- Lower Noise & Vibration (\*\*max 4dB(A) ↓)  
- Less Weight (\*\*20% ↓)  
- Superior Reliability

**R1 Compressor™**

\* LG Internal test result, Based on single split 10 kW Cassette  
\*\* LG Internal test result, Based on conventional compressor (Rotary type GPT442M)

## WIDE OPERATION RANGE

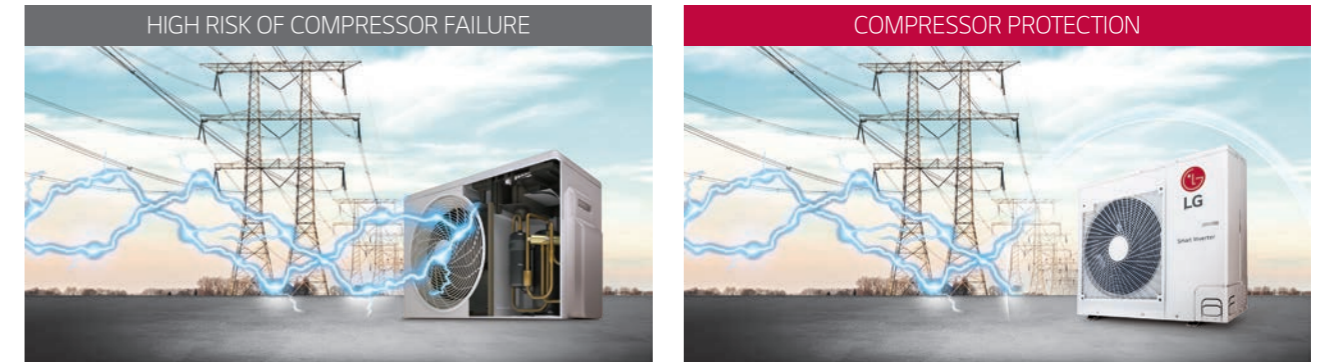
At the same condition, the inverter reaches the set temperature about 30% faster than the constant speed.



\* Different from the model : The operation range of some model is from 0°C to 54°C.

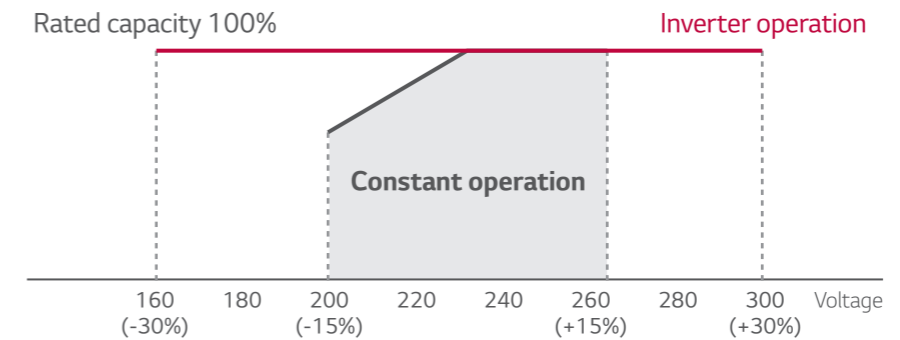
## HIGH AND LOW VOLTAGE PROTECTION

Below low voltage limit, inverter compressor reduces frequency(Hz) and boost DC voltage, over high voltage limit, cuts off the relay to prevent damage of DC capacitor



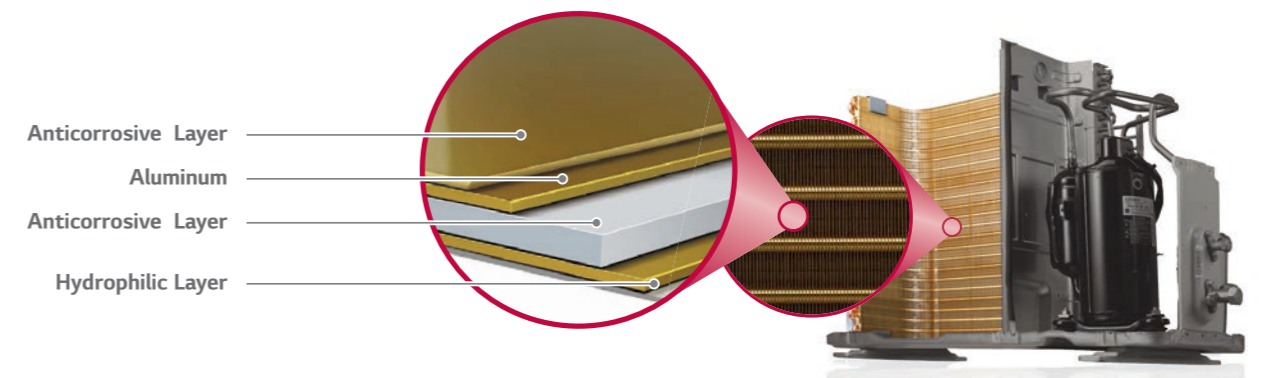
## POWER COOLING AT THE LOW VOLTAGE

LG Smart inverter operate at a wider voltage range than constant speed model. At the low/high voltage, Inverter model keeps capacity of 100%



## CORROSION RESISTANT HEAT EXCHANGER

The gold-colored special coating on the fin of the heat exchanger prevents corrosion, extending the life of the unit.



# Convenience

## SMART ThinQ

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



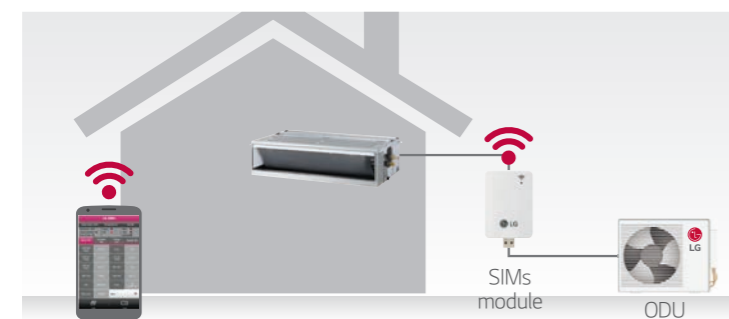
### Simple operation for various functions

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

※ Search "LG Smart ThinQ" on Google market or Appstore then download the app.  
 ※ Wi-Fi modem (PWFMD200) is required by option.

## SMART DIAGNOSIS

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



### Easy Monitoring

Diagnose problems anytime, anywhere with a SIMs Module.

### Easy Diagnosis & Quick Response

Easily monitor IDU / ODU and diagnose problems. Save and review diagnostic data.

- Main**
- Current outdoor temperature
  - Indoor temperature
  - Inverter comp frequency
  - Operating opening
  - Error code / Frequency limits Indoor
  - Outdoor fan speed

- Indoor Unit**
- Indoor Unit Capacity / Operation Mode
  - THM mode / REM mode
  - FAN operating condition / EEV opening
  - Room Temperature / Suction Temperature
  - Intermediate Temperature
  - Exit Temperature

- Outdoor Unit**
- Frequency / Fan RPM
  - DC Link / Input Current
  - Input Voltage
  - EEV operation mode
  - Restart timer
  - Compressor mode / EEV opening

- Chart**
- Room Temperature
  - Heat exchanger pipe temperature
  - Compressor discharge temperature
  - Frequency / Outdoor temperature
  - Compressor suction temperature
  - Electric current / Voltage

※ Search "LG SIMs" on Google market or Appstore then download the app.

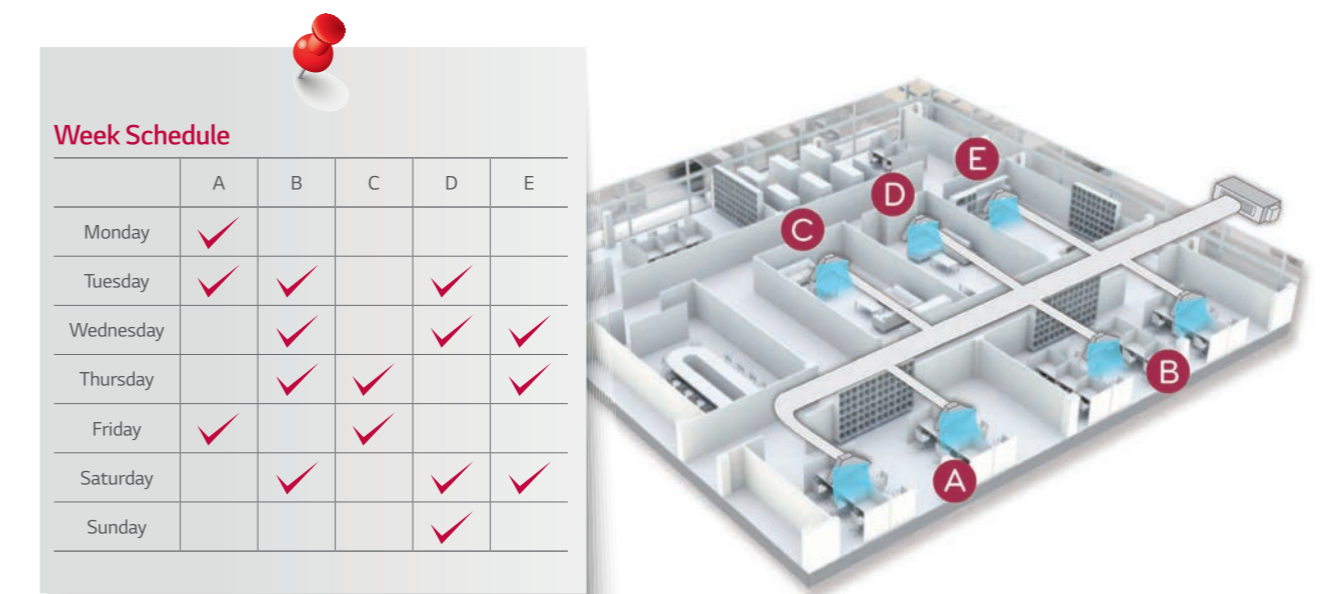
## SIMPLE PUMP DOWN

Simple pump down provides easy maintenance and save the service time.

MANUAL PUMP DOWN		SIMPLE PUMP DOWN (LG INVERTER)	
<b>Time consuming and inconvenience</b> (Conduct the pump down by setting at outdoor unit and indoor unit respectively)		<b>Save time and simple maintenance</b> (Start pump down simply by setting dip switch on PCB in outdoor unit)	
<b>Imprecise pump down</b> (Assuming ref. amount empirically)		<b>Precise pump down (LED signal)</b> (Measuring ref. amount by pressure sensor and alarm LED signal)	
Action	Setting by	Action	Setting by
① Liquid pipe valve closed	ODU	① Liquid pipe valve closed	ODU
② Power On	ODU	② Dip switch On	ODU
③ Cooling operation start by Indoor remote controller	IDU	③ Power On	ODU
④ Collect refrigerant	ODU	④ Collect refrigerant	ODU
⑤ Vapor pipe valve closed assuming ref. amount in person	ODU	⑤ Vapor Pipe valve closed after checking LED signal	ODU
⑥ Power Off	ODU	⑥ Power Off	ODU

## WEEKLY PROGRAM

You can set the daily temperature and automatic on/off time for one week. It will keep running on that time until cancelled by the user.



※ Two weekly reservation Max. 14 schedule for a week

# CEILING MOUNTED CASSETTE



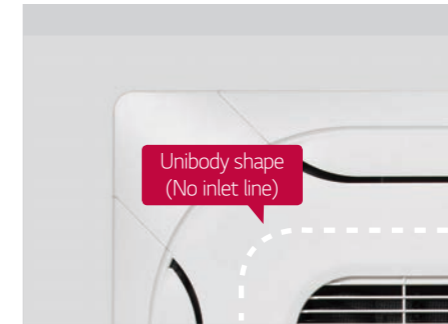
## STYLISH DESIGN PANEL

New 4 way cassette panel adapted a unibody shape that matches with the ceiling.

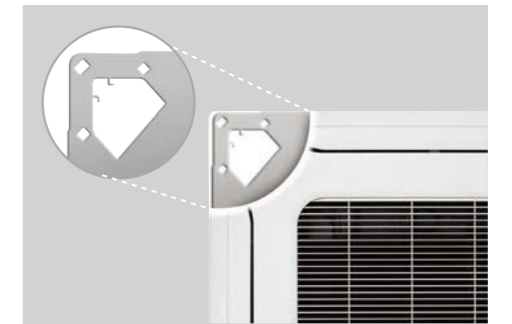
Interior fit



Lineless surface



Detachable corner



## COMPACT SIZE

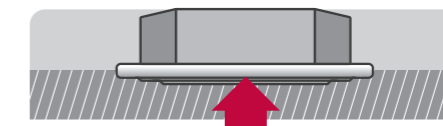
Slim & compact design not only saves space but also reduces installation costs. It's designed to suit most of building designs and fit into various spaces.



Length Width : 840 x 840mm



Conventional

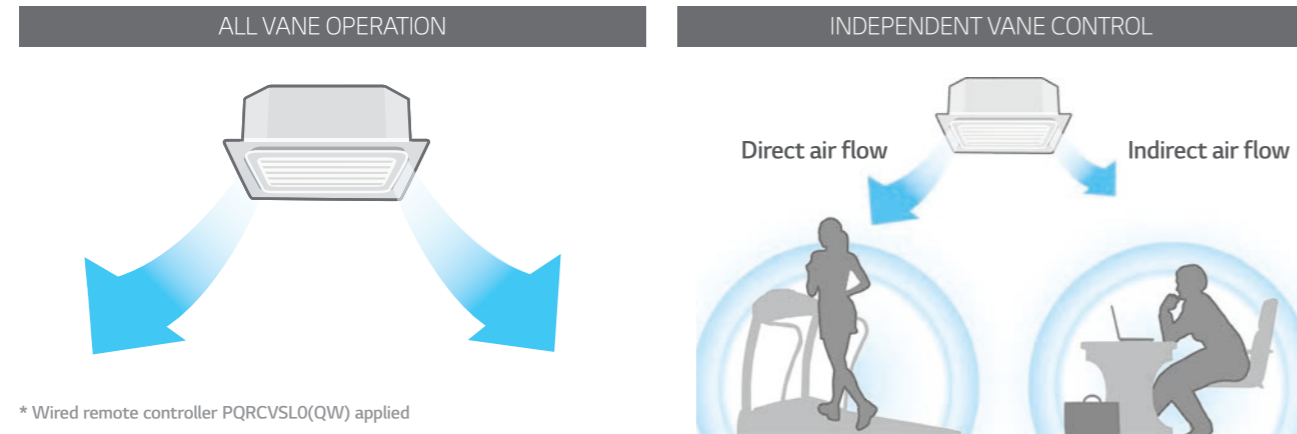


LG

# CEILING MOUNTED CASSETTE

## INDEPENDENT VANE OPERATION

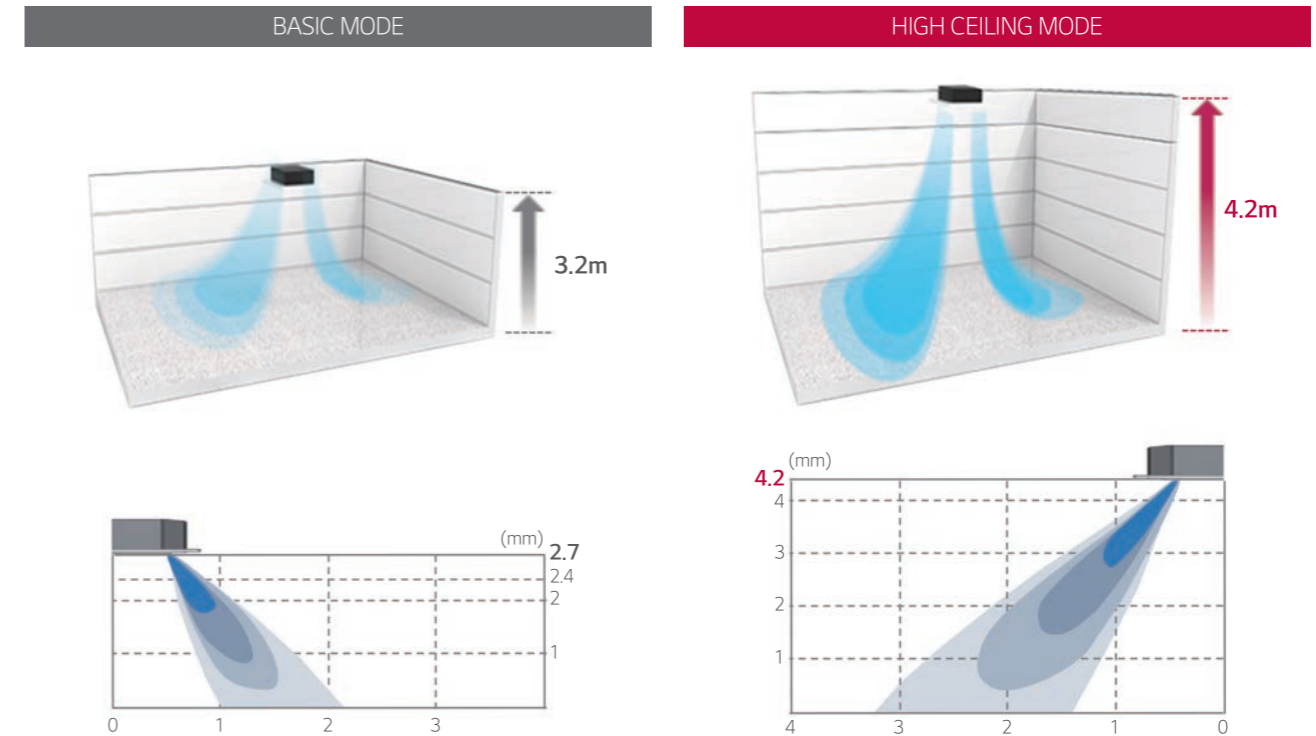
The independent vane operation feature uses separate motors, making it possible to control all four vanes independently.



\* Wired remote controller PQRCVSL0(QW) applied

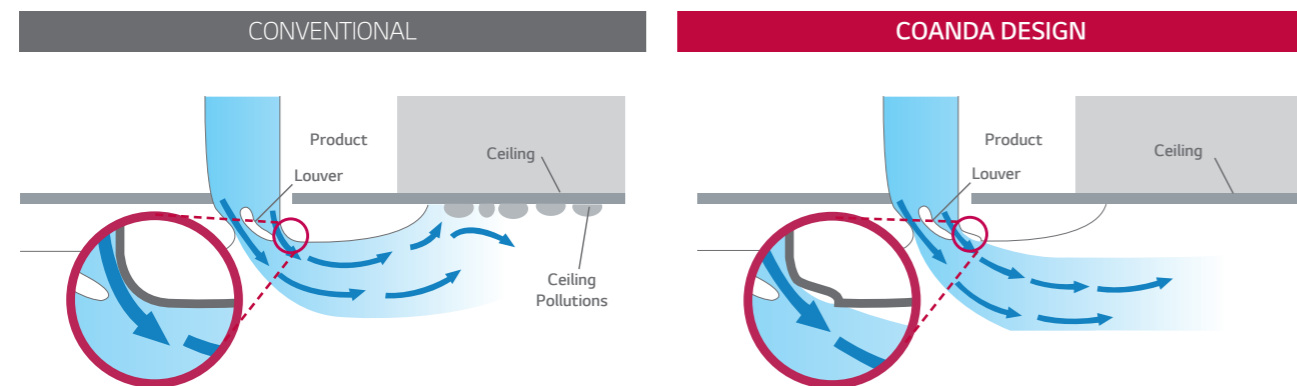
## HIGH CEILING MODE

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



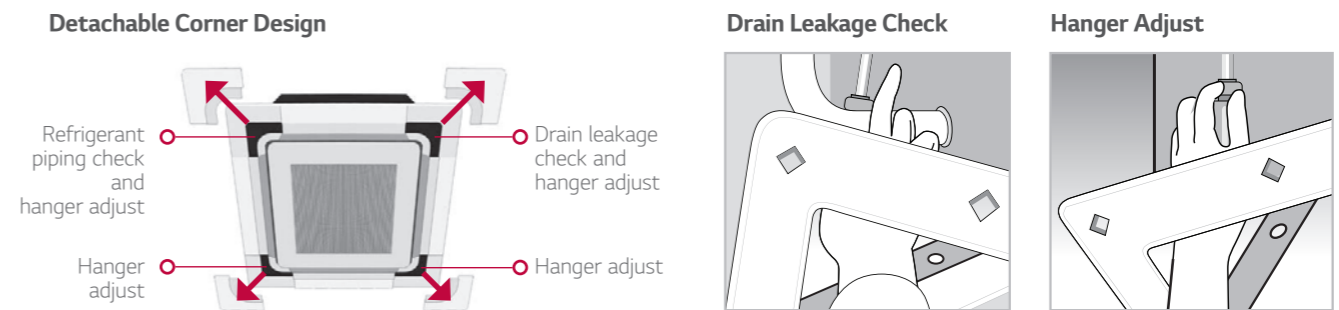
## PREVENT CEILING POLLUTION

Coanda design of air outlet can prevent contamination of ceiling.

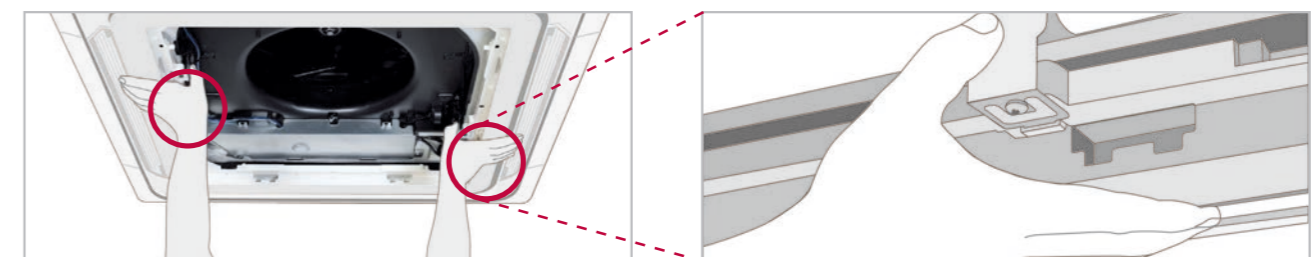


## CONVENIENT PANEL INSTALLATION

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



It is easy to install the panel to the body, using the button type panel design.



# SPECIFICATIONS

## HIGH CEILING MOUNTED CASSETTE (INVERTER / 1PHASE)



ATUQ18GPLT1 / ATUQ24GPLT1 / ATUQ30GPLT1 / ATUQ36GNLT1 / ATUQ48GMLT1 / ATUQ54GMLT1



### COOLING ONLY

Combination	Outdoor unit		Unit	ATUQ18GPLT1	ATUQ24GPLT1
	Indoor unit			ATNQ18GPLT1	ATNQ24GPLT1
Cooling Capacity <sup>1</sup>	Min. - Rated - Max.	kW		2.1-5.27-5.86	2.81-7.03-8.2
		Btu/h		7200-18000-20000	9600-24000-28000
Cooling Capacity <sup>2</sup>	Min. - Rated - Max.	kW		4.53	5.86
		Btu/h		15,450	20,000
Power Input	Cooling <sup>1</sup>	Rated	kW	1.55	2.06
	Cooling <sup>2</sup>	Rated	kW	1.71	2.25
EER / COP			W/W	3.4	3.41
<b>Outdoor</b>			<b>Unit</b>	<b>ATUQ18GPLT1</b>	<b>ATUQ24GPLT1</b>
Power Supply			V, Ø, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)			No. x mm <sup>2</sup>	3C x 2.5	3C x 2.5
Casing Color			-	Warm Gray	Warm Gray
Dimensions	Net	W x H x D	mm	770 x 545 x 288	870 x 650 x 330
Weight	Net		kg	34.3	43.3
Compressor	Type		-	Twin Rotary	Twin Rotary
Refrigerant	Type		-	R410A	R410A
Fan Motor	Type			BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	49	50
	Piping Connections	Liquid	Outer Dia.	mm (inch)	Ø 6.35(1/4)
	Gas	Outer Dia.	mm (inch)	Ø 12.7(1/2)	Ø 15.88 (5/8)
Piping Length	Rated		m	5	5
	Max.		m	30	50
Maximum Height Difference (ODU - IDU)	Max.		m	15	30
<b>Indoor</b>			<b>Unit</b>	<b>ATNQ18GPLT1</b>	<b>ATNQ24GPLT1</b>
Panel Name				PT-UMC1 / PT-MCHWO	PT-UMC1 / PT-MCHWO
Power Supply			V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W x H x D	mm	840 x 204 x 840	840 x 204 x 840
	Decoration Panel	W x H x D	mm	950 x 25 x 950	950 x 25 x 950
Weight	Net		kg	19.6	20.5
Air Flow Rate		H / M / L	m <sup>3</sup> /min	17.0 / 15.0 / 13.0	17.0 / 15.0 / 13.0
Fan Motor	Type			BLDC	BLDC
Safety Device				Fuse	Fuse
Sound Pressure Level		H / M / L	dB(A)	36 / 34 / 32	38 / 36 / 34

#### Notes

- Cooling<sup>1</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### COOLING ONLY

ATUQ30GPLT1	ATUQ36GNLT1	ATUQ48GMLT1	ATUQ54GMLT1
ATNQ30GPLT1	ATNQ36GNLT1	ATNQ48GMLT1	ATNQ54GMLT1
3.44-8.2-9.38	4.7-9.99-11.13	5.392-13.48-15.53	6.328-15.82-16.7
11760-28000-32000	16030-34100-38000	18400-46000-53000	21600-54000-57000
7.38	8.49	11.45	12.34
25,200	28,980	39,100	42,120
2.41	2.93	3.96	5.39
3.02	3.44	4.66	5.40
3.4	3.41	3.4	2.94
<b>ATUQ30GPLT1</b>			
<b>ATUQ36GNLT1</b>			
<b>ATUQ48GMLT1</b>			
<b>ATUQ54GMLT1</b>			
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C x 2.5	3C x 2.5	3C x 6.0	3C x 6.0
Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
59.1	59.1	89.5	89.5
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
R410A	R410A	R410A	R410A
BLDC	BLDC	BLDC	BLDC
51	51	55	55
Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
<b>ATNQ30GPLT1</b>			
<b>ATNQ36GNLT1</b>			
<b>ATNQ48GMLT1</b>			
<b>ATNQ54GMLT1</b>			
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
20.5	23.3	25.5	25.5
19.0 / 17.0 / 15.0	23.0 / 21.0 / 19.0	32.0 / 30.0 / 28.0	32.0 / 30.0 / 28.0
BLDC	BLDC	BLDC	BLDC
Fuse	Fuse	Fuse	Fuse
41 / 38 / 36	42 / 40 / 38	44 / 42 / 40	44 / 42 / 40

#### Notes

- Cooling<sup>1</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# SPECIFICATIONS

## HIGH CEILING MOUNTED CASSETTE (INVERTER / 1PHASE)



ATUW18GPLT1 / ATUW24GPLT1 / ATUW30GPLT1 / ATUW36GNLT1 / ATUW48GMLT1 / ATUW54GMLT1



### HEAT PUMP

Combination		Outdoor unit		Unit	ATUW18GPLT1	ATUW24GPLT1
		Indoor unit			ATNW18GPLT1	ATNW24GPLT1
Cooling Capacity <sup>1</sup>	Min. - Rated - Max.			kW	2.1-5.27-5.86	2.81-7.03-8.2
				Btu/h	7200-18000-20000	9600-24000-28000
Cooling Capacity <sup>2</sup>	Min. - Rated - Max.			kW	4.53	5.86
				Btu/h	15450	20000
Heating Capacity <sup>1</sup>	Min. - Rated - Max.			kW	2.1-5.27-6.1	2.8-7.03-8.2
				Btu/h	7200-18000-21000	9600-24000-28000
Power Input	Cooling <sup>1</sup>	Rated		kW	1.55	2.06
	Cooling <sup>2</sup>	Rated		kW	1.71	2.25
	Heating <sup>1</sup>	Rated		kW	1.50	2.05
EER / COP				W/W	3.4/3.51	3.41/3.43
<b>Outdoor</b>				<b>Unit</b>	<b>ATUW18GPLT1</b>	<b>ATUW24GPLT1</b>
Power Supply				V, Ø, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)				No. x mm <sup>2</sup>	3C x 2.5	3C x 2.5
Casing Color				-	Warm Gray	Warm Gray
Dimensions	Net	W x H x D		mm	770 x 545 x 288	870 x 650 x 330
Weight	Net			kg	35.2	45.5
Compressor	Type			-	Twin Rotary	Twin Rotary
Fan Motor	Type				BLDC	BLDC
Sound Pressure Level	Cooling	Rated		dB(A)	49	50
	Heating	Rated		dB(A)	52	52
Piping Connections	Liquid	Outer Dia.		mm (inch)	Ø 6.35(1/4)	Ø 9.52(3/8)
	Gas	Outer Dia.		mm (inch)	Ø 12.7(1/2)	Ø 15.88 (5/8)
Piping Length	Rated			m	5	5
	Max.			m	30	50
Maximum Height Difference (ODU - IDU)	Max.			m	15	30
<b>Indoor</b>				<b>Unit</b>	<b>ATNW18GPLT1</b>	<b>ATNW24GPLT1</b>
Panel Name					PT-UMC1 / PT-MCHWO	PT-UMC1 / PT-MCHWO
Power Supply				V, Ø, Hz	220 - 240,1,50	220 - 240,1,50
Dimensions	Net	W x H x D		mm	840 x 204 x 840	840 x 204 x 840
	Decoration Panel	W x H x D		mm	950 x 25 x 950	950 x 25 x 950
Weight	Net			kg	19.6	20.5
Air Flow Rate	H / M / L			m <sup>3</sup> /min	17.0 / 15.0 / 13.0	17.0 / 15.0 / 13.0
Fan Motor	Type				BLDC	BLDC
Safety Device					Fuse	Fuse
Sound Pressure Level	H / M / L			dB(A)	36 / 34 / 32	38 / 36 / 34

#### Notes

- Cooling<sup>1</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### HEAT PUMP

ATUW30GPLT1	ATUW36GNLT1	ATUW48GMLT1	ATUW54GMLT1
ATNW30GPLT1	ATNW36GNLT1	ATNW48GMLT1	ATNW54GMLT1
3.44-8.2-9.38	4.7-9.99-11.13	5.39-13.48-15.53	6.33-15.82-16.7
11760-28000-32000	16030-34100-38000	18400-46000-53000	21600-54000-57000
7.38	8.49	11.45	12.34
25200	28980	39100	42120
3.28-8.2-9.09	4.0-9.99-10.84	5.62-14.06-15.8	6.56-16.41-17.6
11200-28000-31000	13640-34100-37000	19200-48000-54000	22400-56000-60000
2.41	2.93	3.96	5.39
3.02	3.44	4.66	5.40
2.33	2.84	4.00	5.09
3.4/3.52	3.41/3.52	3.4/3.52	2.94/3.22
ATUW30GPLT1	ATUW36GNLT1	ATUW48GMLT1	ATUW54GMLT1
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C x 2.5	3C x 2.5	3C x 6.0	3C x 6.0
Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
60.8	60.8	90.2	90.2
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
BLDC	BLDC	BLDC	BLDC
51	51	55	55
53	53	57	57
Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
ATNW30GPLT1	ATNW36GNLT1	ATNW48GMLT1	ATNW54GMLT1
PT-UMC1 / PT-MCHWO	PT-UMC1 / PT-MCHWO	PT-UMC1 / PT-MCHWO	PT-UMC1 / PT-MCHWO
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
20.5	23.3	25.5	25.5
19.0 / 17.0 / 15.0	23.0 / 21.0 / 19.0	32.0 / 30.0 / 28.0	32.0 / 30.0 / 28.0
BLDC	BLDC	BLDC	BLDC
Fuse	Fuse	Fuse	Fuse
41 / 38 / 36	42 / 40 / 38	44 / 42 / 40	44 / 42 / 40

#### Notes

- Cooling<sup>1</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB



# SPECIFICATIONS

## STANDARD CEILING MOUNTED CASSETTE



ATUW18GMLS1 / ATUW24GMLS1 / ATUW30GMLS1 / ATUW36GMLS1 / ATUW48GMLS1 / ATUW54GMLS1 / ATUW48LMLS2 / ATUW54LMLS2



### HEAT PUMP

Combination		Outdoor unit		ATUW18GMLS1	ATUW24GMLS1	ATUW30GMLS1
		Indoor unit		ATNW18GMLS1	ATNW24GMLS1	ATNW30GMLS1
Capacity	Cooling <sup>1</sup>	Min. - Rated - Max.	kW	1.8 - 5.2 - 5.5	2.8 - 7.0 - 8.1	3.0 - 7.8 - 8.4
		Min. - Rated - Max.	Btu/h	6,100 - 17,700 - 18,800	9,600 - 23,900 - 27,600	10,200 - 26,600 - 28,700
	Cooling <sup>2</sup>	Rated	kW	4.20	5.75	6.40
		Rated	Btu/h	14,300	19,600	21,800
Power Input	Heating	Min. - Rated - Max.	kW	1.9 - 5.3 - 5.8	3.0 - 7.6 - 8.6	3.2 - 8.4 - 8.8
		Min. - Rated - Max.	Btu/h	6,500 - 18,100 - 19,800	10,200 - 25,900 - 29,300	10,900 - 28,700 - 30,000
	Cooling <sup>1</sup>	Rated	kW	1.62	2.33	2.59
		Rated	kW	1.75	2.60	3.15
EER / COP	Cooling <sup>1</sup> / Heating	Rated	kW	1.56	2.24	2.77
		W / W		3.21 / 3.41	3.01 / 3.40	3.01 / 3.01
<b>Outdoor</b>				<b>ATUW18GMLS1</b>	<b>ATUW24GMLS1</b>	<b>ATUW30GMLS1</b>
Power Supply		V, Ø, Hz		220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
Power Supply Cable (included Earth)		Nommm2 (AWG)		3C x 2.5 (12)	3C x 2.5 (12)	3C x 2.5 (12)
Casing Color		-		Warm Gray	Warm Gray	Warm Gray
Dimensions		W x H x D	mm	770 x 545 x 288	870 x 650 x 330	870 x 650 x 330
Net Weight		Body		kg (lbs)	35.5 (78.3)	44.8 (98.8)
Compressor		Type		-	Twin Rotary	Twin Rotary
Refrigerant		Type		-	R410A	R410A
Fan Motor		Type		-	BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	53	55	55
		Rated	dB(A)	54	56	56
Piping Connections	Liquid	Outer Dia.	mm(inch)	Ø 6.35 (1/4)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
		Outer Dia.	mm(inch)	Ø 12.7 (1/2)	Ø 15.88 (5/8)	Ø 15.88 (5/8)
Piping Length		Max.		m (ft)	25 (82.0)	30 (98.4)
Maximum Height Difference		Outdoor Unit - Indoor Unit		Max.	m (ft)	15 (49.2)
<b>Indoor</b>				<b>ATNW18GMLS1</b>	<b>ATNW24GMLS1</b>	<b>ATNW30GMLS1</b>
Panel Name		PT-UMC1		PT-UMC1	PT-UMC1	PT-UMC1
Power Supply		V, Ø, Hz		220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
Dimensions		Body	W x H x D	mm	840 x 204 x 840	840 x 204 x 840
Net Weight		kg (lbs)		21 (46.3)	21 (46.3)	21 (46.3)
Air Flow Rate		H / M / L		m <sup>3</sup> /min	16.5 / 14.5 / 13.0	17.0 / 15.0 / 13.0
Fan Motor		Type		-	BLDC	BLDC
Sound Pressure Level	Cooling	H / M / L	dB(A)	38 / 36 / 34	40 / 38 / 36	42 / 39 / 37
		H / M / L	dB(A)	38 / 36 / 34	40 / 38 / 36	42 / 39 / 37
Safety Devices		-			Fuse	Fuse

#### Notes

- Cooling<sup>1</sup>: Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2</sup>: Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature: Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### HEAT PUMP

ATUW36GMLS1	ATUW48GMLS1	ATUW54GMLS1	ATUW48LMLS2	ATUW54LMLS2
ATNW36GMLS1	ATNW48GMLS1	ATNW54GMLS1	ATNW48LMLS2	ATNW54LMLS2
4.0 - 10.5 - 11.0	5.6 - 14.0 - 15.0	6.0 - 15.0 - 16.0	5.6 - 14.0 - 15.0	6.0 - 15.0 - 16.0
13,600 - 35,800 - 37,500	19,100 - 47,800 - 51,200	20,500 - 51,200 - 54,600	19,100 - 47,800 - 51,200	20,500 - 51,200 - 54,600
8.70	12.10	12.40	12.10	12.40
29,700	41,300	42,300	41,300	42,300
4.3 - 11.2 - 11.7	6.1 - 15.3 - 16.5	6.8 - 16.9 - 18.2	6.1 - 15.3 - 16.5	6.8 - 16.9 - 18.2
14,700 - 38,200 - 39,900	20,800 - 52,200 - 56,300	23,200 - 57,700 - 62,100	20,800 - 52,200 - 56,300	23,200 - 57,700 - 62,100
3.49	4.38	4.95	4.38	4.95
3.50	5.14	5.25	5.14	5.25
3.19	4.49	5.45	4.49	5.45
3.00 / 3.51	3.20 / 3.41	3.03 / 3.10	3.20 / 3.41	3.03 / 3.10
ATUW36GMLS1	ATUW48GMLS1	ATUW54GMLS1	ATUW48LMLS2	ATUW54LMLS2
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	380-415, 3, 50	380-415, 3, 50
3C x 2.5 (12)	3C x 6.0 (10)	3C x 6.0 (10)	5C x 2.5 (12)	5C x 2.5 (12)
Warm Gray	Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330	950 x 1,380 x 330	950 x 1,380 x 330
58.0 (127.9)	90.0 (198.4)	90.0 (198.4)	90.0 (198.4)	90.0 (198.4)
Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary
R410A	R410A	R410A	R410A	R410A
BLDC	BLDC	BLDC	BLDC	BLDC
56	55	55	55	55
58	57	57	57	57
Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 15.88 (5/8)	Ø 19.05 (3/4)	Ø 19.05 (3/4)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
40 (131.2)	50 (164.0)	50 (164.0)	50 (164.0)	50 (164.0)
30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)
ATNW36GMLS1	ATNW48GMLS1	ATNW54GMLS1	ATNW48LMLS2	ATNW54LMLS2
PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
840 x 288 x 840	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
28 (61.7)	28 (61.7)	28 (61.7)	28 (61.7)	28 (61.7)
28.5 / 24.5 / 21.0	32.0 / 30.0 / 27.5	32.0 / 30.0 / 27.5	32.0 / 30.0 / 27.5	32.0 / 30.0 / 27.5
BLDC	BLDC	BLDC	BLDC	BLDC
48 / 46 / 44	52 / 51 / 48	52 / 51 / 48	52 / 51 / 48	52 / 51 / 48
48 / 46 / 44	52 / 51 / 48	52 / 51 / 48	52 / 51 / 48	52 / 51 / 48
Fuse	Fuse	Fuse	Fuse	Fuse

#### Notes

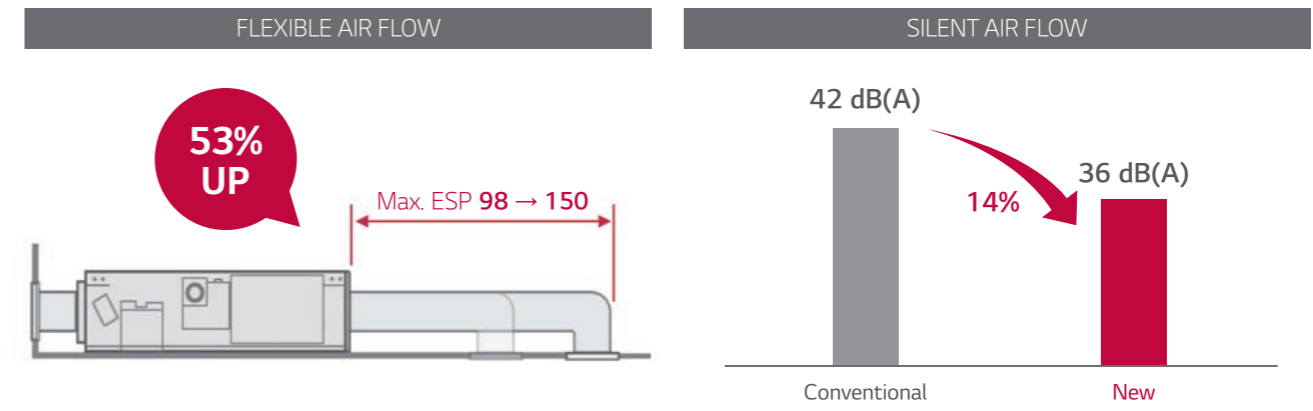
- Cooling<sup>1</sup>: Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2</sup>: Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature: Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# CEILING CONCEALED DUCT



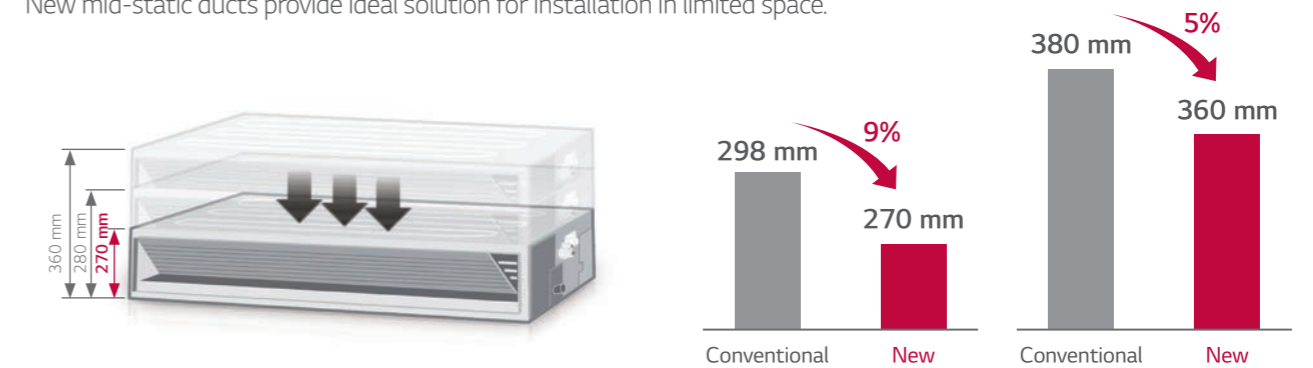
## MAXIMIZED E.S.P. (EXTERNAL STATIC PRESSURE)

With new indoor tool, connectable duct length is more longer than current running unit due to the maximum E.S.P. is improved. Noise level also decreased about 12%



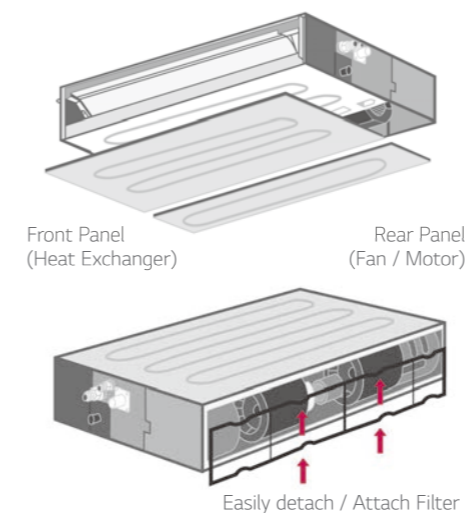
## MINIMIZED HEIGHT

New mid-static ducts provide ideal solution for installation in limited space.



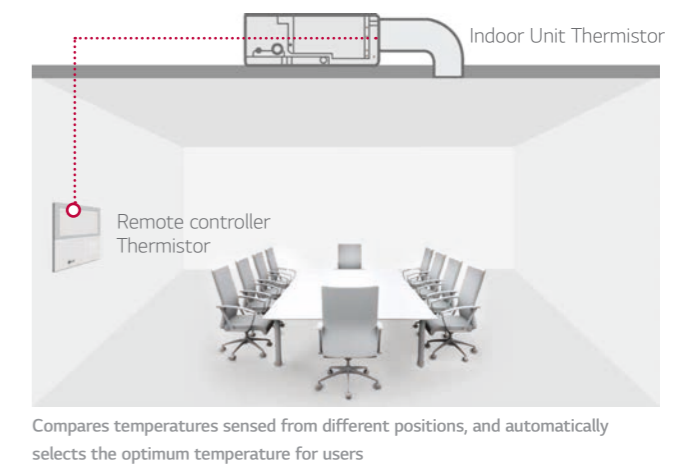
## EASY SERVICE & MAINTENANCE

Users don't need to open whole panel for maintenance, since panel is divided into one for heat exchanger and one for fan/motor. Easily detach and attach the filter even in limited space.



## TWO THERMISTORS CONTROL

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



# SPECIFICATIONS

## HIGH CEILING CONCEALED DUCT (INVERTER / 1 PHASE)



ABUQ18GM1T1 / ABUQ24GM1T1 / ABUQ30GM1T1 / ABUQ36GM3T1 / ABUQ48GM3T1 / ABUQ54GM3T1



### COOLING ONLY

Combination	Outdoor unit		Unit	ABUQ18GM1T1	ABUQ24GM1T1
	Indoor unit			ABNQ18GM1T1	ABNQ24GM1T1
Cooling Capacity <sup>1)</sup>	Min. - Rated - Max.		kW	2.1-5.27-5.86	2.81-7.03-7.91
			Btu/h	7200-18000-20000	9600-24000-27000
Cooling Capacity <sup>2)</sup>	Min. - Rated - Max.		kW	4.53	5.86
			Btu/h	15,480	20,000
Power Input	Cooling <sup>1)</sup>	Rated	kW	1.55	2.06
	Cooling <sup>2)</sup>	Rated	kW	1.72	2.32
EER / COP			W/W	3.4	3.41
<b>Outdoor</b>			<b>Unit</b>	<b>ABUQ18GM1T1</b>	<b>ABUQ24GM1T1</b>
Power Supply			V, ∅, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)			No. x mm <sup>2</sup>	3C x 2.5	3C x 2.5
Casing Color			-	Warm Gray	Warm Gray
Dimensions	Net	W x H x D	mm	770 x 545 x 288	870 x 650 x 330
Weight	Net		kg	34.3	43.3
Compressor	Type		-	Twin Rotary	Twin Rotary
Refrigerant	Type		-	R410A	R410A
Fan Motor	Type		-	BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	49	50
	Piping Connections	Liquid	Outer Dia.	mm (inch)	∅ 6.35(1/4)
Gas		Outer Dia.	mm (inch)	∅ 12.7(1/2)	∅ 15.88 (5/8)
Piping Length		Rated	m	5	5
		Max.	m	30	50
Maximum Height Difference (ODU - IDU)	Max.		m	15	30
<b>Indoor</b>			<b>Unit</b>	<b>ABNQ18GM1T1</b>	<b>ABNQ24GM1T1</b>
Type			-	Ceiling Concealed Duct-Mid. Pressure	
Power Supply			V, ∅, Hz	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W x H x D	mm	900 x 270 x 700	900 x 270 x 700
Weight	Net		kg	23.8	25.3
Air Flow Rate		H / M / L	m <sup>3</sup> /min	16.5 / 14.5 / 13.0	18.0 / 16.5 / 14.5
		Max.	m <sup>3</sup> /min	23.8	23.8
External static pressure	High Mode_Factory Set		Pa (mmAq)	6	6
Fan Motor	Type		-	BLDC	BLDC
Safety Device			-	Fuse	Fuse
Sound Pressure Level	H / M / L		dB(A)	34 / 32 / 30	37 / 35 / 32

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### COOLING ONLY

ABUQ30GM1T1	ABUQ36GM3T1	ABUQ48GM3T1	ABUQ54GM3T1
ABNQ30GM1T1	ABNQ36GM3T1	ABNQ48GM3T1	ABNQ54GM3T1
3.36-8.2-9.96	4.7-9.99-11.13	5.392-13.48-15.53	6.328-15.82-16.7
11480-28000-34000	16030-34100-38000	18400-46000-53000	21600-54000-57000
7.05	8.49	11.59	12.66
24,080	28,980	39,560	43,200
2.41	2.93	3.96	5.39
2.74	3.24	4.27	5.07
3.4	3.41	3.4	2.94
<b>ABUQ30GM1T1</b>	<b>ABUQ36GM3T1</b>	<b>ABUQ48GM3T1</b>	<b>ABUQ54GM3T1</b>
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C x 2.5	3C x 2.5	3C x 6.0	3C x 6.0
Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
59.1	59.1	89.5	89.5
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
R410A	R410A	R410A	R410A
BLDC	BLDC	BLDC	BLDC
51	51	55	55
∅ 9.52(3/8)	∅ 9.52(3/8)	∅ 9.52 (3/8)	∅ 9.52 (3/8)
∅ 15.88 (5/8)	∅ 15.88 (5/8)	∅ 19.05 (3/4)	∅ 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
<b>ABNQ30GM1T1</b>	<b>ABNQ36GM3T1</b>	<b>ABNQ48GM3T1</b>	<b>ABNQ54GM3T1</b>
Ceiling Concealed Duct-Mid. Pressure			
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
900 x 270 x 700	1,250 x 360 x 700	1,250 x 360 x 700	1,250 x 360 x 700
25.3	37.5	43.5	43.5
22.0 / 20.0 / 18.0	30.0 / 25.0 / 20.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0
25.9	41.0	58.8	58.8
6	6	6	6
BLDC	BLDC	BLDC	BLDC
Fuse	Fuse	Fuse	Fuse
37 / 35 / 34	36 / 33 / 31	38 / 36 / 34	46 / 44 / 42

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# SPECIFICATIONS

## HIGH CEILING CONCEALED DUCT (INVERTER / 1 PHASE)

ABUW18GM1T1 / ABUW24GM1T1 / ABUW30GM1T1 / ABUW36GM3T1 / ABUW48GM3T1 / ABUW54GM3T1



### HEAT PUMP

Combination	Outdoor unit		Unit	ABUW18GM1T1	ABUW24GM1T1
	Indoor unit			ABNW18GM1T1	ABNW24GM1T1
Cooling Capacity <sup>1)</sup>	Min. - Rated - Max.		kW	2.1-5.27-5.86	2.81-7.03-7.91
			Btu/h	7200-18000-20000	9600-24000-27000
Cooling Capacity <sup>2)</sup>	Min. - Rated - Max.		kW	4.53	5.86
			Btu/h	15480	20000
Heating Capacity <sup>1)</sup>	Min. - Rated - Max.		kW	2.1-5.27-6.1	2.8-7.03-8.2
			Btu/h	7200-18000-21000	9600-24000-28000
Power Input	Cooling <sup>1)</sup>	Rated	kW	1.55	2.06
	Cooling <sup>2)</sup>	Rated	kW	1.72	2.32
	Heating <sup>1)</sup>	Rated	kW	1.50	2.05
EER / COP			W/W	3.4/3.51	3.41/3.43
<b>Outdoor</b>			<b>Unit</b>	<b>ABUW18GM1T1</b>	<b>ABUW24GM1T1</b>
Power Supply			V, Ø, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)			No. x mm <sup>2</sup>	3C x 2.5	3C x 2.5
Casing Color			-	Warm Gray	Warm Gray
Dimensions	Net	W x H x D	mm	770 x 545 x 288	870 x 650 x 330
Weight	Net		kg	35.2	45.5
Compressor	Type		-	Twin Rotary	Twin Rotary
Refrigerant	Type		-	R410A	R410A
Fan	Air Flow Rate	Rated	m <sup>3</sup> /min x No.	28 x 1	50 x 1
Fan Motor	Type		-	BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	49	50
	Heating	Rated	dB(A)	52	52
Piping Connections	Liquid	Outer Dia.	mm (inch)	Ø 6.35(1/4)	Ø 9.52(3/8)
	Gas	Outer Dia.	mm (inch)	Ø 12.7(1/2)	Ø 15.88 (5/8)
Piping Length	Rated		m	5	5
	Max.		m	30	50
Maximum Height Difference (ODU - IDU)	Max.		m	15	30
<b>Indoor</b>			<b>Unit</b>	<b>ABNW18GM1T1</b>	<b>ABNW24GM1T1</b>
Type			-	Ceiling Concealed Duct-Mid. Pressure	
Power Supply			V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W x H x D	mm	900 x 270 x 700	900 x 270 x 700
Weight	Net		kg	23.8	25.3
Air Flow Rate	H / M / L		m <sup>3</sup> /min	16.5 / 14.5 / 13.0	18.0 / 16.5 / 14.5
	Max		m <sup>3</sup> /min	23.8	23.8
Fan Motor	Type		-	6	6
External static pressure	High Mode_Factory Set		Pa (mmAq)	BLDC	BLDC
Safety Device			-	Fuse	Fuse
Sound Pressure Level	H / M / L		dB(A)	34 / 32 / 30	37 / 35 / 32

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### HEAT PUMP

ABUW30GM1T1	ABUW36GM3T1	ABUW48GM3T1	ABUW54GM3T1
ABNW30GM1T1	ABNW36GM3T1	ABNW48GM3T1	ABNW54GM3T1
3.36-8.2-9.96	4.7-9.99-11.13	5.39-13.48-15.53	6.33-15.82-16.7
11480-28000-34000	16030-34100-38000	18400-46000-53000	21600-54000-57000
7.05	8.49	11.59	12.66
24080	28980	39560	43200
3.28-8.2-9.09	3.75-9.38-10.26	5.62-14.06-15.8	6.56-16.41-17.6
11200-28000-31000	12800-32000-35000	19200-48000-54000	22400-56000-60000
2.41	2.93	3.96	5.39
2.74	3.24	4.27	5.07
2.55	2.46	4.00	4.61
3.4/3.22	3.41/3.81	3.4/3.52	2.94/3.56
<b>ABUW30GM1T1</b>			
<b>ABUW36GM3T1</b>			
<b>ABUW48GM3T1</b>			
<b>ABUW54GM3T1</b>			
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C x 2.5	3C x 2.5	3C x 6.0	3C x 6.0
Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
60.8	60.8	90.2	90.2
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
R410A	R410A	R410A	R410A
60 x 1	60 x 1	60 x 2	60 x 2
BLDC	BLDC	BLDC	BLDC
51	51	55	55
53	53	57	57
Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
<b>ABNW30GM1T1</b>			
<b>ABNW36GM3T1</b>			
<b>ABNW48GM3T1</b>			
<b>ABNW54GM3T1</b>			
Ceiling Concealed Duct-Mid. Pressure			
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
900 x 270 x 700	1,250 x 360 x 700	1,250 x 360 x 700	1,250 x 360 x 700
25.3	37.5	43.5	43.5
22.0 / 20.0 / 18.0	30.0 / 25.0 / 20.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0
25.9	41.0	58.8	58.8
6	6	6	6
BLDC	BLDC	BLDC	BLDC
Fuse	Fuse	Fuse	Fuse
37 / 35 / 34	36 / 33 / 31	38 / 36 / 34	46 / 44 / 42

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# SPECIFICATIONS

## STANDARD CEILING CONCEALED DUCT



ABUW18GM1S1 / ABUW24GM1S1 / ABUW30GM1S1 / ABUW36GM2S1 / ABUW48GM3S1 /  
ABUW54GM3S1 / ABUW50LM3S1 / ABUW60LM3S1



### HEAT PUMP

Combination	Outdoor unit		Unit	ABUW18GM1S1	ABUW24GM1S1	ABUW30GM1S1
	Indoor unit			ABNW18GM1S1	ABNW24GM1S1	ABNW30GM1S1
Capacity	Cooling <sup>1)</sup>	Min. - Rated - Max.	kW	1.8 - 5.2 - 5.5	2.8 - 7.0 - 8.1	3.0 - 7.8 - 8.5
		Min. - Rated - Max.	Btu/h	6,100 - 17,700 - 18,800	9,600 - 23,900 - 27,600	10,200 - 26,600 - 29,000
	Cooling <sup>2)</sup>	Rated	kW	4.20	5.75	6.50
		Rated	Btu/h	14,300	19,600	22,200
Power Input	Heating	Min. - Rated - Max.	kW	1.9 - 5.3 - 6.1	3.0 - 7.6 - 8.7	3.2 - 8.0 - 9.0
		Min. - Rated - Max.	Btu/h	6,500 - 18,100 - 20,800	10,200 - 25,900 - 29,700	10,900 - 28,700 - 30,700
	Cooling <sup>1)</sup>	Rated	kW	1.70	2.33	2.59
		Rated	kW	1.75	2.65	3.15
EER / COP	Cooling <sup>1)</sup> / Heating	Rated	kW	1.65	2.30	2.65
		W/W		3.06 / 3.21	3.01 / 3.30	3.01 / 3.01
<b>Outdoor</b>			<b>Unit</b>	<b>ABUW18GM1S1</b>	<b>ABUW24GM1S1</b>	<b>ABUW30GM1S1</b>
Power Supply			V, ∅, Hz	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
Power Supply Cable (included Earth)			No. x mm <sup>2</sup>	3C x 2.5 (12)	3C x 2.5 (12)	3C x 2.5 (12)
Casing Color			-	Warm Gray	Warm Gray	Warm Gray
Dimensions	Net	W x H x D	mm	770 x 545 x 288	870 x 650 x 330	870 x 650 x 330
Net Weight			kg	35.5 (78.3)	44.8 (98.8)	44.8 (98.8)
Compressor	Type	-	-	Twin Rotary	Twin Rotary	Twin Rotary
Refrigerant	Type	-	-	R410A	R410A	R410A
Fan	Air Flow Rate	Rated	m <sup>3</sup> /min x No.	28 x 1	50 x 1	50 x 1
Fan Motor	Type	-	-	BLDC	BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	53	55	55
	Heating	Rated	dB(A)	54	56	56
Piping Connections	Liquid	Outer Dia.	mm (inch)	∅ 6.35 (1/4)	∅ 9.52 (3/8)	∅ 9.52 (3/8)
	Gas	Outer Dia.	mm (inch)	∅ 12.7 (1/2)	∅ 15.88 (5/8)	∅ 15.88 (5/8)
Piping Length	Max.	m		25 (82.0)	30 (98.4)	30 (98.4)
Maximum Height Difference (ODU - IDU)	Max.	m		15 (49.2)	30 (98.4)	30 (98.4)
<b>Indoor</b>			<b>Unit</b>	<b>ABNW18GM1S1</b>	<b>ABNW24GM1S1</b>	<b>ABNW30GM1S1</b>
Power Supply			V, ∅, Hz	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W x H x D	mm	900 x 270 x 700	900 x 270 x 700	900 x 270 x 700
Net Weight			kg	23.8 (52.5)	24.2 (53.4)	25.3 (55.8)
Fan	Air Flow Rate	H / M / L	m <sup>3</sup> /min	16.5 / 14.5 / 13.0	18.0 / 16.5 / 14.5	22.0 / 20.0 / 18.0
Fan Motor	Type	-	-	BLDC	BLDC	BLDC
External static pressure			High Mode_Factory Set	58.8 (6)	58.8 (6)	58.8 (6)
Sound Pressure Level	Cooling	Rated	dB(A)	36 / 34 / 32	37 / 36 / 34	39 / 37 / 36
	Heating	Rated	dB(A)	36 / 34 / 32	37 / 36 / 34	39 / 37 / 36

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### HEAT PUMP

ABUW36GM2S1	ABUW48GM3S1	ABUW54GM3S1	ABUW50LM3S1	ABUW60LM3S1
ABNW36GM2S1	ABNW48GM3S1	ABNW54GM3S1	ABNW50LM3S1	ABNW60LM3S1
3.6 - 9.5 - 10.5	5.6 - 14.1 - 15.1	6.3 - 15.6 - 16.8	5.6 - 14.1 - 15.1	6.3 - 15.8 - 16.8
12,300 - 32,400 - 35,800	19,100 - 48,100 - 51,500	21,500 - 53,200 - 57,300	19,100 - 48,100 - 51,500	21,500 - 53,900 - 57,300
7.80	12.00	13.40	12.00	13.40
26,600	40,900	45,700	40,900	45,700
4.0 - 10.5 - 11.5	6.3 - 15.8 - 16.8	6.8 - 17 - 18.2	6.3 - 15.8 - 16.8	6.8 - 17 - 18.2
13,600 - 35,800 - 39,200	21,500 - 53,900 - 57,300	23,200 - 58,000 - 62,100	21,500 - 53,900 - 57,300	23,200 - 58,000 - 62,100
3155.00	4390.00	5190.00	4390.00	5210.00
3160.00	4850.00	5690.00	4850.00	5690.00
3080.00	4630.00	4860.00	4630.00	4860.00
3.01 / 3.41	3.21 / 3.41	3.01 / 3.50	3.21 / 3.41	3.03 / 3.50
<b>ABUW36GM2S1</b>	<b>ABUW48GM3S1</b>	<b>ABUW54GM3S1</b>	<b>ABUW50LM3S1</b>	<b>ABUW60LM3S1</b>
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	380-415, 3, 50	380-415, 3, 50
3C x 2.5 (12)	3C x 6.0 (10)	3C x 6.0 (10)	5C x 2.5 (12)	5C x 2.5 (12)
Warm Gray	Warm Gray	Warm Gray	Warm Gray	Warm Gray
950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330	950 x 1,380 x 330	950 x 1,380 x 330
58.0 (127.9)	90.0 (198.4)	90.0 (198.4)	90.0 (198.4)	90.0 (198.4)
Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary
R410A	R410A	R410A	R410A	R410A
58 x 1	58 x 2	58 x 2	58 x 2	58 x 2
BLDC	BLDC	BLDC	BLDC	BLDC
56	55	55	55	55
58	57	57	57	57
∅ 9.52 (3/8)	∅ 9.52 (3/8)	∅ 9.52 (3/8)	∅ 9.52 (3/8)	∅ 9.52 (3/8)
∅ 15.88 (5/8)	∅ 19.05 (3/4)	∅ 19.05 (3/4)	∅ 19.05 (3/4)	∅ 19.05 (3/4)
40 (131.2)	50 (164.0)	50 (164.0)	50 (164.0)	50 (164.0)
30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)
<b>ABNW36GM2S1</b>	<b>ABNW48GM3S1</b>	<b>ABNW54GM3S1</b>	<b>ABNW50LM3S1</b>	<b>ABNW60LM3S1</b>
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
1,250 x 270 x 700	1,250 x 360 x 700	1,250 x 360 x 700	1,250 x 360 x 700	1,250 x 360 x 700
36.0 (79.4)	42.3 (93.3)	42.3 (93.3)	42.3 (93.3)	42.3 (93.3)
32.0 / 28.0 / 24.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0
BLDC	BLDC	BLDC	BLDC	BLDC
58.8 (6)	58.8 (6)	58.8 (6)	58.8 (6)	58.8 (6)
38 / 36 / 35	41 / 39 / 37	44 / 42 / 41	41 / 39 / 37	44 / 42 / 41
38 / 36 / 35	41 / 39 / 37	44 / 42 / 41	41 / 39 / 37	44 / 42 / 41

#### Notes

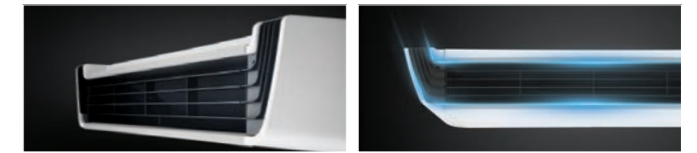
- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# CEILING SUSPENDED UNIT



## IF WINNING DESIGN

With its stunning V-shaped design and black vane, LG's new ceiling-suspended air conditioner exudes modern elegance appropriate for any space.

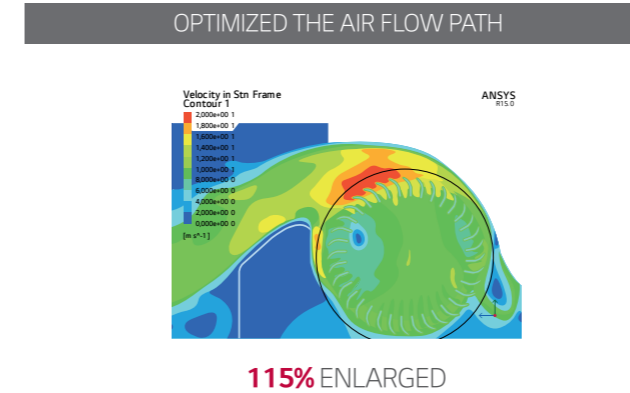
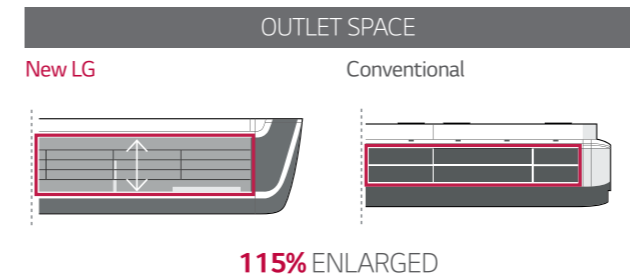


Black Vane

V-Shaped Design

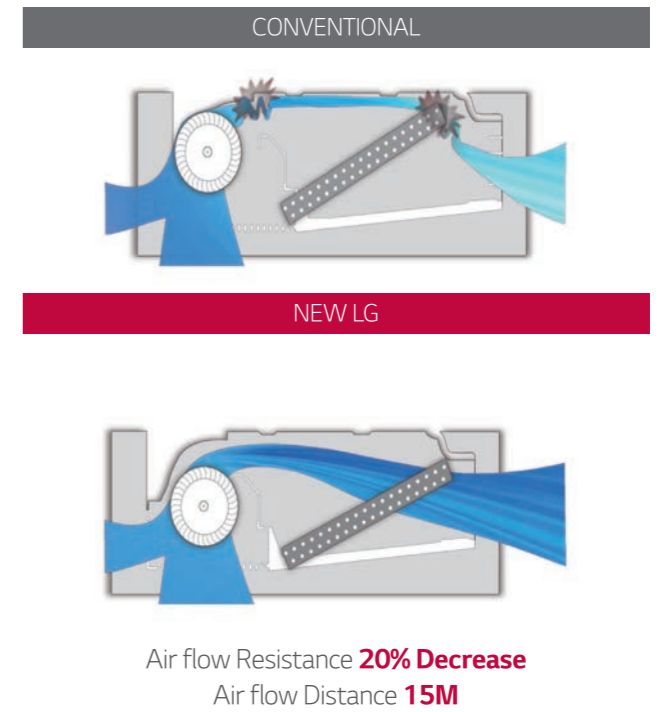
## LARGE CAPACITY

An enlarged outlet space optimized the air flow path and improved heat exchanger's performance. It 30 percent faster cooling enable quick & wide cooling.



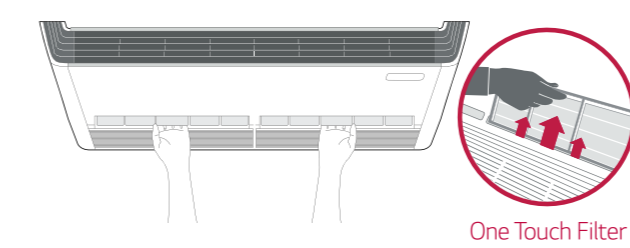
## 15M LONG AIR FLOW

When operating at 15kW, LG's new air conditioner's technology minimizes air flow resistance by 20%, increasing cool air coverage to 15 meters.



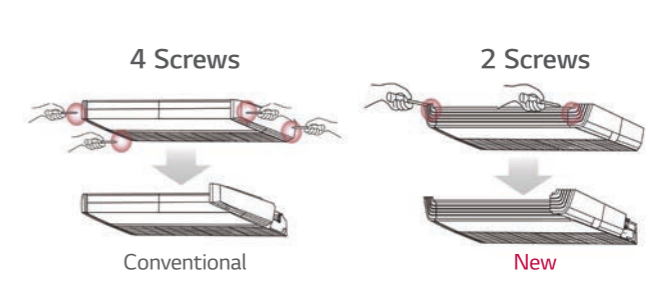
## ONE TOUCH FILTER CHANGING

An easy in/out filter structure as well as a simplified two-piece filter, which slides out for easy cleaning and maintenance.



## EASY INSTALLATION

Installation speed and ease are improved by reducing the total number of screws and placing them on the easily accessible front panel.



# SPECIFICATIONS

## HIGH CEILING SUSPENDED UNIT (INVERTER / 1 PHASE)

AVUQ18GM1T1 / AVUQ24GM1T1 / AVUQ30GM1T1 / AVUQ36GM2T1 / AVUQ48GM2T1 / AVUQ54GM2T1



### COOLING ONLY

Combination	Outdoor unit		Unit	AVUQ18GM1T1	AVUQ24GM1T1
	Indoor unit			AVNQ18GM1T1	AVNQ24GM1T1
Cooling Capacity <sup>1)</sup>	Min. - Rated - Max.		kW	2.1-5.27-5.86	2.81-7.03-7.91
			Btu/h	7200-18000-20000	9600-24000-27000
Cooling Capacity <sup>2)</sup>	Min. - Rated - Max.		kW	4.37	6.04
			Btu/h	14,900	20,610
Power Input	Cooling <sup>1)</sup>	Rated	kW	1.55	2.06
	Cooling <sup>2)</sup>	Rated	kW	1.73	2.38
EER / COP			W/W	3.4	3.41
<b>Outdoor</b>			<b>Unit</b>	<b>AVUQ18GM1T1</b>	<b>AVUQ24GM1T1</b>
Power Supply			V, ∅, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)			No. × mm <sup>2</sup>	3C × 2.5	3C × 2.5
Dimensions	Net	W × H × D	mm	34.3	43.3
Weight	Net		kg	Twin Rotary	Twin Rotary
Compressor	Type		-	R410A	R410A
Refrigerant	Type		-	28 × 1	50 × 1
Fan	Air Flow Rate	Rated	m <sup>3</sup> /min × No.	989 × 1	1,766 × 1
		Rated	ft <sup>3</sup> /min × No.	BLDC	BLDC
Fan Motor	Type		-	49	50
Sound Pressure Level	Cooling	Rated	dB(A)		
	Heating	Rated	dB(A)	∅ 6.35(1/4)	∅ 9.52(3/8)
Piping Connections	Liquid	Outer Dia.	mm (inch)	∅ 12.7(1/2)	∅ 15.88 (5/8)
	Gas	Outer Dia.	mm (inch)	5	5
Piping Length	Rated		m	30	50
	Max.		m	15	30
Maximum Height Difference (ODU - IDU)	Max.		m	15	30
<b>Indoor</b>			<b>Unit</b>	<b>AVNQ18GM1T1</b>	<b>AVNQ24GM1T1</b>
Type			-	Ceiling Suspended Unit	
Power Supply			V, ∅, Hz	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W × H × D	mm	1,200 × 235 × 690	1,200 × 235 × 690
Weight	Net		kg	27.3	28.0
Air Flow Rate			H / M / L	m <sup>3</sup> /min	13.0 / 12.0 / 11.0
Fan Motor	Type		-	BLDC	BLDC
Sound Pressure Level			H / M / L	dB(A)	40 / 38 / 37

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### COOLING ONLY

AVUQ30GM1T1	AVUQ36GM2T1	AVUQ48GM2T1	AVUQ54GM2T1
AVNQ30GM1T1	AVNQ36GM2T1	AVNQ48GM2T1	AVNQ54GM2T1
3.36-8.2-10.26	4.46-9.49-11.13	5.392-13.48-15.53	6.328-15.82-16.7
11480-28000-35000	15230-32400-38000	18400-46000-53000	21600-54000-57000
7.05	8.16	10.51	12.66
24,080	27,860	35,880	43,200
2.41	2.79	3.96	5.39
2.85	3.23	4.10	5.00
3.4	3.4	3.4	2.94
<b>AVUQ30GM1T1</b>			
<b>AVUQ36GM2T1</b>			
<b>AVUQ48GM2T1</b>			
<b>AVUQ54GM2T1</b>			
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C × 2.5	3C × 2.5	3C × 6.0	3C × 6.0
950 × 834 × 330	950 × 834 × 330	950 × 1,380 × 330	950 × 1,380 × 330
59.1	59.1	89.5	89.5
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
R410A	R410A	R410A	R410A
60 × 1	60 × 1	60 × 2	60 × 2
2,119 × 1	2,119 × 1	2,119 × 2	2,119 × 2
BLDC	BLDC	BLDC	BLDC
51	51	55	55
∅ 9.52(3/8)	∅ 9.52(3/8)	∅ 9.52 (3/8)	∅ 9.52 (3/8)
∅ 15.88 (5/8)	∅ 15.88 (5/8)	∅ 19.05 (3/4)	∅ 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
<b>AVNQ30GM1T1</b>			
<b>AVNQ36GM2T1</b>			
<b>AVNQ48GM2T1</b>			
<b>AVNQ54GM2T1</b>			
Ceiling Suspended Unit			
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
1,200 × 235 × 690	1,600 × 235 × 690	1,600 × 235 × 690	1,600 × 235 × 690
28.0	36.5	36.5	36.5
20.0 / 18.0 / 16.0	28.0 / 24.0 / 20.0	30.0 / 25.0 / 20.0	30.0 / 25.0 / 20.0
BLDC	BLDC	BLDC	BLDC
47 / 45 / 42	44 / 41 / 38	46 / 42 / 38	46 / 42 / 38

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# SPECIFICATIONS

## HIGH CEILING SUSPENDED UNIT (INVERTER / 1 PHASE)



AVUQ18GM1T1 / AVUQ24GM1T1 / AVUQ30GM1T1 / AVUQ36GM2T1 / AVUQ48GM2T1 / AVUQ54GM2T1



### HEAT PUMP

Combination	Outdoor unit		Unit	AVUW18GM1T1	AVUW24GM1T1
	Indoor unit			AVNW18GM1T1	AVNW24GM1T1
Cooling Capacity <sup>1)</sup>	Min. - Rated - Max.	kW	kW	2.1-5.27-5.86	2.81-7.03-7.91
				Btu/h	7200-18000-20000
Cooling Capacity <sup>2)</sup>	Min. - Rated - Max.	kW	4.37		6.04
			Btu/h	14900	20610
Heating Capacity <sup>1)</sup>	Min. - Rated - Max.	kW		2.22-5.56-6.1	2.8-7.03-8.2
			Btu/h	7600-19000-21000	9600-24000-28000
Power Input	Cooling <sup>1)</sup>	Rated		kW	1.55
	Cooling <sup>2)</sup>	Rated	kW	1.73	2.38
	Heating <sup>1)</sup>	Rated	kW	1.62	2.05
EER / COP			W/W	3.4/3.43	3.41/3.43
<b>Outdoor</b>			<b>Unit</b>	<b>ATUW18GPLT1 / ABUW18GM1T1 / AVUW18GM1T1</b>	<b>ATUW24GPLT1 / ABUW24GM1T1 / AVUW24GM1T1</b>
Power Supply			V, Ø, Hz	220 - 240,1,50	220 - 240,1,50
Power Supply Cable (included Earth)			No. x mm <sup>2</sup>	3C x 2.5	3C x 2.5
Dimensions	Net	W x H x D	mm	770 x 545 x 288	870 x 650 x 330
	Weight	Net	kg	35.2	45.5
Compressor	Type		-	Twin Rotary	Twin Rotary
Refrigerant	Type		-	R410A	R410A
Fan Motor	Type		-	BLDC	BLDC
Sound Pressure Level	Cooling	Rated	dB(A)	49	50
	Heating	Rated	dB(A)	52	52
Piping Connections	Liquid	Outer Dia.	mm (inch)	Ø 6.35(1/4)	Ø 9.52(3/8)
	Gas	Outer Dia.	mm (inch)	Ø 12.7(1/2)	Ø 15.88 (5/8)
Piping Length	Rated		m	5	5
	Max.		m	30	50
Maximum Height Difference (ODU - IDU)	Max.		m	15	30
<b>Indoor</b>			<b>Unit</b>	<b>ABNW18GM1T1</b>	<b>ABNW24GM1T1</b>
Type			-	Ceiling Suspended Unit	
Power Supply			V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
Dimensions	Net	W x H x D	mm	1,200 x 235 x 690	1,200 x 235 x 690
	Weight	Net	kg	27.3	28.0
Air Flow Rate		H / M / L	m <sup>3</sup> /min	13.0 / 12.0 / 11.0	16.5 / 15.0 / 14.0
Fan Motor	Type		-	BLDC	BLDC
Sound Pressure Level		H / M / L	dB(A)	40 / 38 / 37	44 / 43 / 41

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

### HEAT PUMP

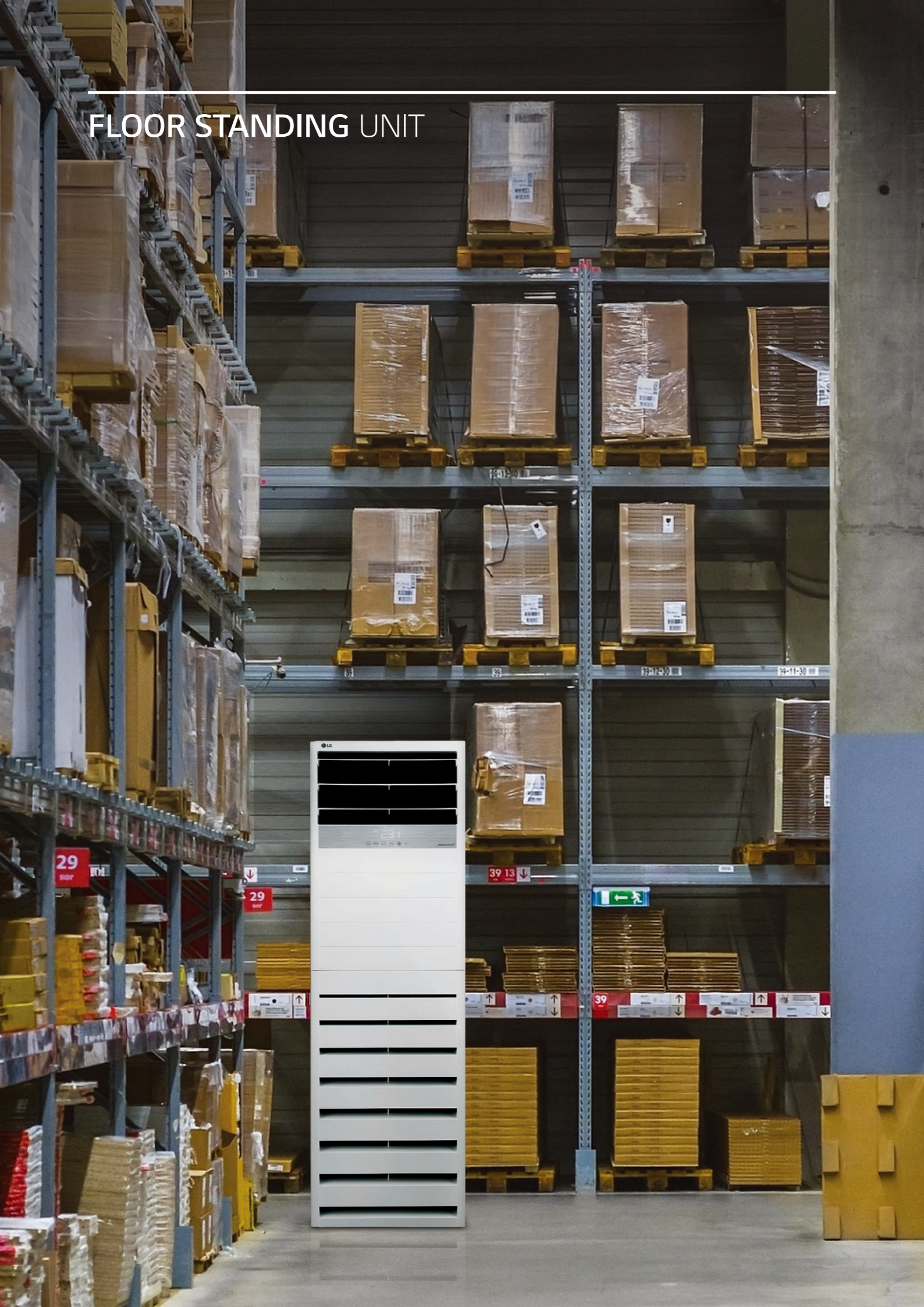
AVUW30GM1T1	AVUW36GM2T1	AVUW48GM2T1	AVUW54GM2T1
AVNW30GM1T1	AVNW36GM2T1	AVNW48GM2T1	AVNW54GM2T1
3.36-8.2-10.26	4.46-9.49-11.13	5.39-13.48-15.53	6.33-15.82-16.7
11480-28000-35000	15230-32400-38000	18400-46000-53000	21600-54000-57000
7.05	8.16	10.51	12.66
24080	27860	35880	43200
3.28-8.2-9.09	3.8-9.49-10.84	5.62-14.06-15.8	6.56-16.41-17.6
11200-28000-31000	12960-32400-37000	19200-48000-54000	22400-56000-60000
2.41	2.79	3.96	5.39
2.85	3.23	4.10	5.00
2.33	2.70	4.00	5.09
3.4/3.52	3.4/3.51	3.4/3.52	2.94/3.22
<b>ATUW30GPLT1 / ABUW30GM1T1 / AVUW30GM1T1</b>	<b>ATUW36GNLT1 / ABUW36GM3T1 / AVUW36GM2T1</b>	<b>ATUW48GMLT1 / ABUW48GM3T1 / AVUW48GM2T1</b>	<b>ATUW54GMLT1 / ABUW54GM3T1 / AVUW54GM2T1</b>
220 - 240,1,50	220 - 240,1,50	220 - 240,1,50	220 - 240,1,50
3C x 2.5	3C x 2.5	3C x 6.0	3C x 6.0
950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
60.8	60.8	90.2	90.2
Twin Rotary	Twin Rotary	LG Inverter Scroll	LG Inverter Scroll
R410A	R410A	R410A	R410A
BLDC	BLDC	BLDC	BLDC
51	51	55	55
53	53	57	57
Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
5	5	5	5
50	50	50	50
30	30	30	30
<b>AVNW30GM1T1</b>	<b>AVNW36GM2T1</b>	<b>AVNW48GM2T1</b>	<b>AVNW54GM2T1</b>
Ceiling Suspended Unit			
220-240, 1, 50	220-240, 1, 50	220-240, 1, 50	220-240, 1, 50
1,200 x 235 x 690	1,600 x 235 x 690	1,600 x 235 x 690	1,600 x 235 x 690
28.0	36.5	36.5	36.5
20.0 / 18.0 / 16.0	28.0 / 24.0 / 20.0	30.0 / 25.0 / 20.0	30.0 / 25.0 / 20.0
BLDC	BLDC	BLDC	BLDC
47 / 45 / 42	44 / 41 / 38	46 / 42 / 38	46 / 42 / 38

#### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB



# FLOOR STANDING UNIT



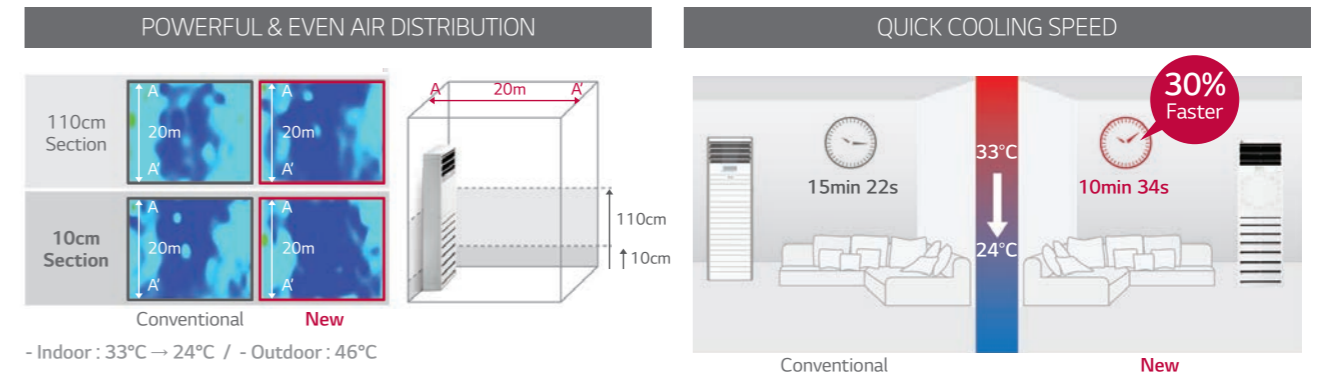
## STYLISH DESIGN

The new LG floor standing air conditioner is ideal for modern interiors in your office or restaurant.



## EXCELLENT COOLING PERFORMANCE

Power cooling function provides the optimal airflow angle, guaranteeing a faster and higher cooling performance



## POWERFUL AIRFLOW

Power Cooling function provides the optimal airflow angle, guaranteeing a faster and higher cooling performance.



# SPECIFICATIONS

## HIGH FLOOR STANDING UNIT



APUW36GT3S1 / APUW50GT3E0 / APUW50LT3E0



### HEAT PUMP

Combination	Outdoor unit	Indoor unit	Unit	APUW36GT3S1	APNW36GT3S1
Capacity	Cooling	Min. - Rated - Max @T1	kW	3.8 - 10.1 - 10.6	
		Min. - Rated - Max @T1	Btu/h	13,000 - 34,500 - 36,200	
		Rated @T3	kW	8.1	
		Rated @T3	Btu/h	27,600	
Power Input	Heating	Min. - Rated - Max	kW	4.1 - 10.8 - 11.5	
		Min. - Rated - Max	Btu/h	14,000 - 36,800 - 39,200	
		Rated @T1	kW	3.34	
		Rated @T3	kW	3.27	
EER / COP	Cooling	Rated	kW	3.17	
		Rated	W/W	3.03 / 3.41	
		Rated	W/W	3.03 / 3.41	
Piping Connections	Liquid Side		mm (inch)	9.52 (3/8)	
			mm (inch)	15.88 (5/8)	
		Drain Pipe	O.D. / I.D.	mm	21 / 17
<b>Outdoor</b>				<b>APUW36GT3S1</b>	
Compressor				V, Ø, Hz	
Power Supply				220-240, 1, 50	
Wiring Connections				No. x mm <sup>2</sup> (AWG)	
Running Current	Cooling	Rated	A	14.5	
		Rated	A	13.8	
Dimensions	W x H x D		mm	950 x 834 x 330	
			kg (lbs)	58.0 (127.9)	
Weight	Body				
Refrigerant	Type			R410A	
Fan	Motor Type			BLDC	
Fan Motor	Air Flow Rate		m <sup>3</sup> /min x No.	58 x 1	
Sound Pressure Level	Type			BLDC	
Sound Pressure Level	Output		W x No.	124.2 x 1	
Sound Pressure Level	Cooling	Rated	dB (A)	56	
		Rated	dB (A)	58	
Piping Length	Heating	Max	m (ft)	40 (131.2)	
		Max	m (ft)	30 (98.4)	
Maximum Height Difference (ODU - IDU)	Cooling	Min. - Max	°CDB (°FDB)	-10 - 54	
		Min. - Max	°CDB (°FDB)	-10 - 54	
<b>Indoor</b>				<b>APNW36GT3S1</b>	
Power Supply				V, Ø, Hz	
Dimensions				W x H x D	
Weight				mm	
Weight				kg (lbs)	
Fan	Air Flow Rate		SH / H / M / L	37.0 / 33.0 / 30.0 / 26.0	
Sound Pressure Level	Motor Type			BLDC	
Sound Pressure Level	Cooling	SH / H / M / L	dB(A)	55 / 52 / 49 / 47	
		SH / H / M / L	dB(A)	55 / 52 / 49 / 47	
Safety Device	Heating	SH / H / M / L	dB(A)	55 / 52 / 49 / 47	
		SH / H / M / L	dB(A)	55 / 52 / 49 / 47	
Power and Communication Cable (included Earth)				No. x mm <sup>2</sup> (AWG)	
Power and Communication Cable (included Earth)				4C x 0.75 (18)	

#### Notes

- Cooling : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB  
 - Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

APUW50GT3E0	APNW50GT3E0	APUW50LT3E0	APNW50LT3E0
5.6-13.5-15.5	5.6-13.5-15.5	5.6-13.5-15.5	5.6-13.5-15.5
19,100 -46,100 -52,900	19,100 -46,100 -52,900	19,100 -46,100 -52,900	19,100 -46,100 -52,900
11.7	11.7	11.7	11.7
40,000	40,000	40,000	40,000
6.2-14.65-16.7	6.2-14.65-16.7	6.2-14.65-16.7	6.2-14.65-16.7
21,200-50,000 -57,000	21,200-50,000 -57,000	21,200-50,000 -57,000	21,200-50,000 -57,000
3.88	3.88	3.88	3.88
4.65	4.65	4.65	4.65
4.15	4.15	4.15	4.15
3.48 / 3.53	3.48 / 3.53	3.48 / 3.53	3.48 / 3.53
Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Ø 19.05 (3/4)	Ø 19.05 (3/4)	Ø 19.05 (3/4)	Ø 19.05 (3/4)
Ø 21 / 17	Ø 21 / 17	Ø 21 / 17	Ø 21 / 17
<b>APUW50GT3E0</b>		<b>APUW50LT3E0</b>	
LG Twin Rotary Inverter		LG Twin Rotary Inverter	
220-240, 1, 50		380-415, 3, 50	
3C x 2.5 (12)		5C x 2.5 (12)	
17.0		6.0	
18.2		6.4	
950 x 1,380 x 330		950 x 1,380 x 330	
93.5 (206.1)		93.5 (206.1)	
R410A		R410A	
BLDC		BLDC	
120 x 2		120 x 2	
BLDC		BLDC	
124.2 x 2		124.2 x 2	
62		62	
62		62	
30 (98.4)		30 (98.4)	
20 (65.6)		20 (65.6)	
-10 - 54		-10 - 54	
<b>APNW50GT3E0</b>		<b>APNW50LT3E0</b>	
220-240, 1, 50		220-240, 1, 50	
590 x 1,840 x 440		590 x 1,840 x 440	
47 (103.6)		47 (103.6)	
38.0 / 33.0 / 28.0 / 24.0		38.0 / 33.0 / 28.0 / 24.0	
BLDC		BLDC	
55 / 52 / 49 / 47		55 / 52 / 49 / 47	
54 / 51 / 49 / 47		54 / 51 / 49 / 47	
Fuse		Fuse	
4C x 0.75 (18)		4C x 0.75 (18)	

# SPECIFICATIONS

## STANDARD FLOOR STANDING



APUW36GT3S1 / APUW48GT3S1 / APUW48LT3S1



## HEAT PUMP

Combination	Outdoor unit		Unit	APUW36GT3S1	
	Indoor unit			APNW36GT3S1	
Capacity	Cooling <sup>1)</sup>	Min. - Rated - Max.	kW	3.8 - 10.0 - 10.6	
		Min. - Rated - Max.	Btu/h	13,000 - 34,100 - 36,200	
	Cooling <sup>2)</sup>	Rated	kW	8.10	
		Rated	Btu/h	27,600	
Power Input	Heating	Min. - Rated - Max.	kW	4.1 - 10.8 - 11.5	
		Min. - Rated - Max.	Btu/h	14,000 - 36,800 - 39,200	
	Cooling <sup>1)</sup>	Rated	kW	3.32	
		Rated	kW	3.27	
EER / COP	Cooling <sup>1)</sup> / Heating	Rated	kW	3.17	
		W/W		3.01 / 3.41	
<b>Outdoor</b>			<b>Unit</b>	<b>APUW36GT3S1</b>	
Power Supply			V, ∅, Hz	220-240, 1, 50	
Power Supply Cable (included Earth)			No. × mm <sup>2</sup>	3C × 2.5 (12)	
Casing Color			-	Warm Gray	
Dimensions	Net	W × H × D	mm	950 × 834 × 330	
	Body		kg	58.0 (127.9)	
Compressor	Type	-		Twin Rotary	
Refrigerant	Type	-		R410A	
Fan Motor	Type	-		BLDC	
Sound Pressure Level	Cooling	Rated	dB(A)	56	
	Heating	Rated	dB(A)	58	
Piping Connections	Liquid	Outer Dia.	mm (inch)	∅ 9.52 (3/8)	
	Gas	Outer Dia.	mm (inch)	∅ 15.88 (5/8)	
Piping Length		Max.	m	40 (131.2)	
Maximum Height Difference (ODU - IDU)		Max.	m	30 (98.4)	
<b>Indoor</b>			<b>Unit</b>	<b>APNW36GT3S1</b>	
Power Supply			V, ∅, Hz	220-240, 1, 50 220, 1, 60	
Dimensions	Body	W × H × D	mm	590 × 1,840 × 440	
		W × H × D	inch	23-7/32 × 72-7/16 × 18-1/8	
Net Weight			kg (lbs)	47 (103.6)	
Fan	Air Flow Rate	SH / H / M / L	m <sup>3</sup> /min	37.0 / 33.0 / 30.0 / 26.0	
Fan Motor	Type	-		BLDC	
Sound Pressure Level	Cooling	SH / H / M / L	dB(A)	55 / 52 / 49 / 47	
	Heating	SH / H / M / L	dB(A)	55 / 52 / 49 / 47	

### Notes

- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

APUW48GT3S1		APUW48LT3S1	
APNW48GT3S1		APNW48LT3S1	
5.6 - 14.1 - 15.5		5.6 - 14.1 - 15.5	
19,100 - 48,100 - 52,900		19,100 - 48,100 - 52,900	
12.20		12.20	
41,600		41,600	
6.2 - 15.5 - 16.5		6.2 - 15.5 - 16.5	
21,200 - 52,900 - 56,300		21,200 - 52,900 - 56,300	
4650.00		4650.00	
5100.00		5100.00	
4550.00		4550.00	
3.03 / 3.41		3.03 / 3.41	
<b>APUW48GT3S1</b>		<b>APUW48LT3S1</b>	
220-240, 1, 50		220-240, 1, 50	
3C × 6.0 (10)		3C × 6.0 (10)	
Warm Gray		Warm Gray	
950 × 1,380 × 330		950 × 1,380 × 330	
90.0 (198.4)		90.0 (198.4)	
Twin Rotary		Twin Rotary	
R410A		R410A	
BLDC		BLDC	
55		55	
57		57	
∅ 9.52 (3/8)		∅ 9.52 (3/8)	
∅ 19.05 (3/4)		∅ 19.05 (3/4)	
50 (164.0)		50 (164.0)	
30 (98.4)		30 (98.4)	
<b>APNW48GT3S1</b>		<b>APNW48LT3S1</b>	
220-240, 1, 50		220-240, 1, 50	
220, 1, 60		220, 1, 60	
590 × 1,840 × 440		590 × 1,840 × 440	
23-7/32 × 72-7/16 × 18-1/8		23-7/32 × 72-7/16 × 18-1/8	
47 (103.6)		47 (103.6)	
38.0 / 33.0 / 28.0 / 24.0		38.0 / 33.0 / 28.0 / 24.0	
BLDC		BLDC	
55 / 52 / 49 / 47		55 / 52 / 49 / 47	
55 / 52 / 49 / 47		55 / 52 / 49 / 47	

### Notes

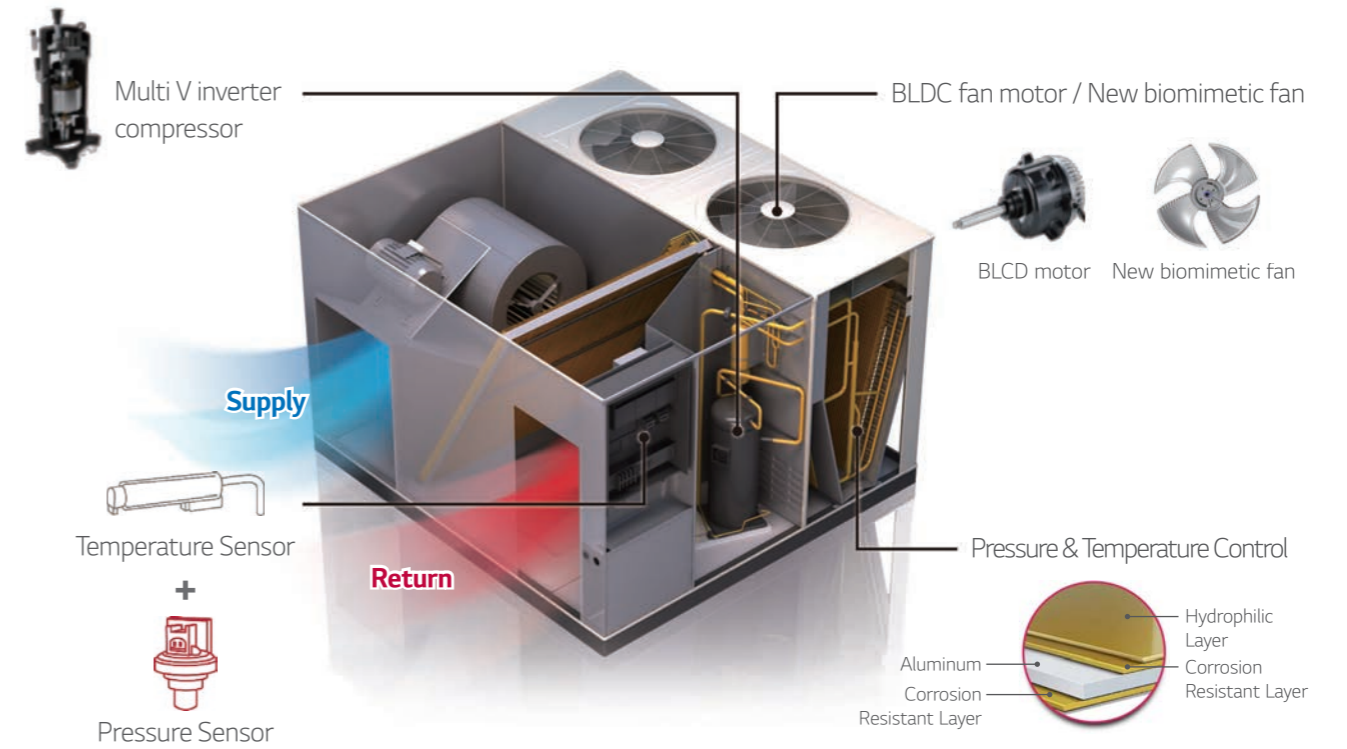
- Cooling<sup>1)</sup> : Indoor Temperature 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 35°C (95°F) DB / 24°C (75.2°F) WB
- Cooling<sup>2)</sup> : Indoor Temperature 29°C (84.2°F) DB / 19°C (66.2°F) WB, Outdoor Temperature 46°C (114.8°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

# SINGLE PACKAGE



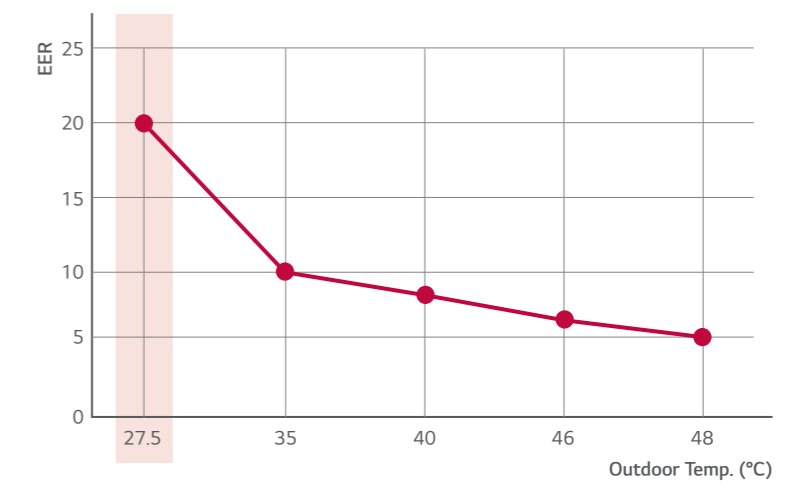
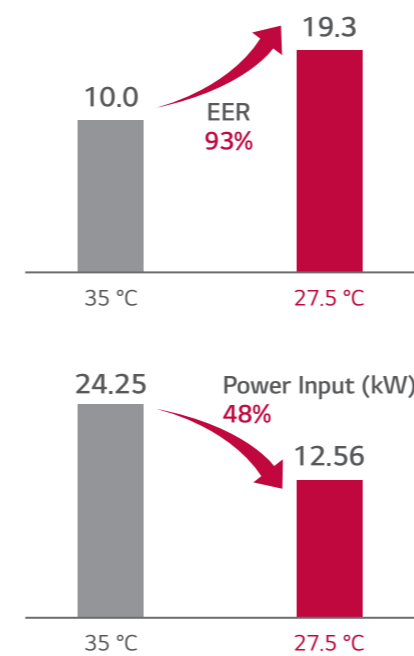
## ADVANCED KEY COMPONENTS FOR HIGH ENERGY EFFICIENCY

High energy efficiency with LG's cutting-edge core components and Inverter leading technology.



## ANNUAL ENERGY SAVINGS

Target low pressure will be adjusted according to cooling load. LG provide energy saving by preventing On / Off operation with inverter technology.



Outdoor Temp. (°C)	27.5	35	40	46	48
EER	19.3	10.0	8.0	6.4	5.9
Power Input (kW)	12.56	24.25	30.12	35.98	37.1

\* Model : LG AK-Q300DC01 / C Company 50HC\*28

# SINGLE PACKAGE

## RELIABLE PERFORMANCE

Field tests in extreme (tropical) conditions are being conducted without failure over a year.



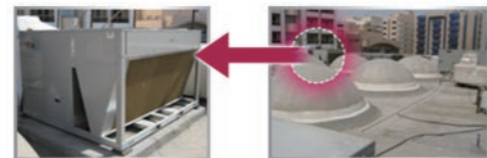
### Installation Site 1

- Location : Riyadh, Saudi Arabia
- Application : Factory (warehouse)
- Operation period : 23rd April 2012 ~
- Capacity : 12.5RT
- Power : 3phase 380V 60Hz

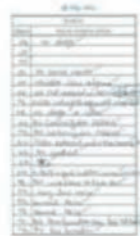


### Installation Site 2

- Location : Dubai, UAE
- Application : Mosque (roof)
- Operation period : 8th April 2012 ~
- Capacity : 12.5RT
- Power : 3phase 400V 50Hz



F/Test check list



LG MV Data



• Structure / Performance / Noise / Installation / Dew formation.....

## COMPACT SIZE

Easy transportation and less space for installation.

### REDUCED FOOTPRINT

### SIZE COMPARISON

**Footprint Comparison**

- LG Inverter: 4.37 m<sup>2</sup>
- Z Company: 6.46 m<sup>2</sup>

↑ Reduce by **32%**

**Volume Comparison**

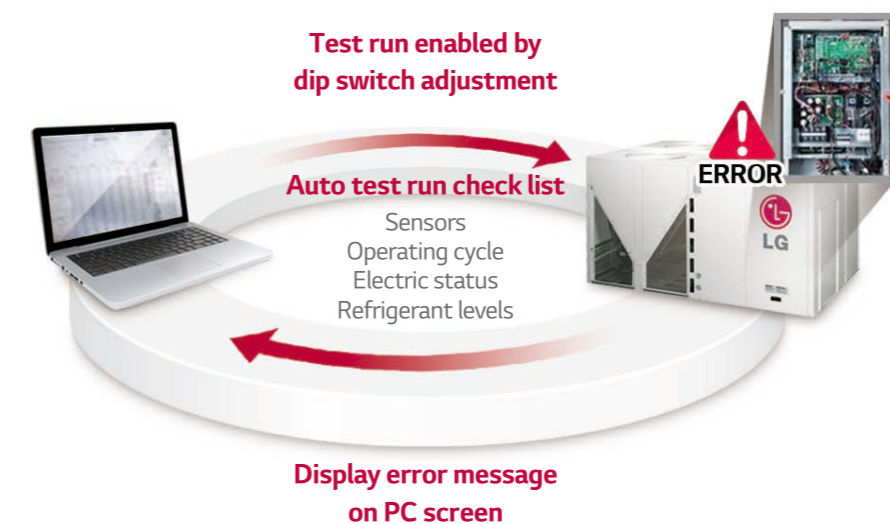
- LG: 5.40 m<sup>3</sup> (83%)
- Z Company: 6.46 m<sup>3</sup> (100%)

**Weight Comparison**

- LG: 530 kg (37%)
- Z Company: 1,440 kg (100%)

## AUTOMATIC TEST RUN

Easy and fast automatic test run saves time during the final stage of installation.



# SPECIFICATIONS

## SINGLE PACKAGE



Nominal Capacity		RT	3	4	5	
Model Name		-	AK-Q036GH50	AK-Q048GH50	AK-Q060GH50	
Cooling Capacity	Net Capacity	kW	10.26	13.63	17.35	
		kcal/h	8,820	11,718	14,918	
		Btu/h	35,000	46,500	59,200	
	Gross Capacity	kW	10.6	14.1	17.6	
		kcal/h	9,072	12,096	15,120	
		Btu/h	36,000	48,000	60,000	
EER	Btu / Wh	13.01	12.05	11.61		
Power Input	Cooling	kW	2.69	3.86	5.1	
Power Supply		V, Ø, Hz	220, 1, 50/60	220, 1, 50/60	220, 1, 50/60	
Indoor Coil	Fin Type	-	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	
	Tube Size	Outer Dia.	mm (inch)	7.0 (9/32)	7.0 (9/32)	7.0 (9/32)
	(Row × Column × Fins per inch) × No.	-	(3 × 46 × 17) × 1	(3 × 46 × 17) × 1	(3 × 46 × 17) × 1	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	0.53 (5.71)	0.53 (5.71)	0.53 (5.71)	
Indoor Fan	Type	-	Centrifugal Blower Fan	Centrifugal Blower Fan	Centrifugal Blower Fan	
	Diameter	mm (inch)	285 (11.2)	285 (11.2)	285 (11.2)	
	Motor Output	Hp	257W × 1	339W × 1	350W × 1	
	Air Flow Rate	Nominal	m <sup>3</sup> /min	34	45.3	49.8
		Nominal	ft <sup>3</sup> /min	1,200	1,600	1,760
Drive type	-	Direct	Direct	Direct		
Compressor (#1, A Cycle)	Type	-	BLDC INV Twin Rotary	BLDC INV Twin Rotary	BLDC INV Twin Rotary	
	Motor Output	W × No.	4,000 × 1	4,000 × 1	4,000 × 1	
	Oil Type	-	FVC68D	FVC68D	FVC68D	
	Oil Charge	cc × No.	1,300 × 1	1,300 × 1	1,300 × 1	
Compressor (#2, B Cycle)	Type	-	-	-	-	
	Motor Output	W × No.	-	-	-	
	Oil Type	-	-	-	-	
	Oil Charge	cc × No.	-	-	-	
Outdoor Coil	Fin Type	-	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	
	Tube Size	Outer Dia.	mm (inch)	7 (9/32)	7 (9/32)	7 (9/32)
	(Row × Column × Fins per inch) × No.	-	(2 × 44 × 17) × 1	(2 × 44 × 17) × 1	(2 × 44 × 17) × 1	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	1.33 (14.28)	1.33 (14.28)	1.33 (14.28)	
Outdoor Fan	Type	-	Propeller	Propeller	Propeller	
	Diameter	mm (inch)	460 (18.11)	460 (18.11)	460 (18.11)	
	Motor Output	W × No.	124.2 × 2	124.2 × 2	124.2 × 2	
	Air Flow Rate	m <sup>3</sup> /min × No.	-	-	-	
		ft <sup>3</sup> /min × No.	-	-	-	
Drive	-	BLDC Inverter	BLDC Inverter	BLDC Inverter		
Discharge Direction	-	Top	Top	Top		
Dehumidification rate	ℓ/h	2.23	3.47	5.58		
Drain Connection Size	-	Male NPT 3/4	Male NPT 3/4	Male NPT 3/4		
Refrigerant	Refrigerant name		-	R410A	R410A	
	Precharged Amount	A-Circuit	kg	3.6	3.6	
		B-Circuit	kg	-	-	
	Control	-	EEV	EEV	EEV	
Dimensions (W × H × D)	mm		1,280 × 1,065 × 1,110	1,280 × 1,065 × 1,110	1,280 × 1,065 × 1,110	
	inch		50-13 / 32 × 41-29 / 32 × 43-23 / 32	50-13 / 32 × 41-29 / 32 × 43-23 / 32	50-13 / 32 × 41-29 / 32 × 43-23 / 32	
Net Weight	kg(lbs)		174	174	174	
Sound pressure levels	Cooling	dB(A)		75	75	
Operation Range (Outdoor Temperature)	Cooling	Min. - Max.	°CDB (*FDB)		-5 - 54 (23.0 - 129.2)	



Nominal Capacity		RT	6.5	7.5	
Model Name		-	AK-Q0788C01	AK-Q0908C01	
Cooling Capacity	Net Capacity	kW	22.9	26.4	
		kcal/h	19,700	22,700	
		Btu/h	78,000	90,000	
	Gross Capacity	kW	24.0	27.5	
		kcal/h	20,700	23,700	
		Btu/h	82,000	94,000	
EER	Btu / Wh	12.8	11.8		
Power Input	Cooling	kW	6.09	7.62	
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	
Indoor Coil	Fin Type	-	LG Louver	LG Louver	
	Tube Size	Outer Dia.	mm (inch)	9.52 (3/8)	9.52 (3/8)
	(Row × Column × Fins per inch) × No.	-	(4 × 36 × 16)	(4 × 36 × 16)	
	Length	mm (inch)	916 (36-1/8)	916 (36-1/8)	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	0.84 (9.02)	0.84 (9.02)	
Indoor Fan	Type	-	Sirocco Fan	Sirocco Fan	
	Diameter	mm (inch)	331.6 (13.1)	331.6 (13.1)	
	Motor Output	Hp	1.5	1.5	
	Air Flow Rate	Nominal	m <sup>3</sup> /min	73.6	85.0
		Nominal	ft <sup>3</sup> /min	2,600	3,000
Drive type	-	Belt	Belt		
Compressor (#1, A Cycle)	Type	-	HSS DC SCROLL	HSS DC SCROLL	
	Motor Output	W × No.	5,300 × 1	5,300 × 1	
	Oil Type	-	FVC68D	FVC68D	
	Oil Charge	cc × No.	1,200 × 1	1,200 × 1	
Compressor (#2, B Cycle)	Type	-	-	-	
	Motor Output	W × No.	-	-	
	Oil Type	-	-	-	
	Oil Charge	cc × No.	-	-	
Outdoor Coil	Fin Type	-	Wide Louver Plus(Gold)	Wide Louver Plus(Gold)	
	Tube Size	Outer Dia.	mm (inch)	7.0 (9/32)	7.0 (9/32)
	(Row × Column × Fins per inch) × No.	-	(3 × 44 × 14)	(3 × 44 × 14)	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	2.08 (22.38)	2.08 (22.38)	
Outdoor Fan	Type	-	Propeller Fan	Propeller Fan	
	Diameter	mm (inch)	680 (26-25/32)	680 (26-25/32)	
	Motor Output	W × No.	1,200 × 1	1,200 × 1	
	Air Flow Rate	m <sup>3</sup> /min × No.	105 × 1	105 × 1	
		ft <sup>3</sup> /min × No.	3,700 × 1	3,700 × 1	
	Drive	-	BLDC Inverter	BLDC Inverter	
Discharge Direction	-	Top	Top		
Dehumidification rate	ℓ/h	8.5	9.9		
Drain Connection Size	-	Male NPT 3/4	Male NPT 3/4		
Refrigerant	Refrigerant name		-	R410A	
	Precharged Amount	A-Circuit	kg	6.9	
		B-Circuit	kg	-	
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	
Dimensions (W × H × D)	mm		2,250 × 1,106 × 1,130	2,250 × 1,106 × 1,130	
	inch		88-19 / 32 × 43-17 / 32 × 44-1 / 2	88-19 / 32 × 43-17 / 32 × 44-1 / 2	
Net Weight	kg (lbs)		340 (750)	340 (750)	
Sound pressure levels	Cooling	dB (A)		70	
Operation Range (Outdoor Temperature)	Cooling	Min. - Max.	°CDB (*FDB)		

# SPECIFICATIONS

## SINGLE PACKAGE



Nominal Capacity		RT	10	12.5	
Model Name		-	AK-Q1208C01	AK-Q1508C01	
Cooling Capacity	Net Capacity	kW	35.2	39.9	
		kcal/h	30,240	34,271	
		Btu/h	120,000	136,000	
	Gross Capacity	kW	37.5	42.8	
		kcal/h	32,255	36,791	
EER	Btu / Wh	11.6	11.6		
Power Input	Cooling	kW	10.34	11.72	
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	
Indoor Coil	Fin Type	-	LG Louver	LG Louver	
	Tube Size	Outer Dia.	mm (inch)	9.52 (3/8)	
	(Row × Column × Fins per inch) × No.	-	(4 × 22 × 16) × 2	(4 × 22 × 16) × 2	
	Length	mm (inch)	1,300 (51-6/32)	1,300 (51-6/32)	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	1.45 (15.61)	1.45 (15.61)	
Indoor Fan	Type	-	Sirocco Fan	Sirocco Fan	
	Diameter	mm (inch)	380 (15)	380 (15)	
	Motor Output	Hp	3.0	3.0	
	Air Flow Rate	Nominal	m <sup>3</sup> /min	113.3	141.6
		Nominal	ft <sup>3</sup> /min	4,000	5,000
Drive type	-	Belt	Belt		
Compressor (#1, A Cycle)	Type	-	HSS DC SCROLL	HSS DC SCROLL	
	Motor Output	W × No.	5,300 × 1	5,300 × 1	
	Oil Type	-	FVC68D	FVC68D	
	Oil Charge	cc × No.	1,200 × 1	1,200 × 1	
Compressor (#2, B Cycle)	Type	-	-	-	
	Motor Output	W × No.	-	-	
	Oil Type	-	-	-	
	Oil Charge	cc × No.	-	-	
Outdoor Coil	Fin Type	-	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	
	Tube Size	Outer Dia.	mm (inch)	7 (9/32)	
	(Row × Column × Fins per inch) × No.	-	(3 × 42 × 14) × 2	(3 × 42 × 14) × 2	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	3.53 (37.99)	3.53 (37.99)	
Outdoor Fan	Type	-	Propeller Fan	Propeller Fan	
	Diameter	mm (inch)	680 (26-25/32)	680 (26-25/32)	
	Motor Output	W × No.	1,500 × 2	1,500 × 2	
	Air Flow Rate	m <sup>3</sup> /min × No.	105 × 2	105 × 2	
		ft <sup>3</sup> /min × No.	3,700 × 2	3,700 × 2	
	Drive	-	BLDC Inverter	BLDC Inverter	
Discharge Direction	-	Top	Top		
Dehumidification rate	ℓ/h	13.8	15.6		
Drain Connection Size	-	Male NPT 1	Male NPT 1		
Refrigerant	Refrigerant name	-	R410A	R410A	
	Precharged Amount	A-Circuit	kg	13.0	
		B-Circuit	kg	-	
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	
Dimensions (W × H × D)	mm		2,230 × 1,237 × 1,958	2,230 × 1,237 × 1,958	
	inch		87-25 / 32 × 48-11 / 16 × 77-3 / 32	87-25 / 32 × 48-11 / 16 × 77-3 / 32	
Net Weight	kg (lbs)		530 (1,168)	530 (1,168)	
Sound pressure levels	Cooling	dB (A)	75	75	
Operation Range (Outdoor Temperature)	Cooling	Min. - Max.	°CDB (°FDB)	-5 - 54 (23.0 - 129.2)	



Nominal Capacity		RT	15	17.5	20	25	
Model Name		-	AK-Q1808C01	AK-Q2108C01	AK-Q2408C01	AK-Q3008C01	
Cooling Capacity	Net Capacity	kW	52.8	61.5	70.6	80.9	
		kcal/h	45,359	52,919	60,700	69,600	
		Btu/h	180,000	210,000	241,000	276,000	
	Gross Capacity	kW	54.2	64.2	73.6	85.0	
		kcal/h	46,619	55,187	63,300	73,100	
EER	Btu / Wh	11.6	12.8	11.2	10.5		
Power Input	Cooling	kW	15.50	16.40	21.50	26.20	
Power Supply		V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	
Indoor Coil	Fin Type	-	LG Louver	LG Louver	LG Louver	LG Louver	
	Tube Size	Outer Dia.	mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	
	(Row × Column × Fins per inch) × No.	-	(3 × 24 × 16) × 2	(3 × 24 × 16) × 2	(3 × 24 × 16) × 2	(3 × 24 × 16) × 2	
	Length	mm (inch)	1,785 (70-9/32)	1,785 (70-9/32)	1,785 (70-9/32)	1,785 (70-9/32)	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	2.18 (23.47)	2.18 (23.47)	2.18 (23.47)	2.18 (23.47)	
Indoor Fan	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Diameter	mm (inch)	457.2 (18)	457.2 (18)	457.2 (18)	457.2 (18)	
	Motor Output	Hp	5.0	5.0	5.0	7.5	
	Air Flow Rate	Nominal	m <sup>3</sup> /min	169.9	198.2	226.5	283.2
		Nominal	ft <sup>3</sup> /min	6,000	7,000	8,000	10,000
Drive type	-	Belt	Belt	Belt	Belt		
Compressor (#1, A Cycle)	Type	-	HSS DC SCROLL	HSS DC SCROLL	HSS DC SCROLL	HSS DC SCROLL	
	Motor Output	W × No.	4,200 × 1	5,300 × 1	5,300 × 1	5,300 × 1	
	Oil Type	-	FVC68D	FVC68D	FVC68D	FVC68D	
	Oil Charge	cc × No.	1,200 × 1	1,400 × 1	1,400 × 1	1,400 × 1	
Compressor (#2, B Cycle)	Type	-	HSS DC SCROLL	HSS DC SCROLL	HSS DC SCROLL	HSS DC SCROLL	
	Motor Output	W × No.	4,200 × 1	5,300 × 1	5,300 × 1	5,300 × 1	
	Oil Type	-	FVC68D	FVC68D	FVC68D	FVC68D	
	Oil Charge	cc × No.	1,200 × 1	1,400 × 1	1,400 × 1	1,400 × 1	
Outdoor Coil	Fin Type	-	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	Wide Louver Plus (Gold)	
	Tube Size	Outer Dia.	mm (inch)	7.0 (9/32)	7.0 (9/32)	7.0 (9/32)	
	(Row × Column × Fins per inch) × No.	-	(2 × 42 × 14) × 4	(3 × 42 × 14) × 4	(3 × 42 × 14) × 4	(3 × 42 × 14) × 4	
	Face Area	m <sup>2</sup> (ft <sup>2</sup> )	7.06 (75.99)	7.06 (75.99)	7.06 (75.99)	7.06 (75.99)	
Outdoor Fan	Type	-	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan	
	Diameter	mm (inch)	680 (26-25/32)	680 (26-25/32)	680 (26-25/32)	680 (26-25/32)	
	Motor Output	W × No.	900 × 4	900 × 4	900 × 4	900 × 4	
	Air Flow Rate	m <sup>3</sup> /min × No.	105 × 4	105 × 4	105 × 4	105 × 4	
		ft <sup>3</sup> /min × No.	3,700 × 4	3,700 × 4	3,700 × 4	3,700 × 4	
	Drive	-	BLDC Inverter	BLDC Inverter	BLDC Inverter	BLDC Inverter	
Discharge Direction	-	Top	Top	Top	Top		
Dehumidification rate	ℓ/h	20.7	24.2	26.18	29.82		
Drain Connection Size	-	Male NPT 1	Male NPT 1	Male NPT 1	Male NPT 1		
Refrigerant	Refrigerant name	-	R410A	R410A	R410A	R410A	
	Precharged Amount	A-Circuit	kg	9.0	12.0	12.0	
		B-Circuit	kg	9.0	12.0	12.0	
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Dimensions (W × H × D)	mm		2,230 × 1,242 × 3,520	2,230 × 1,242 × 3,520	2,230 × 1,242 × 3,520	2,230 × 1,242 × 3,520	
	inch		87-25 / 32 × 48-29 / 32 × 138-19 / 32	87-25 / 32 × 48-29 / 32 × 138-19 / 32	87-25 / 32 × 48-29 / 32 × 138-19 / 32	87-25 / 32 × 48-29 / 32 × 138-19 / 32	
Net Weight	kg (lbs)		850 (2,094)	900 (1,984)	950 (2,094)	950 (2,094)	
Sound pressure levels	Cooling	dB (A)	85	85	85	85	
Operation Range (Outdoor Temperature)	Cooling	Min. - Max.	°CDB (°FDB)	-5 - 54 (23.0 - 129.2)	-5 - 54 (23.0 - 129.2)	-5 - 54 (23.0 - 129.2)	

# CONTROL SOLUTION



## CONTROLLER LINE-UP

Smart management for a variety of usages.

### CENTRAL CONTROLLER



#### AC Smart 5

- Max. 128 unit
- 10.2" touch
- Yearly schedule
- Individual controller Lock
- Operation log
- Floor map view



#### AC Ez touch

- Max. 64 unit
- 5" touch
- Yearly schedule
- Individual controller Lock
- Operation log

### INDIVIDUAL CONTROLLER



#### Standard II



#### Standard III (4.3" color)



#### Premium (5" touch color)



#### Wireless



#### LG Wifi MODEM

### BMS PROTOCOL GATEWAY



#### ACP 5

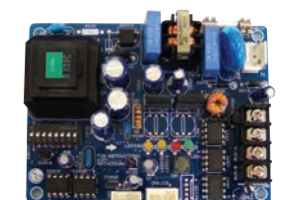


#### LonWorks

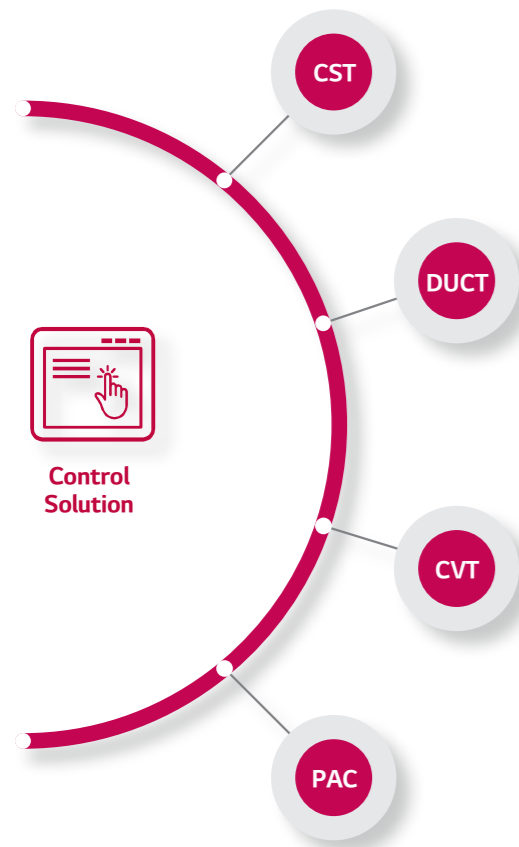
### ETC. ACCESSORIES



#### Dry Contact



#### PI485GW



### CENTRAL CONTROL SOLUTION



- 5" Touch controller
- PI485GW required
- Individual controller Lock
- Yearly schedule
- Max 64 Indoor unit

### INDIVIDUAL CONTROLLER



- 4.3" color display with a modern design
- Soft touch button
- Yearly schedule

### DRY CONTACT SOLUTION



- 1 or 2 contact input
- With 3rd Party Thermostat
- With Automation system