LG
Life's Good

2018 / 2019
RESIDENTIAL
AIR CONDITIONERS

UNIQUE FEATURES

- Embedded Wi-Fi
- 10-Year Inverter Compressor Warranty
- Smart Diagnosis
- Low Heating
- Plasmaster Ionizador^{PLUS}
- Mode Lock
- 3M Micro Dust Filter
- Low Noise

Embedded Wi-Fi

Control your air conditioners via using the smart internet devices as Android or iOS based smartphones.
This advanced technology provides you the best convenience.

LG Smart ThinQ

LG Smart ThinQ

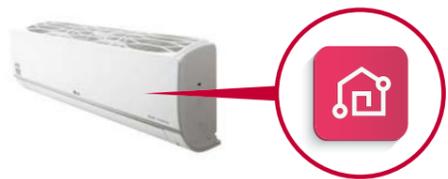Search "LG Smart ThinQ" on Google market or Appstore then download the app.

How it Works

Embedded Wi-Fi modem
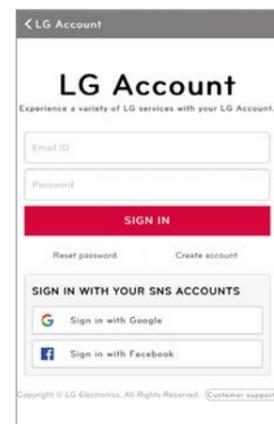Check "LG Smart ThinQ" on your air conditioner.

By embedded Wi-Fi modem, get ready for innovation without boundaries.

Easy Registration and Log-in
Follow the easy set-up steps that will activate smart ThinQ's impressive feature.

Wi-Fi Connectivity
Let's every member of your family choose their own preferred air conditioning temperature and fan speed, then save the settings in their app to run later. You can save the setting for each air conditioner as well.
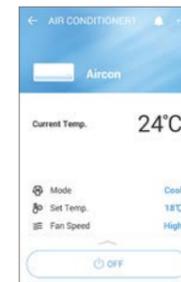
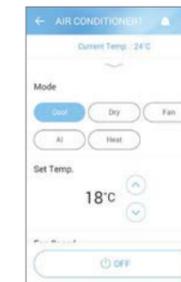### Multiple Devices

Multi-Control

Benefit

Simple operation for various functions

On/Off, Current Temp	Mode, Set Temp	Vane Control	
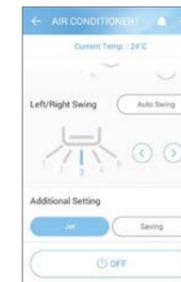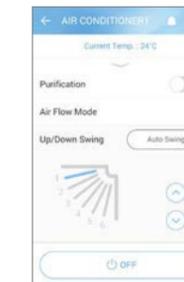
Straight forward Management
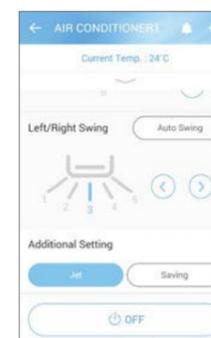
	Reservation	Energy Monitoring	Smart Diagnosis	Filter Management

Integrated Home Appliances Control
Control / Monitor all your LG appliances from one place.

Access your air conditioner anytime and from anywhere
with a Wi-Fi equipped device and LG's exclusive control app, Smart ThinQ.

Smart Diagnosis

Smart Diagnosis allows you to check setup, installation, troubleshooting and other information conveniently from your smartphone.

* Specifications may vary for each model.
* When connected to Multi ODU, Smart Diagnosis function may not be supported.

What is the Smart Diagnosis?

Smart Diagnosis allows users to conveniently check setup, installation, troubleshooting and other information directly from a smartphone.

* Builds upon widespread smartphone use and offers greater USP diversification
* Perfect for consumers who are unable to view information about their air conditioner via a display or remote control.

How it works

Smart Diagnosis allows users to conveniently check setup, installation, troubleshooting and other information directly from a smartphone.

By using "LG Smart ThinQ" App and clicking "Start Smart Diagnosis", monitor and check diagnosis results conveniently via Wi-Fi.

❷ Analyze and Transmit Information
❶ send signal
❸ Display Product Information
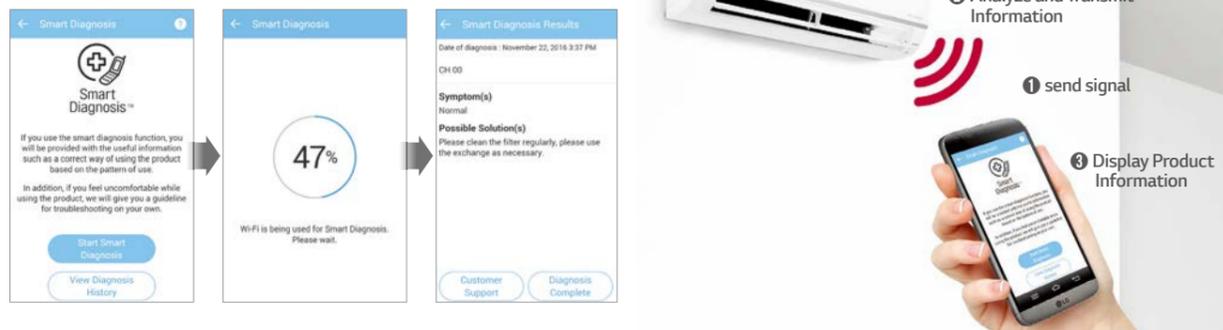
* When the model doesn't provide embedded Wi-Fi, diagnose by buzzer sound with the same app and remote controller.

❷ Transmit sound & Information
❶ send IR signal
❸ Display Product Information

Plasmaster™ Ionizer⁺ᴾᴸᵁˢ

The powerful plasma Ionizer protects you from odors and harmful substances in the air with over 3 million ions to sterilize not only the air passing through the air conditioner, but also surrounding surfaces for a safer, cleaner environment.
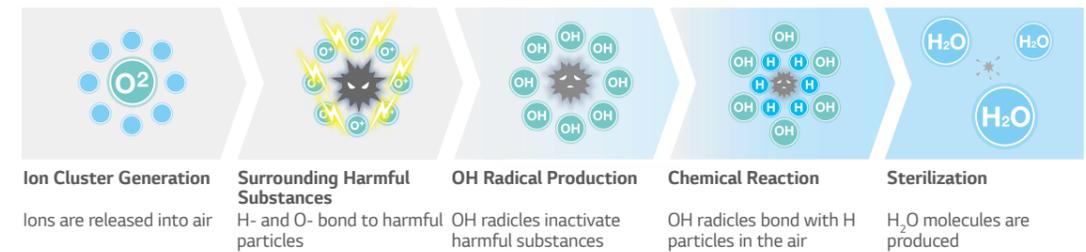

* Specifications may vary for each model.
* Depending on the experimental conditions.

How it works

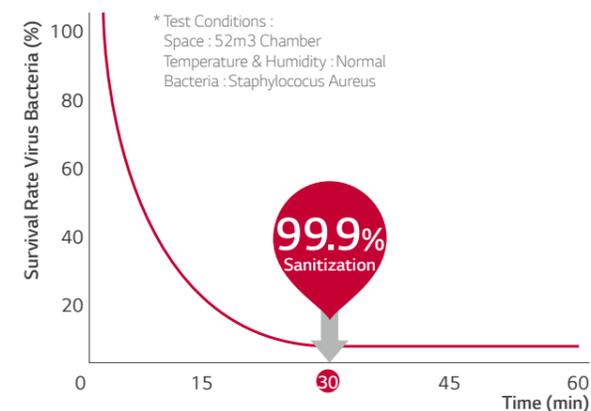### Sterilization and Deodorization (Utilizes Over 3 Million Ions)

Plasmaster Ionizer+ reduces harmful microscopic particles by infusing the air passing through the air conditioner with over 3 millions ions.

Ion Cluster Generation	Surrounding Harmful Substances	OH Radical Production	Chemical Reaction	Sterilization
Ions are released into air	H- and O- bond to harmful particles	OH radicles inactivate harmful substances	OH radicles bond with H particles in the air	H_2O molecules are produced

Test Result

Sterilization Performance Evaluations

Sterilize Bacteria (E.coli colon bacillus) over 99.9% in 30 min.

* Test Conditions :
  Space : 52m3 Chamber
  Temperature & Humidity : Normal
  Bacteria : Staphylococus Aureus

99.9% Sanitization

2.1 odor strength decrease in 60 minutes

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

Odor Strength	1	2	3	4
Offensive odor substance sensitivity	Mountain smell	Indoor life smell	Bathroom smell	Food waste smell
Odor strength level	Light	Moderate	Strong	Very Strong

1.5   Plasmaster Ionizer⁺ᴾᴸᵁˢ   3.6

Odor strength reduce 3.6 ➡ 1.5 / The Odor floating in the room as well as curtain and clothes.

MÍCRO Dust Filter (PRESTIGE PLUS)

The Micro-Dust Filter, a high-airflow, low-noise filter, employs a strong electrostatic charge on its surface to attract and trap harmful microscopic substances including pollen and fine dust, which are known to cause respiratory diseases.

* Specifications may vary for each model.

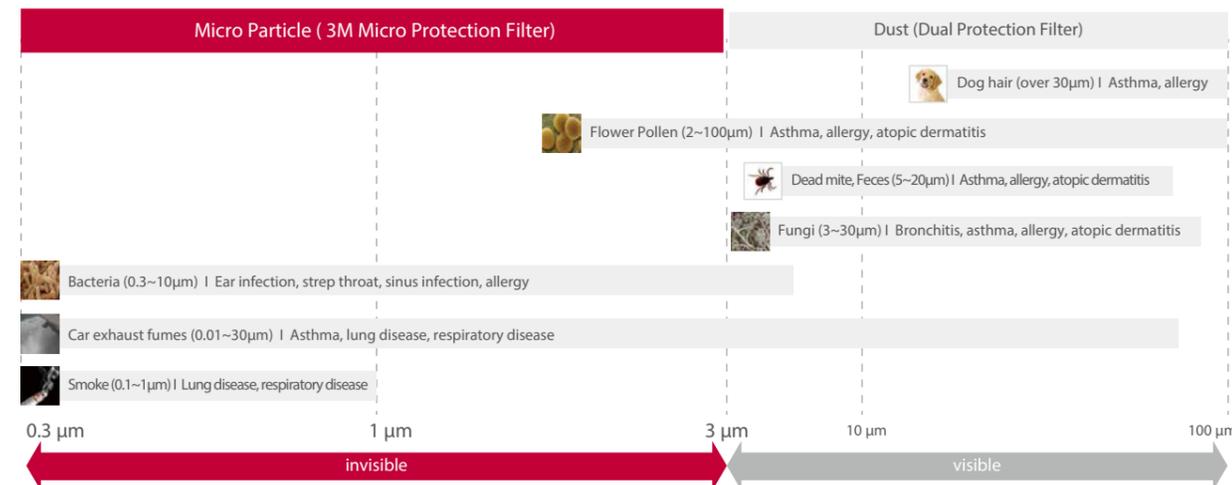## What is the MÍCRO Dust Filter?

The Micro Dust Filter captures and eliminates harmful micro-particles, including bacteria and dust, in order to deliver fresh, clean air.
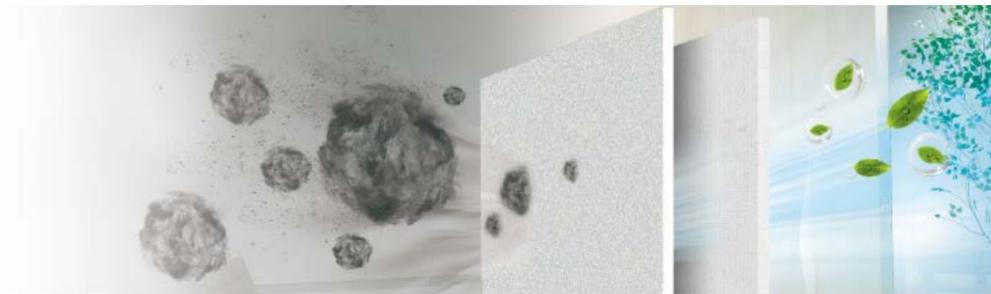
Benefit

Eliminates Allergens and Disease-Causing Particles

Cleans and makes air fresh by removing microscopic particles as small as 0.3μm in size.

Micro Particle (3M Micro Protection Filter)		Dust (Dual Protection Filter)	
			Dog hair (over 30μm) I Asthma, allergy
		Flower Pollen (2~100μm) I Asthma, allergy, atopic dermatitis	
		Dead mite, Feces (5~20μm) I Asthma, allergy, atopic dermatitis	
		Fungi (3~30μm) I Bronchitis, asthma, allergy, atopic dermatitis	
Bacteria (0.3~10μm) I Ear infection, strep throat, sinus infection, allergy			
Car exhaust fumes (0.01~30μm) I Asthma, lung disease, respiratory disease			
Smoke (0.1~1μm) I Lung disease, respiratory disease			

| 0.3 μm	1 μm	3 μm	10 μm	100 μm
invisible			visible	

10-Year Inverter Compressor Warranty

LG, with confidence in product quality, preserves is better lives for customers by providing 10 years warranty for Inverter Compressor of Air conditioners.

* Specifications may vary for each model.

What is the 10 Year Warranty?

The compressors is for the Air Conditioner what the engine is to the vehicle. With the 10year warranty on the compressor, users can enjoy the benefits of LG air conditioner for a longer period on time.
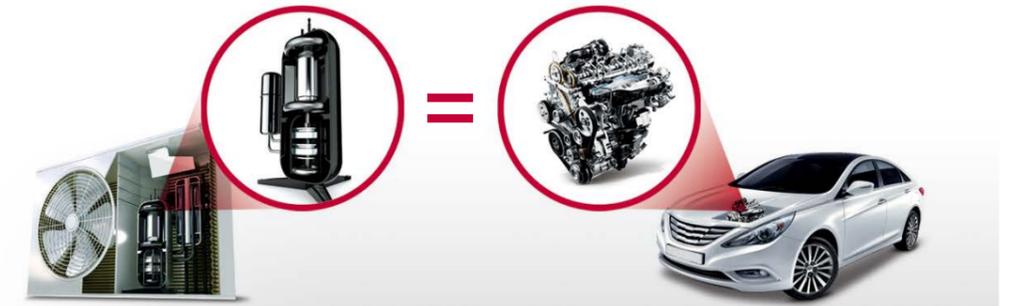
Benefit & Verification

Reliable Air Conditioner

Product safety is emphasized by offering a 10-year warranty on the compressor to reassure customers about product durability.

Cerification

TUV Rheinland, Long Term Accelerated-reliability Test & High Marginal Test

* Long Term Accelerated-Reliability test
  LG's unique testing method with reinforced operating condition for a product life assurance to test and determine the product life cycle in a short period of time by accelerating the life cycle.
* High Marginal Test
  Test method to secure durability in various adverse conditions that may occur in the field by performing comp reliability test against higher pressure and temperature than the designed range of pressure and temperature which the comp operates in.
* Verification obtained from TUV Rheinland for 10-year product life cycle

Single Rotary Type   Twin Rotary Type

Low Heating

Low Heating will keep your place warm (9℃) and preventing from damages due to freezing facilities, with low energy

9℃

How it works

The Micro Dust Filter captures and eliminates harmful micro-particles, including bacteria and dust, in order to deliver fresh, clean air.

Click

Benefit

20℃ Heating Mode(Normal)
Consume useless Energy

Low Heating Mode
Power saving & Protect freeze

Energy Consumption (%)

Up to **40%** Saving

Noarmal Heating   Low Heating

---

Mode Lock

LG air conditioners protect your place and buseinss from inappropriate control of unauthorized users

❶ **Fix server room cooling**
Loosing data

❷ **Fix Shop / Restaurant cooling**

Pain point

People in special or commercial place can mistakenly and accidentally change the operation mode. It may cause very serious problem in Server room and Shop/ Restaurant
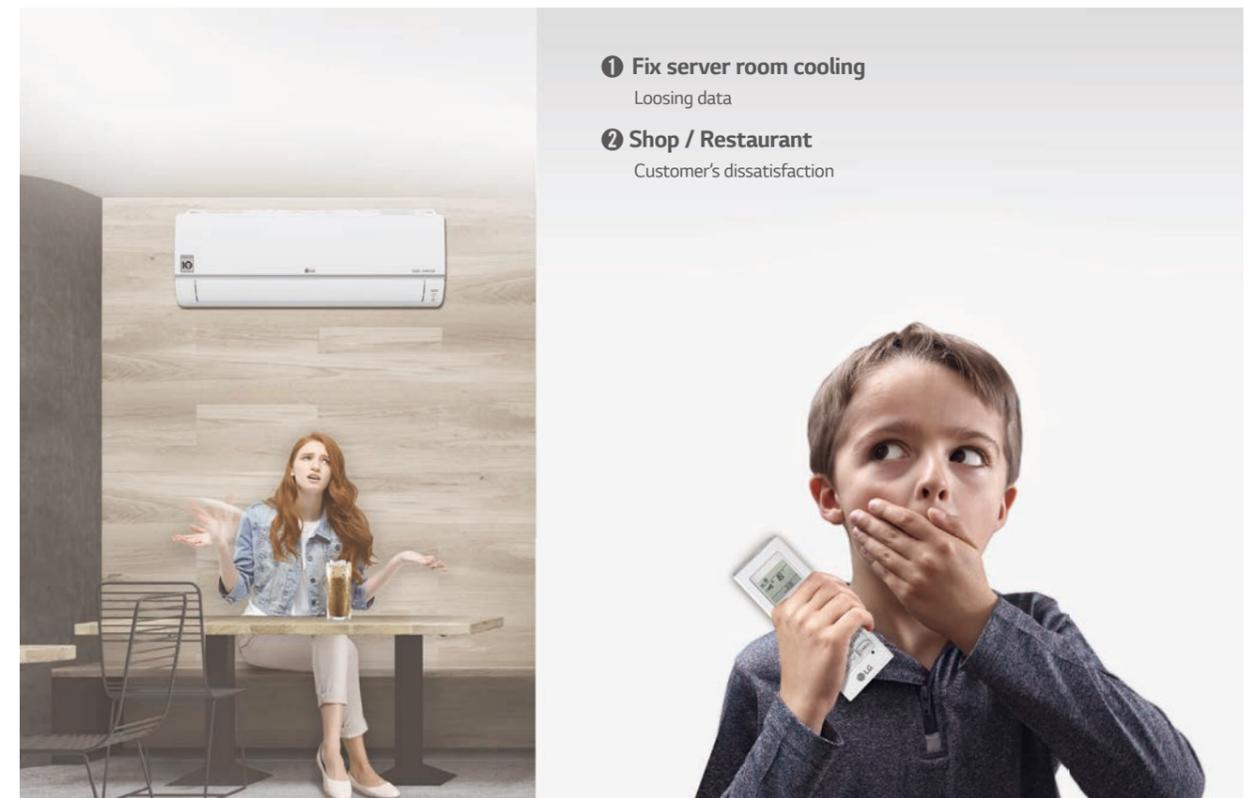
❶ **Fix server room cooling**
Loosing data

❷ **Shop / Restaurant**
Customer's dissatisfaction

COMFORT
Low Noise

LG Air Conditioners operate at 19dB low noise level, moreover provide healthy soft air by just 1 touch.

DUAL Inverter

* Specifications may vary for each model.

How It Works

LG's Unique Skew Fan
By minimizing the surface pressure of the fan blade when in contact with the air peak noise are reduced to a level that is among the lowest in the world.
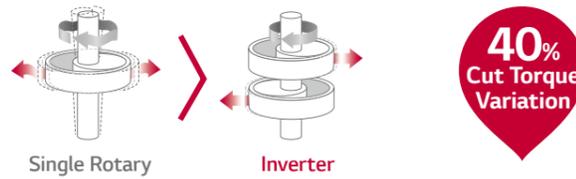
Conventional → Skew Fan

15% Tilted Stabilizer

BLDC Fan Motor
With strong torque and powerful ND magnetism as well as precise speed control of 13 different steps for smooth operation, the BLDC motor provides substantial air volume and high static pressure, while keeping electrical and mechanical noise lower, and making high-speed operation available.
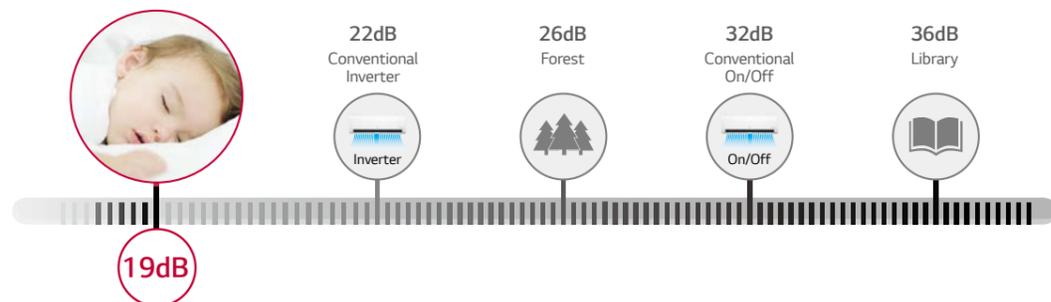
AC Motor → BLDC Motor

Conductor Permanent Magnet

Advanced Motor

AC Motor
- Low Efficiency.
- Heat Problem during overhauling.
- Difficult precise speed control.

BLDC Motor
- Low Electric and mechanical noise.
- Precise speed control durable.

ALVC (Active Low Vibration Control)
A speed-error component estimates the load to compensate for imbalances, which are the primary causes of vibration and noise, enabling the rotation of the motor without vibration at low Hz levels.

Single Rotary → Inverter

40% Cut Torque Variation

Benefit

22dB Conventional Inverter	26dB Forest	32dB Conventional On/Off	36dB Library
Inverter		On/Off	

19dB

SPECIFICATION

PRESTIGE PLUS

| WI-FI READY | 4-WAY AUTO SWING | PLASMASTER IONIZER PLUS | MULTI PROTECTION FILTER | MiCRO DUST FILTER | LOW NOISE 19DB | 10-YEAR INVERTER COMPRESSOR WARRANTY |

F09KM / F12KM

Model			Unit	F09KM	F12KM
capacity	Cooling	Min – Reted – Max	kW	0.30 / 2.50 / 4.00	0.30 / 3.50 / 4.25
			Btu/h	1,024 / 8,536 / 13,649	1,024 / 11,940 / 14,502
			kcal/h	- / 2,151 / -	- / 3,010 / -
	Heating	Min – Reted – Max	kW	0.30 / 3.20 / 6.90	0.30 / 4.00 / 7.32
			Btu/h	1,024 / 10,926 / 23,544	1,024 / 13,650 / 24,977
			kcal/h	- / 2,753 / -	- / 3,440 / -
	Heating - 7°C	Max	kW	4.30	4.70
Power Input	Cooling	Min – Reted – Max	W	60 / 490 / 1,400	60 / 833 / 1,400
	Heating	Min – Reted – Max	W	110 / 593 / 1,700	110 / 785 / 1,700
Running Current	Cooling	Min – Reted – Max	A	0.70 / 2.50 / 6.00	0.70 / 3.90 / 6.00
	Heating	Min – Reted – Max	A	1.05 / 2.90 / 7.40	1.05 / 3.70 / 7.40
EER			W/W	5.10	4.20
			(Btu/h)/W	17.42	14.33
SEER			-	9.40	9.10
P design C			kW	2.5	3.5
COP			W/W	5.40	5.10
SCOP			-	5.20	5.10
P design H			kW	3.2	3.3
Energy Label Grade	Cooling		-	A+++	A+++
	Heating		-	A+++	A+++
Annual Energy Consumption	Cooling		kWh/year	94	135
	Heating		kWh/year	862	1,045
Power Supply			Ø, V, Hz	1, 220-240, 50	1, 220-240, 50
Available Voltage Range			V	187 – 276	187 – 276
Power Factor	Cooling		%	96.0	96.0
	Heating		%	96.0	96.0
Moisture Removal			l/h	1.70	1.70
			pts/h	3.59	3.59
Indoor	Air Flow Rate	Cooling, Max / H /M / L	m³/min	12.4 / 11.1 / 8.7 / 6.6	12.4 / 11.1 / 8.7 / 6.6
		Heating, Max / H /M / L	m³/min	14.3 / 11.1 / 8.7 / 6.6	14.3 / 11.1 / 8.7 / 6.6
	Fan Motor Speed	Cooling, Max / H / HM / M / ML / L / SL	rpm	1300/1020/960/900/840/780	1300/1020/960/900/840/780
		Heating, Max / H / HM / M / ML / L / SL	rpm	1400/1200/1120/1020/900/780	1400/1200/1120/1020/900/780
	Sound Pressure Level	Cooling, Max / H /M / L / SL	dB(A)	- / 42 / 37 / 29 / 19	- / 42 / 37 / 29 / 19
		Heating, Max / H /M / L	dB(A)	- / 42 / 37 / 29	- / 42 / 37 / 29
	Sound Power Level		dB(A)	60	60
	Dimension (W × H × D)	Net	mm	875 × 295 × 235	875 × 295 × 235
	Weight	Net	kg	11.5	11.5
	Disconnect Switch		A	20A	20A
Outdoor	Air Flow Rate	Max	m³/min	49.0	49.0
			CFM	1730	1730
	Sound Pressure Level	Cooling, Reted	dB(A)	48	48
		Heating, Reted	dB(A)	50	50
	Sound Power Level		dB(A)	65	65
	Dimension (W × H × D)	Net	mm	870 × 650 × 330	870 × 650 × 330
	Weight	Net	kg	43.0	43.0
	Operation Range	Cooling	°C DB	-10 ~ 48	-10 ~ 48
		Heating	°C DB	-25 ~ 24	-25 ~ 24
Piping	Size	Liquid	in.	6.35 (1/4)	6.35 (1/4)
		Gas	in.	9.52 (3/8)	9.52 (3/8)
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20	3 / 7.5 / 20
	Max. Elevation Difference		m	10	10
Refrigerant		Type	-	R32	R32
		Pre Charge	g	1000	1000
		Additional Charge	g/m	20	20
Functions	Temperature Control			O	O
	Prefilter (washable/anti-fungus)			O	O
	Ionizer (Plasmaster Ionizer Plus or Plasmaster Ionizer)			O	O
	3M Filter (Multi Protection Filter or Micro Dust Filter)			O	O
	Auto Clean			O	O
	CHAOS Wind (Auto Wind)			O	O
	Steps, Fan/Cool/Heat			5/6/6	5/6/6
	Airflow Direction Control (up& Down)			O	O
	Airflow Direction Control (left & right)			O	O
	Remote Controller Type			Better	Better
	Setting Temperature Range (Cooling/Heating)			18–30 / 16–30	18–30 / 16–30
	Self Diagnosis			O	O
	Timer			O	O
	Sleep Operation			O	O
	Soft Dry Operation			O	O
	Restart Delay (minute)			3min	3min
	Deice Control (Defrost)			O	O
	Hot Start			O	O
	Jet Cool			O	O
	Low Ambient Operation			O	O
	LG Smart AC (Wi-Fi App.)			Embedded	Embedded
	Dry Contact			O	O
	Wired Remote Controller			O	O
	Low Heating MODE			O	O

DELUXE PLUS

WI-FI READY | 4-WAY AUTO SWING | PLASMASTER IONIZER PLUS | MULTI PROTECTION FILTER | MiCRO DUST FILTER | LOW NOISE 19DB | 10-YEAR INVERTER COMPRESSOR WARRANTY

D09TR / D12TR

Model			Unit	D09TR	D12TR
capacity	Cooling	Min ~ Reted ~ Max	kW	0.89 / 2.50 / 3.70	0.89 / 3.50 / 4.04
			Btu/h	3,039 / 8,536 / 12,633	3,039 / 1,950 / 13,794
	Heating	Min ~ Reted ~ Max	kW	0.89 / 3.20 / 5.00	0.89 / 4.00 / 6.00
			Btu/h	3,039 / 10,926 / 7,072	3,039 / 13,658 / 20,487
	Heating - 7°C	Max	kW	3.20	3.50
Power Input	Cooling	Min ~ Reted ~ Max	W	170 / 572 / 1,400	170 / 933 / 1,400
	Heating	Min ~ Reted ~ Max	W	160 / 711 / 1,600	160 / 976 / 1,600
Running Current	Cooling	Min ~ Reted ~ Max	A	1.00 / 2.50 / 6.00	1.00 / 4.00 / 6.00
	Heating	Min ~ Reted ~ Max	A	1.00 / 3.20 / 7.00	1.00 / 4.30 / 7.00
EER			W/W	4.27	3.65
			(Btu/h)/W	14.57	12.45
SEER			-	7.90	7.60
P design C			kW	2.5	3.5
COP			W/W	4.30	4.00
SCOP			-	4.30	4.30
P design H			kW	2.8	2.9
Energy Label Grade		Cooling	-	A++	A++
		Heating	-	A+	A+
Annual Energy Consumption		Cooling	kWh/year	111	161
		Heating	kWh/year	852	883
Power Supply			Ø, V, Hz	1, 220-240, 50	1, 220-240, 50
Available Voltage Range			V	187 ~ 276	187 ~ 276
Power Factor		Cooling	%	96.0	96.0
		Heating	%	96.0	96.0
Moisture Removal			l/h	1.10	1.30
Indoor	Air Flow Rate	Cooling, Max / H /M / L	m³/min	13.0 / 11.0 / 9.0 / 5.5	15.5 / 12.4 / 11.1 / 8.7
		Heating, Max / H /M / L	m³/min	13.5 / 11.0 / 9.0 / 6.5	16.5 / 14.3 / 11.1 / 8.7
	Sound Pressure Level	Cooling, Max / H /M / L / SL	dB(A)	48 / 42 / 37 / 27 / 19	48 / 42 / 37 / 27 / 19
		Heating, Max / H /M / L	dB(A)	48 / 42 / 37 / 27	48 / 42 / 37 / 27
	Sound Power Level		dB(A)	60	60
	Dimension (W × H × D)	Net	mm	837 × 308 × 189	837 × 308 × 189
	Weight	Net	kg	9.1	9.1
Outdoor	Air Flow Rate	Max	m³/min	35.0	35.0
	Sound Pressure Level	Cooling, Reted	dB(A)	49	49
		Heating, Reted	dB(A)	51	51
	Sound Power Level		dB(A)	65	65
	Dimension (W × H × D)	Net	mm	770 × 545 × 288	770 × 545 × 288
	Weight	Net	kg	34.1	34.1
	Operation Range	Cooling	°C DB	-15 ~ 48	-15 ~ 48
		Heating	°C DB	-20 ~ 24	-20 ~ 24
Piping	Size	Liquid	in.	ø 6.35	ø 6.35
		Gas	in.	ø 9.52	ø 9.52
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20	3 / 7.5 / 20
	Max. Elevation Difference		m	10	10
Refrigerant		Type	-	R32	R32
		Pre Charge	g	800	800
		Additional Charge	g/m	20	20
Functions	Temperature Control			O	O
	Prefilter (washable/anti-fungus)			O	O
	Ionizer (Plasmaster Ionizer Plus or Plasmaster Ionizer)			O	O
	3M Filter (Multi Protection Filter or Micro Dust Filter)			O	O
	Auto Clean			O	O
	CHAOS Wind (Auto Wind)			O	O
	Steps, Fan/Cool/Heat			5/6/6	5/6/6
	Airflow Direction Control (up& Down)			O	O
	Airflow Direction Control (left & right)			O	O
	Remote Controller Type			Better	Better
	Setting Temperature Range (Cooling/Heating)			18~30 / 16~30	18~30 / 16~30
	Self Diagnosis			O	O
	Timer			O	O
	Sleep Operation			O	O
	Soft Dry Operation			O	O
	Restart Delay (minute)			3min	3min
	Deice Control (Defrost)			O	O
	Hot Start			O	O
	Jet Cool			O	O
	Low Ambient Operation			O	O
	LG Smart AC (Wi-Fi App.)			Embedded	Embedded
	Dry Contact			O	O
	Wired Remote Controller			O	O
	Low Heating MODE			O	O

MEMO

LG Electronics

www.lgeaircon.com

LG Electronics, Air Conditioning &
Energy Solution Company
20 Yoido-dong, Youngdungpo-gu,
Yoido P.O.Box 355 Seoul 150-721, Korea

Distributed by