



## ARTCOOL

2015 Residential Air Conditioner



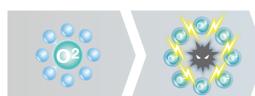
The powerful plasma lonizer protects you from odors and harmful substances in the air with over 3 million ions to sterilize not only the air passing through the air conditioner, but also surrounding surfaces for a safer, cleaner environment.

\* Specifications may vary for each model.



## Impact of Over 3 Mollions Ions

## Sterilization and Deodorization



### Ion Cluster Generation

(+)(-) lon clusters are generated through polar bonding of H2O molecules in the air. Surrounding of Harmful Substances

lons surround and bind to harmful substances such as bacteria and viruses.



OH Radical Production

OH radicals are produced through a chemical



Chemical Reaction

The OH radicals react with harmful substances.

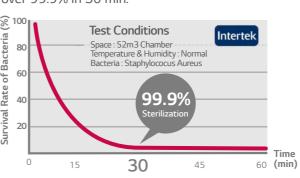
# HaD HaD

### Complete Sterilization

The substances are transformed into H20 molecules leaving your indoor air fresher and safer.

## **Sterilization Performance Evaluations**

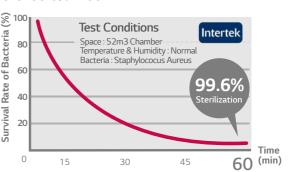
Sterilize Bacteria (E.coli colon bacillus) over 99.9% in 30 min.



Sterilize Bacteria (Staphyiococus Aureus) over 99.6% in 60 min.

99.9%

Sterilization



## **Energy Saving** (\$)



yet silent performance while also greatly lowering energy consumption by as much as 60%. LG has taken energy efficiency to a whole new level with its inverter technology.



## **BLDC Compressor**

The LG inverterV air conditioner comes with a BLDC compressor that uses a strong neodymium magnet. Its compressor thus has improved efficiency compared with an AC inverter.



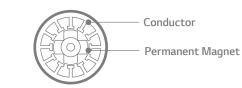
Minimizes Oil Circulation with an Oil-Separator system

Reliability second at high speed Efficiency increased at low speeds

Maximizes Motor Efficiency - Concentrate & distribute Increase EER at lower loads Minimizes Compression Loss

### **BLDC Fan Motor**

The BLDC Fan motor, which is specifically adapted to work with the LG InverterV, makes quiet cooling possible compared to conventional AC/DC motors. In addition, precise speed control provides 13 different steps for smoother operation.

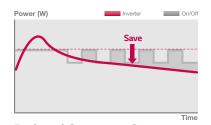


## **Torque Control**

Delicate torque control enables the compressor to operate at minimum hertz levels of 35Hz and below, which minimizes noise and vibration while increasing energy efficiency.

## **Quick cooling with Lower Energy Consumption**

By utilizing a variable speed compressor rather than a fixed speed compressor, the cooling capacity of the LG inverter system can be varied to suit indoor conditions.



Reduced Operating Costs The advanced InverterV drive minimizes energy loss and keeps the efficiency level high to provide the most economical air conditioning system.



Maximum User Comfort The compressor speed of LG Inverter V is constantly adjusted and varied to maintain the desired temperature with minimal fluctuation.



Quick Cooling The speed and performance of the

Inverter V compressor is faster and more powerful, allowing it to cool much faster than conventional air conditioners.

## 

Various filtration and Mosquito Away protect the users

from all harmful substances including odor, bacteria,

allergen, virus, micro-dust, and mosquitos.





**MULTI Protection Filter** 

The advanced technologies of 3M & LG remove

and allergens to provide a safer, healthier

harmful micro-particles including viruses, bacteria

Powered by 3M Tech

environment.









## **Antibacterial Air Filter**

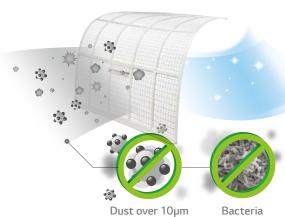
\*Plasmaster

**Auto Cleaning** 

\* Specifications may vary for each model.

\* Depending on the experimental conditions.

The Antibacterial Air Filter is the first line of defense, designed to initially capture dust particles over 10µm in size then eliminate finer particles, bacterias from various other sources.



The interior of the air conditioner is maintained by

drying off the heat exchanger, then sterilizing the

interior once more with **Plasmaster** ions to

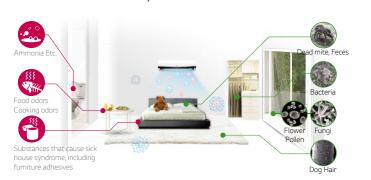
eliminate unwanted mold and odors.



## \*Plasmaster Ioniser<sup>PLUS</sup>

3 million ions generated from Plasmaster Ionizer track and eliminate virus, bacteria and odor floating in the room as well as on curtain, couch, carpet and clothes.

### Absolute Sterilization, Plus Deodorization



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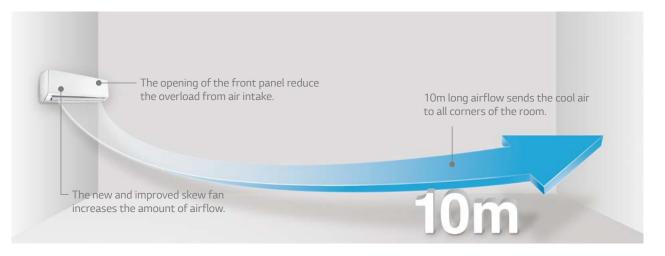




regardless of outside temperature. LG air conditioner is cool in a short period of time.

## 10m Windblast

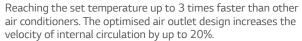
The new and improved skew fan increases the amount of airflow. 10m long airflow sends the cool air to all corners of the room.



## **Jet Cool**

In the hot climate of Algeria, it is essential for an air conditioner to cool in a short period of time.





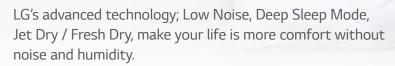


In jet cooling mode, strong air blows out at a temperature of 18°C for 30 minutes

## Comfort Comfort







<sup>\*</sup> Specifications may vary for each model.

## Low Noise 19dB

LG's unique outdoor fan and BLDC motor eliminates unnecessary noise and allows smooth operation. Additionally, night silence mode can make more silent environment for you.

### Skew Fan

By minimizing the surface pressure of the fan blade when in contact with the air, the peak noise is reduced to a level that is among the lowest in the world.



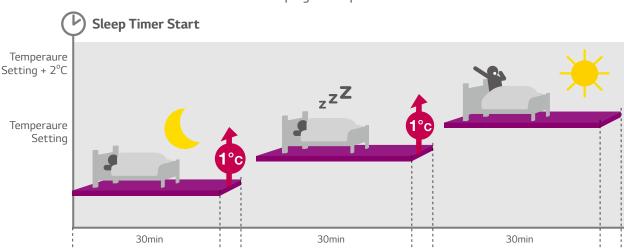
**BLDC Fan Motor** 

With strong torque and powerful ND magnetism inside the rotor, the BLDC motor provides large air volume and high static pressure. Precise speed control provides 13 different steps which makes operation smoother. Both electrical and mechanical noise is lower, and high speed operation is available.



## **Deep Sleep Mode**

The deep sleep mode will increase the temperature by a degree every 30 minutes, and eventually by 2 degrees per hour to create a more comfortable and sound sleeping atmosphere.



LG's unique microprocessor is programmed to automatically increase the temperature setting to match the metabolism of human body at night. Fan speed will automatically switch to low setting, and sleep timer can be preset for a maximum period of 7 hours.

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## **ARTCOOL** INVERTER **V**























Jet Cool

Low Noise Deep Sleep 19dB Mode

Dual Protection Filter

Auto Cleaning

Plasmaster Plasmaster MULTI Gold Fin Protection Filter Powered by 3M Tech

Model			ES-W096BWS0	ES-W126BWS0	ES-W186CWS0	ES-W246CWS0
Cooling Capacity		kW	0.89~2.50~3.70	0.90~3.50~4.04	0.90~5.20~6.00	0.90~7.03~8.65
Heating Capacity		kW	0.89~3.20~4.10	0.89~3.66~5.10	0.90~6.30~9.00	0.90~8.20~11.40
PowerInput	Cooling	W	1010	1500	2190	1611
	Heating	W	1050	1650	2330	2418
Running Current	Cooling	A	2.66	4.6	6.6	9.5
	Heating	A	3.4	4.65	7.3	10.1
Max Current	Cooling	A	6.5	6.5	7.8	13
	Heating	A	6	6	9.4	14
EER		W/W	3.85	3.47	3.47	3.21
COP		W/W	3.86	3.49	3.82	3.52
Power Supply		Ø/V/Hz	1/220-240/50	1/220-240/50	1/ 220-240/50	1/220-240/50
Air Flow Rate	Indoor;Max	m³/min(CFM)	12 (423)	12 (423)	19 (670)	19 (670)
	Outdoor,Max	m³/min(CFM)	27 (953)	27 (953)	50 (1765)	60 (2119)
Moisture Removal		l/h.	1.1	1.3	2	2.6
Sound Pressure Level	Indoor,H/M/L/Sleep	dB(A) ±3	38/33/23/19	39/33/23/19	42/40/35/29	42/40/35/29
	Outdoor,Max	dB(A) ±3	47	47	54	56
Sound Power Level	Indoor,H/M/L/Sleep	dB(A) ±3	57	57	60	60
	Outdoor,Max	dB(A) ±3	65	65	65	70
Refrigerant & Charge		Type	R410A	R410A	R410A	R410A
		g(oz) at 7,5 m	900 (31,75)	900 (31,75)	1350 (47,63)	1800 (63,49)
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)	20(0.22)	35(0.37)
		9/11(02/10)	Rotary	Rotary	Twin Rotary	Twin Rotary
Compressor	Type Motor Type		Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
Fan(Indoor)			Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	Type Mater Time		BLDC	BLDC	BLDC	BLDC
	Motor Type	W	20	20	20	30
	Motor Output	VV				
Fan(Outdoor)	Туре		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
	Motor Type	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	BLDC	BLDC	BLDC	BLDC
	Motor Output	W	43	43	85	124
Circuit Breaker*		A	15	15	20	25
Power Supply Cable		No.*mm²	3*1,0	3*1,0	3*1,5	3*2,5
Connection Cable No.*mm²		No.*mm²	4*1.0 (Including Earth)	4*1.0 (Including Earth)	4*1.0 (Including Earth)	4*1.0 (Including Earth)
Connection Pipe	Liquid Side	mm(in)	Ø 6.35 (1/4)	Ø 6.35 (1/4)	Ø 6.35 (1/4)	Ø 9.52 (3/8)
	Gas Side	mm(in)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 12,7 (1/2)	Ø 15,88 (5/8)
	Drain Hose (O.D/I.D)	mm(in)	21.5/16(0.85/0.63)	21.5/16(0.85/0.63)	21.5/16(0.85/0.63)	21.5/16(0.85/0.63)
Dimensions	Indoor(W*H*D)	mm	885*285*210	885*285*210	1030*325*250	1030*325*250
		inch	35.2*11.2*8.3	35.2*11.2*8.3	40.6*12,8*9.8	40.6*12,8*9.8
	Outdoor(W*H*D)	mm	717*500*230	717*500*230	870*655*320	870*800*320
		inch	28.2*19.0*9.1	28.2*19.0*9.1	34.3*28.8*12.6	34.3*31,5*12.6
Net Weight	Indoor	kg(lbs)	9	9	14.8	15.1
	Outdoor	kg(lbs)	27.4	29	43.8	55.8
Operation Range	Cooling(Outdoor)	°C(°F)	-10~48	-10~48	-10~48	-10~48
	Heating(Outdoor)	°C(°F)	-10~24	-10~24	-15~24	-15~24
Max. Piping Length		m(ft)	15 (49,2)	15 (49,2)	20 (65,6)	30 (98,4)
Max. Elevation Difference		m(ft)	7 (23)	7 (23)	10 (33)	10 (33)

### www.lg.com/za

- Product label KW capacity may vary from catalogue, due to different countries labeling requirements.
- Performance certification available on request.