Key Feature

DUAL Vane

AI Comfort Control

Dual Vane spreads airflow up or down, further and faster, for ideal comfort in any season.



22% UP
Air Flow Distance

23% UP
Cooling Performance Speed

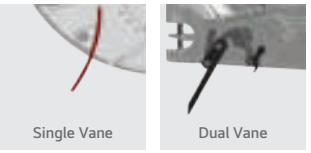
6% UP
Heating Performance Speed

Longer Stream Wind

The innovative Dual Vane system combines two separate vanes into one long, unified vane, allowing airflow to reach further than traditional models. This extended airflow ensures more effective and consistent cooling throughout the room, enhancing comfort in every corner.

Indirect Flow

The Dual Vane system offers an indirect airflow mode for a more comfortable experience than traditional single vane. Cold air flows gently from above your head, while warm air rises from beneath your feet, minimizing the discomfort of direct wind contact and creating a more balanced and pleasant environment.



Faster Cooling & Heating

Dual Vane can provide optimized airflow that single vane can not achieve It enables cooling up to 23% faster and heating up to 6% faster than single vane.



※ Performance comparison vs Single Vane

1) Date 2024.12, Measurement results in LG air conditioner R&D Center, installation height 2.0 m, Fan mode. Using a wind speed probe, the height range from 0.1 to 1.7 m is measured in 0.2 m increments. Measures the maximum distance reached by airflow more than 0.25 m/s speed from the products.
2) Date 2023.10 LG air conditioner home environment testing chamber, 20.9 ㎡/50.1 ㎡, Jet Mode, Indoor DB (33±0.3)℃ / RH (60±5)%, Outdoor DB (35±0.3)℃ / RH (50±5)% 18℃ setting on cooling mode, Indoor DB (12±0.3)℃ / RH (60±5)%, Outdoor DB (7±0.3)℃ / RH (87±5)% 30℃ setting on heating mode, measured the time took reduce 5℃ (for Cooling) / rise 5℃ (for heating), from the initial average room temperature. Test Model : S3-M12KL2MB (SK), S3-M121L1C0 (S1 New Platform)
3) The performance result may vary depending on actual usage conditions.

Comfort Humidity Control

AI Comfort Control

No excess chill, Comfort Humidity Control perfects your home with humidity optimized to your desired temperature.

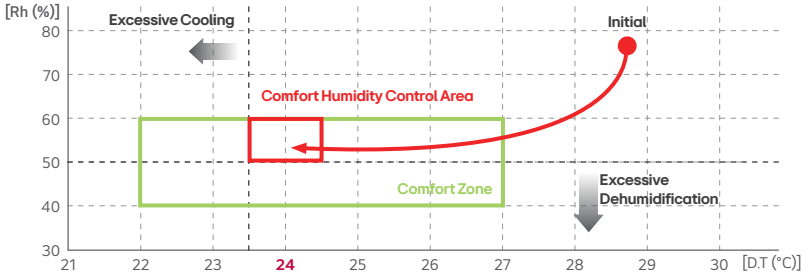
Conventional



LG DUALCOOL



Operation Example (24°C Setting)



※ The air flow changes automatically based on the operating environment.
※ This function can be used through remote controller and LG ThinQ app.
※ When connected to Multi ODU, this function may not be supported.

※ For our policy of continuous product improvement, specification, design and feature are subject to change without prior notice.
※ Specifications may vary for each model.

COOLING

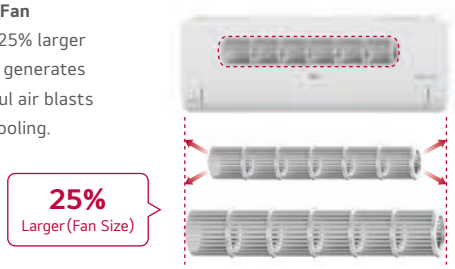
Fast Cooling

The cool airflow rapidly reaches all the corners of the room, keeping the space cool and comfortable.

How It Works

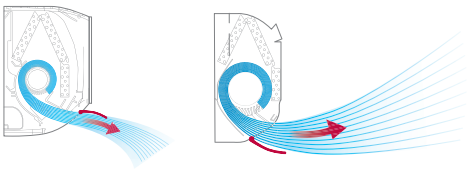
Bigger Skew Fan

Experience a 25% larger skew fan that generates highly powerful air blasts for efficient cooling.



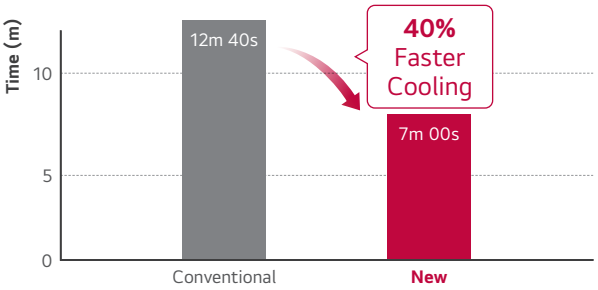
Cooling Outlet

The larger and optimally designed cooling outlet ensures broader coverage, rapidly cooling larger areas for a more comfortable environment.



Test Result

Test Result



※ Depending on the experimental conditions.

TÜVRheinland®

※ 26.5℃ Reach Time Comparison
※ Test Model
- Conventional : TS-H2465DA0
- New : US-Q242Kxy0

※ Test Conditions :
Indoor temperature 33°C, Outdoor temperature 35°C,
Relative humidity 60%, Setting temperature 26°C
Test room size : 4.3 m x 7.0 m x 2.3 m

HEATING

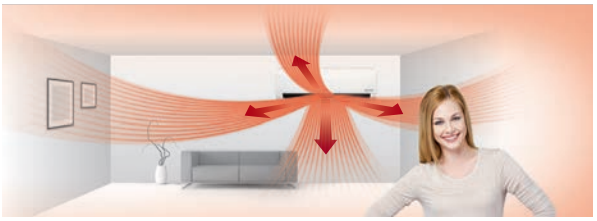
Fast Heating

LG Residential Air Conditioners satisfy user needs by consuming less energy and heating a wider space in a shorter period. This creates a warm and comfortable living environment.

How It Works

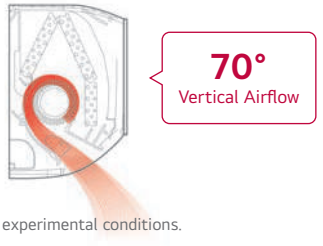
4 Way Auto Swing (Easy Airflow Control)

The 4-Way Auto Swing feature adjusts airflow dynamically based on the surrounding environment. This ensures the optimal distribution of warm air throughout living areas, facilitating quick and efficient heating.



Vertical Airflow

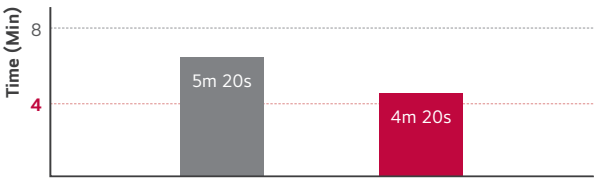
During heating, the vane directs warm air downward, ensuring a pleasant and balanced room temperature.



※ Depending on the experimental conditions.

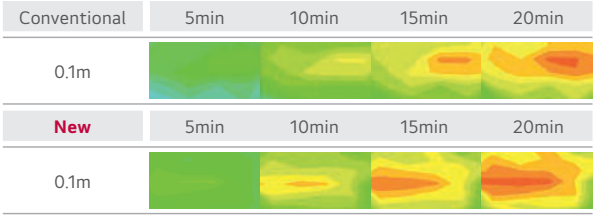
Benefit & Test Result

22% Quick Heating



※ Test Conditions :
Outdoor temperature : 7°C, Indoor temperature : 12°C,
Humidity : 87%, Remote control : 30°C Power

Changes in Temperature Over 20 Minutes



※ Test Conditions :
Outdoor temperature : 7°C, Indoor temperature : 12°C,
Humidity : 87%, Remote control : 30°C Power

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UVnano™

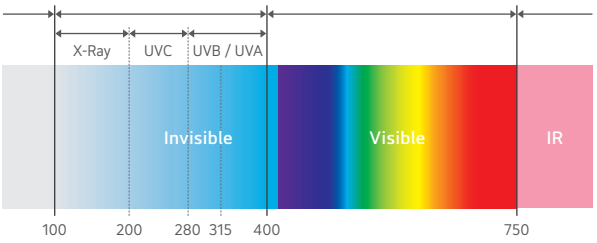
LG DUALCOOL, keeping the fan (inside the unit) 99.99% bacteria-free with ultraviolet light to ensure that the air passing through is clean too.

What Is UVnano™ and How It Works?

- Emit Ultraviolet rays of UVC wavelength directly damage the DNA of microorganisms (bacteria/mold/viruses) making it impossible for them to multiply.
- High absorption into DNA at 260 to 270 nm wavelengths

DNA Absorption Efficiency by Wavelength

Electromagnetic Spectrum and Types



Destruction Nuclear Sequence (Chain)



Before irradiation

After irradiation



UVC Applied Product

LG Product



Humidifier | Stand AC | Water Purifier | Refrigerator

Various Product Lines



Utensil | Earbud | Surgery Kit | Air Cleaning Robot

Benefit & Verification

Keep the fan 99.99% bacteria-clean for a cleaner breeze.



Removes up to **99.99%** of bacteria from the internal fan.

TÜVRheinland®

※ Test Condition
- Test Model : S3NM12JL1GA(SJ), S3NM24K21GA(SK)
- Test Standard : LG test method with referenced to ISO 20743:2007
- Bacteria : Staphylococcus aureus, Staphylococcus epidermidis, Klebsiella pneumoniae

※ UVnano is an integrated marketing name that applies LG Electronics' entire home appliances and it is a compound of the words UV (ultraviolet) and nanometer (unit of length).

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Wi-Fi R32 AI Air



AI DUAL Inverter™

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

LG participates in the ECP programme for EUROVENT AC program.
Check ongoing validity of certification : www.eurovent-certification.com

AI-Advanced Care with Lower Energy Consumption

- AI AIR: Your air conditioner takes care of everything effortlessly, ensuring optimal comfort by adapting its airflow with radar sensors tracking your location and ambient temperature via ThinQ.
- High SEER: Enjoy top performance and significant energy savings.
- Soft Air: Stay comfortably cool with ultra-fine settings for wind strength and temperature, avoiding any chill.
- Dual Vane: Multi-link technology optimizes control of two separate vanes, expanding the airflow range.
- Comfort Humidity Control: Maintain comfort without excess chill by finely adjusting airflow based on desired temperature and current humidity.
- AI kW Manager (Cooling Mode Only): Automatically sets energy-saving stages based on your target electricity and period information, ensuring efficient energy use.
- All Cleaning: The unit automatically operates from cleaning to drying, keeping the interior hygienic.
- Automatic Energy Saving: Detects open windows and activates Pro-Active Energy Saving Mode Control.
- Sleep Timer+ (Plus): Adjusts cooling temperature based on your air conditioner usage patterns for a restful night.
- Low Heating, Plasmaster™ Ionizer++, Allergy Filter, Freeze Cleaning: Ensure a cleaner, healthier, and more comfortable indoor environment.

Single Combination

EFFICIENT DATA				H09S1DA.SS1	H12S1DA.SS1	H18S1DA.SS1	H24S1DA.SS1
Capacity	Cooling	Min ~ Rated ~ Max	kW	0.89 / 2.5 / 3.8	0.89 / 3.5 / 4.2	0.9 / 5.0 / 5.5	0.9 / 6.6 / 7.42
	Heating	Min ~ Rated ~ Max	kW	0.65 / 3.2 / 4.9	0.65 / 4.0 / 5.4	0.9 / 5.8 / 6.4	0.9 / 7.5 / 8.64
	Heating -7 °C	Max	kW	3.3	3.6	4.65	6.00
Power Input	Cooling	Min ~ Rated ~ Max	W	180 / 555 / 1,260	180 / 890 / 1,400	210 / 1,545 / 1,940	210 / 2,164 / 2,500
	Heating	Min ~ Rated ~ Max	W	180 / 700 / 1,450	180 / 920 / 1,600	210 / 1,560 / 2,000	210 / 2,238 / 2,750
Running Current	Cooling	Min ~ Rated ~ Max	A	1.5 / 2.6 / 5.5	1.5 / 4.1 / 6.1	1.6 / 6.9 / 9.0	1.6 / 9.8 / 14.0
	Heating	Min ~ Rated ~ Max	A	1.5 / 3.2 / 6.3	1.5 / 4.25 / 7.0	1.6 / 7.0 / 9.5	1.6 / 10.0 / 14.0
EER			W/W	4.50	3.93	3.24	3.05
SEER			-	8.7	8.5	7.0	6.9
COP			W/W	4.57	4.35	3.72	3.35
SCOP (Average / Warmer)			-	4.6 / 5.7	4.6 / 5.7	4.3 / 5.6	4.3 / 5.6
P design C / P design H			kW	2.5 / 2.8	3.5 / 2.8	5.0 / 3.9	6.6 / 5.0
Energy Label Grade (A+++ to D Scale)		Cooling	-	A+++	A+++	A++	A++
		Heating (Average/Warmer)	-	A++ (A+++)	A++ (A+++)	A+ (A+++)	A+ (A+++)
Annual Energy Consumption		Cooling	kWh	101	144	250	335
		Heating (Average/Warmer)	kWh	852 (368)	852 (368)	1,270 (534)	1,626 (670)
INDOOR UNIT				**H09S1DA.NS1**	**H12S1DA.NS1**	**H18S1DA.NS1**	**H24S1DA.NS1**
Dimensions (W × H × D)		Net	mm	895 x 307 x 235	895 x 307 x 235	895 x 307 x 235	895 x 307 x 235
		Shipping	mm	967 x 383 x 296	967 x 383 x 296	967 x 383 x 296	967 x 383 x 296
Weight		Net	kg	11	11	12.8	12.8
Air Filter Type				Prefilter (Washable), Allegy Filter	Prefilter (Washable), Allegy Filter	Prefilter(Washable), Allegy Filter	Prefilter(Washable), Allegy Filter
Air Flow Rate	Cooling	SH / H / M / L	m^3/min	13.6 / 10.5 / 8.1 / 5.7	13.6 / 10.5 / 8.1 / 5.7	13.6 / 11.7 / 9.9 / 7.0	14.6 / 12.3 / 10.1 / 7.3
	Heating	SH / H / M / L	m^3/min	14.2 / 10.5 / 8.1 / 5.7	14.2 / 10.5 / 8.1 / 5.7	14.2 / 11.7 / 9.9 / 7.0	14.6 / 12.3 / 10.1 / 7.3
Sound Pressure Level	Cooling	SH / H / M / L / SL	dB(A)	47 / 40 / 35 / 27 / 19	47 / 40 / 35 / 27 / 19	49 / 44 / 39 / 34 / 29	51 / 47 / 42 / 34 / 31
	Heating	SH / H / M / L	dB(A)	48 / 40 / 35 / 27	48 / 40 / 35 / 27	50 / 44 / 39 / 34	51 / 47 / 42 / 34
Sound Power Level			dB(A)	60	60	60	65
Dehumidification Rate			l/h	1.15	1.30	1.80	2.50
Drain Hose Size		O.D, I.D	mm	21.5, 16	21.5, 16	21.5, 16	21.5, 16
OUTDOOR UNIT				**H09S1DA.U12**	**H12S1DA.U12**	**H18S1DA.U18**	**H24S1DA.U24**
Dimensions (W × H × D)		Net	mm	717 x 495 x 230	717 x 495 x 230	770 x 545 x 288	870 x 650 x 330
		Shipping	mm	836 x 540 x 321	836 x 540 x 321	919 x 599 x 392	1,026 x 683 x 446
Weight		Net	kg	25.1	25.1	32.5	44.0
Operation Range		Cooling	°C DB	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
		Heating	°C DB	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24
Power Supply			Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Sound Pressure Level	Cooling	Rated	dB(A)	49	49	53	54
	Heating	Rated	dB(A)	51	51	55	57
Sound Power Level			dB(A)	65	65	65	70
Air Flow Rate		Max	m^3/min	27.0	27.0	35.0	49.0
Circuit Breaker			A	15	15	20	25
Power Supply Cable			No. × mm^2	3 x 1.0	3 x 1.0	3 x 1.5	3 x 2.5
Power and Communication Cable			No. × mm^2	4 x 1.0 (Including Earth)	4 x 1.0 (Including Earth)	4 x 1.0 (Including Earth)	4 x 1.0 (Including Earth)
Refrigerant	Type / GWP (Global Warming Potential)		-	R32 / 675	R32 / 675	R32 / 675	R32 / 675
	Pre Charged Amount / t-CO_2 eq		kg	0.8 / 0.540	0.8 / 0.540	1.13 / 0.763	1.15 / 0.776
	Chargeless		m	12.5	12.5	7.5	7.5
	Additional Charge		g/m	20	20	20	20
Piping	Size	Liquid	mm	ø 6.35	ø 6.35	ø 6.35	ø 6.35
		Gas	mm	ø 9.52	ø 9.52	ø 12.70	ø 15.88
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20	3 / 7.5 / 20	3 / 7.5 / 20	3 / 7.5 / 30
		No Charge (Chargeless)	m	12.5	12.5	11.5	7.5
	Max. Elevation Difference		m	10	10	10	15
Compressor	Type		-	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary
ACCESSORIES & OTHERS							
Multi Compatible				Y	Y	Y	Y
PI 485				-	-	Y	Y
Dry Contact				Y	Y	Y	Y
Wired Remote Controller				Y	Y	Y	Y

* : Sound Pressure is not a value declared on Eurovent Program.
※ This product contains Fluorinated greenhouse gases (R32).
※ S : Sleep / L : Low / M : Medium / H : High
※ GWP : Global warming potential
※ t-CO_2eq : F-gas(kg)*GWP/1000
※ Y : Available or Applied / - : Not Available or Not Applied
※ For our policy of continuous product improvement, specification, design and feature are subject to change without prior notice.