

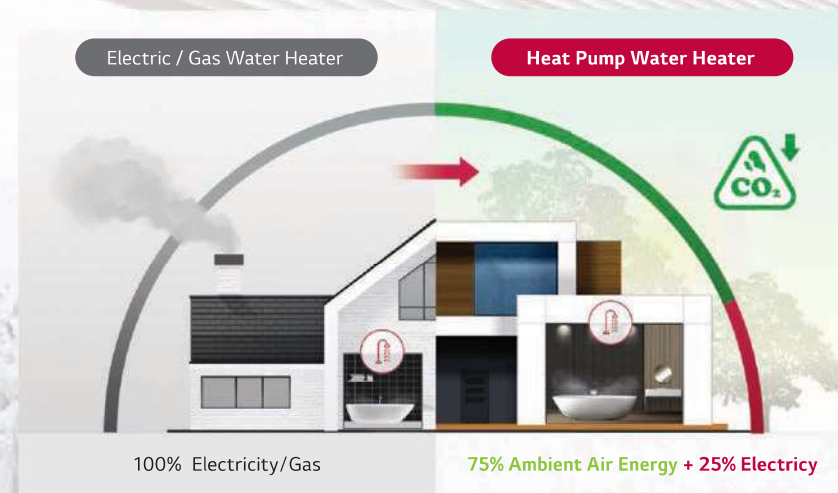
HEAT PUMP WATER HEATER

THERMA V



What is a Heat Pump Water Heater?

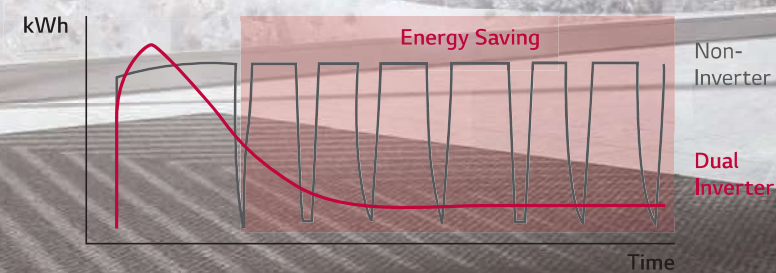
With an increasing emphasis on eco-conscious energy solutions, the LG Heat Pump Water Heater obtains 75% of its energy from outside air. This renewable energy source converts low temperature to high temperature using two heat exchangers, a condenser and an evaporator.



* LG Inverter Technology

LG Inverter Technology can be found in many of LG's renowned devices, from refrigerators and washing machines to our air conditioner line-up. This technology allows the inverter compressor to achieve superior energy efficiency, cooling performance and comfort compared to compressors with on-off capabilities.

Power Consumption Change



Flexible Installation Locations



Laundry Room



Storage Room



Bathroom



Bathroom



Garage



Garage

※ Actual product appearance may differ from the above simulated scene.

Stylish Design

LG's exclusive square design and luxury silver color make it an excellent design for the interior.

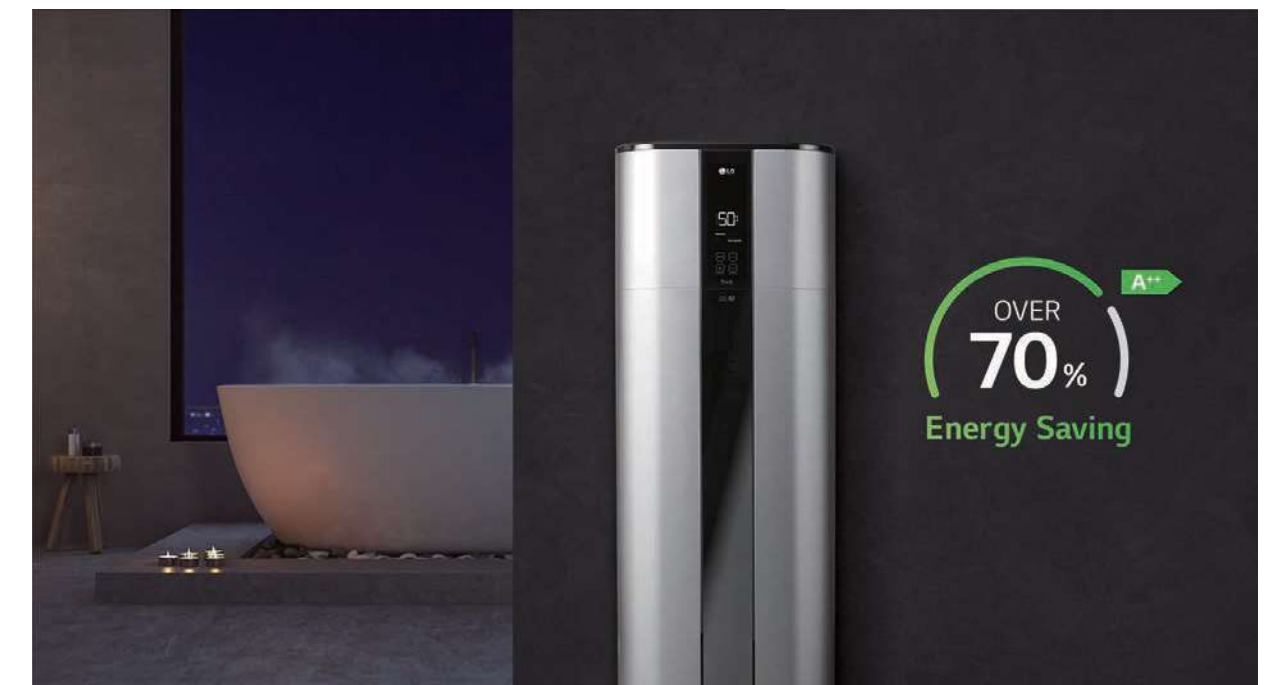


Perfect Matching with Various Spaces



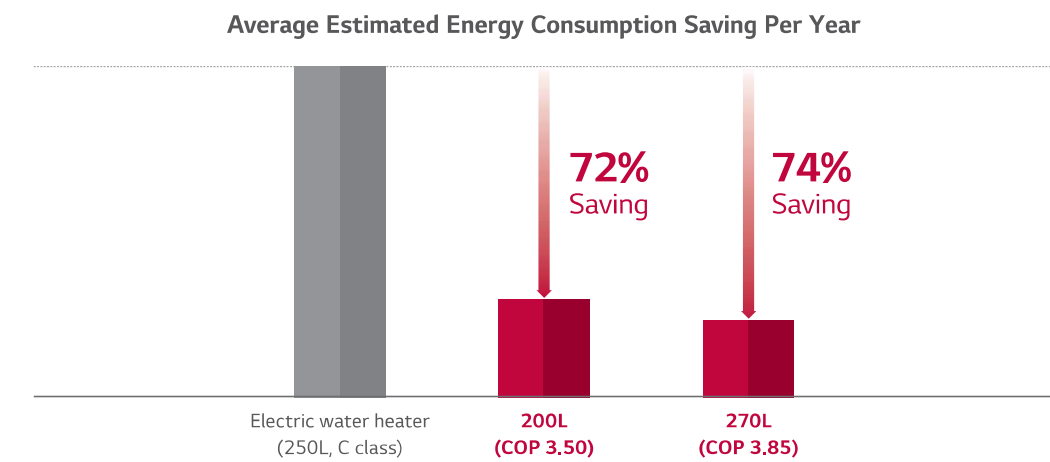
Top Class Energy Efficiency

LG's new Inverter Heat Pump Water Heater allows for an impressive energy savings of over 70% compared to a conventional electric heater due to the highly efficient DUAL Inverter Compressor.



Energy Saving

LG's Heat Pump Water Heater, using market's first DUAL Inverter Compressor, DUAL Inverter Compressor can run at low rotational speed (up to 10Hz) and reduces energy consumption, 70% more than Electric Water Heater (250L, C class).



※ Simulation Data on Daily Electricity Consumption, based on EU Climate Condition (Average, 15°C).
 ※ Data is based on LG Internal Simulation.
 ※ The data is depending on the experimental condition and is changeable according to the usage environment

Powerful Heating Performance

The DUAL Inverter Compressor maximizes the heat pump's power in turbo mode for a 30% faster heating time for first-use water than auto mode operation.



Fast & Powerful Water Heating

Turbo Mode can run at high speeds (up to 80Hz) with simultaneous heating. The target water temperature in the tank will be achieved 30% faster in Turbo Mode than in Use auto mode or Auto Mode. Furthermore, Turbo Mode can recover the water at 25% warmer temperatures than Use auto mode or Auto Mode after 1 hour from an empty tank.

※ The data is based on LG internal test and simulation.

※ The data is depending on the experimental condition and is changeable according to the usage environment

Continuous Operation

The two heat sources, two heaters and heat pump, complement each other perfectly. If one of the heaters or the heat pump fails, the other heat source allows alternative operation.



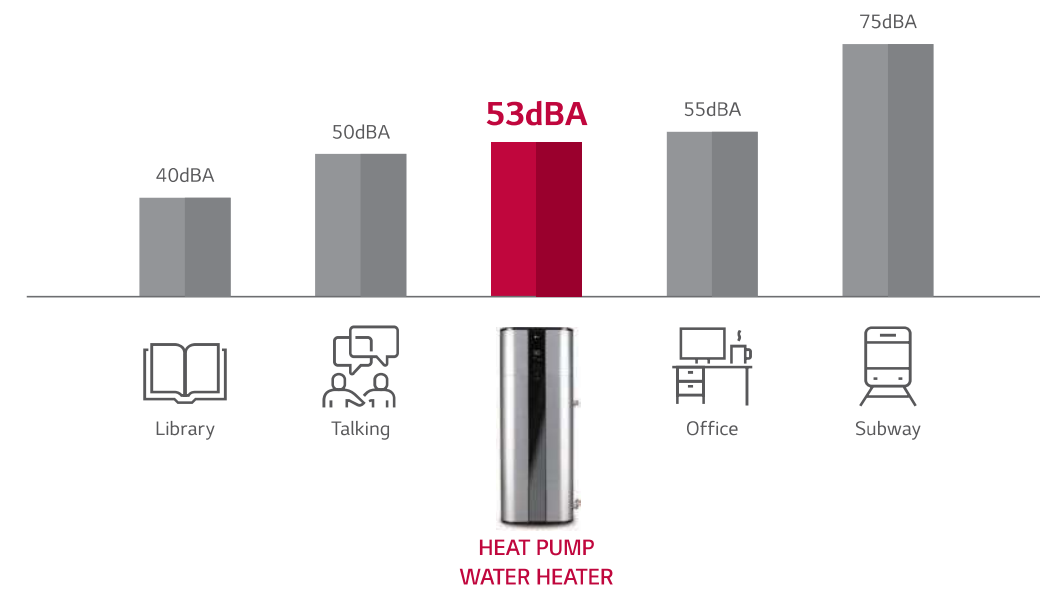
Low Noise Operation

Through BLDC Motor and DUAL Inverter Compressor, noise is reduced to 53dBA (sound power) and provides a comfortable environment even in indoor installation scenes.



Low Noise Operation

Through BLDC Fan Motor and DUAL Inverter Compressor, noise is reduced to 53dBA and creates a comfortable environment even in indoor installation scenes.



※ Sound Pressure is 38dBA based on LG internal test.

※ The data is based on LG Internal Test (Sound Power).

※ The data is based on LG internal test and simulation.

※ The data is depending on the experimental condition and is changeable according to the usage environment.

Various Operation Mode

LG Inverter Heat Pump Water Heater can be operated in 4 different modes for different conditions.

Heat Pump
Heating water with the heat pump function

Turbo
Boosting heat function to quickly heat water

Auto
Automatically controls the heat pump and heating functions for optimal performance

Vacation
Minimizing the energy loss while heat function is not in use

Smart Control

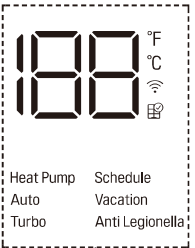
With the LG ThinQ smartphone app, users can easily control and monitor the heat pump, checking for current water temperatures, setting operating schedules and more.



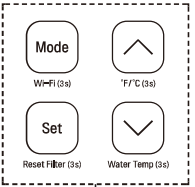
Operation



Using Basic Control
Display Screen



2 Display Screen



1 Button

Button	Display Screen	Description
Mode	Heat Pump	To select the Heat Pump mode.
	Auto	To select the Auto mode.
	Turbo	To select the Turbo mode.
	Vacation	To select the Vacation mode.
-	Schedule	Set Schedule mode only in LG ThinQ application.
-	Anti Legionella	To select the Anti Legionella mode.
Set	-	To set the desired water temperature.
Up/Down	18.8	To adjust the desired water temperature.
Wi-Fi (3s)	Wi-Fi icon	To enable the Wi-Fi pairing.
Reset Filter (3s)	Filter icon	To reset the filter alarm.
°F/°C (3s)	°F/°C icon	To change unit between °F and °C.
Water Temp (3s)	18.8	To display the current water temperature for 5 seconds.

Embedded Wi-Fi

You can control the LG ThinQ app, checking information such as current water temperature, operating mode and more.



Smart Diagnosis

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



Easy Check & Monitoring

Easily comprehensible error messages make detecting a solution and contacting the service center simple and convenient.



powered by DUAL Inverter Compressor™

LG's DUAL Inverter Compressor™ saves energy with a wide power-saving operating range. Also, in max operation mode, it produces power heating to perform quiet and efficient heating.



Varied-Speed Dual Rotary

A compressor motor with a wider rotational frequency that is energy efficient and has a higher volumetric quick cooling capacity than conventional non-inverter compressor.

Product Reliability Improvement

As twin rotaries balance each other while they are rotating with high speed, it reduces noise dramatically compared to the shaking single rotary compressor. The reduction in vibration reduces the possibility of fractures occurring in the surrounding pipework.

- ※ The data is based on LG internal test and simulation.
- ※ The data is depending on the experimental condition and is changeable according to the usage environment

Benefit & Verification

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



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

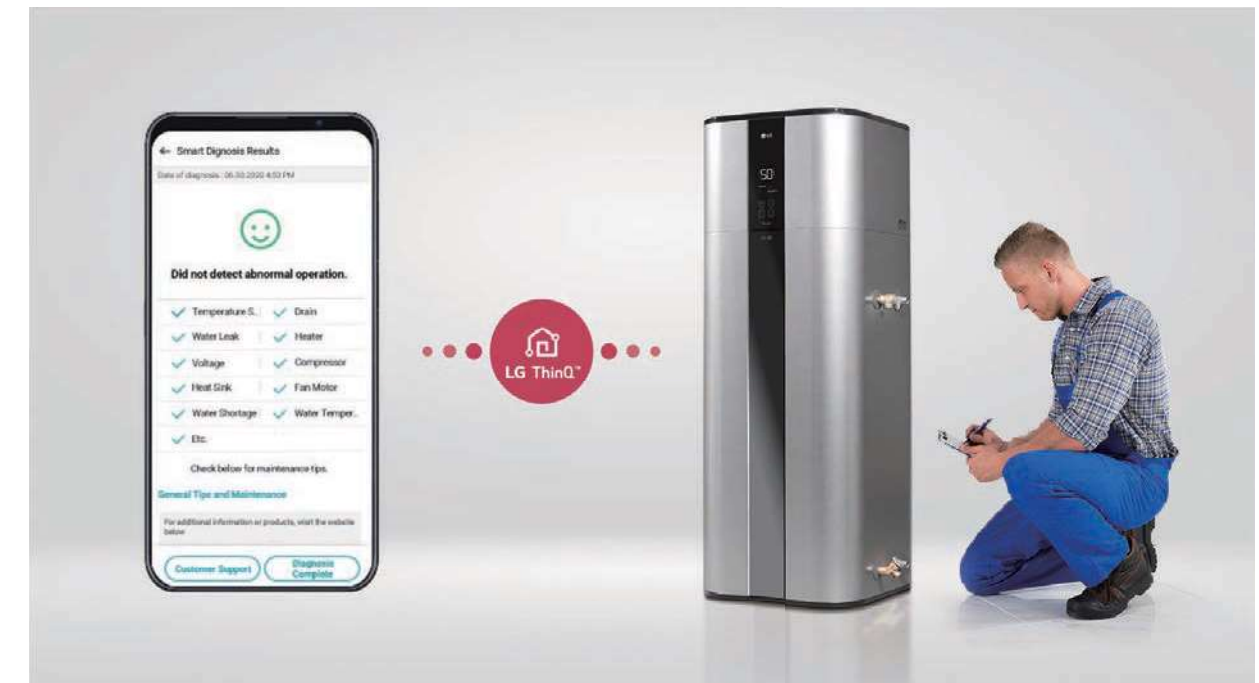


Twin Rotary Type

- ※ 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.

Quick & Easy Installation

The machine's one-direction inlet and outlet piping and easy-to-connect wires in the junction box allow for quick and easy installation. Furthermore, the LG ThinQ app provides Service Alarm and Self Diagnosis programs for convenience maintenance.

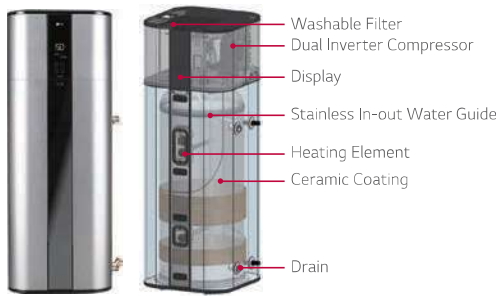


10 Year Warranty

10 year warranty for the core parts of the heat pump water heater - Water Tank, Compressor, TUV Rheiland certified 10 year durability of Dual Inverter Compressor, Ceramic coating inside water tank meets Germany Ceramic Standard DIN 4753 and it provides 10 years of corrosion resistance



※ Other Parts warranty may vary according to After Sales Service condition



SALES MODEL			WH20S	
FACTORY MODEL			R5TT20F-SA1	
Capacity	Volume (Nominal)		200L	
Energy Efficiency ¹⁾	COP (7°C / 15°C)		3.30 / 3.50	
Energy Consumption	Annual Energy Consumption (7°C / 15°C)		kWh	
Load Profile			Large	
Power Input	Upper Element Wattage (230V)	kW	2	
	Lower Element Wattage (230V)	kW	2	
Energy Efficiency Class (7°C / 15°C)			A+ / A+	
Power Supply	Ø, V, Hz		1 / 230 / 50	
Available Voltage Range	V		195 ~ 265	
Operating Mode			Turbo / Auto / HeatPump / Vacation	
Air Flow Rate	H / M	m³/min	6.7 / 4.4	
	H / M	CFM	236.6 / 155.4	
Sound Pressure Level	Auto	dB(A)+3	38	
Sound Power Level		dB(A)	55	
Dimensions	Net (W x H x D)		mm	
Weight	Net		kg	
Norminal insulation thickness	Min. / Max.		mm	
Heat Pump Operation Range	Min. / Max.		°C DB	
Exterior Color Code			-	
Compressor	Type	-	Inverter Twin Rotary	
	Warranty	Year	10	
	Manufacturer	-	LG Electronics	
	Motor Output	W	43	
Design Pressure (System)	High Side	-	2.0MPa / 290 PSI	
	Low Side	-	0.9MPa / 130.5 PSI	
Max. Working Pressure (Water Tank)			-	
Circuit Breaker			A	
Condensate water connection	I.D	mm	19, 12.7	
V40 (Mixed water at 40°C)			L	
Refrigerant	Type	-	R134a	
	Pre Charge	kg	0.650	
	GWP		1, 430	
	t-CO ₂ eq		0.930	
Defrost Method			-	
Anode			Reverse Cycle	
T&P Relief Valve			-	
Water Connection Location			Yes	
Water Connection Size			side	
Water Connection Size			inch	
Digital Display			G ¾ M	
Wi-Fi (LG ThinQ) ²⁾			-	
Tank Warranty			Yes	
			Year	
			10	

1) Water Heater Energy Efficiency (At Auto mode)
2) ThinQ Main Function
- Operation mode (Auto, Heatpump, Turbo, Vacation, Schedule), Temperature setting
- Monitoring hot water Temperature
- Maintenance point Alarm (Filter, Anode Rod, etc.)
※ This product contains Fluorinated greenhouse gases (R134a).
※ GWP : Global warming potential
※ t-CO₂eq : F-gas(kg)*GWP/1000
※ Specification, design and feature are subject to change without prior notice.



SALES MODEL			WH27S	
FACTORY MODEL			R5TT27F-SA0	
Capacity	Volume (Nominal)		270L	
Energy Efficiency ¹⁾	COP (7°C / 15°C)		3.45 / 3.85	
Energy Consumption	Annual Energy Consumption (7°C / 15°C)		kWh	
Load Profile			712 / 646	
Load Profile			Large	
Power Input	Upper Element Wattage (230V)	kW	2	
	Lower Element Wattage (230V)	kW	2	
Energy Efficiency Class (7°C / 15°C)			A+ / A++ ²⁾	
Power Supply	Ø, V, Hz		1 / 230 / 50	
Available Voltage Range	V		195 ~ 265	
Operating Mode			Turbo / Auto / HeatPump / Vacation	
Air Flow Rate	H / M	m³/min	6.7 / 4.4	
	H / M	CFM	236.6 / 155.4	
Sound Pressure Level	Auto	dB(A)+3	38	
Sound Power Level		dB(A)	55	
Dimensions	Net (W x H x D)		mm	
Weight	Net		kg	
Norminal insulation thickness	Min. / Max.		mm	
Heat Pump Operation Range	Min. / Max.		°C DB	
Exterior Color Code			-	
Compressor	Type	-	Inverter Twin Rotary	
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	Low Side	-	0.9MPa / 130.5 PSI	
Max. Working Pressure (Water Tank)			-	
Circuit Breaker			A	
Condensate water connection	I.D	mm	19, 12.7	
V40 (Mixed water at 40°C)			L	
Refrigerant	Type	-	R134a	
	Pre Charge	kg	0.750	
	GWP		1,430	
	t-CO ₂ eq		1.073	
Defrost Method			-	
Anode			Reverse Cycle	
T&P Relief Valve			-	
Water Connection Location			Yes	
Water Connection Location			side	
Water Connection Size			inch	
Digital Display			G ¾ M	
Wi-Fi (LG ThinQ) ³⁾			-	
Tank Warranty			Yes	
			Year	
			10	

1) Water Heater Energy Efficiency (At Auto mode)
2) Energy Label marked A+ and more than COP 3.75 in EU Standard is A++
3) ThinQ Main Function
- Operation mode (Auto, Heatpump, Turbo, Vacation, Schedule), Temperature setting
- Monitoring hot water Temperature
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