



LG INVERTER HEAT PUMP WATER HEATER

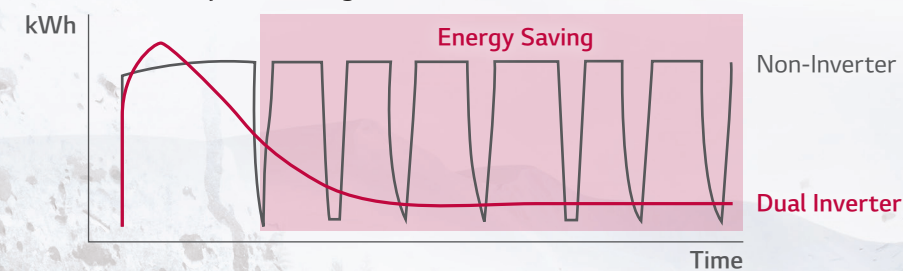


LG INVERTER HEAT PUMP WATER HEATER

What is LG Inverter Technology?

LG Inverter Technology is applied to various electronics including refrigerators and washing machines, especially to air conditioners which continuously receive global attention. With Inverter technology, consumer may have better energy saving and more saving money on their utility bills.

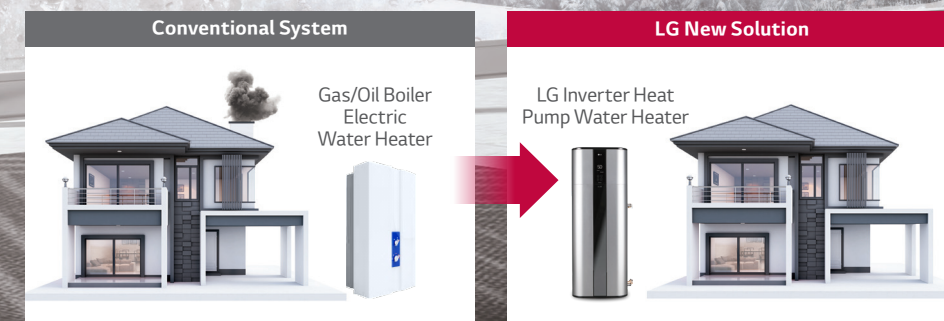
Power Consumption Change



What is LG Inverter Heat Pump Water Heater ?

Modernized Technology : Replacing Conventional Type Heater

In recent years, interest in these environmentally friendly devices has been increasing because global warming and environment pollution has been progressing fast and in order to meet these market demands, LG has further developed their heat pump technology to produce the most efficient, environmentally friendly products in the industry.



VARIOUS INSTALLATION PLACE



Laundry Room



Storage Room



Bathroom



Bathroom



Garage



Garage

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

FOR USER

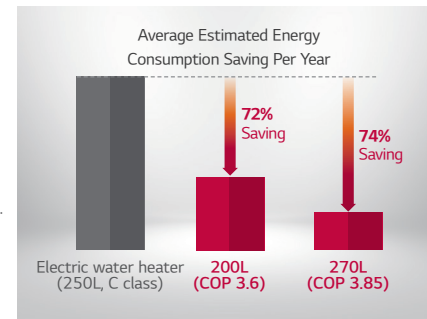
INVERTER TECHNOLOGY



Top Class Energy Efficiency

LG's heat pump water heater using market first DUAL Inverter Compressor achieved COP 3.85 (270L) and COP 3.6 (200L), top class efficiency in the industry. 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.



Fast & Powerful Water Heating

Turbo Mode can run at very high speed (up to 80Hz) with Heater simultaneously, target water temperature in the tank will be arrived at 30% faster than Auto Mode. Additionally, Turbo mode can recover the water at 25% Warmer than Auto Mode after 1 hour from empty tank.

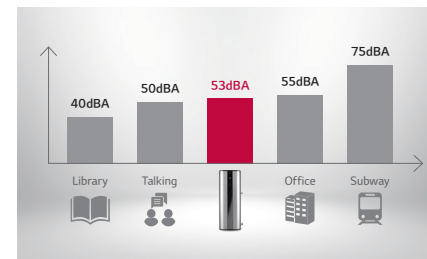
* The data is based on LG internal test and simulation.
* The data is depending on the experimental condition and is changeable according to the usage environment.



Low Noise Operation

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

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



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.



SMART CONTROL



Embedded Wi-Fi

You can control the product through LG ThinQ app. You can check information such as current water temperature, operating mode, etc.

* Download the LG ThinQ app from Google or Apple app stores.



Smart Diagnosis

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

* Smart Control Function may not be supported according to Wi-Fi situation and smartphone specification.



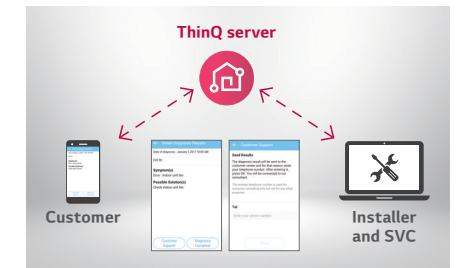
FOR INSTALLER

SMART CONTROL



Easy Check & Monitoring

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



EXTREME DURABILITY



Dual Inverter Compressor

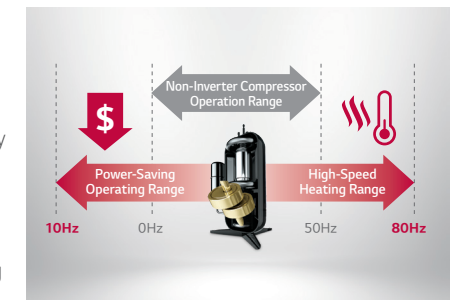
Varied-Speed Dual Rotary :

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.



10 Year Warranty

10 year warranty for the core parts of the heat pump water heater - Water Tank, Compressor, TÜV Rheinland certified 10 year durability of Dual Inverter compress. 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.



DESIGN



Quick & Easy Installation

Easy to install the piping by designing the inlet and outlet piping only in one direction, You can easily connect wires in the junction box.

* Refer to the user's manual and installation manual.



Differentiated Design

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

Red Dot Design Award 2020
iF DESIGN AWARD 2020



reddot winner 2020



LG Inverter Heat Pump Water Heater

SPECIFICATION & FUNCTION LIST

SPECIFICATION



Sales Model			Unit	WH20S	WH27S
Factory Model				R5TT20F-SA1	R5TT27F-SA0
Capacity	Volume (Nominal)	-		200L	270L
Energy Efficiency ¹⁾	COP (7°C / 15°C)	-		3.3 / 3.6	3.45 / 3.85
Energy Consumption	Annual Energy Consumption (7°C / 15°C)	kWh		756 / 692	712 / 634
Energy Efficiency Class (7°C / 15°C)		-		A+ / A+	A+ / A++ ²⁾
Power Supply		-		1Ø, 230V, 50Hz	1Ø, 230V, 50Hz
Available Voltage Range		V		195 ~ 265	195 ~ 265
Operating Mode		-		Turbo / Auto / Heat Pump / Vacation	Turbo / Auto / Heat Pump / Vacation
Indoor	Air Flow Rate	H/M	m ³ /min	(6.7) / (4.4)	(6.7) / (4.4)
		H/M	CFM	(236.6) / (155.4)	(236.6) / (155.4)
	RPM	H/M	-	1,150 / 850	1,150 / 850
	Sound Pressure Level	Auto	dB(A)+3	38	38
		Turbo / Heat Pump	dB(A)+3	41	41
	Sound Power Level		dB(A)	53	53
	Dimensions	Net (W x H x D)	mm	580 x 1,625 x 582	580 x 2,008 x 582
	Weight	Net	kg	100	119
	Operation Range	Heating	°C DB	-5 ~ 48.9	-5 ~ 48.9
Compressor	Exterior Color Code		-	Luxury Silver	Luxury Silver
	Type		-	Twin Rotary	Twin Rotary
	Warranty	Year		10	10
Refrigerant	Manufacturer / Country of Origin		-	LG Electronics / China	LG Electronics / China
	Type		-	R134a	R134a
	Pre Charge		g	650	750
	GWP		-	1,430	1,430
	t-CO ₂ eq		-	0.930	1.073
Defrost Method	F-Gas		kg	1.001	1.072
			-	Reverse Cycle	Reverse Cycle
Anode			-	ICCP	ICCP
T&P Relief Valve			-	Yes	Yes
Digital Display			-	Yes	Yes
Wi-Fi (LG ThinQ) ³⁾			-	Yes	Yes
Tank Warranty		Year		10	10

Note : 1) Water Heater Energy Efficiency (At Auto mode)

2) Q Label marked A+ and more than COP 3.75 in EU Standard is A++

3) ThinQ Main Function

- Operation mode (Auto, Heat pump, Turbo, Vacation, Schedule), Temperature setting

- Monitoring hot water Temperature

- Maintenance point Alarm (Filter, Anode Rod, etc.)

* Data in the bracket is to be updated.

* Maximum heating capacity is for heating operation without any frost.

* Some specifications may be changed without notifications due to our policy of innovation.

FUNCTION LIST

Category	Function	Description
Air Purifying	Pre filter (Washable / Anti.Bacteria)	Capture dust particles over 10µm in size and finer bacteria.
Reliability	Self Diagnosis	Self-diagnostic for product protection.
	De-ice Control (Defrost)	In this mode, de.icing of the evaporator automatically.
Convenience	Heat Pump	This mode minimizes power consumption by using only heat pump for heating.
	Auto	This mode provides relatively low power consumption and high recovery. This mode primary uses heat pump for heating. This mode is factory set mode for shipping.
	Turbo	This mode provides the highest recovery. This mode uses heat pump and heating element simultaneously.
	Vacation	This feature is recommended when the water heater is not in used for an extended period of time. In this mode, tank temperature will be maintained at about 68°F to minimize energy consumption and prevent the water heater from freezing.
	Schedule	The customer can set up the operation time and mode based on their Demand Condition.
	Auto Restart Operation	If power is resupplied after blackout, product restart automatically.
	Two Thermistor Control ¹⁾	If there is a temperature difference between room temperature and desired temperature, you can use this function in other to prevent insufficient cooling and insufficient heating.
	Overheating Protection	If there is a temperature difference between room temperature and desired temperature, you can use this function in other to prevent over-heating.
	Indoor Unit Display Type	LED Type
Special Function Kit	Anti legionella	(Activates the water disinfection function, set to between 1 and 4 times per month. The water temperature reaches 60° C during a cycle.)
	Wi-Fi ²⁾	Easily access and control an water heater's functions from anywhere.
	Water Level Sensor Connection ²⁾	Detect the water level in drain pan.
	Crank Case Heater	Pre.heating the compressor during winter.
	Smart Inverter Monitoring System (SIMS) ²⁾	Help you to easily monitor, diagnose the air conditioner and get a quick resolution. (Need to purchase SIMS Kit)
Others	Temperature Control	Basic cycle control method.

Note :

1) : This function can be operated only w hen the wired remote controller is connected. The applicability of each function depends on the above table.

2) : Optional accessories must be purchased separately. If shown as "Embedded", this function is included in product.

The function Wi-Fi is only compatible with 2.4 GHz band. (802.11 b/g/n)

* These functions must be applied according to the model. Please refer to the following function list for each model.

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