







# **Pure Independence**

Take control of your home energy usage and self-power your home, day or night, with the LG ESS Home 8, a cleaner, more-reliable energy storage system that can help you work towards independence from the grid.

## Your Home. Your Energy. Your Way.

AC-coupled, or connected directly to the grid, LG ESS Home 8 provides clean and reliable energy. Whether Home 8 is your main power source, being used as backup power for outages, or in time-of-use mode (when power rates are highest), take control of your electric bill with LG ESS Home 8.

## **Intelligent LG Offerings for Smarter Consumption**

When you choose LG ESS Home 8, you not only get an energy efficient system, you also get access to the Thin  $Q^{(8)}$  app, an integrated smart-energy management system that can also be used with your LG smart appliances, HVAC, and beyond.



## **LG ESS Home 8 Features**



## **Smart Technology for a Smart Home**

With a modern, clean design, the integrated battery not only stores energy, but also can connect (via the LG ThinQ app) with all your LG home appliances.



### Secure & Sustainable

The LG ESS Home 8 eliminates the need for any type of fueled generator with cleaner solar-fed energy, while working to protect against utility outages by providing clean battery backup power.



### Powerful & Modular

Connect up to four LG ESS Home 8 systems to store and provide up to 57.6 kWh of usable energy.



### **Built for Ease**

The homeowner can easily control and navigate the LG ESS Home 8 system via the LG ThinQ<sup>®</sup> app. For installers, the provided LG Enervu app allows ease of set up and testing without the need for additional equipment.

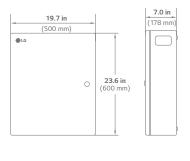
# **LG ESS Home 8 Product Dimensions**





Smart Energy Box





Home 8 (PCS+Battery)

# **LG Electronics Home 8 Specifications**

#### Home 8 - General Specifications

Nominal Voltage (L-N/L-L)	120/240 V Split Phase	
Grid Frequency (Nominal)	60 Hz	
Rated AC Power (Discharging)	7.5 kVA <sup>1</sup>	
Rated AC Power (Charging)	5.4 kVA <sup>1</sup>	
Total Capacity	15.8 kWh	
Usable Capacity	14.4 kWh <sup>2</sup>	
Round Trip Efficiency	> 90% <sup>3, 4</sup>	
CEC Efficiency (PCS only)	98%	
Overvoltage Category	Category IV	
Interface	LED Display	

#### Home 8 - Grid Connection Mode

Nominal Voltage (L-N/L-L)	120/240 V Split Phase
Grid Frequency (Nominal)	60 Hz
Rated AC Power (Discharging)	7.5 kVA <sup>1</sup>
Rated AC Power (Charging)	5.4 kVA <sup>1</sup>
Rated AC Current (Discharging)	31.25 A
Rated AC Current (Charging) 22.5 A	
Power Factor	- 0.8 ~ + 0.8

#### Home 8 Stacking - Single SE Box

Home 8 Units	1	2	3	4
Battery Capacity (kWh)	14.4	28.8	43.2	57.6
Rated AC Power (kVA)	7.5	15	22.5	30
Max AC Power (kVA) 10 Sec	9	18	27	36

#### Home 8 - Backup Mode

120/240 V Split Phase
60 Hz
9.0 kVA (10s)
7.5 kVA <sup>1</sup>
5.4 kVA <sup>1</sup>
37.5 A (10s)
31.25 A
22.5 A

#### Home 8 - Battery

Battery Package Types	Cylindrical Li-ion
Total Capacity	15.8 kWh
Usable Capacity	14.4 kWh <sup>2</sup>
Nominal DC Voltage	406.56 V

#### Home 8 - Battery Module

Cylindrical Li-ion
101.64 V
36.9Ah
600 x 212 x 190 [mm]
(23.6 x 8.4 x 7.5 [in])
26 kg / 57 lb

<sup>\*</sup>Battery Capacity (Nominal) = 38.9Ah





#### Compliance

LGE ESS Home 8	Home 8	SE Box	
	IEEE1547, 1547.1, UL1741,	CA Rule21,	
Grid Code	UL1741SA, UL1741SB, CA	IEEE2030.5-2018/	
	Rule21	Sunspec CSIP	
Cafatu	UL1741, C22.2 No.107.1-16,	UL1741, UL869A9, UL679	
Safety	UL1642, UL1973, UL9540A	C22.2 No.107.1-16	
Functional Safety	IEC60730-1 Annex H	-	
System Safety	UL9540		
Enclosure	NEMA Type 3R⁵		
EMC	FCC Part15 Subpart B		
Seismic	IEEE 693-2005, High		

#### **Environmental Specifications**

	Home 8	SE Box
Dimensions	698 X 1260 X 205 [mm]	500X600X178[mm]
[W*H*D]	(27.5 X 49.6 X 8.1 [in])	(19.7 X 23.6 X 7.0 [in])
Weight	163 kg / 359 lb	25 kg / 55 lb
Cooling	Fan (Forced Air Cooling)	Natural Convection
Operating Temperature	-20~50°C(-4~122°F)@Discharging	-20 ~ 50 °C
	-10 ~ 45 °C (14 ~ 113 °F) @ Charging	(-4 ~ 122°F)
Recommended	0 ~ 35°C (32 ~ 95°F) @ Discharging	
Operating Temperatur	re 0 ~ 33°C (32 ~ 91.4°F) @ Charging	(-4 ~ 122°F)
Storage Temperature	-20 ~ 50°C (-4 ~ 122°F)	
Ambient Humidity (RI	<b>H)</b> 5 ~ 95% (non-con	idensing)
Altitude	< 3000 m (98	43 ft)
Mounting Type	Floor Stand with Wall Support	Wall Mount
Noise	< 47 dB	
Warranty	10 years (Battery: 70%	@ 10 years) <sup>6</sup>

#### SE Box - General Specifications

Nominal Voltage (L-N/L-L)	120/240 V Split Phase
Grid Frequency (Nominal)	60 Hz
Max AC Current Rating	200 A
Max Continuous AC Current Rating	160 A
Input Short Circuit Current Rating	10 kAIC <sup>7</sup>
Over Current Protection Device	100 ~ 200 A, Service Entrance Rated <sup>7,8,9</sup>
AC Meter Accuracy	+/- 2%
Operating Mode	PVSelf-Consumption,Time-of-Use(ToU),BackupOnly
Backup Operation	Automatic Disconnect for Seamless Backup
Backup Transfer Time	< 100 ms
Modularity	Up to 4 Home 8 units
Overvoltage Category	Category IV

#### SE Box - Interface

User Interface	7-inch Touch LCD, LG ThinQ® App (User), EnerVu Web (Installer)
Internet Connection	Ethernet 10/100, WLAN (802.11 b/g/n)
External Device	MODBUS

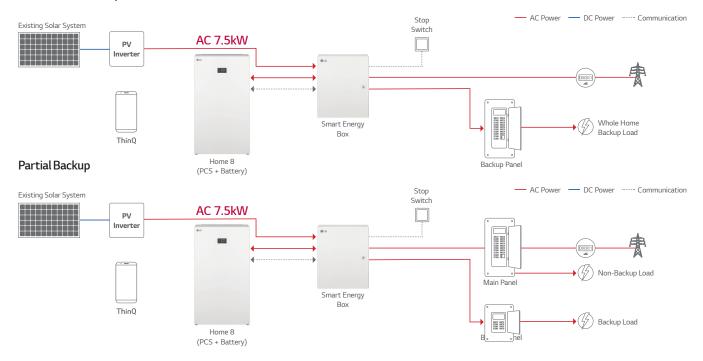
<sup>&</sup>lt;sup>1</sup> Adjustable, limited by the battery pack output capability such as charging/discharging power derating by the atmosphere temperature <sup>2</sup> Usable energy might be reduced for enhancing the battery lifetime and system stability. <sup>3</sup> Verified according to LG Electronics conditions. <sup>4</sup> AC to battery to AC with 4.32 kW charging and 2.88 kW discharging power at 25 °C (77 °F) under the beginning of life. <sup>5</sup> Tested by NEMA 250

<sup>\*</sup> lested by NEMA 250 floyears LimitedWarranty-Standard limitedwarranty period is five years parts/energy capacity for qualified products. Upon expiration of original manufacturer's limited warranty, an extended limited warranty may apply (ten years parts/energy capacity) for qualified products registered with LGS Thin(9° service and connected to internet. Full limited warranty terms are available at Jusacom/ess 7 When protected by Class J fuses, LG, SE Box, is suitable for use in circuits capable of delivering not more than 22 kA symmetrical amperes.

LG SE Box is not suitable for use as service equipment in Canada.
 Sections from these standards were used during the safety evaluation and included in the UL1741 testing

# **System Configuration**

#### Whole Home Backup



# Connect Four Units with Large-Scaled PV Inverter

