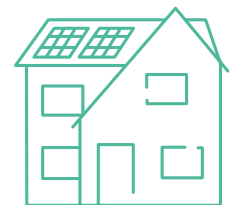




## Pure Independence

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 ThinQ® 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® app. For installers, the provided LG Enervu app allows ease of set up and testing without the need for additional equipment.

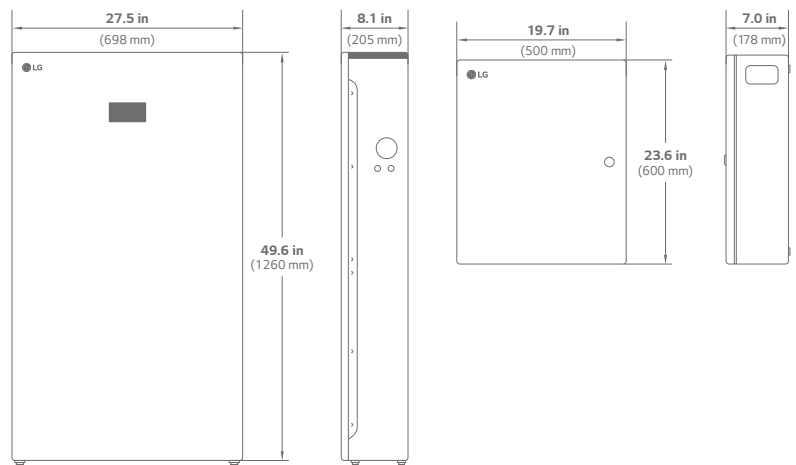
## LG ESS Home 8 Product Dimensions



Home 8 (PCS+Battery)



Smart Energy Box



# LG ESS 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 - Backup Mode

Nominal AC Voltage	120/240 V Split Phase
Nominal AC Frequency	60 Hz
Max AC Power (Discharging)	9.0 kVA (10s)
Rated AC Power (Discharging)	7.5 kVA <sup>1</sup>
Rated AC Power (Charging)	5.4 kVA <sup>1</sup>
Max AC Current (Discharging)	37.5 A (10s)
Rated AC Current (Discharging)	31.25 A
Rated AC Current (Charging)	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

Battery Package Types	Cylindrical Li-ion
Module Nominal DC Voltage	101.64 V
Module Capacity (Min)*	36.9Ah
Module Size[W*H*D]	600 x 212 x 190 [mm] (23.6 x 8.4 x 7.5 [in])
Module Weight (Max)	26 kg / 57 lb

\*Battery Capacity (Nominal) = 38.9Ah

## Compliance

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

## Environmental Specifications

	Home 8	SE Box
Dimensions [W*H*D]	698 X 1260 X 205 [mm] (27.5 X 49.6 X 8.1 [in])	500 X 600 X 178 [mm] (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 -10 ~ 45 °C (14 ~ 113 °F) @ Charging	-20 ~ 50 °C (-4 ~ 122 °F)
Recommended Operating Temperature	0 ~ 35 °C (32 ~ 95 °F) @ Discharging 0 ~ 33 °C (32 ~ 91.4 °F) @ Charging	-20 ~ 50 °C (-4 ~ 122 °F)
Storage Temperature	-20 ~ 50 °C (-4 ~ 122 °F)	
Ambient Humidity (RH)	5 ~ 95% (non-condensing)	
Altitude	< 3000 m (9843 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</sup>
AC Meter Accuracy	+/- 2%
Operating Mode	PV Self-Consumption, Time-of-Use (ToU), Backup Only
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

## SE Box - Wire Gauges

Grid lug (L1,L2)	Cu/Al: 6 AWG ~ 300 KCMIL
CSR/BW Breaker (L1,L2)	Cu/Al: 6 AWG ~ 300 KCMIL
Backup/Non-backup load lugs (L1,L2)	Cu/Al: 6 AWG ~ 250 KCMIL
Neutral (Large)	Cu/Al: 6 AWG ~ 250 KCMIL
Neutral (Medium) and Ground	Cu/Al: 14 AWG ~ 2/0 AWG

<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>6</sup> 10-years Limited Warranty: Standard limited warranty 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 LG's ThinQ® service and connected to internet. Full limited warranty terms are available at lgusa.com/ess

<sup>7</sup> 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.

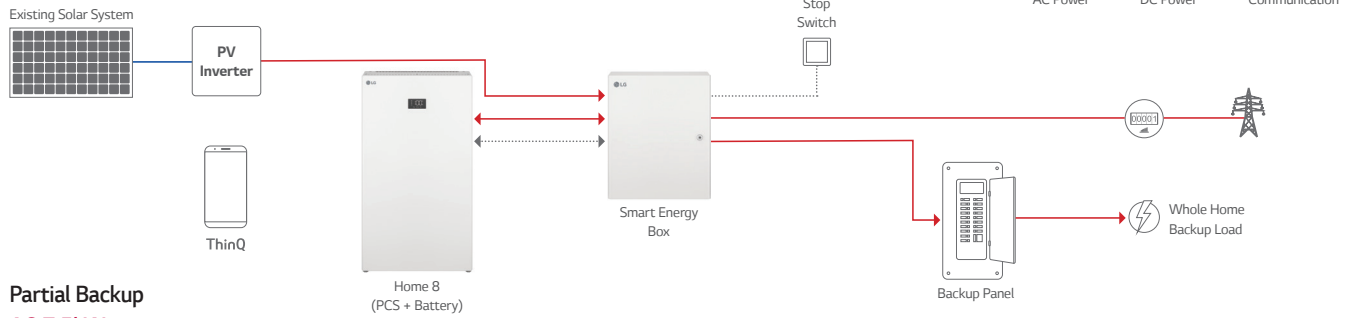
<sup>8</sup> LG SE Box is not suitable for use as service equipment in Canada.



# System Configuration

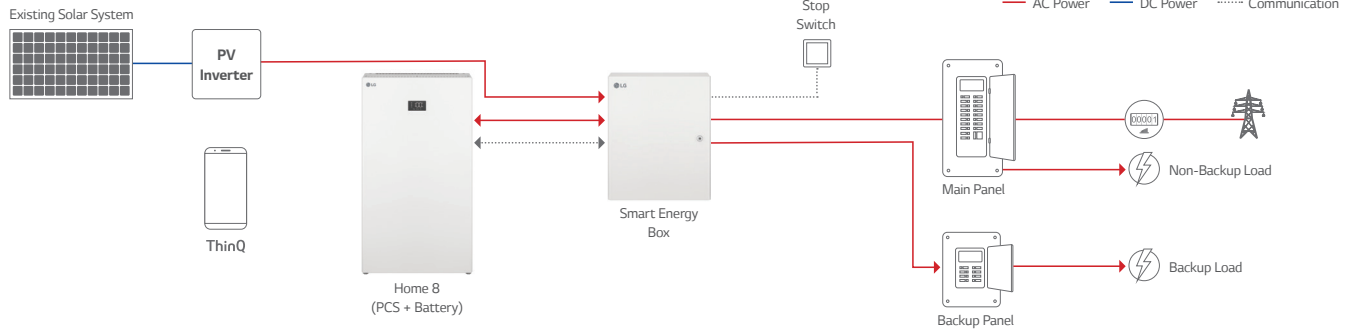
## Whole Home Backup

AC 7.5kW

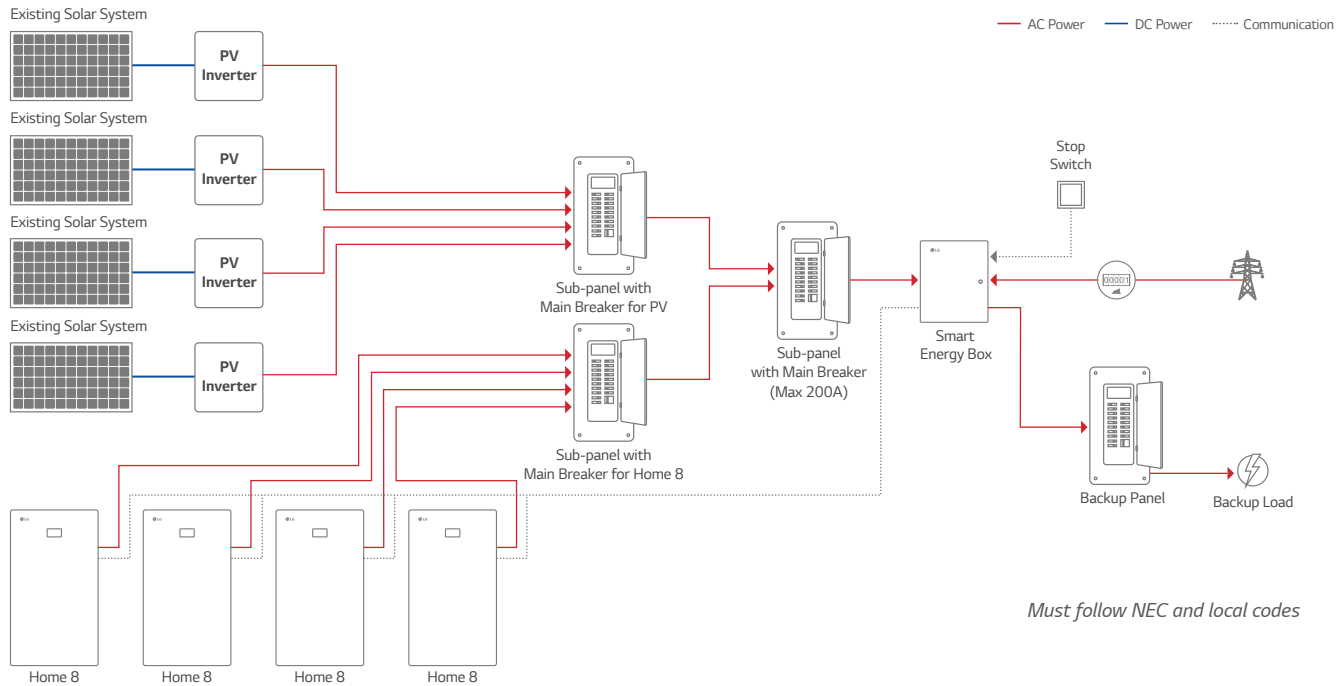


## Partial Backup

AC 7.5kW



# Connect Four Units with Large-Scaled PV Inverter



©2023 LG & Rights Reserved Due to our commitment to continued innovations, some specs may be changed without modification. Ratings are subject to change without notice. Current pertinent ratings are available at [www.lgusa.com/ess](http://www.lgusa.com/ess) Resi\_LGEUS\_Home 8 Spec\_012523

To learn more about LG ESS Home 8 visit [lgusa.com/ess](http://lgusa.com/ess)