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.


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.

To learn more about LG ESS Home 8 visit lgusa.com/ess
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 Features

LG ESS Home 8 Product Dimensions
**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

**Rated AC Power (Charging)** 5.4 kVA

**Total Capacity** 15.8 kWh

**Usable Capacity** 14.4 kWh

**Round Trip Efficiency** > 90%

**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

**Rated AC Power (Charging)** 5.4 kVA

**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

**Rated AC Current (Discharging)** 37.5 A (10s)

**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

**Nominal DC Voltage** 406.56 V

### Home 8 - Battery Module

**Battery Package Types** Cylindrical Li-ion

**Module Nominal DC Voltage** 106.4 V

**Module Capacity (Min)** 36.9Ah

**Module Size [W*H*D]** 600 x 212 x 190 [mm]

**Module Weight (Max)** 26 kg / 57 lb

*Battery Capacity (Nominal) = 38.9Ah

### Compliance

**LGE ESS Home 8**

**Grid Code** IEE1547, 1547.1, UL1741, UL1741SA, 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

**EMC** FCC Part15 Subpart B

**Seismic** IEEE 693-2005, High

### Environmental Specifications

**Home 8**

**SE Box**

| Dimensions | 698 X 1260 X 205 [mm] | 500 X 600 X 178 [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

**Weight** 25 kg / 55 lb

**Cooling** Fan (Forced Air Cooling)

**Natural Convection**

**Operating Temperature**

- 20 → 50 °C (4 → 122 °F) @ Discharging
  - (-4 → 113 °F) @ Charging

**Recommended**

- 0 → 35°C (32 → 95°F) @ Discharging
- 0 → 33°C (32 → 91°F) @ Charging

**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)^6

### 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

**Over Current Protection Device** 100 → 200 A, Service Entrance Rated

**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

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1 Adjustable limited by the battery pack output capability such as charging/discharging power denting by the atmosphere temperature.

2 Usable energy might be reduced for enhancing the battery lifetime and system stability.

3 Tested according to LG Electronics conditions.

4 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.

5 Tested by NEMA 250

6 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

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.

8 LG SE Box is not suitable for use as service equipment in Canada.
System Configuration

Whole Home Backup
AC 7.5kW
Existing Solar System

Partial Backup
AC 7.5kW
Existing Solar System

Connect Four Units with Large-Scaled PV Inverter

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To learn more about LG ESS Home 8 visit lgusa.com/ess