



LG Electronics Home Series Energy Storage System



Enjoy life, uninterrupted

Take control of your home energy usage with the LG Electronics Home Series Energy Storage System (ESS)—a cleaner, more reliable energy storage system that delivers power when you need it, and peace of mind when you don't.

Your home. Your power. Your way.

Whether paired with a solar PV system or AC-coupled to the grid, the LG Electronics Home Series ESS can store and provide up to 14.4 kWh of usable backup power for your home. Power outage? Rolling blackout? Energy price hike? Trust LG Electronics Home Series ESS to keep your home powered up, while keeping your monthly utility costs low.

Manage your home, from your phone

When you choose LG Electronics Home Series ESS, you'll gain access to the LG ThinQ® mobile app—a complete home energy management system that connects your LG appliances and systems. Track energy usage, set your preferences, and optimize your home for max savings with LG ThinQ®.

To learn more please visit [LG.com/ESS](https://www.lg.com/ESS)

Life's Good.



LG Home Series ESS features



Load shifting to offset costs

Store energy during off-peak hours to gain power peace of mind and maximize utility cost savings.



Renewable energy integration

Harness energy generated from solar for cleaner backup power when the sun isn't shining.



More reliable backup power

Connect a maximum of four units for up to 57.6 kWh of total power to keep your home running smoothly.



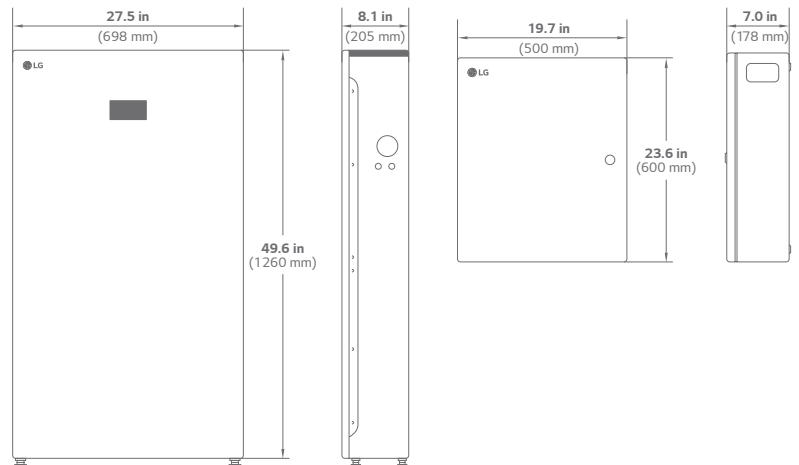
Home appliance efficiency

Access a stable power supply that allows you to manage energy fluctuations and ensure consistent power to your LG systems and appliances.

Product Dimensions

Home 5/8 (PCS+Battery)

Smart Energy Box



LG Electronics Home Series ESS specifications

Home 5/8 - General Specifications

Model	Home 5	Home 8
Nominal Voltage (L-N/L-L)	120/240 V Split Phase	
Grid Frequency (Nominal)	60 Hz	
Rated AC Power (Discharging)	5.0 kVA ¹	7.5 kVA
Rated AC Power (Charging)	5.0 kVA ¹	5.4 kVA
Total Capacity	15.8 kWh	
Usable Capacity	14.4 kWh ²	
Round Trip Efficiency	> 90% ^{3,4}	
CEC Efficiency (PCS only)	98%	
Overvoltage Category	Category IV	
Interface	LED Display	

Home 5/8 - Grid Connection Mode

Model	Home 5	Home 8
Nominal Voltage (L-N/L-L)	120/240 V Split Phase	
Grid Frequency (Nominal)	60 Hz	
Rated AC Power (Discharging)	5.0 kVA ¹	7.5 kVA ¹
Rated AC Power (Charging)	5.0 kVA ¹	5.4 kVA ¹
Rated AC Current (Discharging)	20.84 A	31.25 A
Rated AC Current (Charging)	20.84 A	22.5 A
Power Factor	- 0.8 ~ + 0.8	

Home 5/8 Stacking - Single SE Box

Units	1	2	3	4
Battery Capacity (kWh)	14.4	28.8	43.2	57.6
Home 5 Rated AC Power (kVA)	5	10	15	20
Home 8 Max AC Power (kVA)	7.5	15	22.5	30
Max AC Power (kVA) 10 Sec	9	18	27	36

Home 5/8 - Backup Mode

Model	Home 5	Home 8
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)	Total 5.0 kVA ¹ 2.5 kVA@120 V (L1-N,L2-N)	Total 7.5 kVA ¹ 3.75 kVA@120 V (L1-N,L2-N)
Rated AC Power (Charging)	Total 5.0 kVA ¹ 2.5 kVA@120 V (L1-N,L2-N)	Total 5.4 kVA ¹ 2.7 kVA@120 V (L1-N,L2-N)
Max AC Current (Discharging)	37.5 A (10s)	
Rated AC Current (Discharging)	20.84 A per line (L1-N,L2-N)	31.25 A per line (L1-N,L2-N)
Rated AC Current (Charging)	20.84 A per line (L1-N,L2-N)	22.5 A per line (L1-N,L2-N)

Home 5/8 - Battery

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

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

Environmental Specifications

	Home 5/8	SE Box
Dimensions [W*H*D]	698 X 1260 X 205 [mm] (27.5 X 49.6 X 8.1 [in])	500X600X178[mm] (19.7X23.6X7.0[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, and Wall Mount	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 ⁷
Over Current Protection Device	100 ~ 200 A, Service Entrance Rated ^{7,8}
AC Meter Accuracy	+/- 2%
Operating Mode	PV Self-Consumption, Time-of-Use (ToU), Backup Only, AI ⁹
Backup Operation	Automatic Disconnect for Seamless Backup
Backup Transfer Time	< 100 ms
Modularity	Up to 4 Home5/8 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

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

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

³ Verified 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.

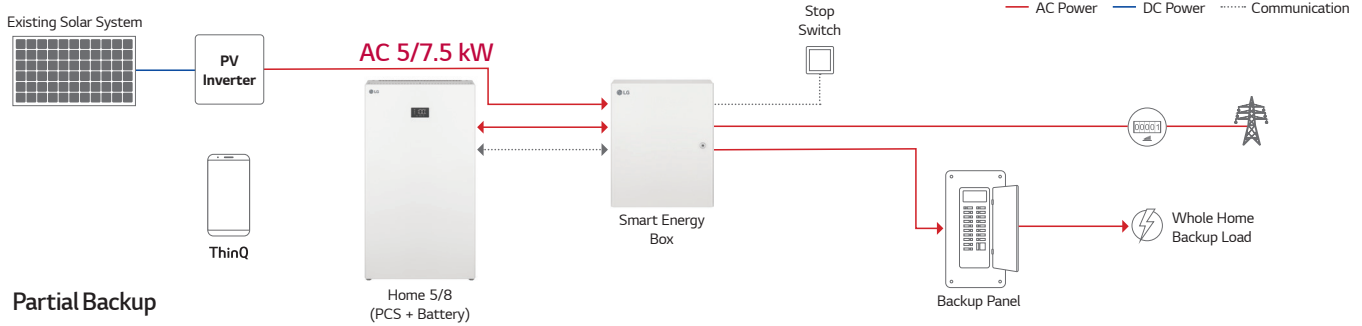
⁸ LG SE Box is not suitable for use as service equipment in Canada.

⁹ AI (Artificial Intelligence) mode operates based on the tariff setting in ToU.

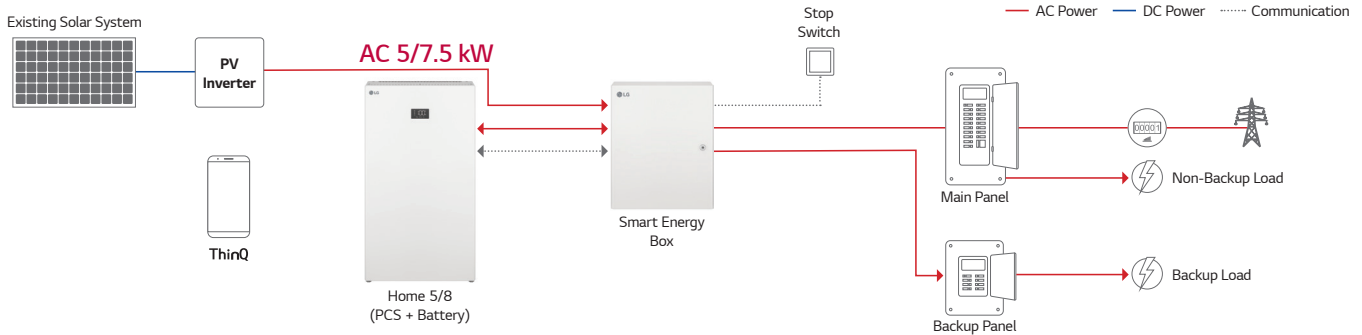


System configuration

Whole Home Backup



Partial Backup



Connect up to four (4) units with large-scaled PV inverter

