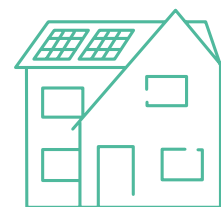


# LG ESS Home 8



## 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.

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



## 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.

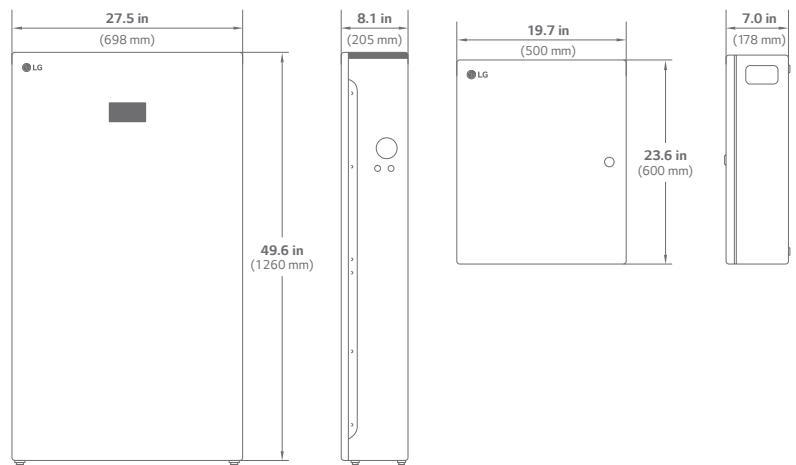
## LG ESS Home 8 Product Dimensions



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]<br>(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]<br>(27.5 X 49.6 X 8.1 [in])                               | 500 X 600 X 178 [mm]<br>(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<br>-10 ~ 45 °C (14 ~ 113 °F) @ Charging | -20 ~ 50 °C<br>(-4 ~ 122 °F)                     |
| Recommended Operating Temperature | 0 ~ 35 °C (32 ~ 95 °F) @ Discharging<br>0 ~ 33 °C (32 ~ 91.4 °F) @ Charging     | -20 ~ 50 °C<br>(-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  |

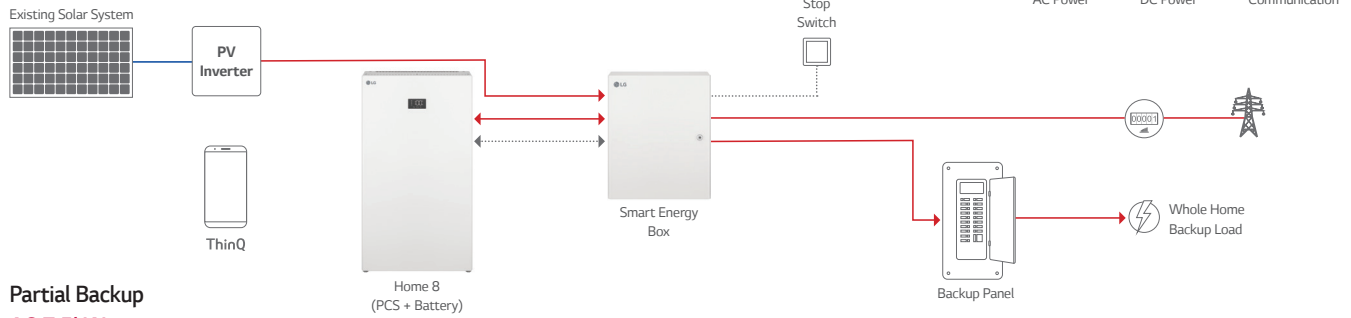
<sup>1</sup> Adjustable, limited by the battery pack output capability such as charging/discharging power derating by the atmosphere temperature.  
<sup>2</sup> Usable energy might be reduced for enhancing the battery lifetime and system stability.  
<sup>3</sup> Verified according to LG Electronics 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

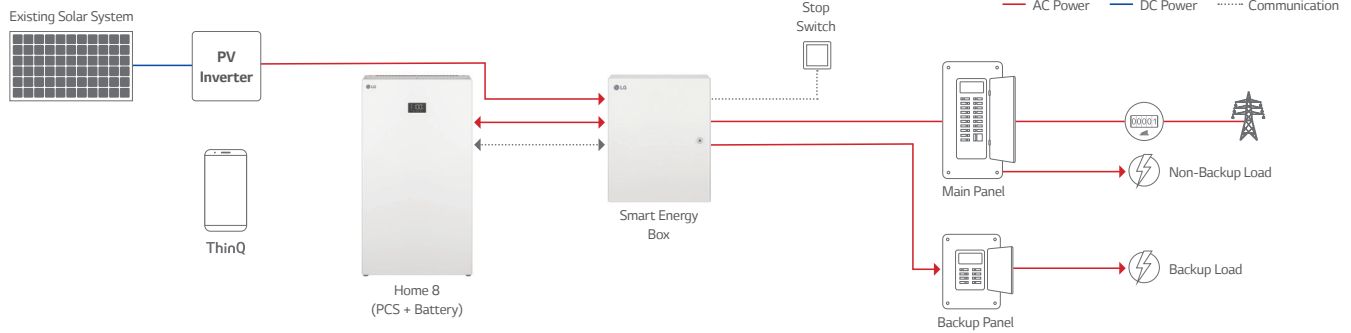
## Whole Home Backup

AC 7.5kW

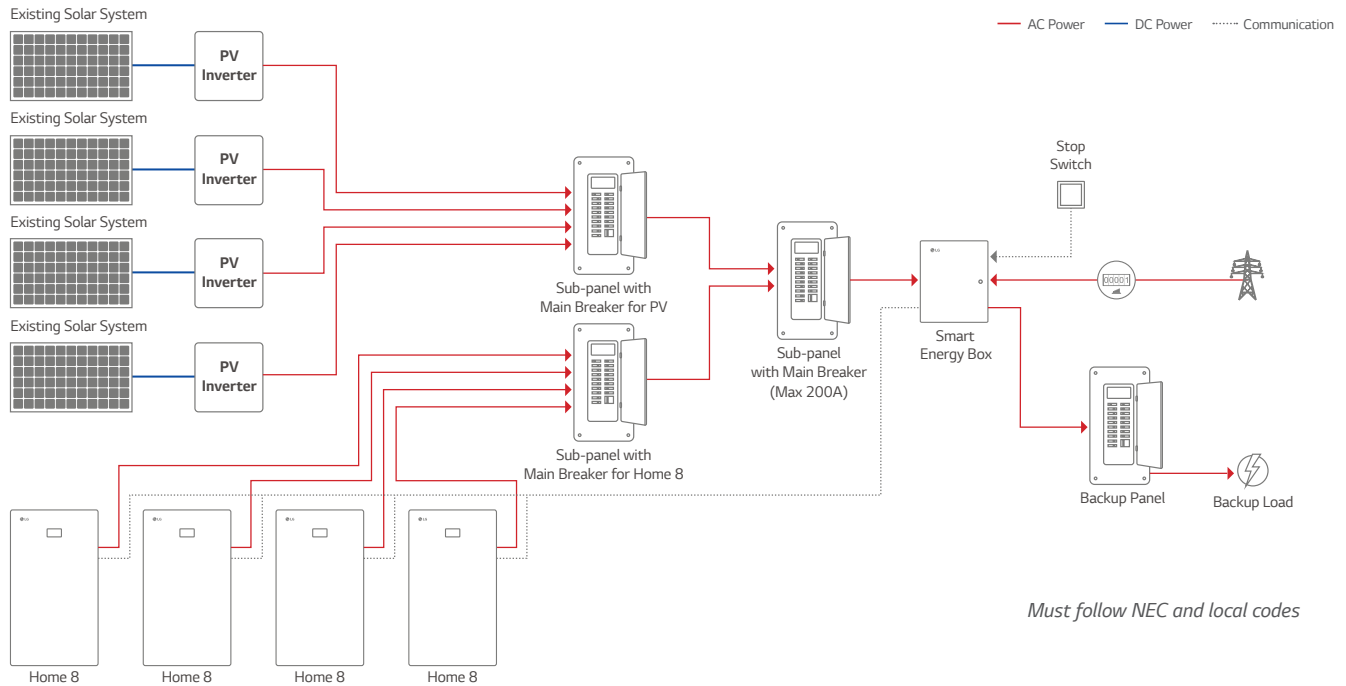


## Partial Backup

AC 7.5kW



# Connect Four Units with Large-Scaled PV Inverter



©2022 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\_091622

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