

LG Energy Storage System



Reliable Power from a Reliable Brand

The LG Electronics ESS is a state-of-the-art home energy system designed for homeowners ready to take control of their home energy usage. It offers reliable power both day and night from a highly efficient system. Expertly designed, the battery capacity can be expanded up to 28.5kWh without any additional devices.



LG ESS Home D008KE1N211 D010KE1N211

Highly Efficient Energy Storage System



One brand, one warranty

LG is a single manufacturer of both the battery and PCS



Compatibility with LG Therma V, air-to-water heat pump

Expertly designed with compatibility in mind



Quick and easy installation

Thanks to the modular design, transportation and installation become easy



Large storage capacity

No additional device required for expanding capacity (10.7/14.2/21.4/28.5kWh)



Using more sunlight with 3 MPPT advanced feature

With flexible 3 MPPT, Home ESS can capture more energy for a multi-angled roof



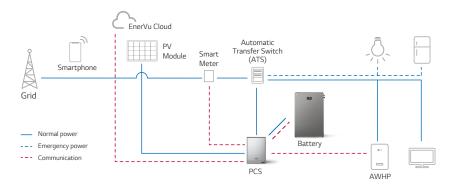
Smart Management using EnerVu

User-friendly app enables to easily check electricity generation, self-consumption and other valuable information



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System Layout



For safe ESS system operation, it is recommended to register Enervu Cloud (https://enervu.lg-ess.com) and stay connected

PCS Specifications

DC Input

| Model | LG ESS Home 8 | LG ESS Home 10 |
|--|----------------------------|----------------|
| Input Voltage Range | 150 ~ 1,000V _{DC} | |
| Max. DC Power (per channel) | 12kW (6kW) | 13.5kW (7.5kW) |
| Usable MPP Voltage Range | 150 ~ | 800V |
| Input Voltage Range MPPT at Rated AC Output Power | 275 ~ | 800V |
| Number of MPPT | 3 | |
| Number of String per MPPT | 1 | |
| Max. Input Current per MPPT | 13 | 3 A |

AC Output

| Rated Grid Voltage | 3-NPE 400V / 230V | |
|------------------------------|-------------------------------|-------|
| AC Voltage Range | 312 ~ 458 V / 195.5 ~ 287.5 V | |
| Frequency (Range) | 50Hz (47.5 ~ 52.0Hz) | |
| Rated Output Power | 8kVA | 10kVA |
| Rated Output current | 11.5A | 14.4A |
| THD / Power Factor | < 5% / ±0.8 | |
| Max. Efficiency (PV to Grid) | > 97.7% | |

General Data

| General Bata | | |
|------------------------|-------------------------------|--|
| Dimension (W/H/D, mm) | 450 / 599 / 210 | |
| Weight | 34kg | |
| Operation Temperature | 0°C ~ 60°C (derating at 40°C) | |
| Typical Noise emission | 40dB | |
| Topology | Transformer-less | |
| Cooling Type | Forced Convection | |
| Degree of Protection | IP21 | |
| Warranty | 10 years | |
| | | |

Battery Specifications

DC Input / Output

| Model | LG HBC 11H | LG HBC 15H | |
|--|------------------------|-------------------------------|--|
| Battery Type | Lithiu | Lithium Ion | |
| Total Capacity | 11.9kWh | 15.8kWh | |
| Usable Capacity ¹⁾ | 10.7kWh | 14.2kWh | |
| Max. Charge (Single/Dual) ²⁾ | 4kW/7kW | 5kW/7kW | |
| Max. Discharge (Single/Dual) ²⁾ | 5kW/7kW | 5kW/7kW | |
| Peak Power (Single/Dual) | 7kW /10kW for 10sec | 7kW / 10kw for 10sec | |
| Capacity options | 10.7 / 14.2 / 2 | 10.7 / 14.2 / 21.4 / 28.5 kWh | |
| Efficiency | >95.5% | | |

- Value for battery cell only (depth of discharge 92%) capacity may be limited to protect system. The capacity may decrease as the battery ages.
- 2) Charging and discharging may take longer depending on ambient temperature and SoC.

General Data

| Dimension (W/H/D, mm) | 698 / 1,073 / 205 |
|---|--------------------|
| Weight (11H/ HBC 15H) | 117kg / 142Kg |
| Operating Temperature Range (Charging) | -10 to 45°C |
| Operating Temperature Range (Discharging) | -20 to 50°C |
| Cooling Type | Natural Convection |
| Degree of Protection | IP55 |
| Warranty | 10 years (SOH 80%) |

Compatibility Product List

| Energy Meter | ABB (B23 112-100, B23 212-100, B23 312-100) |
|------------------------|---|
| Air to Water Heat Pump | LG Electronics (Therma V Monobloc, Spilt-Hydro Box) |
| Auto Transfer Switch | Enwitec (Type 10013677, 10013678, 10016021, 10016022) |
| Smart Gateway | 3 rd party compatible |

Certifications

| Battery | UN38.3, IEC62619, IEC63056, IEC60730-1 Annex H, IEC61000(CE), IP55, UL1973 |
|---------|--|
| | AS/NZS 4777.2 |
| PCS | 100, TOR Erzeuger Type A, OVE-R25, C10/C11, RD 1699, TED 749, NTS 2.0, UNE 206007-1, UNE 217002, UNE 217001, TF 3.3.1, |
| | IEC/EN 62109-1/-2, EN 61000 Series, EN 55011, EN 301, 2014/53/EU RED, EN 50549-1, VDE-AR4105:11-2018, DIN VDE V 0124- |

