

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 usable capacity can be expanded up to 28.5kWh without any additional devices.



LG ESS Home 8 | 10
D008KE1N211
D010KE1N211

LG HBC Battery 11H | 15H
BUEL011HBC1
BUEL015HBC1

Highly Efficient Energy Storage System



One brand, one warranty

LG is a single manufacturer of both the battery and PCS (inverter)



Quick and easy installation

Thanks to the modular design, transportation and installation become easy



Using more sunlight with 3 MPPT advanced feature

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



Combinable with LG air-to-water heat pump and LG EV-charger

Direct communication between LG ESS, LG heat pump and future LG EV Charger



Large storage capacity

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

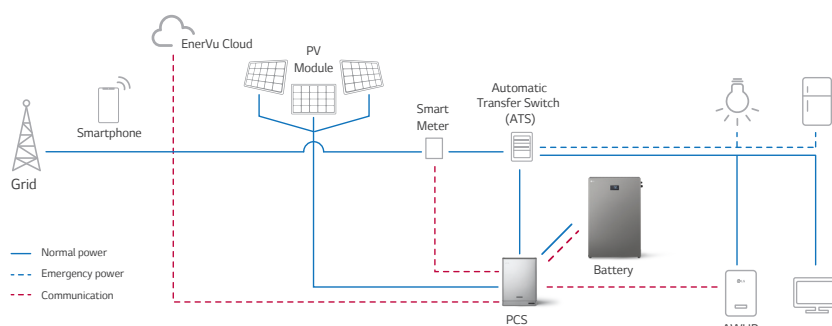


Smart Management using EnerVu

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 string)	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 Impp	13 A	
Max Short Circuit Current Isc	15 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

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	

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)
Automatic Transfer Switch (ATS)	Enwitec (Type 10013677, 10013678, 10016021, 10016022)
Smart Gateway	Smart1, Smartfox PRO, Solarmanager
SG-Ready / Ripple Control Receiver	LG IO Modul PEXPMB100, PEXPMB300

Certifications

PCS	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 0124-100, 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, AS/NZS 4777.2
Battery	UN38.3, IEC62619, IEC63056, IEC60730-1 Annex H, IEC61000(CE), IP55, UL1973

Battery Specifications

DC Input / Output

Model	LG HBC 11H	LG HBC 15H
Battery Type	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 (Usable) ³⁾	10.7 / 14.2 / 21.4 / 28.5 kWh	
Efficiency	>95.5%	

1) Value for battery cell only (depth of discharge 90%) 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.

3) Expansion of the battery is only possible within 12 months after the initial installation.

General Data

Dimension (W/H/D, mm)	698 / 1,073 / 205
Weight (HBC 11H 15H) (Battery Modules + Housing)	112kg / 138kg (26kg per battery module+34kg)
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%)