

# LG ELECTRONICS HOME SYSTEM



# The Energy Storage System (ESS) 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 with LG ThinQ.

It offers reliable power both day and night from a highly efficient system. LG Electronics ESS applies a modular battery design that allows for easy installation and capacity expansion, allowing customers to propose the desired battery capacity.



LG ESS Home 4.6 RA460K07A00 (4.6kW | 7.12kWh) RA460K11A00 (4.6kW | 10.68kWh) LG ESS Home 6 RA600K07A00 (6kW | 7.12kWh) RA600K11A00 (6kW | 10.68kWh) PCS (Inverter) RA460K00A10 (Home 4.6) RA600K00A10 (Home 6)

**Battery** RA000K07A00 (7.12kW) RA000K11A00 (10.68kW)

# Highly Efficient Energy Storage System



₩ LG

### One brand. one warranty

LG is manufacturer of both the battery and PCS. One-Stop-Service for both products. Higher value with higher energy throughput



## LG air-to-water heat pump and EV-charger connectivity

Easy plug & play installation and commissioning for LG Therma V heat pumps and EV Charger qualified for LG ESS. With LG IO Module 3rd party compatibility i.e. SG-Ready



### Quick and easy installation

With the modular design, the transportation and instal-lation become easy. 26kg per battery module only



### Backup Light at black out

In case of grid outage 3000W of backup energy is provided based on battery and PV availability



### **Battery Expansion** for more savings

An additional battery module can be easily installed from 2 to 3 modules up to 10.7kWh within 200 cycle



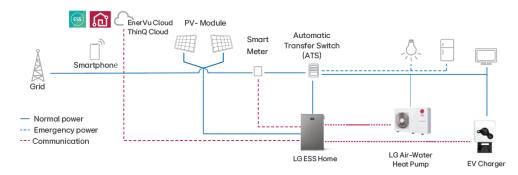
### Smart Management using EnerVu and ThinQ

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



# **LG ELECTRONICS HOME SYSTEM**

## **System Layout**



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

# **PCS Specifications**

#### DC Input

Model (4.6 kW I 6 kW)	RD460KCBA01	RD600KCBA01
Input Voltage Range	150 ~ 600V <sub>DC</sub>	
Max. DC Power (Per string)	6.9kW (3.68kW)	9kW (4.5kW)
Usable MPP Voltage Range	150 ~ 510V	
Number of MPPT	2	
Number of String per MPPT	1	
Max. Short Current per MPPT	18 A	
Rated Current per MPPT	13 A	

#### **AC Output**

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Rated Grid Voltage	230V	
AC Voltage Range	207 - 253 V	
Frequency	50Hz	
Rated Output Power	4.6kW	6.0kW
Rated Output Current	20A	26A
THD / Power Factor	< 5% / ±0.8	

#### General Data

Operation Temperature	Discharging -20 °C ~ 50 °C Charging -10 °C ~ 45 °C
Recommended Operating temperature	Discharging 0 °C ~ 40°C charging 0 °C ~ 35°C
Topology	Transformerless
Typical Noise Emission	<47dB

# **Battery Specifications**

#### DC Input / Output

Model Name	BPEL007HBG2	BPEL011HBG2
Number of Battery Modules	2 Modules	3 Modules
Battery Type	Lithium Ion	
Total Capacity	7.91kW h	11.87kWh
Usable Capacity <sup>1)</sup>	7.12kWh	10.68kWh
Max. Charge Power (Home 4.6 / Home 6.0) <sup>2)</sup>	2.5kW / 2.5kW	4kW / 4kW
Max. Discharge Power(ATS <sup>4</sup> ) (Home 4.6 / Home 6.0) <sup>2)</sup>	3.68kW/ 3.68kW	4.6kW / 5.6kW
Max. Discharge Power(Back up Light)	3kW	3kW
Battery Module Expansion <sup>3)</sup>	Yes	No

- 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 module is only possible within 200 cycles after the initial installation.
- 4) ATS product is optional component

### General Data

Dimension (W/D/H, mm)	698 / 205 /1,260
Weight (2 Battery Modules   3 Battery Modules)	110kg / 135kg (26kgper battery module + 58kg)
Cooling Type	Forced Convection
Degree of Protection	IP56
Warranty	10 years

#### Compatibility Product List (Optional)

Energy Meter	ABB (B21-112-100, B21-212-100, B21-312-100) Eastron (SDM230-MODBUS)
Air to Water Heat Pump	LG Electronics (Therma V Monobloc, Spilt-Hydro Box)
SG-Ready	LG IO Module PEXPMB100, PEXPMB300

### Certifications

PCS	IEC/EN 62109-1/-2, EN 55011, EN IEC 61000, RED(2014/53/EU)
Battery	IEC/EN 62619, IEC60730-1 Annex H, IEC 63056

