# 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



ΕN

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



## 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



### Backup Light at black out

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



### Smart Management using EnerVu and ThinQ

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**

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

| AC Output            |             |       |  |
|----------------------|-------------|-------|--|
| 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 |       |  |

## **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<br>(Home 4.6 / Home 6.0) <sup>2)</sup>                       | 2.5kW / 2.5kW  | 4kW / 4kW     |
| Max. Discharge Power(ATS <sup>4</sup> )<br>(Home 4.6 / Home 6.0) <sup>2)</sup> | 3.68kW/ 3.68kW | 4.6kW / 5.6kW |
| Max. Discharge Power(Light Back up)  | 3kW            | 3kW           |
| Battery Module Expansion <sup>3)</sup>   | Yes            | No            |

 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

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

#### General Data

| Dimension (W/D/H, mm)   | 698 / 205 /1,260                                 |
|---|--|
| Weight<br>(2 Battery Modules   3 Battery<br>Modules)                  | 110kg / 135kg<br>(26kgper battery module + 58kg) |
| Cooling Type  | Forced Convection                                |
| Degree of Protection  | IP56   |
| Warranty  | 10 years   |
| ABB (B21-112-100, B21-212-100, B21-312-100<br>Eastron (SDM230-MODBUS) | ))   |
| LG Electronics (Therma V Monobloc, Spilt-Hydro                        | Box)   |
| LG IO Module PEXPMB100, PEXPMB300                                     |  |
|   |  |
| N 62109-1/-2, EN 55011, EN IEC 61000, RED(20                          | 14/53/EU)  |

### Certifications

SG-Ready

Energy Meter

Air to Water Heat Pump

| Battery IEC/EN 62619, IEC60730-1 Annex H, IEC 63056 |  |
|---|--|

Compatibility Product List (Optional)

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