

LG Energy storage system

D005KD1N111 | **ED00064CN00**
PCS Battery Pack



The Smartest Way to use Solar Energy

LG Electronics provides energy storage system to enhance self-consumption rate of photovoltaic systems. LG's DC-coupled ESS converts power more efficiently than AC-coupled ESS. Thus, LG ESS can achieve higher efficiency.

Furthermore, LG ESS generates the three-phase AC current producing the balanced grid power. Above all, the user-friendly mobile application helps the easy system set-up.

The web monitoring function also allows installers and users to check their system status anytime and anywhere.



PCS

Compact DC Coupled Energy Storage



High Efficiency

97.7 % of maximum PV to grid conversion efficiency by three-level topology



Slim and Luxury Design

More compact, and lighter, but luxury and durable with stainless steel cover



Battery Scalability

Battery capacity can be doubled by using expansion kit

* Battery expansion kit is soled separately



Wireless Communication

Smartphone app installation via direct wireless connection is included (iOS & android app is available)



Battery Pack

LG Energy storage system

DC Input

Max. Input Voltage	800 V
Min. Input Voltage	210 V
Max. DC Power	6.6 kW (3.3 kW per MPPT)
Input Voltage Range MPPT at Rated AC Output Power	210 - 680 V
Number of MPPT	2
Number of String per MPPT	1
Max. Input Current per MPPT	13 A

AC Output

Rated Grid Voltage	3-NPE 400 V/230 V
AC Voltage Range	319 - 458 V 184 - 264.5 V
Frequency (Frequency Range)	50 Hz (47.5 Hz - 51.5 Hz)
Max. Output power	5.6 kVA
Rated Output Power	5 kW
Max. Output Current	8 A
Total Harmonic Distortion / Power Factor with Rated Power	< 5 % / ±0.9
Phases	3

Battery

Battery Type	Lithium Polymer
Max. Charger Power	3.0 kW
Capacity (Expandable)	6.4 kWh (max. 12.8 kWh)
DoD	90 %
Current Capacity	31.5 Ah
Rated Input Voltage	207.2 V

Energy Meter Compatibility List

Manufacturer	Model
ABB	B23 112-100, B23 212-100, B23 312-100

Efficiency (PCS)

Max. Efficiency (PV to Grid)	97.7 %
European Efficiency (PV to Grid)	96 %

General Data

Dimension (W/H/D, mm)	408/490/185 (PCS) 408/682/180 (Battery)
Weight (PCS/Battery)	25 kg / 58 kg
Operation Temperature	0°C - 40°C

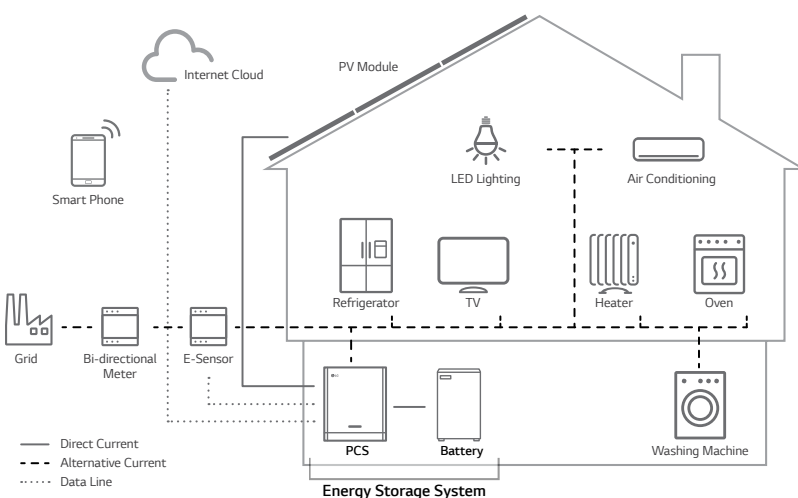
Feature & Function

Noise emission (Typical)	< 40 dB
Cooling Type	Forced Convection
Topology	Transformerless
Degree of Protection	IP21
Max. Permissible Value of Relative Humidity (Non-condensing)	85 % (Climate Class 3K5)
Warranty (PCS)	10 years
Warranty (Battery)	10 years (SOH 80 %)
Certification (PCS)	IEC/EN 62109-1/-2, VDE-AR-N 4105, VDE 0126-1-1, ÖVE/ONORM E 8001-4-712, TOR D4:2016, IEC61000 Series
Certification (Battery)	CE/IEC 62133/IEC 62619/UN38.3

Battery Expansion Kit (option) Model : APEPT000008

Dimension (W/H/D, mm)	300/270/85
Weight	3.7 kg
Operating Voltage Range	168 - 232.4 Vdc
Max. Charging/Discharging Current	19 A
Communication	CAN
Safety	IEC 62477-1
Degree of Protection	IP21
Warranty	10 years

System Block Diagram



System Line-Up

5kW / 6.4 kWh

5 kW / 12.8 kWh
(with expansion pack)



* Expansion pack includes one expansion kit and one battery pack
** If you wish to install additional batteries, we recommend within 1 year after the first ESS installation date.