

# RESU13

13.0kWh Battery Pack Specification

**RESU13**
**Electrical Characteristics**

Total Energy Capacity	13.0 kWh
Usable Energy Capacity <sup>1)</sup>	12.4 kWh
Battery Capacity	252 Ah
Voltage Range	42.0 to 58.8 V <sub>DC</sub>
Nominal Voltage	51.8 V <sub>DC</sub>
Max. Charge/Discharge Current	119A
Peak Current <sup>2)</sup>	166.7A for 3 sec.
Max. Charge/Discharge Power <sup>3)</sup>	5.0kW
Peak Power <sup>2)</sup>	7.0kW for 3 sec.
Peak Power for backup mode	11.0kW for 3 sec.
Battery Pack Round-Trip Efficiency	>95% (under specific condition)
Communication Interface	CAN 2.0B
DC Disconnect	Circuit Breaker, Contactor, Fuse

**Operating Conditions**

Installation Location	Indoor / Outdoor (Stand / Wall-Mounted)
Operating Temperature	-10 to 50°C
Operating Temperature (Recommended)	15 to 30°C
Storage Temperature	-30 to 60°C : ~7 days -20 to 45°C : ~6 months
Humidity	5% to 95%
Altitude	Max. 2,000m
Cooling Strategy	Natural Convection

**Certification**

Safety	Cell	UL1642
	Battery Pack	CE / RCM / TUV (IEC 62619) / FCC
EMC		IEC61000-6-1, IEC61000-6-3
Hazardous Materials Classification		Class 9
Transportation		UN38.3
Ingress Rating		IP55

※ Test Conditions - Temperature 25°C, at the beginning of life

※ Total Energy is measured under specific condition from LGC(0.3CCCV/0.3CC)

1) Value for Battery Cell Only (Depth of Discharge 95%). Actual usable energy at the AC output may vary by condition, such as the inverter efficiency and temperature.

2) Peak Current excludes repeated short duration (less than 3 sec. of current pattern).

3) LG ES recommends 0.3CP for maximum battery lifetime. Values temperature and SOC - dependent.

**Features**

RESU13 battery pack designed for photovoltaic systems is easily adaptable energy storage solution. With RESU Plus, RESU13 can be connected with the same model.

※ RESU Plus is an expansion kit specially designed for 48V models.  
 Number of expandable battery units : up to 2EA

- Backup functionality supported
- Powerful Performance : World Best Energy Density
- Easy and Flexible installation
  - : Easy wall-mounted or floor-standing installation enable
  - : Diverse Matched Inverters Available
- BMS firmware can be updated easily by using SD Card


**Mechanical Characteristics**

Dimensions	Width	452 mm (17.8")
	Height	626 mm (24.7")
	Depth	227 mm ( 8.9")
Weight		98.5 kg (217.2lbs)



# LG Energy Solution

ESS Battery Division