# RESU13

13.0kWh Battery Pack Specification

LG Energy Solution

2021.Apr.

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# Product Specification (1/2)

2021.Apr.

## RESU13

| Electrical Characteristics | |
|---|---|
| Total Energy Capacity | 13.0 kWh |
| Usable Energy Capacity[1)] | 12.4 kWh |
| Battery Capacity | 252 Ah |
| Voltage Range | 42.0 to 58.8 $V_{DC}$ |
| Nominal Voltage | 51.8 $V_{DC}$ |
| Max. Charge/Discharge Current | 119A |
| Peak Current[2)] | 166.7A for 3 sec. |
| Short Circuit Current[3)] | 3.209kA |
| Max. Charge/Discharge Power[4)] | 5.0kW |
| Peak Power[2)] | 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 |
| Battery Chemistry | Lithium Ion |

| Operating Conditions | |
|---|---|
| Installation Location | Indoor / Outdoor (Stand / Wall-Mounted) |
| Ingress Rating | IP55 |
| Operating Temperature | -10 to 50°C |
| Operating Temperature (Recommended) | 15 to 30°C |
| Storage Temperature | -30 to 60°C : ~7 days<br>-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 |

※ 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) Short circuit current is measured at installer-accessible terminal
4) LGES recommends 0.3CP for maximum battery lifetime. Maximum power will vary due to temperature and SOC

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# Product Specification (2/2)

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**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) |



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