



Features

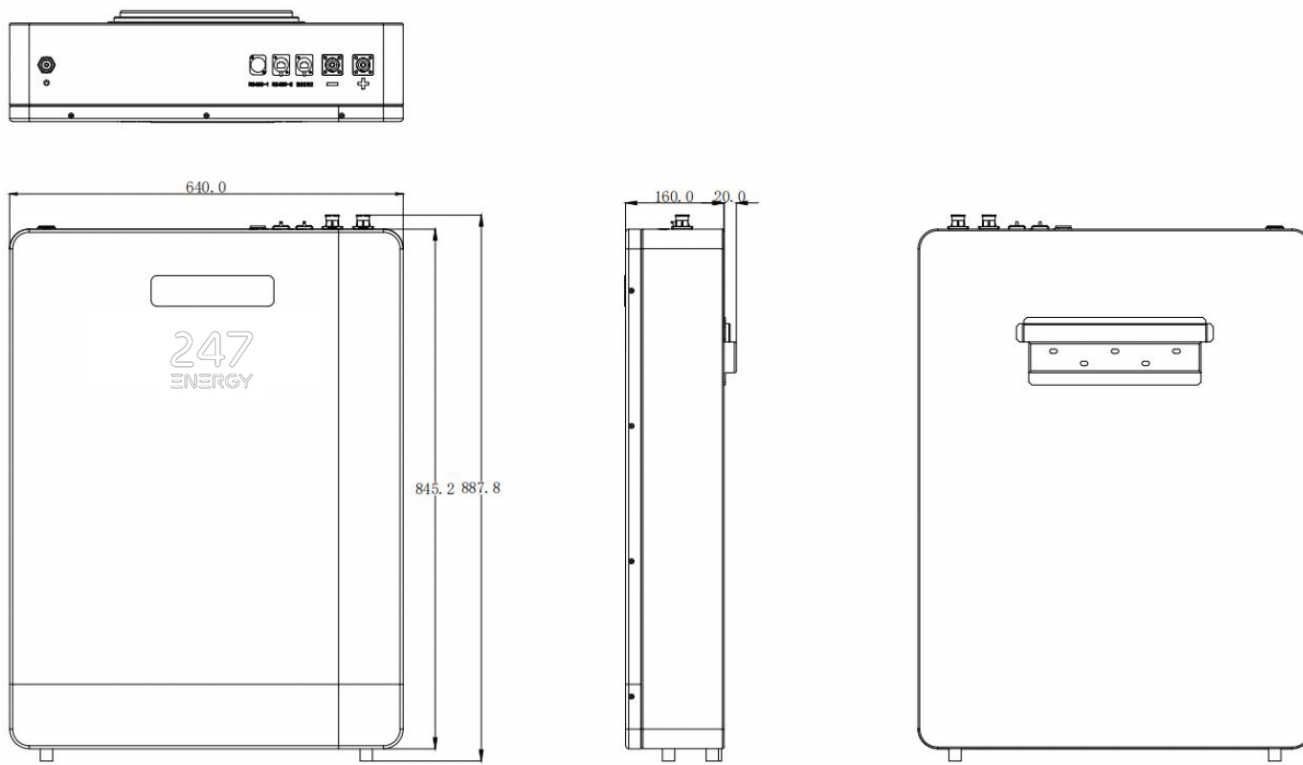
- SOLID STATE SUPERCAPACITOR CELLS
- SAFEST TECHNOLOGY
- WALL MOUNTABLE
- ULTRA LONG CYCLE LIFE
- EASY TO INSTALL
- LOW MAINTENANCE
- BLUETOOTH COMMUNICATION

Technical Specifications

Specification	RES 5 kWh	RES
Part Number	247-RES-48V5K	247-RES-48V10K
Features		
Core technology	Solid-state super capacitor battery technology	Solid-state super capacitor battery technology
Safety	Extreme safe	
Installation	Wall mountable	
Service life	Ultra long cycle life	
Communication	Bluetooth	
Inverter compatibility	Compatible with standard inverters	
Electrical Specifications		
Energy storage	5 kWh	10 kWh
Capacity	100 Ah	200 Ah
Nominal voltage	51,2 V DC	
Maximum charge voltage	58,4 V DC	
Discharge cut-off voltage	43,2 V DC	
Internal configuration	16S2P / EF50	16S4P / EF50
ESR / AC @ 1 kHz, 50 % SOC	< 9 mΩ	
Max. continuous charge current	80 A	100 A
Max. continuous discharge current	100 A	
Cell self-discharge rate	2 % per month	
Round-trip efficiency (BoL, 25 °C)	97,7 %	

Projected cycle life (25 °C)	15 000 cycles	
Projected life (25 °C)	15 years	
Recommended depth of discharge	≤ 90 %	
Maximum depth of discharge	100 %	
Cooling method	Natural	
Shell material	Metal & ABS plastic	
Parallel connection	Up to 16 sets	
Communication protocols	CAN, RS485	
Monitoring data	System voltage, current, temperature, SOC, SOH, cycles, cell voltage	
Mechanical Specifications		
Weight	50 kg	117 kg
Dimensions (W x H x T)	470 x 570 x 175 mm	640 x 887 x 180 mm
Mount option	Wall mountable	
Environmental Specifications		
Ingress rating	Indoor IP20	
Operating humidity	0 ~ 90 % RH, non-condensing	
Charge temperature	0 °C ~ +55 °C	
Discharge temperature	-20 °C ~ +55 °C	
Storage conditions	SOC > 30 %, -20 °C ~ +40 °C, 25 % ~ 95 % RH; one full charge every two months	
Transport conditions	50 % SOC, -20 °C ~ +40 °C	
Maximum elevation	3000 m (9843 ft)	
Compliance Information		
IEC	IEC 62619 (on testing, certificate pending)	
Italy	CEI 0-21:2022	
CE	EN 62133:2013; EN 55032:2015 + AC:2016; EN 55035:2017; EN 61000-3-2:2014	
Transport	UN 38.3, MSDS	
Environmental	RoHS	
Charging Notes		
Recommended U-Float (charger setting)	54 V	54 V
Bulk / Absorption voltage	57 V	57 V
Return voltage	45 V	44 V
Maximum charge current (I _{max})	80 A	100 A
Load current (discharge)	100 A	100 A (-100 A plot)

Mechanical Specifications



247 RES 10

Charging-Discharging Curve

