

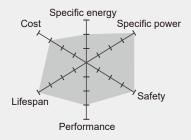
Battery System Designed For PV Industrial & Commercial Application

Battery Series M48112-S



⊘ Key Features





CHEMISTRY

AlphaESS only goes with LFP for safest operation and longest cycle-life

Whilst Alpha's batteries are slightly larger per physical capacity versus other types of Li-lon used in electronics and EVs, they are easily banked in parallel close together because they don't suffer heat issues and thermal runaway. We have chosen LiFePO4 for their superior life, safety and environmental performance.

About AlphaESS

As one of the earliest pioneers in energy storage market with lithium iron technology, AlphaESS has a vision to pave the path for everyone in the world to enjoy clean energy one day.

AlphaESS is a multinational company that currently has more than 10'000 residential and commercial systems running in 30 countries globally and its products are accredited by IEC, TÜV, CEC and many other international standards.

All AlphaESS energy systems are integrated with smart energy management solutions. AlphaESS is committed to revolutionize the future energy network through our patented German technologies.







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Physical	
Model	M48112-S
Battery Type	LFP (LiFePO4)
Battery Manufacturer	
System Weight	65 kg
Dimension (W x D x H)	450 x 580 x 165 mm
IP Protection	IP20
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
Electrical	
Energy Capacity	5.7 kWh
Usable Capacity	5.2 kWh
Depth of Discharge (DoD)	90%
Nominal Voltage	51.2 V
Operating Voltage Range	48 ~ 57.6 V
Internal Resistance	≤ 30 mΩ
Cycle Life	≥ 6000
Operation	
Max. Charging Current	112 A (1C)
Max. Discharging Current	112 A (1C)
Operating Temperature Range	-10 °C ~ 50°C*
Humidity	15% ~ 85%
BMS	
Modules Connection	4 ~ 15 in series
Capacity	22.9 / 28.6 / 34.4 / 40.1 / 45.9 / 51.6 / 57.3 / 63.1 / 68.8 / 74.5 / 80.2 / 86.0 kWh
Power Consumption	<2 W (Work), <100 mW (Sleep)
Monitoring Parameters	System voltage, current, cell voltage,
	cell temperature, PCBA temperature.
Communication	CAN and RS-485 compatible
BMU Model	HV900112
	(TOP BMU required with more than one parallel cluster)

*When the temperature is below 0 °C or above 40 °C, the performance will be limited.

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