





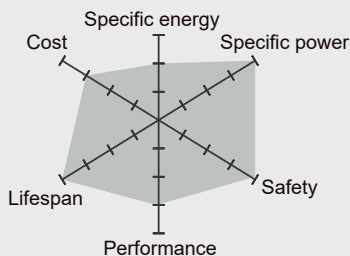
Battery System Designed For PV Household Application

Battery Series SMILE5-BAT



✓ Key Features

-  **Modular**
-  **Plug & play**
-  **Safe**
-  **Long lifespan**



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-Ion 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.



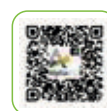
Official Website




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Physical	
Model	SMILE5-BAT
Battery Type	LFP (LiFePO4)
Battery Manufacturer	
System Weight	65 kg
Dimension (W x D x H)	600 x 250 x 600 mm
IP Protection	IP21 / IP65
Warranty	10 Year Battery Warranty
Electrical	
Energy Capacity	5.8 kWh
Usable Capacity	5.5 kWh
Depth of Discharge (DoD)	96%
Nominal Voltage	51.2 V
Operation Voltage Range	48 V ~ 57.6V
Internal Resistance	≤ 30 mΩ
Cycle Life	10 000*
Operation	
Max. Charge Current	56 A (0.5C)
Max. Discharge Current	56 A (0.5C)
Max. Short-circuit Current	200 A
Operating Temperature Range	-10 °C ~ 50 °C**, 0 °C ~ 40 °C (0.5C)
Humidity	15% ~ 85%
BMS	
Modules Connection	1 ~ 6 in parallel
Capacity Range	5.8 / 11.5 / 17.2 / ... / 34.4 kWh
Usable Capacity Range	5.5 / 11.0 / 16.5 / / 33.0 kWh
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature
Communication	CAN and RS485 compatible
Certification	
Transportation	UN38.3
Safety	IEC 62619 (Cell), IEC 62619 (Pack)

* Under specific test conditions

** When the temperature is below 0 °C or above 40 °C, the performance will be limited.
The detailed battery safety datasheet is supplied with battery.

