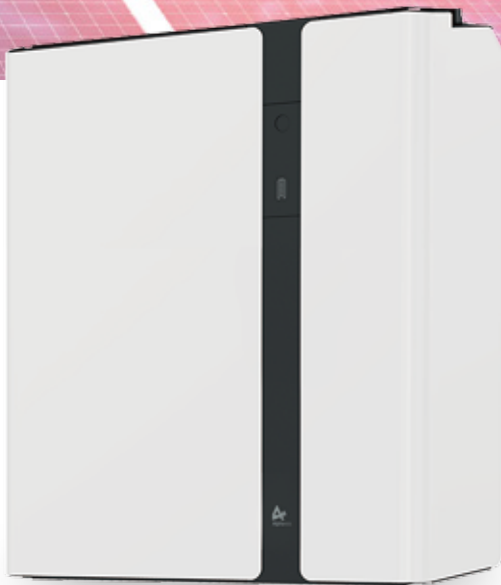






Battery System Designed For PV Household Application

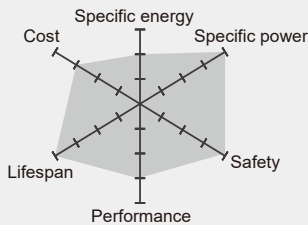
Battery Series

SMILE-BAT-10.1P



✓ 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




Scan to download APP (iOS/Android)



Twitter



FaceBook

Physical	
Model	SMILE-BAT-10.1P
Battery Type	LFP (LiFePO4)
Battery Manufacturer	
System Weight	90 kg
Dimension (W x D x H)	610 x 236 x 723 mm
IP Protection	IP21 (Indoor) / IP65 (Outdoor)
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
Electrical	
Energy Capacity	10.1 kWh
Usable Capacity	9.1 kWh
Depth of Discharge (DoD)	90%
Nominal Voltage	48 V
Operating Voltage Range	45 ~ 54 V
Internal Resistance	≤ 30 mΩ
Cycle Life	8000
Operation	
Max. Charging Current	100 A (0.5C)
Max. Discharging Current	100 A (0.5C)
Max. Short-circuit Current	200 A
Operating Temperature Range	-10 °C ~ 50 °C*
Humidity	15% ~ 85%
BMS	
Modules Connection	1 ~ 6 in parallel
Capacity	10.1 / 20.2 / 30.2 / 40.3 / 50.4 / 60.5 kWh
Usable Capacity	9.1 / 18.1 / 27.2 / 36.3 / 45.4 / 54.4 kWh
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature
Communication	CAN and RS-485 compatible

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

