

• YOUR
• SMART
• ENERGY



SMILE-M5-S

RESIDENTIAL SERIES

POWER

5 kW Hybrid Inverter
Single Phase

CAPACITY

5 ~ 30 kWh with
5 kWh Battery Module
13.99 ~ 27.98 kWh with
13.99 kWh Battery Module



KEY FEATURES

Quick Setup with Stackable Design

Fast-Suppression Aerosol Fire Defense

Boost Profits with 200% PV Oversizing

All-in-One System Design



SMILE-M5-S



Model	SMILE-M5-S	
System Specification		
Nominal Output Power	5000 W	
Max. Battery Capacity	5 ~ 30 kWh (100% DoD)	
Battery Chemistry	LFP (LiFePO ₄)	
Warranty	10 Years Warranty	
Inverter Technical Specification		
Model	SMILE-M5-S-INV	
Inverter Type	Hybrid Inverter	
Max. PV Input Current (per MPPT)	16 A	
Max. PV Input Power	10000 W	
MPPT Number / Max. Input Strings per MPPT	2 / 1	
MPPT Voltage Range	100 ~ 550 V	
Max. PV Short-Circuit Current (per MPPT)	25 A	
Max. Charging / Discharging Current	100 A	
Max. Charging / Discharging Power	5000 W	
Rated Frequency	50 / 60 Hz	
Rated Voltage	230 V	
Phase	Single Phase	
Backup	UPS	
Communication	Ethernet / Wi-Fi	
Dimensions (W x H x D)	620 x 240 x 412.5 mm	
Weight	19.5 kg	
Ingress Protection (IP) Rating	IP65	
Safety	IEC62109-1 / -2, IEC62477	
EMC	IEC61000-6-1 / 3, IEC61000-302 / 3	
Grid Regulation	AS / NZ4777.2	
Battery Technical Specification		
Module Model	SMILE-M-BAT-5P	SMILE-M-BAT-13.9P
Nominal Capacity	5 kWh	13.99 kWh
Modules Connection	1 ~ 6 in Parallel	1 ~ 2 in Parallel
Max. Charging / Discharging Current	100 / 100A	105 / 105 A
Operating Temperature Range	0 ~ 50 °C (Charge); -10 ~ 50 °C (Discharge)	
IP Protection	IP65	
Dimensions (W x H x D)	620 x 390 x 240 mm	620 x 240 x 710 mm
Weight	50 kg	115 kg

Max. charge / discharge current derating may occur with changes in temperature and SoC.



Alpha ESS Australia Pty.Ltd.
✉ australia@alpha-ess.com
☎ +61 02 90007676
📍 31 Richmond Rd, Homebush West NSW 2140

Alpha ESS Co., Ltd
✉ info@alpha-ess.com
☎ +86 513 8060 6891
📍 No.1086, Bihua Road, Nantong Hi-Tech Zone, Jiangsu Province, China