

YOUR
SMART
ENERGY



SMILE-G3-T5/T10

RESIDENTIAL SERIES

POWER

5 / 10 kW

CAPACITY

9.3 kWh Battery Module, Up to 55.8 kWh

4.56 kWh Battery Module, Up to 27.36 kWh

KEY FEATURES

3 MPPT for Higher PV Input

Bypass Function for Series Battery

Fast-Suppression Aerosol Fire Defense

Capable of 150% Unbalancing per Phase



SMILE-G3-T5/T10



Model	SMILE-G3-T5	SMILE-G3-T10
System Specification		
Nominal Output Power	5000 W	10000 W
Capacity Range	9.3 ~ 55.8 kWh (100% DoD)	
Battery Chemistry	LFP (LiFePO ₄)	
IP Protection	IP65 (Outdoor)	
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty	
Inverter Technical Specification		
Model	SMILE-G3-T5-INV	SMILE-G3-T10-INV
Coupling	Hybrid Inverter	
Max. PV Input Power	10000 W	20000 W
Max. PV Input Current	16 A / 16 A / 16 A	
Max. PV Input Voltage	1000 V	
MPPT Number / Max. Input Strings Number per MPPT	3 / 1	
Start-up Voltage	120 V	
MPPT Voltage Range	140 ~ 950 V	
Max. PV Short-Circuit Current per MPPT	24 A / 24 A / 24 A	
Max. Charging/Discharging Current	40 A	
Max. Charging/Discharging Power	5000 W	10000 W
Rated Frequency	50 / 60 Hz	
Rated Voltage	220 V / 380 V, 230 V / 400 V	
Rated Output Apparent Power (Grid Port)	5000 VA	10000 VA
Rated Output Apparent Power (Backup Port)	5000 VA	10000 VA
Max. AC input Power (Grid Port)	10000 W	20000 W
Rated Output Current (Grid Port)	7.3 A	14.5 A
Max. AC Output Current (Grid Port)	14.5 A	29 A
Rated Output Current (Backup Port)	7.3 A	14.5 A
Max. AC Output Current (Backup Port)	14.5 A	29 A
Backup	UPS	
Phase	Three Phase	
Communication	Ethernet / WiFi / Modbus / API	
Dimensions (W x H x D)	610 x 416 x 212.5 mm	
Weight	26.7 kg	
Ingress Protection(IP) Rating	IP 65	
Max. Inverter Efficiency	97.6 %	
Humidity	0 ~ 90% (No Condensation)	
Operating temperature	-25 °C~60 °C(Charge/Discharge)	
Active anti-Islanding method	Integrated	
Country of manufacture	China	
Safety	IEC 62109, IEC 62040	
EMC	IEC 61000	
Grid Regulation	AS/NZS 4777.2	
Battery Technical Specification		
Module Model	SMILE-G3-BAT-4.5S	SMILE-G3-BAT-9.3S
Module Capacity	4.56 kWh	9.3 kWh
Usable Capacity	4.56 kWh (100%* DoD)	9.3 kWh (100%* DoD)
Nominal Voltage	96 V	96 V
Battery Voltage Range	90 ~ 105.6 V	90 ~ 105.6 V
Modules Connection	1~6 in Series	1~6 in Series
Max. Charging/Discharging Current	50 A / 50 A	52.5 A / 52.5 A
Operating Temperature Range	-20°C~50°C**	-20°C~50°C**
IP Protection	IP 65	IP 65
Dimensions (W*H*D)	610 x 435 x 212.5 mm	610 x 634 x 210 mm
Weight	53 kg	81 kg

* Test condition: Max. 0.5C charge/discharge at 25±2°C.

** Performance reduction may occur depending on the state of charge and temperature. Optimal operating temperature 15°C ~ 30°C.



Alpha ESS Co., Ltd

✉ info@alpha-ess.com

☎ +86 513 8060 6891

🏠 No. 1086, Bihua Road, Nantong Hi-Tech Zone, Jiangsu Province, China

ALPHAESS Australia

✉ australia@alpha-ess.com

☎ +61 02 90007676

🏠 8/15-21 Gibbes Street Chatswood NSW 2067 Australia

V01.24102025 | Text and Images correspond to the current state of technology at the time of printing. Subject to modifications. All information is without guarantee in spite of careful editing - liability excluded.