YOUR
SMART
ENERGY

AlphaESS

SMILE-G3-T5/T10

RESIDENTIAL SERIES

POWER
5 / 10 kW

CAPACITY
9.3 kWh Battery Module, Up to 55.8 kWh



reddot design award 2022

GOOD DESIGN AWARD

KEY FEATURES

3 MPPT for 200% Max PV Input

Automatic Series Battery Bypass

Fast-Suppression Aerosol Fire Defense

SMILE-G3-T5/T10

Model	SMILE-G3-T5	SMILE-G3-T10
System Specification		
Nominal Output Power	5000 W	99990 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 Specifications		
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	
DC Voltage Range for Battery Port	90 ~ 700V	
Max. Input DC Power for PV Port	10000 W	20000 W
MPPT Number / Max. Input Strings 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 / 40 A	
Max. Charging / Discharging Power	5000 W	10000 W
Rated Frequency	50 Hz	
Rated Voltage	230 V / 400 V	
Rated Output Apparent Power (Grid Port)	5000 VA	99990 VA
Rated Output Apparent Power (Backup Port)	5000 VA	10000 VA
Max. AC Input Power (Grid Port)	10000 W	15000 W
Rated Output Current (Grid Port)	7.3 A	14.5 A
Max. AC Output Current (Grid Port)	7.3 A	14.5 A
Rated Output Current (Backup Port)	7.3 A	14.5 A
Max. AC Output Current (Backup Port)	7.3 A	14.5 A
Phase	Three Phase	
Communication	Wi-Fi / LAN	
Dimensions (W x H x D)	610 x 416 x 212.5 mm	
Weight	26.7 kg	
IP Protection	IP65	
Max. Inverter Efficiency	97.8%	
Humidity	0 ~ 90% (No Condensation)	
Operating Temperature	-25 °C ~ 60 °C (Charge / Discharge)	
Overvoltage Category	BAT,PV (II) / Grid,Backup (III)	
Active Anti-Islanding Method	Frequency Shift	
Country of Manufacture	China	
Safety	IEC 62109	
EMC	IEC 61000	
Grid Regulation	AS / NZS 4777.2	
Battery Technical Specification		
Module Model	SMILE-G3-BAT-9.3S	
Module Capacity	9.3 kWh (100% DoD)	
Nominal Voltage	96 V	
Operating Voltage Range	90 ~ 105.6 V	
Max. Charging / Discharging Current	52.5 A / 52.5 A	
Modules Connection	1 ~ 6 in Series	
Operating Temperature Range	-20 °C ~ 50 °C*	
IP Protection	IP65	
Dimensions (W x H x D)	610 x 630 x 212 mm	
Weight	81 kg	

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

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