YOUR
SMART
ENERGY

AlphaESS

SMILE-G3-S5

RESIDENTIAL SERIES

POWER

5 kW Hybrid Inverter
Expandable to 15 kW
Single Phase

CAPACITY

9.3 ~ 37.2 kWh with 9.3 kWh Battery Module



KEY FEATURES

All-in-One Design

High Voltage System

UPS Seamless Switch

Off-grid Max. 150% Overload, 30s

Support 3 in Parallel, Dual Power Supply

200% PV Oversized, Max. 16A DC Input

Wider Range of MPPT Work Voltage

Max. 28 Configurable Time Periods*

*Up to 6 time periods daily or 4 time periods*7days weekly for charging and discharging can be set.

SMILE-G3-S5

Model	SMILE-G3-S5
System Specifications	
Rated Output Power	5,000 W
Battery Chemistry	LFP ($LiFePO_4$)
Capacity Range	9.3 ~ 37.2 kWh
Warranty	10 Years Product Warranty
PV String Input Data	
Max. PV Input Power	10,000 W
Max. PV Input Voltage	580 V
MPPT Voltage Range	100 ~ 550 V
MPPT Number / Max. Input Strings Number per MPPT	2 / 1
Max. Input Current per MPPT	16 A / 16 A
Max. Short Circuit Currnet per MPPT	24 A / 24 A
AC Input / Output Data	
AC Input & Output Data (Grid Side)	
Rated AC Output Power	5,000 W
Max. AC Input Power	10,000 W
Rated Frequency	50 / 60 Hz
Rated Voltage	230 V
Grid Voltage Range	180 ~ 270 V
Backup Output Data	
Rated Output Power (Off-grid)	5,000 W
Rated Output Voltage (Off-grid)	230 V
Peak Power (Off-grid)	5,500 W@60 s ; 7,500 W @30 s ; 10,000 W @1 s
Rated Output Power (On-grid)	8,000 W
Max. Continuous AC Passthrough	35 A
On / Off Grid Switch Time	≤10 ms
Battery Data (Inverter Side)	
Max. Charge / Discharge Power	5,000 W
Max. Charge / Discharge Current	60 A
General Specifications	
Dimensions (W x D x H)	610 x 212 x 366 mm
Weight	19.5 kg
Communication	Ethernet / Wi-Fi
Relative Humidity	0 ~ 90% (Non-Condensing)
Operation Temperature	-25 ~ 60 °C
Noise	<35 dB
Over Voltage Category	DC Type III / AC Type II
Ingress Protection(IP) Rating	IP65
Operation Altitude	3,000 m
Battery Technical Specifications	**SMILE-G3-BAT-9.3S**
Module Capacity	9.3 kWh
Usable Capacity	9.3 kWh (100% DoD)
Nominal Voltage	96 V
Battery Voltage Range	90 ~ 105.6 V
Modules Connection	1~4 in Series
Max. Charging / Discharging Current	52.5 A / 52.5 A
Operating Temperature Range	-20°C ~ 50°C *
IP Protection	IP65
Dimensions (W x D x H)	610 x 212 x 630 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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