

• YOUR
• SMART
• ENERGY



SMILE-G3-T5/T10/T15/T20

RESIDENTIAL SERIES

POWER

5 / 10 / 15 / 20 kW

CAPACITY

9.3 ~ 55.8 kWh with
9.3 kWh Battery Module



3 MPPT for Higher PV Input

Redundant Design without HV Box

Capable of 150% Unbalancing per Phase



SMILE-G3-T5/T10/T15/T20 AlphaESS

Model	SMILE-G3-T5	SMILE-G3-T10	SMILE-G3-T15	SMILE-G3-T20
System Specifications				
Nominal Output Power	5000 W	10000 W	15000 W	20000 W
Capacity Range	9.3~55.8 kWh			
Battery Chemistry	LFP (LiFePO4)			
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty			
Inverter Technical Specifications				
PV String Input Data				
Max. PV power	10000W	20000W	30000W	30000W
Max. PV Input voltage	1000 V			
Start-up Voltage	120 V		220 V	
MPPT Voltage Range	140~950 V		200~850 V	
Max. Input Current per MPPT	16 A / 16 A / 16 A		18 A / 18 A / 18 A	
Max. Short Circuit Current per MPPT	24 A / 24 A / 24 A		22.5 A / 22.5 A / 22.5 A	
MPPT Number / Max. Input Strings Number per MPPT	3 / 1			
AC Input & Output Data (Grid side)				
Rated Output Power	5000 W	10000 W	15000 W	20000 W
Rated Output Current	7.3 A	14.5 A	21.7 A	29 A
Max. Input Power	10000 W	20000 W	20000 W	25000 W
Nominal AC voltage	220 V / 380 V, 230 V / 400 V			
Grid Voltage Range	150~288 V		180~270 V	
Rated Frequency	50 / 60 Hz			
AC Output Data (Backup side)				
Rated Output Power (On-Grid)	5000 W	10000 W	15000 W	20000 W
Rated Output Power (Off-Grid)	5000 W	10000 W	15000 W	20000 W
Switch Time	<20ms			
Rated Output Voltage	230±10%			
Rated Frequency	50 / 60 Hz			
Efficiency				
Max. Efficiency	97.6%		98%	
General Parameter				
Dimensions (W*D*H)	610 x 212.5 x 416 mm		610 x 250x 610 mm	
Weight	26.7 kg		44 kg	
Operation Temperature Range	'-25 ~ 60 C		'-25 ~ 60 C	
Relative Humidity	0 ~ 90% (No Condensation)			
Ingress Protection	IP65			
Noise Emission	≤30 dB		≤50 dB	
Overvoltage Category	DC II			
Certifications & Standards				
Safety	IEC 61000-6-1/3; IEC 62109-1/-2; IEC 62477			
Grid Code	AS4777.2, EN50549, VDE4105			
Battery Technical Specifications				
Module Model	SMILE-G3-BAT-9.3S			
Module Connection	1 ~ 6 in Series			
Depth of Discharge (DoD)	100%			
Nominal Capacity	9.3 kWh			
Nominal Voltage	96 V			
Max. Charging / Discharging Current	52.5 A / 52.5 A			
Operating Temperature Range	'-20°C~50°C(Charge/Discharge)			
Fire-fighting	Aerosol, explosion-proof valve			
Dimension (W x D x H)	610 x 210 x 634 mm			
Weight	81 kg			
Ingress Protection	IP65			
Safety Compliance	IEC 62619, IEC 62040, IEC 61000			