YOUR
SMART
ENERGY

up to >12% Additional energy use

up to >20% Longer service life

AlphaESS

SMILE-G3-S3.6/S5/B5

HOME SERIES

POWER

3.6 / 5 kW

CAPACITY

3.65 kWh modular
expandable up to 14.6 kWh

3.8 kWh modular
expandable up to 15.2 kWh

4.56 kWh modular
expandable up to 18.24 kWh

9.3 kWh modular
expandable up to 37.2 kWh

COBALT-FREE · LUMIT Versicherung · Munich RE · reddot design award 2022 · GOOD DESIGN AWARD

HYBRID BATTERY

- Optimal capacity utilization through pack balancing
- 100% charge/discharge power at 1C
- High reliability through Multi-BMS system
- Safe lithium iron phosphate (LFP) cells
- Performance warranty up to 25 years
- 5-year all-risk insurance (optional)

HYBRID INVERTER

- UPS capability
- Intelligent off-grid capability
- Price signaling capability
- Wall or floor mounting
- Anti-shading function
- Smart Home Ready

*Net Promoter Score (Recommendation Rate); Source: EUPD Research 2024

SMILE-G3-S3.6/S5/B5

AlphaESS

Model	SMILE-G3-S3.6	SMILE-G3-S5	SMILE-G3-B5
System Specifications			
Nominal Output Power	3.68 kW	5 kW	5 kW
Usabe Capacity Range	3.65 - 14.6 kWh / 3.8 - 15.2 kWh / 4.56 - 18.24 kWh / 9.3 - 37.2 kWh		
Battery Chemistry	LFP (LiFePO4)		
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty		
Inverter Technical Specifications			
Model	SMILE-G3-S3.6-INV	SMILE-G3-S5-INV	SMILE-G3-B5-INV
Coupling	Hybrid	Hybrid	AC
Max.PV Input Power	7.36 kW	10 kW	N/A
Max.PV Input Current	15 A / 15 A		N/A
Max.PV Input Voltage	580 V		N/A
MPPT Number / Strings per MPPT	2 / 1		N/A
MPPT Voltage Range	100 ~ 550 V		N/A
Max.PV Short-Circuit Current	18.75 A / 18.75 A	24 A / 24 A	N/A
Max.Charging/Discharging Current	60 A		
Max.Charging/Discharging Power	3.68 kW	5 kW	5 kW
Nominal Frequency	50 / 60 Hz		
Nominal Voltage	220 V / 230 V		
Phase	Single Phase / 3-Phase Compensation		
Nominal Output Current (Grid Port)	16 A	21.7 A	21.7 A
Nominal Output Current (Backup Port)	16 A	21.7 A	21.7 A
Nominal Input Power(on-grid)	7.36 kW	10 kW	10 kW
Backup	UPS		
Communication	Ethernet / WiFi / Modbus / API		
Relative Humidity	0～90% (No Condensation)		
Dimensions (W×DxH)	610 × 212 × 366 mm		
Weight	19.5 kg		
Ingress Protection	IP65		
Safety	IEC 62109-1/-2,IEC 62040		
EMC	IEC 61000-6-1/-2/-3/-4		
Grid Regulation	VDE 4105, VDE 0126-1-1, EN 50549-1, CEI O-21, RD1699, G98/G99, AS 4777.2, NRS 097, C10/11		
Overvoltage Category	DC Type II according to EN / IEC 61643		
Cooling	Natural Convection		
Noise	≤ 35 dB		
Maximum/European Efficiency	97 % / 96.2 %		

Battery Technical Specifications				
Model	SMILE-G3-BAT-3.8S	SMILE-G3-BAT-4.0S	SMILE-G3-BAT-4.5S	SMILE-G3-BAT-9.3S
Nominal Capacity	3.8 kWh	4.0 kWh	4.56 kWh	9.3 kWh
Usable Capacity	3.65 kWh	3.8 kWh	4.56 kWh	9.3 kWh
Depth of Discharge (DoD)	95 % *	95 % *	100% *	100% *
Nominal Voltage	96 V	96 V	96 V	96 V
Max. Charging/Discharging Current	40 A	42 A	50 A	52.5 A
Operating Temperature Range	-10°C ~ 50 °C **	-10°C ~ 60 °C **	-20 °C ~ 50 °C **	-20 °C ~ 50 °C **
Cycle Life	10,000 ***	10,000 ***	10,000 ***	10,000 ***
Modular Connection	1 ~ 4	1 ~ 4	1 ~ 4	1 ~ 4
IP Protection	IP21	IP65	IP65	IP65
Dimensions (W x D x H)	610 × 212.5 × 435 mm	610 × 212.5 × 435 mm	610 × 212.5 × 435 mm	610 × 210 × 634 mm
Weight	39.2 kg	42.5 kg	53 kg	81 kg
Noise	≤ 35 dB	≤ 25 dB	≤ 35 dB	≤ 35 dB
Fire-Fighting	Aerosol	N/A	Aerosol	Aerosol

* 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.
*** Under specific test conditions.

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