

YOUR
SMART
ENERGY



up to
>12%

Additional
energy use



up to
>20%

Longer
service life



SMILE-G3-T12/T15/T20

HOME SERIES

POWER

12 / 15 / 20 kW

CAPACITY

SMILE-G3-BAT-3.8S Modular
7.3 kWh ~ 43.8 kWh

SMILE-G3-BAT-4.5S Modular
9.12 kWh ~ 27.36 kWh

SMILE-G3-BAT-9.3S Modular
18.6 kWh ~ 111.6 kWh



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

Price signaling capability

Wall or floor mounting

Anti-shading function

3x MPPTs optimal for flexible roof orientation

Smart Home Ready

SMILE-G3-T12/T15/T20



Model	SMILE-G3-T12	SMILE-G3-T15	SMILE-G3-T20
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System Specifications

Nominal Output Power	12 kW	15 kW	20 kW
Usable Capacity Range	7.3 - 43.8 kWh / 7.6 - 22.8 kWh / 9.12 - 27.36 kWh / 18.6 - 111.6 kWh		
Battery Chemistry	LFP (LiFePO ₄)		
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty		

Inverter Technical Specifications

Model	SMILE-G3-T12-INV	SMILE-G3-T15-INV	SMILE-G3-T20-INV
Coupling	Hybrid	Hybrid	Hybrid
Max. PV Input Power	24 kW	30 kW	40 kW
Max. PV Input Current	18 A / 18 A / 18 A		
Max. PV Input Voltage	1,000 V		
MPPT Number / Strings per MPPT	3 / 1		
MPPT Voltage Range	200 ~ 850 V		
Max. PV Short-Circuit Current	22.5 A / 22.5 A / 22.5 A		
Max. Charging/Discharging Current	60 A		
Max. Charging/Discharging Power	12 kW	15 kW	20 kW
Nominal Frequency	50 / 60 Hz		
Nominal Voltage	220 V / 380 V, 230 V / 400 V		
Phase	Three Phase		
Nominal Output Power (Grid Port)	12 kW	15 kW	20 kW
Nominal Output Power (Backup Port)	12 kW	15 kW	20 kW
Nominal Input Power (On-Grid)	17 kW	20 kW	25 kW
Backup	UPS		
Communication	Ethernet / Wi-Fi / Modbus / API		
Relative Humidity	0 ~ 90% (No Condensation)		
Dimensions (W×D×H)	610 × 250 × 610 mm		
Weight	44 kg		
Ingress Protection	IP65		
Safety	IEC 62109-1/-2		
EMC	IEC 61000-6-1/-2/-3/-4		
Grid Regulation	VDE 4105, EN 50549-1, Tor Erzeuger, NRS 097, C10/11		
Overvoltage Category	DC Type II according to EN / IEC 61643		
Cooling	Controlled Ventilator		
Noise	≤ 50 dB		
Maximum/European Efficiency	98 % / 97.5 %		

Battery Technical Specifications

Model	SMILE-G3-BAT-3.8S	SMILE-G3-BAT-4.5S	SMILE-G3-BAT-9.3S
Nominal Capacity	3.8 kWh	4.56 kWh	9.3 kWh
Usable Capacity	3.65 kWh	4.56 kWh	9.3 kWh
Depth of Discharge (DoD)	95 % *	100 % *	100 % *
Nominal Voltage	96 V	96 V	96 V
Max. Charging/Discharging Current	40 A	50 A	52.5 A
Operating Temperature Range	-10°C ~ 50 °C **	-20 °C ~ 50 °C **	-20 °C ~ 50 °C **
Modular Connection	2 ~ 6,8,10,12 ***	2 ~ 6	2 ~ 6,8,10,12 ***
Ingress Protection	IP21	IP65	IP65
Dimensions (W×D×H)	610 × 212.5 × 435 mm	610 × 212.5 × 435 mm	610 × 210 × 634 mm
Weight	39.2 kg	53 kg	81 kg
Noise	≤ 35 dB	≤ 35 dB	≤ 35 dB
Fire-Fighting	Aerosol	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.

*** Maximum 6 Batteries for each cluster in series, up to 2 clusters in parallel.



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