

YOUR
SMART
ENERGY

up to
>12%

Additional
energy use

bis zu
>20%

Longer
service life



SMILE-G3-T15/T20

HOME SERIES

POWER

15 / 20 kW

CAPACITY

7.3 kWh modular
expandable up to 43.8 kWh



reddot design award 2022

GOOD DESIGN AWARD



HYBRID BATTERY

World
First

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 and floor mounting

Anti-shading function

3x MPPTs optimal for flexible roof
orientation

Smart Home Ready



SMILE-G3-T15/T20



Model	SMILE-G3-T15	SMILE-G3-T20
Energy Storage System		
Max. AC Nominal Power	15,000 W	20,000 W
Rated Apparent Power	16,500 VA	22,000 VA
Usable Capacity	7.3 ~ 43.8 kWh	
Cell Technology	LFP (LiFePO4) cobalt-free	
IP Protection	IP 21 (Battery), IP 65 (Inverter)	
Product Warranty	10 years	
Battery Performance Warranty	10 years linear, extendable up to 25 years	
Max. Efficiency	98%	
European Efficiency	97.5%	
Hybrid Inverter		
Model	SMILE-G3-T15-INV	SMILE-G3-T20-INV
Max. PV Input Power	30,000 W	40,000 W
Max. PV Input Current	18 A / 18 A / 18 A	
Max. PV Input Voltage	1,000 V	
MPPT Count/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. Charge/Discharge Current	60 A	
Max. Charge/Discharge Power*	15,000 W	20,000 W
Grid Frequency	50 / 60 Hz	
Nominal Voltage	230 V / 400 V	
Grid Connection	Three-phase	
Nominal Output Power (AC)	15,000 W	20,000 W
Nominal Output Power (Backup)	15,000 W	20,000 W
Backup Function	UPS	
Communication	Ethernet / WiFi / Modbus / API	
Relative Humidity	0 ~ 90% (No Condensation)	
Dimensions (W x H x D)	610 x 610 x 250 mm	
Weight	44 kg	
Certifications	IEC 62109, IEC 62040, EN 61000-6-1/3	
Grid Compliance	VDE 4105, EN 50549-1, TOR Erzeuger	
DC Overvoltage Protection	Yes (Protection Type II according to EN / IEC 61643)	
Cooling	Controlled Ventilator	
Noise Emission	≤ 50 dB	
Battery SMILE-G3-BAT-3.8S		
Usable Capacity	3.65 kWh	
Nominal Voltage	96 V	
Operating Temperature	-10°C to 50°C, optimal 15°C to 30°C	
Weight	39.2 kg	
Dimensions (W x H x D)	610 x 435 x 212.5 mm	
Cycle Life	10,000 ****	
Max. Charge / Discharge Current	40 A **	
Modular Units	2 ~ 12 in series	
Expansion	Max. 36 months after commissioning ***	
Noise Emission	≤ 35 dB	

* Performance reduction may occur depending on the state of charge and temperature.

** In off-grid mode, discharge up to 50 A is possible for up to 30 minutes.

*** Subject to availability.

**** Under specific test conditions.



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