

• YOUR
• SMART
• ENERGY



SMILE5

RESIDENTIAL SERIES

POWER

5 / 4.6 kW inverter

CAPACITY

2.9 / 5.7 / 10.1 / 13.3 kWh
Battery Modular
expandable to 80.0 kWh



reddot design award 2018



product
design award 2018



5kW single phase hybrid inverter

Fast response

UPS ability

24/7 Monitoring

- S**elf sufficient
- M**odular battery
- I**ntelligent control
- L**ong lifespan
- E**ssential load protected
- 5** kW system



SMILE5



Model SMILE5				
System Specification				
Nominal Output Power		5000 W / 4600 W (DE)		
Capacity Range	2.9 ~ 17.2 kWh (96% DoD)	5.7 ~ 34.4 kWh (96% DoD)	10.1 ~ 60.6 kWh (96% DoD)	13.3 ~ 80.0 kWh (100% DoD)
Usable Capacity Range	2.8 ~ 16.5 kWh	5.5 ~ 33.0 kWh	9.7 ~ 58.1 kWh	13.3 ~ 80.0 kWh
Battery Chemistry		LFP (LiFePO4)		
IP Protection		IP21 (Indoor) / IP65 (Outdoor)		
Warranty		5 Year Product Warranty, 10 Year Battery Warranty		

Inverter Technical Specification			
Model	SMILE5-INV	Rated Frequency	50 / 60 Hz
Max. PV Input Power	2 x 3300 W	Phase	Single-Phase
Max. PV Input Current	2 x 12 A	Backup	UPS
Max. PV Input Voltage	580 V	Display	LCD
MPPT Number	2	Communication	Ethernet / WIFI
MPPT Voltage Range	125 ~ 550 V	Start Up DC Voltage	125 V
Max. PV Short-circuit Current	2 x 15 A	Relative Humidity	15% ~ 85% (No Condensing)
Max. Charging/Discharging Current	100 A	Dimension (W x D x H)	610 x 210 x 627 mm
Max. Charging/Discharging Power	5000 W	Weight	35 kg
Rated Voltage	230 V	EMC	EN 61000-6-1/2/3/4
Safety		IEC 62109-1&-2, IEC 62477-1, IEC 62040.1.1, IEC 62116	
Grid Regulation		VDE-AR-N 4105, VDE 0126-1-1, AS 4777.2/3, CEI 0-21, G99-1, G100, RD 1699, NRS 097-2-1, TOR Erzeuger Typ A	

Battery Technical Specification				
Module Model	M4856-P	SMILE5-BAT	SMILE-BAT-10.1P	SMILE-BAT-13.3P
Module Capacity	2.9 kWh	5.7 kWh	10.1 kWh	13.3 kWh
Module Nominal Voltage	51.2 V	51.2 V	48 V	48 V
Operating Temperature Range	-10 °C ~ 50 °C*	-10 °C ~ 50 °C*	-10 °C ~ 50 °C*	-10 °C ~ 50 °C*
Max. Modules in Parallel	6	6	6	6**
Max. Charging/Discharging Current	56 A	56 A	100 A	100A
Cycle Life	10 000***	10 000***	8000***	8000***

* When the temperature is below 0 °C or above 40 °C, the performance will be limited.

** ≥2 needs to install expansion pack

*** Under specific test conditions



Headquarter: Alpha ESS Co., Ltd.

☎ +86 513 8060 6891
✉ info@alpha-ess.com
🌐 www.alpha-ess.com
📍 Jiuhua Road 888, Nantong High-Tech Industrial Development Zone, Nantong City, 226300

Alpha ESS Suzhou Co., Ltd.

☎ +86 512 6828 7609
✉ info@alpha-ess.com
🌐 www.alpha-ess.com
📍 Building 10-A, Canal Town Industrial Park, 99 Taihu E Rd, Wuzhong District, Suzhou 215000

Australia: Alpha ESS Australia Pty. Ltd.

☎ +61 402 500 520 (Sales)
+61 1300 968 933 (Technical Support)
✉ australia@alpha-ess.com
🌐 www.alpha-ess.com.au
📍 Unit 1, 2 Ralph Street Alexandria NSW 2015

Germany: Alpha ESS Europe GmbH

☎ +49 6103 4591 601
✉ europe@alpha-ess.de
🌐 www.alpha-ess.de
📍 Paul-Ehrlich-Straße 1a, D-63225 Langen, Hessen

Italy: Alpha ESS Italy S.r.l.

☎ +39 599 239 50
✉ info@alpha-ess.it
🌐 www.alpha-ess.it
📍 Via Loda, 17-41013 Castelfranco Emilia (MO)

Korea: Alpha ESS Korea Co., Ltd.

☎ +82 64 721 2004
✉ korea@alpha-ess.com
📍 2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea

UK: Alpha ESS UK Ltd.

✉ uk@alpha-ess.com
📍 Drake House, Long Street, Dursley, gl11 4hh