

YOUR  
SMART  
ENERGY



# SMILE5

RESIDENTIAL SERIES

## POWER

5 / 4.6 kW

## CAPACITY

2.9 / 5.7 / 10.1 / 13.3 kWh

Battery Modular

Expandable to 80.0 kWh



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			
<b>System Specification</b>					
<b>Nominal Output Power</b>		5000 W / 4600 W (DE)			
<b>Capacity Range</b>	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)	
<b>Usable Capacity Range</b>	2.8 ~ 16.5 kWh	5.5 ~ 33.0 kWh	9.7 ~ 58.1 kWh	13.3 ~ 80.0 kWh	
<b>Battery Chemistry</b>		LFP (LiFePO4)			
<b>IP Protection</b>		IP21 (Indoor) / IP65 (Outdoor)			
<b>Warranty</b>		5 Year Product Warranty, 10 Year Battery Warranty			

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

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



Alpha ESS Co., Ltd.

+86 513 8060 6891  
 info@alpha-ess.com  
 www.alphaess.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.alphaess.com  
 Building 10-A, Canal Town Industrial Park, 99 Taihu E Rd, Wuzhong District, Suzhou 215000

Alpha ESS Europe GmbH

+49 610 3459 1601  
 europe@alpha-ess.de  
 www.alphaess.de  
 Paul-Ehrlich-Straße 1a, D-63225 Langen, Hessen

Alpha ESS Australia Pty. Ltd.

+61 402 500 520  
 Australia@alpha-ess.com  
 www.alphaess.com  
 Adelaide: 19 Heath St, Lonsdale SA5160  
 Sydney: 8/15-21 Gibbs Street, Chatswood, NSW 2067

Alpha ESS Italy S.r.l.

+39 339 462 4288  
 info@alpha-ess.it  
 www.alphaess.com  
 Via Don Minzoni, 17, Calenzano Firenze 50041

Alpha ESS UK Ltd.

+44 145 354 5222  
 info@alpha-ess.com  
 Drake House, Long Street, Dursley, gl11 4hh

Alpha ESS International Pte. Ltd.

+65 6513 1125 / +65 6513 1126  
 Singapore@alpha-ess.com  
 2 Corporation Road #01-06A Corporation Place Singapore 618494

Alpha ESS USA, Inc.

+1 408 368 7828  
 usa@alpha-ess.com  
 Unit 5, 2180 S Ivanhoe St, Denver, CO 80222

Alpha ESS Korea Co., Ltd.

info@alpha-ess.com  
 2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea