

● YOUR
● SMART
● ENERGY



SMILE-G3-S3.6/S5

RESIDENTIAL SERIES

POWER

3.68 / 5 kW

CAPACITY

4.0 kWh Battery Module Expandable to 16 kWh

10.1 kWh Battery Module Expandable to 60.5 kWh



reddot design award 2022



GOOD DESIGN AWARD



200% PV Input

PV Inverter Works in Off-Grid Operation

Support Multiple VPP Applications

**Support Dual Power Supply
(Grid & Diesel Generator)**

Parallel Operation

10 Year Product Warranty

SMILE-G3-S3.6/S5



Model	SMILE-G3-S3.6	SMILE-G3-S5
System Specifications		
Nominal Output Power	3680 W	5000 W
Capacity Range	4.0 - 16kWh / 10.1 - 60.5kWh (95% DoD)	
Battery Chemistry	LFP (LiFePO ₄)	
IP Protection	IP65 (Outdoor) / IP21 (Indoor)	
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty	

Inverter Technical Specifications		
Model	SMILE-G3-S3.6-INV	SMILE-G3-S5-INV
Coupling	Hybrid	
Max. PV Input Power	7360 W	10000 W
Max. PV Input Current	15 A / 15 A	
Max. PV Input Voltage	580 V	
MPPT Number / Max. Input Strings Number per MPPT	2 / 1	
MPPT Voltage Range	100 ~ 550 V	
Max. PV Short-Circuit Current	18.75 A / 18.75 A	
Max. Charging/Discharging Current	60 A	
Max. Charging/Discharging Power	3680 W	5000 W
Rated Frequency	50 / 60 Hz	
Rated Voltage	230 V	
Phase	Single Phase	
Rated Output Apparent Power (Grid Port)	3680 VA	5000 VA
Rated Output Apparent Power (Backup Port)	3680 VA	5000 VA
Max. AC Input Power (Grid Port)	7680 W	10000 W
Rated Output Current (Grid Port)	16 A	21.7 A
Max. AC Output Current (Grid Port)	16 A	21.7 A
Rated Output Current (Backup Port)	16 A	21.7 A
Max. AC Output Current (Backup Port)	16 A	21.7 A
Max. Inverter Efficiency	97.3%	
Backup	UPS	
Communication	Ethernet / WiFi	
Relative Humidity	0 ~ 90% (No Condensation)	
Dimensions (W x D x H)	610 x 212 x 366 mm	
Weight	19.5 kg	
Safety	IEC 62109, IEC 62040	
EMC	EN 61000-6-1/-2/-3/-4	
Grid Regulations	AS 4777.2, NRS 097, VDE 0126-01-01, VDE 4105, EN 50549, CE1 0-21, RD 1699, G98, G99	

Battery Technical Specifications		
Module Mode	SMILE-G3-BAT-4.0S	SMILE-G3-BAT-10.1P
Module Capacity	4.0 kWh	10.1 kWh
Usable Capacity	3.8 kWh	9.6 kWh
Depth of Discharge (DoD)	95%*	95%*
Nominal Voltage	96 V	96 V
Battery Voltage Range	90 V ~ 108 V	91.5 V ~ 106.5 V
Max. Charging/Discharging Current	40 A**	60 A
Operating Temperature Range	-10°C ~ 50°C****	-10°C ~ 50°C****
Cycle Life	10000*****	10000*****
Battery Modules Connection	1 ~ 4 in Series	1 ~ 6 in Parallel

* Test condition: Max. 0.5C charge/discharge at 25±2°C.

** 50A discharging current sustainable for 30 minutes in off-grid operation.

*** 40A discharging current sustainable for 30 minutes in off-grid operation.

**** Max. charge/discharge current derating may occur with changes in temperature and SoC.

***** 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, Jiangsu Province, China

Alpha ESS Europe GmbH

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

Alpha ESS Australia Pty. Ltd.

+61 02 9000 7676
 Australia@alpha-ess.com
 www.alphaess.com
 8/15-21 Gibbes Street, Chatswood, NSW 2067 Australia

Alpha ESS International Pte. Ltd.

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

Alpha ESS Italy S.r.l.

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

Alpha ESS UK Ltd.

0330 043 2610
 info@alpha-ess.co.uk
 Suite 4F, Regus House, Herons Way, Chester Business Park, Chester, Cheshire, United Kingdom. CH4 9QR

Alpha ESS USA, Inc.

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

Alpha ESS Korea Co., Ltd.

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