



# SMILE-S5/B5



Model	SMILE-S5	SMILE-B5
<b>System Specifications</b>		
Nominal Output Power	5000 W	5000 W
Capacity Range	5.04 ~ 30.24kWh (95% DoD)	
Battery Chemistry	LFP (LiFePO <sub>4</sub> )	
IP Protection	IP65 (Outdoor)	
System Dimensions (W x D x H)	640 x 250 x 745 mm	
System Weight	75 kg	
Warranty	5 Years Product Warranty, 10 Years Battery Performance Warranty	

<b>Inverter Technical Specifications</b>		
Model	SMILE-S5-INV	SMILE-B5-INV
Coupling	Hybrid	AC
Max. PV Input Power	8000 W	N/A
Max. PV Input Current	15 A / 15 A	N/A
Nominal PV Input Voltage	330 V	N/A
MPPT Number/Max. Input Strings Number per MPPT	2 / 1	N/A
MPPT Voltage Range	90 ~ 520 V	N/A
Max. PV Short-Circuit Current	22.5 / 22.5 A	N/A
Max. Charging/Discharging Current	100 A	
Max. Charging/Discharging Power	5000 W	
Rated Frequency	50 / 60 Hz	
Rated Voltage	230 V	
Max. AC Output Current	21.7 A	
Max. AC Input Current	33 A	
Backup	UPS	
Communication	Ethernet / WiFi/DR Controllable	
Humidity	0 ~ 95% (No Condensation)	
Dimensions (W x D x H)	640 x 250 x 350 mm	
Weight	21 kg	
Safety	IEC 62109, IEC 62477, EN 50549	
EMC	EN 61000-6-1/-2/-3/-4	
Grid Regulation	AS 4777.2	

<b>Battery Technical Specifications</b>	
Module Mode	SMILE-BAT-5P
Module Capacity	5.04 kWh
Usable Capacity	4.79 kWh
Depth of Discharge (DoD)	95%*
Nominal Voltage	48 V
Max. Charging/Discharging Current	52.5 A
Operating Temperature Range	-10°C ~ 50°C**
Cycle Life	6000
External Battery Expansion	1 ~ 5 in parallel

\* Test Condition: Max. 0.5C charge & discharge at 25±2°C.

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



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.  
 ☎ +44 145 354 5222  
 ✉ info@alpha-ess.com  
 📍 Drake house, Long street, Dursley, gl11 4hh UK

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