

• YOUR
• SMART
• ENERGY



SMILE-SP/SPB SERIES

7.6 kW 8.2 kWh / 9.6 kW 8.2 kWh ▼

Expandable to **49.2 kWh** with
8.2 kWh Battery Module



Outdoor

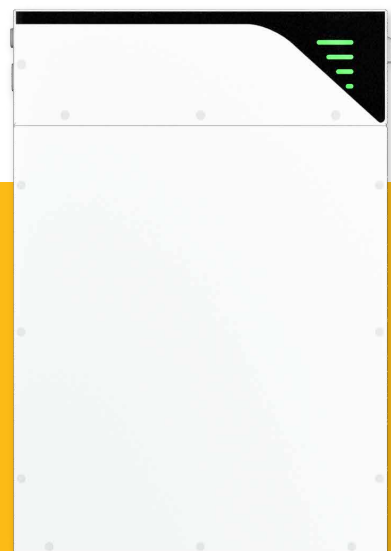
24/7 Monitoring

AFCI & Rapid Shutdown

4 MPPTs

High Efficiency Battery

WIFI Module Integrated



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Model	SMILE-SP7.6	SMILE-SP9.6	SMILE-SPB7.6	SMILE-SPB9.6
Inverter PV Data				
Max. PV Input Power	11.4 kW	15 kW	N.A	N.A
Max. PV Input Voltage	600 V	600 V	N.A	N.A
MPPT Operating Voltage Range	80 ~ 550 V	80 ~ 550 V	N.A	N.A
Start-up Voltage	95 V	95 V	N.A	N.A
Number of MPPTs	4	4	N.A	N.A
Max. Input Current per MPPT	12.5 A	12.5 A	N.A	N.A
Max. Short Circuit Current per MPPT	15.2 A	15.2 A	N.A	N.A
Inverter AC Input and Output Data				
Nominal AC Output Power	7.6 kW	9.6 kW*	7.6 kW	9.6 kW*
Max. Apparent Power Output to Grid	7.6 kVA	9.6 kVA	7.6 kVA	9.6 kVA
Nominal AC Input Power	9.12 kW	9.6 kW	9.12 kW	9.6 kW
Max. Apparent Power from Grid	9.12 kVA	9.6 kVA	9.12 kVA	9.6 kVA
Output Voltage Range	211 to 264 Vac @240 Vac			
Nominal AC Grid Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Max. AC Current Output to Utility Grid	31.7 A	40 A	31.7 A	40 A
Max. AC Current From Utility Grid	38 A	40 A	38 A	40 A
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%
Inverter Backup Data				
Max. Output Apparent Power@240V	7.6 kVA	9.6 kVA	7.6 kVA	9.6 kVA
Peak Output Apparent Power@240V	9.12 kVA@60sec	11.52 kVA@60sec	9.12 kVA@60sec	11.52 kVA@60sec
Max. Output Current@240V	31.7 A	40 A	31.7 A	40 A
Nominal Output Voltage L1-L2/L-N	240 Vac / 120 Vac	240 Vac / 120 Vac	240 Vac / 120 Vac	240 Vac / 120 Vac
Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Switch time to emergency mode	≤10 ms	≤10 ms	≤10 ms**	≤10 ms**
Inverter Battery Data				
Battery Voltage Range	80 - 495 V	80 - 495 V	80 - 495 V	80 - 495 V
Max. Charging/Discharging Current	50 A***	50 A***	50 A***	50 A***
System Battery Module Technical Data				
System Battery Module Model	SMILE-BAT-8.2PHA (With EMS)			
Chemistry	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Capacity	8.2 kWh	8.2 kWh	8.2 kWh	8.2 kWh
Usable Capacity	7.8 kWh	7.8 kWh	7.8 kWh	7.8 kWh
Depth of Discharge (DoD)	95%	95%	95%	95%
Nominal Voltage	256 V	256 V	256 V	256 V
Voltage Range	236 ~ 288 V	236 ~ 288 V	236 ~ 288 V	236 ~ 288 V
Max. Charging/Discharging Current	38.4 A	38.4 A	38.4 A	38.4 A
Max. Charging/Discharging Power	7.6 kW	9.6 kW	7.6 kW	9.6 kW
Operating Temperature Range	-10°C ~ 50°C (14°F ~ 122°F) ****			
Other Information	Inbuilt EMS	Inbuilt EMS	Inbuilt EMS	Inbuilt EMS

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System Storage Capacity Extensions

Extension Battery Module Model	SMILE-BAT-8.2PHA			
Extension Battery Module Nominal	8.2 kWh	8.2 kWh	8.2 kWh	8.2 kWh
Extension Battery Module Usable	7.8 kWh	7.8 kWh	7.8 kWh	7.8 kWh
Max. Additional Battery Modules	5 Units	5 Units	5 Units	5 Units
Battery Modules Electrical Connection	Parallel	Parallel	Parallel	Parallel
Max. System Storage Capacity Nominal	49.2 kWh	49.2 kWh	49.2 kWh	49.2 kWh
Max. System Storage Capacity Usable	46.8 kWh	46.8 kWh	46.8 kWh	46.8 kWh

CT & Meter Data

Meter Type	AGF-AE-D/200			
Mounting	Din35 Rail			
Rated Voltage L-N	120 V			
Rated Voltage L1-L2	208 V / 240 V			
Rated RMS Current	200 A			
Current Measurement Accuracy	± 1%			
Number of Supplied Current Transformers	2			

General Data

Battery Charging/ Discharging to AC Max. Efficiency	96.6%	96.6%	96.6%	96.6%
Operating Altitude	4000 m (>3000 m derating)			
Noise	<45 dB	<45 dB	<45 dB	<45 dB
Cooling Method	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Safety	Cell		UL 1973 UL9540A	
	Battery Pack		UL 1973 UL9540A	
	Inverter		IEEE 1547	
	System		UL 9540 UL1741	
Transport	UN 38.3			
Emissions	FCC			
Ingress Rating	NEMA Type 4X			
Communication	WiFi			

* Under the condition of ambient temperature of 25-35 °C, when the system is connected to the grid, a single battery module can discharge 9.6 kW

** This is switching time of inverter. The whole system switching time depends on Automatic Transfer Switch that customer selected

*** Need to configure more than two batteries

**** When the ambient temperature is too low or too high, the performance of battery may be limited

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Mechanical Specifications

Inverter	Battery Modules
16.3in × 31.1in × 6.9in W*H*D (415mm × 791mm × 175mm)	22.8in × 31.3in × 9.0in W*H*D (580mm × 800mm × 230mm)
32kg (70.5lb)	81kg (178.7lbs)
Transformer	Meter Dimensions
13.6in × 10.8in × 1.2in W*H*D (345mm × 274mm × 31mm)	2.13in × 3.65in × 2.05in W*H*D (54.1mm × 92.6mm × 52mm)
22kg (48.5 lbs)	0.2kg (0.441 lbs)

* SMILE-SP Series 7.6kW System contains the following components: 7.6kW hybrid inverter + 8.2kWh battery module + Transformer + Meter

* SMILE-SP Series 9.6kW System contains the following components: 9.6kW hybrid inverter + 8.2kWh battery module + Transformer + Meter

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