

GOODWE

SBP Series

5kW | Single Phase
AC-Coupled LV Retrofit Inverter

The GoodWe SBP series is the world's first AC-coupled battery storage retrofit solution, with UPS function for both single-phase and three-phase systems. It can effectively upgrade any existing string inverter system by adding a backup battery. Capable of being grid-interactive, it allows users to store surplus power and sell it back to the grid when demand peaks and the price of electricity is at its highest. With UPS-level switching functionality (switching time less than 10 milliseconds), the SBP provides uninterruptible power supply to inductive loads such as air conditioners or refrigerators.



Capable of being grid-interactive



Suitable for both single-phase & three-phase systems



Smart BMS – Max. discharge power up to 5kW



Export control (zero export)



8ms UPS-level Switching

Technical Data		GW5000S-BP
Battery Input Data		
Battery Type ^{*1}	Li-Ion	
Nominal Battery Voltage (V)	48	
Battery Voltage range (V)	40 ~ 60	
Max. Continuous Charging Current (A) ^{*1}	100	
Max. Continuous Discharging Current (A) ^{*1}	100	
Max. Charging Power (W)	4700	
Max. Discharging Power (W)	5300	
AC Output Data (On-grid)		
Nominal Apparent Power Output to Utility Grid (VA)	5000	
Max. Apparent Power Output to Utility Grid (VA) ^{*2}	5000	
Max. Apparent Power from Utility Grid (VA)	9200	
Nominal Output Voltage (V)	230	
Output Voltage Range (V)	0 ~ 300	
Nominal AC Grid Frequency (Hz)	50 / 60	
Max. AC Current Output to Utility Grid (A)	22.8	
Max. AC Current From Utility Grid (A)	40	
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	
AC Output Data (Back-up)		
Back-up Nominal Apparent Power (VA)	5000	
Max. Output Apparent Power (VA) ^{*3}	5000 (5500@10sec)	
Max. Output Current (A)	22.8	
Nominal Output Voltage (V)	230	
Nominal Output Frequency (Hz)	50 / 60 (±0.2%)	
Output THDv (@Linear Load)	<3%	
Efficiency		
Max. Efficiency	95.5%	
European Efficiency	94.0%	
Max. Battery to AC Efficiency	95.5%	
Protection		
Anti-islanding Protection	AFDPF + AQDPF ^{*4}	
AC Overcurrent Protection	Integrated	
AC Short Circuit Protection	Integrated	
AC Overvoltage Protection	Integrated	
General Data		
Operating Temperature Range (°C)	-25 ~ 60	
Relative Humidity	0 ~ 95%	
Max. Operating Altitude (m) ^{*6}	4000	
Cooling Method	Nature Convection	
Display	LED & APP	
Communication with BMS ^{*5}	RS485; CAN	
Communication with Meter	RS485	
Communication with Portal	Wi-Fi	
Weight (kg)	18.5	
Dimension (W × H × D mm)	347 × 432 × 190	
Noise Emission (dB)	<25	
Topology	Non-isolated	
Self-consumption at Night (W)	<15	
Ingress Protection Rating	IP65	
Mounting Method	Wall Bracket	
Country of Manufacture	China	

*1: The actual charge and discharge current also depends on the battery.

*2: For CEI 0-21 GW3600S-BP is 4050, GW5000S-BP is 5100; For VDE-AR-N4105 GW5000S-BP is 4600.

*3: Can be reached only if battery capacity is enough, otherwise will shut down.

*4: AFDPF: Active Frequency Drift with Positive Feedback, AQDPF: Active Q Drift with Positive Feedback.

*5: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.

*6: 2000m for Australia.

*: Battery capacity could be not less than 100Ah where the back-up function is to be applied.

*: Please visit GoodWe website for the latest certificates