GOODWE

SBP Series

5kW I 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
- Export control (zero export)
- Smart BMS – Max. discharge power up to 5kW
- 8 ms UPS-level Switching

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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 x 432 x 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