

GOODWE SINGLE-PHASE ENERGY STORAGE BATTERY INVERTER

GW5000S-BP (AC - Coupled Battery Inverter)



The GoodWe SBP series is an energy storage inverter that is suitable for installation on existing solar power systems. This AC-coupled retrofit solution is applicable for both single-phase and three-phase systems.

Compatible with Low Voltage (LV) Batteries, the SBP series can store electricity in the battery to be released when required during the night.

This hybrid inverter series also has back-up functionality and supports uninterrupted power supply (UPS), which allows for a switching time of less than 0.1 seconds during black-out or grid outage scenarios, greatly reducing potential damage to electrical appliances.

The GW5000S-BP provides a ~5kW power output and a charge rate of 100A.

How you benefit:



COMPATIBLE WITH LOW VOLTAGE BATTERIES

Designed to pair with Goodwe Batteries for tight integration.



AC-COUPLED

Unique ability to perform the function of a PV Inverter and a Battery Inverter in a single unit.



BACKUP FUNCTIONALITY

Keep dedicated circuits running during black-outs or grid outages



UPS FALLBACK

Uninterrupted power supply (UPS) reduces risk of damage to electrical appliances when switching to backup.



SAFE OPERATION

Robust design is suitable for outdoor and indoor installations with an IP rating of IP65.

GOODWE 5000S-BP

TECHNICAL DATA



Model	GW5000S-BP		
AC Output Data (on-grid)			
Nominal apparent power output to utility grid	5000 VA ¹		
Max output apparent power to utility grid ²	5000 VA		
Max apparent power from utility grid (VA)	9200 VA		
Nominal output voltage	230 V		
Nominal output frequency	50/60 Hz		
Max AC current output to utility grid	22.8 A ³		
Max AC current from utility grid	40 A		
Output power factor	-1 (Adj. from 0.8 leading to 0.8 lagging)		
AC frequency	50/60 Hz		
Output THDi (@nominal output)	<3%		
AC Output Data (Backup)		Battery Input Data	
Max output apparent power	5000 VA	Battery type	Li-Ion
Peak output apparent power ⁴	5500, 10 sec	Nominal battery voltage	48 V
Automatic switch time	10 ms	Max. charging voltage	≤ 60 (Configurable)
Max output current	22.8 A	Max. charging current ⁵	100 A
Nominal output voltage	230 (±2%)	Max. discharging current ⁵	100 A
Nominal output frequency	50/60 (±0.2%)	Charging strategy for Li-Ion battery	Self-adaption to BMS
Output THDv (@linear load)	< 3%		
Efficiency			
Maximum efficiency	95.5%		
Protection			
Anti-islanding protection	Integrated		
Output over current protection	Integrated		
Output short protection	Integrated		
Output over voltage protection	Integrated		
General Data			
Operating temperature range	-25-60 °C		
Relative humidity	0-95%		
Operating altitude	≤ 4000 m		
Cooling	Natural convection		
Noise	< 25dB		
User interface	LED & APP		
Communication with BMS ⁶	RS485 or CAN		
Communication with meter	RS485		
Communication with portal	Wi-Fi		
Weight	30 kg		
Size (W x H x D)	516 x 440 x 184 mm		
Mounting	Wall bracket		
Protection degree	IP65		
Standby self-consumption	<13W		
Topology	High frequency isolation		
Manufacturer's warranty	5 Years [†]		
Solahart warranty	5 Years*		
Certificates & Standards			
Grid regulation	AS/NZS 4777.2:2015, G59/3, G100, CEI 0-21;RD1699;UNE206006; VDE4105-AR-N; VDE0126-1-1; EN50438		
Safety regulation	IEC62477-1, IEC62040-1		
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29		

¹4600W for VDE0126-1-1&VDE-AR-N 4105 and CEI 0-21. ²For CEI 0-21 GW5000S-BP is 5100W; for VDE-AR-N4105 GW5000S-BP is 4600W. ³21.7A for AS4777.2.

⁴Can be reached only if PV and battery power is enough. ⁵The actual charge and discharge current also depends on the battery. ⁶The standard configuration is CAN.

[†]For full details see the manufacturer's warranty statement. *For full details see Solahart Owner's Guide & Installation Instructions