

GOODWE

SBP G2 Series

3.6-6kW | Single Phase
AC-coupled retrofit inverter (LV)

The GoodWe SBP G2 Series, is an AC-coupled inverter designed for retrofitting to existing single-phase or three-phase on-grid PV systems, providing an energy storage solution by adding a battery. The inverter is compatible with low-voltage batteries ranging from 40 to 60V such as the GoodWe Lynx Home U Series battery, allowing surplus electricity to be stored for later use. The integrated plug-and-play features, compact design, and minimal weight provides easy installation, operation, and maintenance. The SBP G2 has the functionality of providing UPS-level switching to back-up mode in less than 10ms, ensuring a stable and reliable power supply.



Smart Control & Monitoring

- <10ms UPS-level switching
- Smart home integration with multi-protocol communications



Friendly & Thoughtful Design

- Plug & Play
- Elegant and compact design



Superb Safety & Reliability

- IP65 ingress protection
- Remote Shutdown



Flexible & Adaptable Applications

- AC-coupled battery storage retrofit solution
- Suitable for both single-phase & three-phase systems

Technical Data	GW3600-SBP-20	GW5000-SBP-20	GW6000-SBP-20
Battery Input Data			
Battery Type ¹		Li-Ion	
Nominal Battery Voltage (V)		48	
Battery Voltage Range (V)		40 ~ 60	
Start-up Voltage (V)		48	
Number of Battery Input		1	
Max. Continuous Charging Current (A) ¹	75	120	120
Max. Continuous Discharging Current (A) ¹	75	120	120
Max. Charging Power (W) ¹	3600	5000	6000
Max. Discharging Power (W)	3900	5300	6300
AC Output Data (On-grid)			
Nominal Output Power (W)	3680	5000	6000
Nominal Apparent Power Output to Utility Grid (VA)	3680	5000 ²	6000 ²
Max. Apparent Power Output to Utility Grid (VA)	3680	5000 ²	6000 ²
Max. Apparent Power from Utility Grid (VA)	7360	10000	10000
Nominal Output Voltage (V)		220 / 230 / 240	
Output Voltage Range (V)		170 ~ 280	
Nominal AC Grid Frequency (Hz)		50 / 60	
Max. AC Current Output to Utility Grid (A)	16.7	22.7	27.3
Max. AC Current From Utility Grid (A)	33.5	43.5	43.5
Rated Output Current (A)	16.7	22.7	27.3
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)	3680	5000	6000
Max. Output Apparent Power without Grid (VA)	3680 (7360@10sec)	5000 (10000@10sec)	6000 (10000@10sec)
Max. Output Apparent Power with Grid (VA)	3680	5000	6000
Max. Output Current (A)	16.7	22.7	27.3
Rated Output Current (A)	16.7	22.7	27.3
Nominal Output Voltage (V)		220 / 230 / 240	
Nominal Output Frequency (Hz)		50 / 60	
Output THDv (@Linear Load)		<3%	
Efficiency			
Max. Battery to AC Efficiency		95.5%	
Protection			
Residual Current Monitoring		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
AC Surge Protection		Type III	
Remote Shutdown		Integrated	
General Data			
Operating Temperature Range (°C)		-25 ~ +60	
Relative Humidity		0 ~ 95%	
Max. Operating Altitude (m)		3000 (>2000 derating)	
Cooling Method		Natural Convection	
User Interface		LED, WLAN + APP	
Communication with BMS		CAN	
Communication with Meter		RS485	
Communication with Portal		WiFi / WiFi + LAN / 4G	
Weight (kg)	19.2	19.5	19.5
Dimension (W x H x D mm)		505.9 x 434.9 x 154.8	
Noise Emission (dB)		<30	
Topology		Isolated	
Self-consumption at Night (W)		<10	
Ingress Protection Rating		IP65	
Mounting Method		Wall Mounted	
Protective Class		I	
Overvoltage Category		DC II / AC III	
Active Anti-islanding Method		SMS (Slip-mode frequency) +AFD	
Country of Manufacture		China	

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

*2: 4600 for VDE-AR-N4105 & NRS 097-2-1.

*: Please visit GoodWe website for the latest certificates.