GOODWE

SBP G2 Series

3.6-6kW I 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.

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Smart Control & Monitoring

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

Superb Safety & Reliability

- · IP65 ingress protection
- · Remote Shutdown

- Friendly & Thoughtful Design • Plug & Play
- · Elegant and compact design

Flexible & Adaptable Applications

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

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Technical Data	GW3600-SBP-20	GW5000-SBP-20	GW6000-SBP-2
Battery Input Data			
Battery Type ^{*1}		Li-Ion	
Nominal Battery Voltage (V)		48	
Battery Voltage Range (V)		40 ~ 60	
Start-up Voltage (V)		40	
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)	7300	220 / 230 / 240	10000
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
Nominal Output Current (A)	16.0	21.7	26.1
Power Factor			
Max. Total Harmonic Distortion	~1 (Adjustable from 0.8 leading to 0.8 lagging) <3%		
AC Output Data (Back-up)			
• • • • •	0000	5000	0000
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
Nominal Output Voltage (V)		220 / 230 / 240	
Nominal Output Frequency (Hz) Output THDv (@Linear Load)		50 / 60 <3%	
		<3%	
Efficiency		05.50/	
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 Overvoltage Protection AC Surge Protection		Integrated Type III	
AC Overvoltage Protection AC Surge Protection		Integrated	
AC Overvoltage Protection AC Surge Protection Remote Shutdown		Integrated Type III Integrated	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C)		Integrated Type III Integrated -25 ~ +60	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity		Integrated Type III Integrated -25 ~ +60 0 ~ 95%	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m)		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating)	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating)	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN	
AC Short Circuit Protection AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter		Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN	
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg)	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm)	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5 505.9 × 434.9 × 154.8	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB)	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5 505.9 × 434.9 × 154.8 <30	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5 505.9 × 434.9 × 154.8 <30 Isolated	19.5
AC Overvoltage Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)	19.2	Integrated Type III Integrated -25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5 505.9 × 434.9 × 154.8 <30 Isolated <10	19.5

*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.