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 battlery, 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



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
- · Suitable for both single-phase & three-phase systems



Technical Data	GW3600-SBP-20	GW5000-SBP-20	GW6000-SBP-2
Battery Input Data			
Battery Type ^{*1}	Li-lon	Li-lon	Li-lon
Nominal Battery Voltage (V)	48	48	48
Battery Voltage Range (V)	40 ~ 60	40 ~ 60	40 ~ 60
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 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	220 / 230 / 240	220 / 230 / 240
Output Voltage Range (V)	170 ~ 280	170 ~ 280	170 ~ 280
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	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		justable from 0.8 leading to 0.8 la	
Max. Total Harmonic Distortion	<3%	<3%	<3%
AC Output Data (Back-up)			
, , , , ,	3680	5000	6000
Back-up Nominal Apparent Power (VA)			
Max. Output Apparent Power (VA)	3680 (7360@10sec)	5000 (10000@10sec)	6000 (10000@10sec)
Max. Output Current (A)	16.7	22.7 220 / 230 / 240	27.3 220 / 230 / 240
Nominal Output Voltage (V)	220 / 230 / 240		
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60
Output THDv (@Linear Load)	<3%	<3%	<3%
Efficiency			
Max. Battery to AC Efficiency	95.5%	95.5%	95.5%
Protection			
Residual Current Monitoring	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
AC Surge Protection	Type III	Type III	Type III
Darracka Claudalaum	Integrated	Integrated	Integrated
Remote Shutdown	Integrated	9:	
	integrated		-
Remote Shutdown General Data Operating Temperature Range (°C)	-25 ~ +60	-25 ~ +60	-25 ~ +60
General Data Operating Temperature Range (°C)			-25 ~ +60 0 ~ 95%
General Data	-25 ~ +60	-25 ~ +60	0 ~ 95%
General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m)	-25 ~ +60 0 ~ 95%	-25 ~ +60 0 ~ 95%	0 ~ 95%
General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method	-25 ~ +60 0 ~ 95% 3000 (>2000 derating)	-25 ~ +60 0 ~ 95% 3000 (>2000 derating)	0 ~ 95% 3000 (>2000 derating
General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection	0 ~ 95% 3000 (>2000 derating Natural Convection
General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP
General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485
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	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485
General Data Operating Temperature Range (°C) Relative Humidity	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40
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) Dimension (W × H × D mm)	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.2	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.5	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40
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) Dimension (W × H × D mm) Noise Emission (dB)	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.2 505.9 × 434.9 × 154.8 <30	-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	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40 19.5 505.9 × 434.9 × 154.4
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) Dimension (W × H × D mm) Noise Emission (dB) Topology	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.2 505.9 × 434.9 × 154.8	-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	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40 19.5 505.9 × 434.9 × 154.8
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) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.2 505.9 × 434.9 × 154.8 <30 Isolated <10	-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	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40 19.5 505.9 × 434.9 × 154.8 <30 Isolated <10
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) Dimension (W × H × D mm) Noise Emission (dB) Topology	-25 ~ +60 0 ~ 95% 3000 (>2000 derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 19.2 505.9 × 434.9 × 154.8 <30 Isolated	-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	0 ~ 95% 3000 (>2000 derating Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 40 19.5 505.9 × 434.9 × 154.8 <30 Isolated

^{*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.