



ENERGY STORAGE SOLUTION

STORAGE SYSTEM

PRODUCT MODEL

- BW-INV-SPH3.6K
- BW-INV-SPB5.0K
- BW-INV-SPH5.0K
- BW-BAT-10.1K



HIGH PERFORMANCE

- 200% PV over management;
- 200% backup overload capacity, 60A battery current;
- Max. efficiency 97.3%, Battery efficiency 97%;
- Load monitoring accuracy 10W, Battery discharging threshold 10W;



HIGH RELIABILITY

- UPS level redundant protection against backup load breakdown;
- Three-level firmware and two-level hardware battery protection;
- Multiple temperature monitoring, delicate thermal management;
- Max. 6 Inverters in parallel to increase power availability.



HIGH INTELLIGENCE

- Internal EMS optimizes home energy supply automatically;
- PV production forecast;
- Built-in electric power service, FCAS, VPP, etc.;
- Online monitoring, online diagnosis, online service.

PARAMETERS

INVERTER MODEL	BW-INV-SPH3.6K	BW-INV-SPB5K	BW-INS-SPH5K
PV INPUT			
Max. PV Input Power Max.	7.36kW		10kW
PV Input Voltage	580V		580V
MPPT Range	100~550V		100~550V
Max. Input Current	15A/15A		15A/15A
Max. Short Circuit Current	18.75A/18.75A		18.75A/18.75A
MPP Trackers	2		2
Strings Per MPP Trackers	1/1		1/1
AC PORT			
Rated Grid Output Power	3.68kVA	5kVA/4.6kVA(DE)	5kVA/4.6kVA(DE)
Max. Grid Input Power	7.36kVA	10kVA	10kVA
Rated Grid / Backup Voltage		230Vac	
Rated Grid/ Backup Frequency		50/60Hz	
Max. Backup Power	7.36kVA/7.36kW	10kVA/10kW	10kVA/10kW
THDi		<3%	
THDv		<3% (Linear Load) / <5%(Non-linear Load)	
DCV		<100mV	
Crest Ratio		3:1	
Transfer Time		<10ms	
EFFICIENCY			
Max. Efficiency	97.3%		97.3%
Round Trip Efficiency	90%	90%	90%
GENERAL DATA			
Operating Temperature Range		-20~60°C	
Topology		Transformerless	
Dimensions (W*H*D)		590×405×205mm	
Weight	19.5kg	18kg	19.5kg
Load Monitoring		Meter / CT / Backup box	
External Communication		RS-485 / WIFI / 4G / Ethernet	
Grid Regulation		CEI 0-21, VDE 4105-AR-N, VDE 0126-1-1, EN 50438, G99, G100, AS4777.2 NRS 097, EN 50549, C10/C11, UNE, UTE, NCRfG/PTPIREE	
Safety Regulation		IEC 62109-1&2, IEC 62477	
BATTERY MODEL			
		BW-BAT-10.1P	
Battery Type		LFP	
Battery Capacity		10.1kWh	
Usable Capacity		9.6kWh	
Depth of Discharge (DoD)		95%	
Nominal Battery Voltage		96V	
Operating Voltage Range		90~108V	
Max.Charging Current		52.5A	
Max. Discharging Current		52.5A	
Operating Temperature Range		-10~50°C	
Cycle Lifetime		8000	
Parallel		1~6	
Dimensions (W*H*D)		590×750×205mm	
Weight		90kg	
Communication		CAN / RS-485 (Optional)	
Safety Regulation		IEC 62619, IEC 62040	
Transportation		UN38.3	
SYSTEM			
Operating Altitude		≤4000m	
Relative Humidity		0~95% (No Condensing)	
Protection Degree		IP65	
Cooling		Nature Convection	
Noise		<30dB	
Warranty		5 years / 10 years (optional)	
EMC		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4	

Note: Specifications are subject to change without advance notice.



ENERGY STORAGE SOLUTION

HYBRID INVERTER



PRODUCT MODEL

- BW-INV-SPH3.6K
- BW-INV-SPB5K
- BW-INV-SPH5K

HIGH PERFORMANCE

- 200% PV over management;
- 200% backup overload capacity, 60A battery current;
- Max. efficiency 97.3%, Battery efficiency 97%;
- Load monitoring accuracy 10W, Battery discharging threshold 10W;

HIGH RELIABILITY

- UPS level redundant protection against backup load breakdown;
- Three-level firmware and two-level hardware battery protection;
- Multiple temperature monitoring, delicate thermal management;
- Max. 6 Inverters in parallel to increase power availability.

HIGH INTELLIGENCE

- Internal EMS optimizes home energy supply automatically;
- PV production forecast;
- Built-in electric power service, FCAS, VPP, etc.;
- Online monitoring, online diagnosis, online service.

PARAMETERS

MODEL	BW-INV-SPH3.6K	BW-INV-SPB5K	BW-INV-SPH5K
BATTERY INPUT			
Battery Type	Li-on/Lead-acid		
Nominal Battery Voltage	96V		
Battery Voltage Range	75~400V		
Max. Charging Current	45A	60A	60A
Max. Discharging Current	45A	60A	60A
PV INPUT			
Max. PV Input Power	7.36kW	10kW	
Max. PV Input Voltage	580V	580V	
MPPT Range	100~550V	100~550V	
Full Load MPPT Range	125~550V	180~550V	
Startup Voltage	100V	100V	
Max. Input Current	15A/15A	15A/15A	
Max. Short Circuit Current	18.75A/18.75A	18.75A/18.75A	
MPP Trackers	2	2	
Strings Per MPP Trackers	1/1	1/1	
GRID PORT			
Rated Output Power	3.68kVA	5kVA/4.6kVA(DE)	5kVA/4.6kVA(DE)
Max. Input Power	7.36kVA	10kVA	10kVA
Rated Grid Voltage	230Vac		
Grid Voltage Range	180~270Vac		
Rated Grid Frequency	50/60Hz		
Power Factor	-0.8~+0.8		
THDi	<3%		
BACKUP PORT			
Max. Backup Power	7.36kVA/7.36kW	10kVA/10kW	10kVA/10kW
Rated Backup Voltage	230Vac		
Rated Backup Frequency	50/60Hz		
THDv	<3% (Linear Load) / <5% (Non-linear Load)		
DCV	<100mV		
Crest Ratio	3:1		
Transfer Time	<10ms		
EFFICIENCY			
Max. Efficiency	97.3%	97.3%	
Europe Efficiency	96.2%	96.2%	
MPPT Efficiency	99.9%	99.9%	
Round Trip Efficiency	90%	90%	90%
SYSTEM			
Operating Temperature Range	-20~60 C		
Relative Humidity	0~95% (No Condensing)		
Operating Altitude	≤4000m		
Cooling	Nature Convection		
Noise	<30dB		
Topology	Transformerless		
Dimensions WHD	590x405x205 mm		
Protection Degree	IP65		
Weight	19.5kg	18kg	19.5kg
Warranty	5 years / 10 years (optional)		
HMI&COMM			
Communication with BMS	CAN / RS-485		
Load Monitoring	Meter / CT / Backup box		
External Communication	RS-485 / WIFI / 4G / Ethernet		
User Interfac	LED / LCD		
CERTIFICATE			
Grid Regulation	CEI 0-21, VDE 4105-AR-N, VDE 0126-1-1, EN 50438, G99, G100, AS4777.2 NRS 097, EN 50549, C10/C11, UNE, UTE, NCRfG/PTPIREE		
Safety Regulation	IEC 62109-1&2, IEC 62477		
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4		

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ENERGY STORAGE SOLUTION

BATTERY

PRODUCT MODEL

- BW-BAT-10.1P



HIGH INTELLIGENCE

- Online cycle lifetime forecast;
- Online monitoring, online diagnosis, online service



HIGH Safety

- Vehicle-level redundant protection;
- Multiple hardware and firmware protection

MODEL	BW-BAT-10.1P
ELECTRICAL	
Battery Capacity	10.1kWh
Usable Capacity	9.6kWh
Depth of Discharge (DoD)	95%
Nominal Voltage	96V
Operating Voltage Range	90~108V
Internal Resistance	< 30 mΩ
Cycle Lifetime	8000
OPERATION	
Max. Charging Current	52.5A
Max. Discharging Current	52.5A
Operating Temperature Range	-10~50 °C
Relative Humidity	0~95% (No Condensing)
PHYSICAL	
Battery Type	LFP
Weight	90kg
Dimensions (W*H*D)	590x750x205 mm
Protection Degree	IP65
Warranty	5 years product warranty, 10 years performance warranty
BMS	
Modules	1~6 in parallel
Capacity	10.1 / 20.2 / 30.3 / 40.4 / 50.5 / 60.6 kWh
Usable Capacity	9.6 / 19.2 / 28.8 / 38.4 / 48.0 / 57.6 kWh
Communication	CAN / RS-485 (Optional)
CERTIFICATE	
Transportation	UN38.3
Safety Regulation	IEC 62619, IEC62040
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4

Note: Specifications are subject to change without advance notice.