



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		

Note: Specifications are subject to change without advance notice.