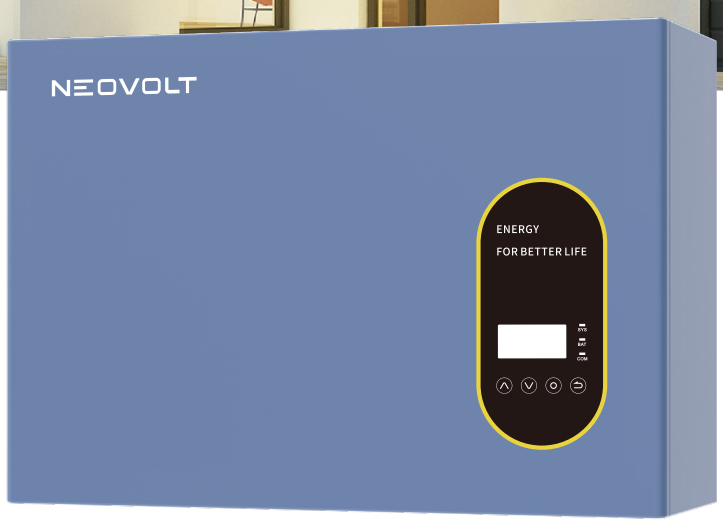
NEOVOLT

Single Phase

HYBRID INVERTER



PRODUCT MODEL

- BW-INV-SPH3.6K (Hybrid Inverter)
- BW-INV-SPH5K (Hybrid Inverter)
- BW-INV-SPB5K (Battery Inverter)

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

NEOVOLT

INVERTER MODEL	BW-INV-SPH3.6K	BW-INV-SPB5K	BW-INV-SPH5K
BATTERY PORT			
Battery Type		Li-on / Lead-acid	
Nominal Battery Voltage		96V	
Battery Voltage Range		80~400V	
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
Startup Voltage	100V		100V
Max. Input Current	15A / 15A		15A / 15A
Max. Short Circuit Current	18.75A / 18.75A		18.75A / 18.75A
MPPT Trackers	2		2
Strings Per MPPT Tracker	1 / 1		1/1
GRID PORT			
Rated Output Power	3.68kVA	5kVA / 4.6kVA(DE)	5kVA / 4.6kVA(DE)
Max. Output Current	16A	21.7A	21.7A
Max. Output Apparent 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			
Surge Backup Power	7.36kVA	10kVA	10kVA
Rated Backup Power	3.68kVA	5kVA	5kVA
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%
Max. Round Trip Efficiency	90%	90%	90%
GENERAL DATA			
Operating Temperature Range		-20°C~60°C	
Relative Humidity		0~95% (No Condensing)	
Operating Altitude		≤3000m (>3000m Derating)	
Cooling		Natural Convection	
Noise		<30dB	
Topology		Transformerless	
Dimensions (W*H*D)		590x405x205mm	
Protection Degree		IP65	
Weight	19.5kg	18kg	19.5kg
Warranty		5 Years / 10 Years	
HMI&COMM.			
Communication With BMS		CAN / RS-485	
Load Monitoring		Meter / CT / Backup box	
External Communication		RS-485 / WIFI / 4G / Ethernet	
User Interface		LED / LCD	
CERTIFICATE			
Grid Regulation		VDE-AR-N 4105:2018, G98, G99, C10/11:2021, NTS 631, RD647:2020	
		UNE 217002:2020, CEI 0-21, VDE 0126-1-1, NRS 097-2-1, AS/NZS 4777.2:2020, EN 50549-1	
Safety Regulation		IEC/EN 62109-1&2, IEC/EN 62477-1:2012	
EMC		IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4	

Note: Specifications are subject to change without advance notice.

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