

Single Phase
STORAGE SYSTEM



BW-SPH SERIES

INVERTER

10 kW

BATTERY

9.6 kWh

Key Features

- 200% backup overload capacity, 50A battery current;
- Load monitoring accuracy 10W, battery discharging threshold 10W;
- Max. 3 inverters in parallel to increase power availability;
- Built-in electric power service, FCAS, VPP, etc.

UPS

Backup

Stackable

Plug & Play

VPP

Ready

3 Units

Parallel Support

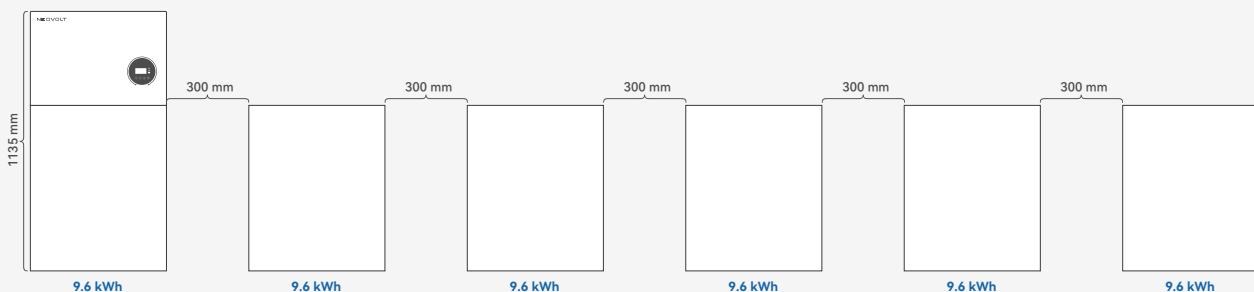
<10 ms

Seamless Switching

IP65

Rating

Product Lineup



PARAMETERS

Inverter Model		BW-INV-SPH10K
PV Side		
Max. DC Input Power (kW)		10
Max. DC Input Voltage (V)		580
MPPT Voltage Range (V)		100~550
Start-up Voltage (V)		90
Nominal DC Input Voltage (V)		380
Max. MPPT Current (A)		15 / 15
Max. MPPT Short Circuit Current (A)		18.7 / 18.7
Number of MPPTs		2
Number of Strings per MPPT		1 / 1
Battery Side		
Battery Type		LFP
Battery Voltage Range (V)		80~450
Max. Continuous Charging/Discharging Current (A)		60 / 60
AC Side (On-grid)		
Nominal Power (kW)		10 / 9.99 (AU)
Nominal Apparent Power to Grid (kVA)		10 / 9.99 (AU)
Max. Apparent Power to Grid (kVA)		10 / 9.99 (AU)
Max. Apparent Power from Grid (kVA)		11.5
Max. Current to Grid (A)		43.4 / 43 (AU)
Max. Current from Grid (A)		50
Nominal Voltage (V)		220/230, L/N/PE
Nominal Frequency (Hz)		50 / 60
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)
THDi		<3%
AC Side (Backup)		
Nominal Output Apparent Power (kVA)		10
Max. Output Apparent Power (kVA)		10
Max. Output Apparent Power (Bypass) (kVA)		11.5
Max. Output Current (A)		43.4
Max. Output Current (Bypass) (A)		50
Nominal Output Voltage (V)		220/230, L/N/PE
Nominal Output Frequency (Hz)		50 / 60
THDv (@Linear Load)		<3%
Efficiency		
Max. Efficiency		97.3%
European Efficiency		96.2%
Protection		
Safety Protection Feature	PV String Current Monitoring, PV Insulation Resistance Detection, Residual Current Monitoring, PV Reverse Polarity Protection, Battery Reverse Polarity Protection, Anti-Islanding Protection, AC Overcurrent Protection, AC Short Circuit Protection, AC Overvoltage Protection, DC Surge Protection Type II**, AC Surge Protection Type II**, RSD (Option), AFCI, Remote Shutdown	
General Data		
Operating Temperature Range (°C)		-25~60
Communication		RS-485 / WiFi / LAN / Bluetooth
Dimensions (W × H × D mm)		590 × 405 × 205
Weight (kg)		21
Cooling Method		Natural Convection
Topology		Transformerless
Ingress Protection Rating		IP65
Grid Connection Standard	VDE-AR-N 4105, G98, G99, C10/11, NTS 631, RD647, UNE 217002, CEI 0-21, VDE 0126-1-1, NRS 097-2-1, AS/NZS 4777.2EN 50549-1/10, MEA. PEA, IEC 61727, IEC 62116, NF EN50549, NCRFG, NA/IEA-NE7-CH	
Safety Standard	IEC 62109-1/-2	

Battery Model		BW-BAT-9.6P
Battery Type		LFP
Battery Capacity (kWh)		9.6
Usable Capacity (kWh)		9.6
Depth of Discharge (DoD)		100%
Nominal Battery Voltage (V)		96
Operating Voltage Range (V)		90~108
Max. Charging Current (A)		50
Max. Discharging Current (A)		50
Operating Temperature Range (°C)		Charge:0<T<50 / Discharge:-10<T<50
Cycle Lifetime		8000
Parallel / Series		1~6 In Parallel
Dimensions (W*H*D mm)		590 × 730 × 205
Weight (kg)		86
Communication		CAN / RS-485 (Optional)
Safety Regulation		IEC 62619, IEC 62040
Transportation		UN38.3

System		
Max. Operating Altitude (m)		≤3000 (>3000 Derating)
Relative Humidity		0~95% (Non-Condensing)
Mounting Method		Floor Stacked
Warranty		10 Years
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.
 **Type II: Equivalent Type II Capability.