

Three Phase STORAGE SYSTEM



BW-TPH SERIES

INVERTER

4 / 5 / 6 / 8 / 10 / 12 / 15 kW

BATTERY

4.8 kWh

Key Features

- Max. 200% PV input;
- 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

200%

PV Input

VPP

Ready

3 Units

Parallel Support

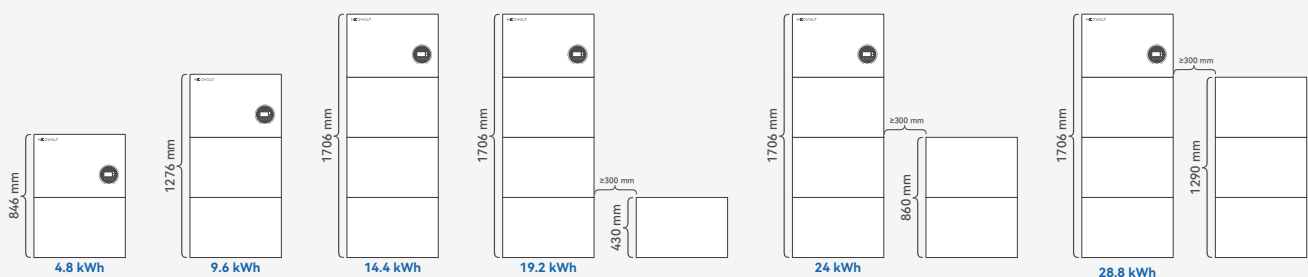
<10 ms

Seamless Switching

IP65

Rating

Product Lineup



PARAMETERS

Inverter Model	BW-INV-TPH4K	BW-INV-TPH5K	BW-INV-TPH6K	BW-INV-TPH8K	BW-INV-TPH10K	BW-INV-TPH12K	BW-INV-TPH15K
PV Side							
Max. DC Input Power (kW)	8	10	12	16	20	24	30
Max. DC Input Voltage (V)	1100						
MPPT Voltage Range (V)	140~950						
Start-up Voltage (V)	85						
Nominal DC Input Voltage (V)	720						
Max. MPPT Current (A)	18 / 18 / 18						
Max. MPPT Short Circuit Current (A)	27 / 27 / 27						
Number of MPPTs	3						
Number of Strings per MPPT	1 / 1 / 1						
Battery Side							
Battery Type	LFP						
Battery Voltage Range (V)	90~700						
Max. Continuous Charging / Discharging Current (A)	50 / 50						
AC Side (On-grid)							
Nominal Power (kW)	4	5	6	8	10	12	15
Nominal Apparent Power to Grid (kVA)	4	5	6	8	10	12	15
Max. Apparent Power to Grid (kVA)	4.4	5.5	6.6	8.8	11	13.2	15.75
Max. Apparent Power from Grid (kVA)	8	10	12	16	20	20	20
Max. Current to Grid (A)	6.3	7.8	9.5	12.7	15.9	19.1	22.8
Max. Current from Grid (A)	11.5	14.4	17.3	23.1	28.9	28.9	28.9
Nominal Voltage (V)	3/N/PE, 220/380 or 3/N/PE, 230/400						
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)	4	5	6	8	10	12	15
Max. Output Apparent Power (kVA)	4	5	6	8	10	12	15
Max. Output Apparent Power (Bypass) (kVA)	6	7.5	9	12	15	15	15
Max. Output Current (A)	8.6	10.8	13	17.3	21.7	21.7	21.7
Max. Output Current (Bypass) (A)	8.6	10.8	13	17.3	21.7	21.7	21.7
Nominal Output Voltage (V)	220/380, 230/400, 3/N/PE						
Nominal Output Frequency (Hz)	50 / 60						
THDv (@Linear Load)	<3%						
Efficiency							
Max. Efficiency	98%	98%	98.2%	98.4%	98.4%	98.4%	98.4%
European Efficiency	96.7%	96.7%	96.9%	97.1%	97.1%	97.1%	97.1%
Protection							

General Data							
Operating Temperature Range (°C)	-25~60						
Communication	WiFi / RS-485 / LAN / Bluetooth (Optional) / 4G (Optional)						
Dimensions (W × H × D mm)	590 × 416 × 205						
Weight (kg)	27.5	27.5	27.5	27.5	27.5	27.5	28.5
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Smart Forced Air Cooling
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 4777.2, EN 50549-1, EN 59549-10, MEA, PEA, IEC 61727, IEC 62116, NF EN50549, NCRFG, NA/EEA-NE7-CH, OVE R 25						
Safety Standard	EN/IEC 62109-1, EN/IEC 62109-2						

Battery Model		BW-BAT-4.8S
Battery Type		LFP
Battery Capacity (kWh)		4.8
Usable Capacity (kWh)		4.6
Depth of Discharge (DoD)		96%
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 Series
Dimensions (W*H*D mm)		590 × 430 × 205
Weight (kg)		53.4
Communication		CAN / RS-485 (Optional)
Ingress Protection Rating		IP65
Safety Standard		IEC 62619:2022, IEC 62040:2017
Transportation		UN38.3

System	
Max. Operating Altitude (m)	≤3000 (>3000 Derating)
Relative Humidity	0~100% (Non-Condensing)
Mounting Method	Floor Stacked
Noise Emission @1 m	<30 dB
Warranty	10 Years
EMC	EN/IEC 61000-6-1, EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN/IEC 61000-6-4

*Type II: Equivalent Type II capability.

Note: Specifications are subject to change without advance notice.