



ALL-IN-ONE THREE PHASE HYBRID INVERTER+ BATTERY

BW-INV-TPH8K / BW-INV-TPH10K / BW-INV-TPH12K



Easy Installation

Flexible configuration, plug and play set-up, built-in fuse protection.



High Voltage

Includes high-voltage batteries for maximum round-trip efficiency.



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Remote Monitoring

Monitor your system remotely via smart phone app or web portal.

Mnincube_Three Phase All in one 8k 10k 12k

INVERTER MODEL PV INPUT	BW-INV-TPH8K	BW-INV-TPH10K	BW-INV-TPH12K
	PV INPUT		
Max. PV Input Power	16kw	20kW	22.5kW
Max. PV Input Voltage	1100V		
MPPT Range	140-950V		
Max. Input Current	16A / 16A / 16A		
Max. Short Circuit Current	24A / 24A / 24A		
MPP Trackers	3		
Strings Per MPP Trackers	1 / 1 / 1		
	AC PORT		
Rated Grid Output Power	8kVA	10kVA	12kVA
Max. Grid Input Power	16kVA	20kVA	22.5kVA
Rated Grid / Backup Voltage	220/380Vac, 230/400Vac, 3/N/PE		
Rated Grid / Backup Frequency	50 / 60Hz		
Surge Backup Power	16kVA / 16kW	20kVA / 20kW	24kVA / 24kW
Rated Backup Power	8kVA	10kVA	12kVA
THDi	<3%		
THDv	<3% (Linear Load) / <5% (Non-linear Load)		
DCV	<100mV		
Crest Ratio	3:1		
Transfer Time	<10ms		
	EFFICIENCY		
Max. Efficiency	98.4%		
Max. Round Trip Efficiency	96%		
	GENERAL DATA		
Operating Temperature Range	-20~60°C		
Topology	Transformerless		
Dimensions (W*H*D)	590× 416× 205mm		
Weight	25kg		
Load Monitoring	Meter / CT / Backup box		
External Communication	RS-485 / WIFI / 4G / Ethernet		
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		
	BATTERY MODEL (BW-BAT-4.8S)		
Battery Type	LFP		
Unit of Battery	3	4	4
Battery Capacity	4.8kWh		
Usable Capacity	4.6kWh		
Depth of Discharge (DoD)	95%		
Nominal Battery Voltage	96V		
Operating Voltage Range	90~108V		
Max. Charging Current	50A		
Max. Discharging Current	50A		
Operating Temperature Range	Charge:0<T<50 °C / Discharge:-10<T<50°C		
Cycle Lifetime	8000		
Series/Parallel	1~6 in series		
Dimensions (W*H*D)	590x430x205 mm		
Weight	39.2kg		
Communication	CAN / RS-485 (Optional)		
Safety Regulation	IEC 62619:2017, IEC 62040:2017		
Transportation	UN38.3		
	SYSTEM		
Operating Altitude	≤3000m (>3000m Derating)		
Relative Humidity	0~95% (No Condensing)		
Protection Degree	IP65		
Cooling	Natural Convection		
Noise	<30dB		
Warranty	5 years / 10 years		
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4		