

The stand-alone BPE Hybrid Inverter is designed to monitor and manage the power flow throughout your entire home. By intelligently combining your Solar PV, Battery Storage and Emergency Backup Power, our Single Phase Hybrid Inverter is the perfect flexible solution for any homeowner.

Main Benefits

High Yield

- » Max efficiency 97.3%
- » Max Solar PV input 9kW
- » Max charge/discharge current 120A

High Reliability

- » Natural cooling
- » 5 year warranty
- » Integrated BMS works with a variety of LiFePO4 batteries



Technical Specifications

Inverter Specifications		BPE-HI-SP-3.6K	BPE-HI-SP-5.5K
Efficiency	Max Efficiency (PV to AC)	97.3%	
Input (PV)	Max PV Power	9000W	
	Max PV Voltage	550V	
	Max Input Current (input A/input B)	15A/15A	
	Max Short Current (input A/input B)	20A/20A	
	Start Operating Voltage	90V	
	MPPT Voltage Range	70V-520V	
	Number of MPPTs	2	
	String per MPPT	1	
Input (BAT)	Compatible Battery Type	Lithium/Lead-acid	
	Nominal Battery Voltage	48V	
	Battery Voltage Range	40V-60V	
	Max Charge/Discharge Current	120A/120A	
	Max Charge/Discharge Power	3680W/3680W	5500W/5500W
	Lithium Battery Charge Curve	Self-adaption to BMS	
Protection	Protection Category	Class I	
	DC Switch	Integrated	
	Anti-Islanding Protection	Integrated	
	AC Overcurrent Protection	Integrated	
	AC Short Circuit Protection	Integrated	
	DC Reverse Connection	Integrated	
	Surge Arrester	DC Type III, AC Type III	
	Insulation Detection	Integrated	
	Leakage Current Protection	Integrated	
	PV Overvoltage Category	II	
	AC Overvoltage Category	II	

Technical Specifications

Inverter Specifications		BPE-HI-SP-3.6K	BPE-HI-SP-5.5K
Output (Grid)	Nominal AC Output Power	3680W	5500W
	Max AC Output Apparent Power	3680VA	5500VA
	Max AC Output Power (PF=1)	3680W	5500W
	Max AC Output Current	16A	25A
	Rated AC Voltage	220V ±10%	
	AC Voltage Range	150V-300V (Adjustable)	
	Rated Grid Frequency	50Hz/60Hz	
	AC Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)	
	Grid Connection	Single Phase	
	Power Factor	> 0.99 @ rated power (Adjustable 0.8 LD – 0.8 LG)	
	THDI	<3% (Rated Power)	
Output (Back up)	Nominal Output Voltage	230V	
	Nominal Output Frequency	50Hz/60Hz	
	Nominal Output Power	3680W	5500W
	Nominal Output Current	16A	25A
	Transfer Time	10ms(typ) / 20ms(max)	
	THDV	<3% @ 100 % R Load	
Certifications	Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1:2019, C10/11, G98, G99, CEI 0-21, NRS 097-2-1, RD 1699/661/413, NTS	
	Safety	IEC 62109-1&2, IEC 62040-1, IEC 62477-1	
	Warranty	5 Years	
General	Max Operation Altitude	4000m	
	Noise Emission	<35dB	
	Ingress Protection Degree	IP65	
	Operating Temperature Range	-25°C ~ 60°C	
	Relative Humidity	0 ~ 100%	
	Cooling Concept	Natural Cooling	
	Mounting	Wall Bracket	
	Dimensions (W*H*D)	515mm*485mm*175mm	
	Weight	25Kg	
	PV Connection Via	MC4	
	Battery Connection Via	Dedicated DC Connector	
	AC Connection Via (grid & back up)	Dedicated AC Connector	
	Compatible Batteries	BPE, Dyness, Pylontech & Aodo	
HMI & COM	Display	LED & APP	
	Communication Interface	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Wi-Fi	

