

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-5K	BPE-HI-SP-6K
<b>Efficiency</b>	Max Efficiency (PV to AC)	97.3%		
<b>Input (PV)</b>	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		
<b>Input (BAT)</b>	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	5000W/5000W	6000W/6000W
	Lithium Battery Charge Curve	Self-adaption to BMS		
<b>Protection</b>	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-5K	BPE-HI-SP-6K
Output (Grid)	Nominal AC Output Power	3680W	5000W	6000W
	Max AC Output Apparent Power	3680VA	5500VA	6000VA
	Max AC Output Power (PF=1)	3680W	5500W	6000W
	Max AC Output Current	16A	25A	27.2A
	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	5000W	6000W
	Nominal Output Current	16A	21.7A	26A
	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), Optional: WiFi/GPRS/LAN		

