

## BST HP Inverter series (1KW~7.2KW)

### Feature:

- ◆ High frequency design, high power density, small size, high efficiency, low no-load loss.
- ◆ Built-in MPPT or PWM solar charge controller optional.
- ◆ Pure sine wave output, any types of loads adaptable.
- ◆ Battery charge and discharge voltage parameters adjustable, suitable for different types of batteries, can prolong the life of the battery and improve system performance.
- ◆ AC charge current adjustable, battery capacity configuration more flexible.
- ◆ Three working modes adjustable: AC first, Battery first, PV first.
- ◆ Output voltage/frequency adjustable function, adapt to different grid environment.
- ◆ Extra wide voltage and frequency input range, support mains or generator.
- ◆ LED+LCD display, easy operation and data checking, can set each function and data directly.



### Product Parameters

#### Specification

Model: BST HP	1KW	1.5KW	3.2KW	5KW	7.2KW	
Rated Power	1000W	1500W	3200W	5000W	7200W	
Peak Power (20ms)	3000VA	4500VA	9600VA	15KVA	21.6KVA	
Battery Voltage	12VDC	24VDC	24VDC	48VDC	48VDC	
Product Size (L*W*Hmm)	411.5x283x88	411.5x283x88	476x350x118	476x350x118	538x388x118	
Package Size (L*W*Hmm)	459X345X147	459X345X147	502x402x165	502x402x165	561X454X167	
N.W (Kg)	7	7	11.5	11.8	16	
G.W (Kg)	8	8	12.5	12.8	17.5	
Installation Method	Wall-Mounted					
Inside MPPT Solar controller (Optional)	Charging Mode	MPPT				
	Rated PV input voltage	360VDC				
	MPPT tracking voltage range <small>(At the lowest temperature)</small>	120V-450V				
	PV Maximum charging current	80A	60A	100A	100A	150A
	PV Array Maximum Power	2000W	2000W	4000W	6000W	4500W*2
	MPPT tracking channels (input channels)	1	1	1	1	2
	Charging Mode	PWM				
Inside PWM Solar controller (Optional)	Charging current	30A	30A	60A/120A	60A/120A	60A/120A
	PV Input Voltage Range <small>(At the lowest temperature)</small>	15V-44V	30V-44V	30V-44V	60V-88V	60V-88V
	PV Array Maximum Power	420W	840W	1680W/3360W	3360W/6720W	3360W/6720W
	PV input channels	1	1	1 or 2	1 or 2	1 or 2

Input	DC Input Voltage Range	10.5-15VDC	21-30VDC	21-30VDC	42-60VDC	42-60VDC
	Max AC charging current	60A	40A	60A	60A	80A
	Rated AC input voltage	220VAC / 230VAC / 240VAC				
	AC Input Voltage Range	170VAC~280VAC (UPS mode) / 120VAC~280VAC (INV mode)				
	AC Input Frequency Range	45Hz~55Hz (50Hz), 55Hz~65Hz (60Hz)				
Output	Output efficiency(Battery/PV Mode)	94% (Peak value)				
	Output Voltage(Battery/PV Mode)	220VAC±2% / 230VAC±2% / 240VAC±2%				
	Output Frequency(Battery/PV Mode)	50Hz±0.5 or 60Hz±0.5				
	Output Wave(Battery/PV Mode)	Pure Sine Wave				
	Efficiency(AC Mode)	>99%				
	Output Voltage(AC Mode)	Follow input				
	Output Frequency(AC Mode)	Follow input				
	Output waveform distortion Battery/PV Mode)	≤3%(Linear load)				
	No load loss(Battery Mode)	≤1% rated power				
	No load loss(AC Mode)	≤1% rated power(charger does not work in AC mode)				
Battery	VRLA Battery	Charge Voltage :13.8V; Float Voltage:13.7V(Single battery voltage)				
	Battery Type	Charging and discharging parameters of different types of batteries can be customized according to user requirements (charging and discharging parameters of different types of batteries can be set through the operation panel)				
	Customize battery					
	Maximum charging current (mains + PV)(Built-in MPPT controller model)	80A	60A	100A	100A	150A
	Maximum charging current (mains + PV)(Built-in PWM controller model)	Mains 60A+ PWM	Mains 40A+ PWM	Mains 60A+ PWM	Mains 60A+ PWM	Mains 80A+ PWM
Protection	Charging method	Three-stage (constant current, constant voltage, floating charge)				
	Battery low voltage alarm	Battery undervoltage protection value+0.5V(Single battery voltage)				
	Battery low voltage protection	Factory default: 10.5V(Single battery voltage)				
	Battery over voltage alarm	Constant charge voltage+0.8V(Single battery voltage)				
	Battery over voltage protection	Factory default: 17V(Single battery voltage)				
	Battery over voltage recovery voltage	Battery overvoltage protection value-1V(Single battery voltage)				
	Overload power protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)				
	Inverter output short circuit protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)				
Environment	Temperature protection	>90°C(Shut down output)				
	Working Mode	Mains priority/Solar priority/Battery priority(Can be set)				
	Transfer Time	≤4ms				
	Display	LCD+LED				
	Thermal method	Cooling fan in intelligent control				
Communication(Optional)	Communication(Optional)	RS485/APP(WIFI monitoring or GPRS monitoring)				
	Operating temperature	-10°C~40°C				
	Storage temperature	-15°C~60°C				
	Noise	≤55dB				
	Elevation	2000m(More than derating)				
Humidity	Humidity	0%~95% (No condensation)				

**Note: 1. The working mode of the built-in MPPT controller model supports PV priority/battery priority/mains priority,**

**and the working mode of the built-in PWM controller model only supports battery priority/mains priority;**

**2. All specifications are subject to change without prior notice.**