

# Three phase Hybrid Inverter

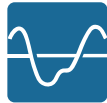
# BSE20/30KH3

**POWER:**

# 20KW/30KW



**WIDE RANGE**  
 Voltage Range  
 (150-800V)



**100% UNBALANCE**  
 Support Unbalance Load

**Max.  
 1.5**

**PV OVERSIZE**  
 1.5 Times PV Oversize

**Max.  
 40A**

**MAX. 40A<sub>dc</sub>**  
 String Current Up To 40A

**<10  
 ms**

**UPS FUNCTION**  
 Switch Time < 10ms

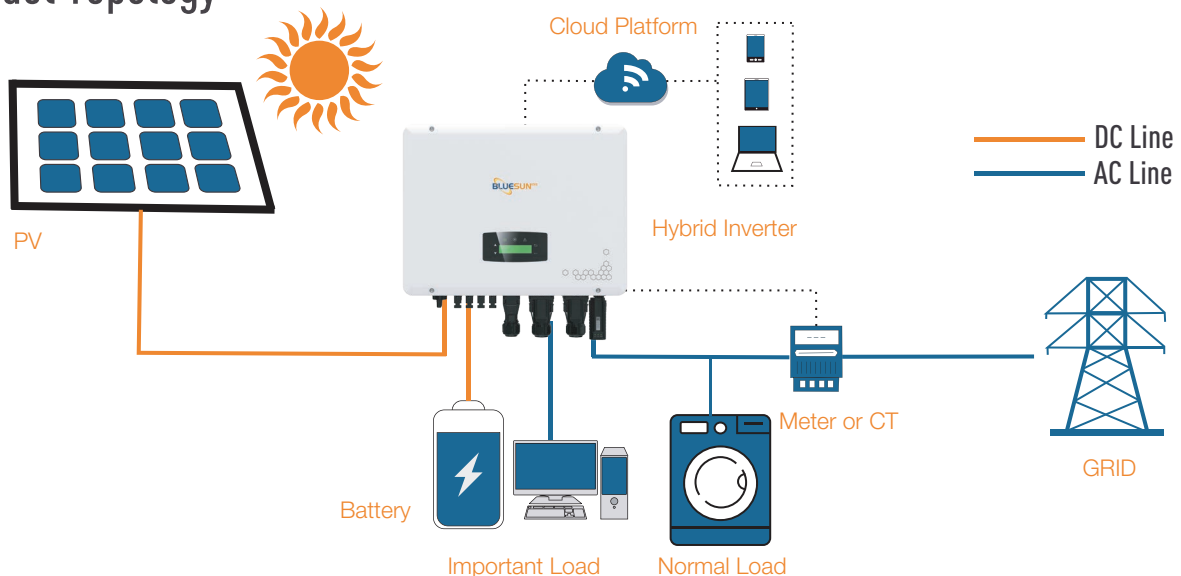


**INPUT**  
 Support Generator

- Support for Time-of-use Optimization
- Configurable Operation Modes
- AFCI (Optional) & Rapid Shutdown Ready

- Build in Anti-feed-in Function
- 100% unbalanced output, each phase;  
 200% unbalanced output, each phase (Below 10kW)
- Smart Monitoring & Remote Firmware Upgrade

## Product Topology



Model	BSE20KH3	BSE30KH3	
<b>PV Input</b>	Max. DC Input Power (kW)	30	45
	Max. PV Voltage (V)		1000
	Rated DC Input Voltage (V)		620
	DC Input Voltage Range (V)		150-1000
	MPPT Voltage Range (V)		150-850
	Full MPPT Range(V)		500-850
	Start-up Voltage (V)		160
	Max. DC Input Current (A)	32x2	40x2
	Max. Short Current(A)	48x2	60x2
	No. of MPPT Tracker / Strings	2/4	2/4
<b>Battery Port</b>	Battery Nominal Voltage (V)	500	550
	Battery Voltage Range (V)		150-800
	Max. Charge/Discharge Current (A)	50	60
	Max. Charge/Discharge Power (W)	20K	30K
	Charging Curve		3 Stages
	Compatible Battery Type		Li-ion / Lead-acid
<b>AC Grid Output</b>	Nominal AC Output Power (VA)	20000	30000
	Max. AC Input Power	30000	45000
	Max. AC Output Current (A)	32	48
	Nominal AC Voltage (V)		230/400
	Nominal AC Frequency (Hz)		50/60
	Power Factor		1 (-0.8-0.8)
	Current THD (%)		<3%
<b>AC Load Output (Back-up)</b>	Nominal Output Power (VA)	20000	30000
	Nominal Output Voltage (V)		230/400
	Nominal Output Frequency (Hz)		50/60
	Nominal Output Current (A)	29	43.5
	Peak Output Power	22000VA, 60s	33000VA, 60s
	THDV (with linear load)		<3%
	Switching Time (ms)		<10
<b>Efficiency</b>	Europe Efficiency	97.80%	98.10%
	Max. Efficiency	98.30%	98.50%
	Battery Charge/Discharge Efficiency		98.00%
	MPPT Efficiency		99.90%
<b>Protection</b>	Reverse Polarity Protection		Yes
	Over Current / Voltage Protection		Yes
	Anti-islanding Protection		Yes
	AC Short-circuit Protection		Yes
	Leakage Current Detection		Yes
	Ground Fault Monitoring		Yes
	Grid Monitoring		Yes
	Enclosure Protect Level		IP65
<b>General Data</b>	Dimensions (H x W x D) (mm)		558 x 535 x 260 mm
	Weight (kg)	29kg	36kg
	Topology		Transformerless
	Cooling Concept		IntelligentFan
	Relatively Humidity		0-100%
	Operating Temperature Range (°C)		-25 to 60°C
	Operating Altitude (m)		<4000
	Noise Emission (dB)		<40
	Standby Consumption (W)		<5
	Display & Communication Interfaces		LCD, LED,RS485,CAN,WI-FI,GPRS,4G
	Certification & Approvals		NRS97, G98/G99, EN50549-1, C10/C11, AS 4777, VDE-AR-N4105, VDE0126, IEC62040, IEC62109-1, IEC62109-2
	EMC		EN61000-6-2,EN61000-6-3