



THREE PHASE HYBRID STORAGE INVERTER

BSE15KH3

Output Power: 15KW



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_{dc}
String Current Up To 40A

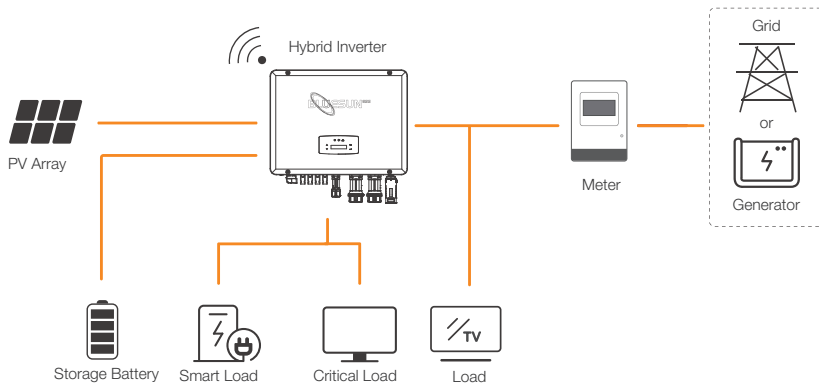
<10 ms

UPS FUNCTION
Switch Time < 10ms



INPUT
Support Generator

Product Topology



Build in Anti-feed-in Function



100% unbalanced output, each phase;
200% unbalanced output, each phase (Below 10kW)



Smart Monitoring & Remote Firmware Upgrade



Support for Time-of-use Optimization

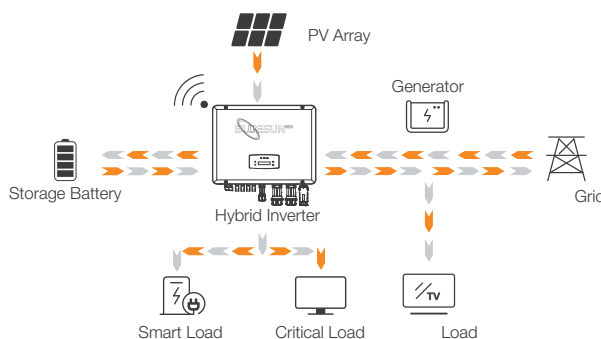


Configurable Operation Modes

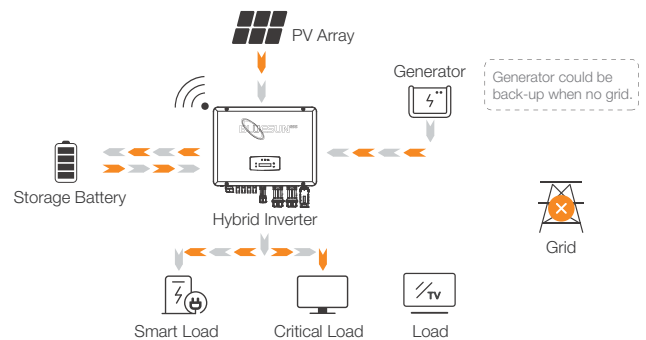


AFCI (Optional) & Rapid Shutdown Ready

Optimizing Self-Consumption (on-grid)



Emergency Power Supply (off-grid)



PV Input		BSE15KH3
Max. DC Input Power (kW)		22.5
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)		20+32
Max. Short Current(A)		30+48
No. of MPPT Tracker / Strings		2/3
Battery Port		
Battery Nominal Voltage (V)		500
Battery Voltage Range (V)		150-800
Max. Charge/Discharge Current (A)		50
Max. Charge/Discharge Power (kW)		15
Charging Curve		3 Stages
Compatible Battery Type		Li-ion / Lead-acid
AC Grid		
Nominal AC Output Power (kW)		15
Max. AC Input/Output Power(kVA)		22.5/16.5
Max. AC Output Current (A)		27
Nominal AC Voltage (V)		230/400
Nominal AC Frequency (Hz)		50 / 60
Power Factor		1 (-0.8-0.8) adjustable
Current THD (%)		<3%
AC Load Output (Back-up)		
Nominal Output Power (VA)		15000
Nominal Output Voltage (V)		230 / 400
Nominal Output Frequency (Hz)		50 / 60
Nominal Output Current (A)		21.8
Peak Output Power		16500VA, 60s
THDV (with linear load)		<3%
Switching Time (ms)		<10
Efficiency		
Europe Efficiency		97.50%
Max. Efficiency		98.30%
Battery Charge/Discharge Efficiency		98.00%
MPPT Efficiency		99.90%
Protection		
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
General Data		
Dimensions (WxHxD,mm)		558 x 535 x 260 mm
Weight (kg)		29kg
Topology		Transformerless
Cooling Concept		Intelligent Fan
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		NRS097, EN50549-1, C10/C11, OVE Directive R25:2020,TOR Erzeuger Type A V1.2, VDE-AR-N4105, IEC62109-1, IEC62109-2
EMC		EN61000-6-1, EN61000-6-3

Three phase Hybrid Inverter

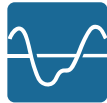
BSE20/30KH3

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_{dc}
 String Current Up To 40A

<10 ms

UPS FUNCTION
 Switch Time < 10ms

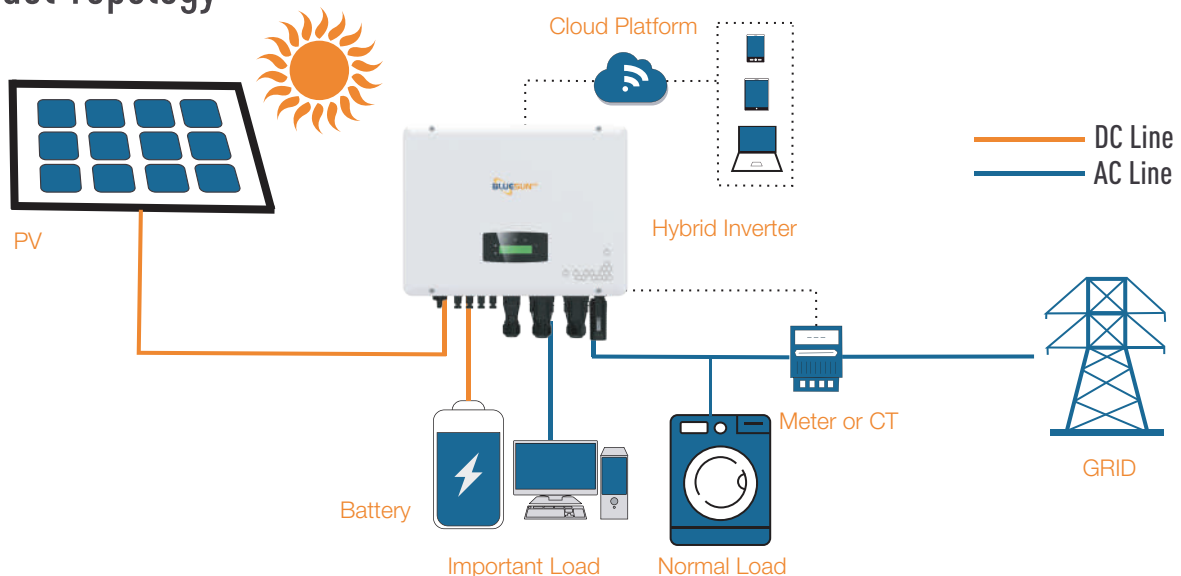


INPUT
 Support Generator

- 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	
PV Input	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
Battery Port	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	
AC Grid Output	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%
AC Load Output (Back-up)	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
Efficiency	Europe Efficiency	97.80%	98.10%
	Max. Efficiency	98.30%	98.50%
	Battery Charge/Discharge Efficiency		98.00%
	MPPT Efficiency		99.90%
Protection	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
General Data	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