BOOSTESS POWER

50kW/100kWh

Air-Cooled Energy Battery Storage Outdoor Cabinet

All-In-One Design

The equipment is highly integrated,with a compact product size, occupying only1.2 square meters per cabinet

Reliable Performance

Low loss series connection on the DC side
dynamic temperature regulation enhanced ESS cycling effciency

Security and Stability

Utilizing top-tier battery cell suppliers
Battery safety warnings and fault switching
Automatic fire system response

Multi-unit Parallel Expansion

Flexible scalability, On-Demand configuration
Supports multiple units parallel
Cooperative control

Application Scenarios:

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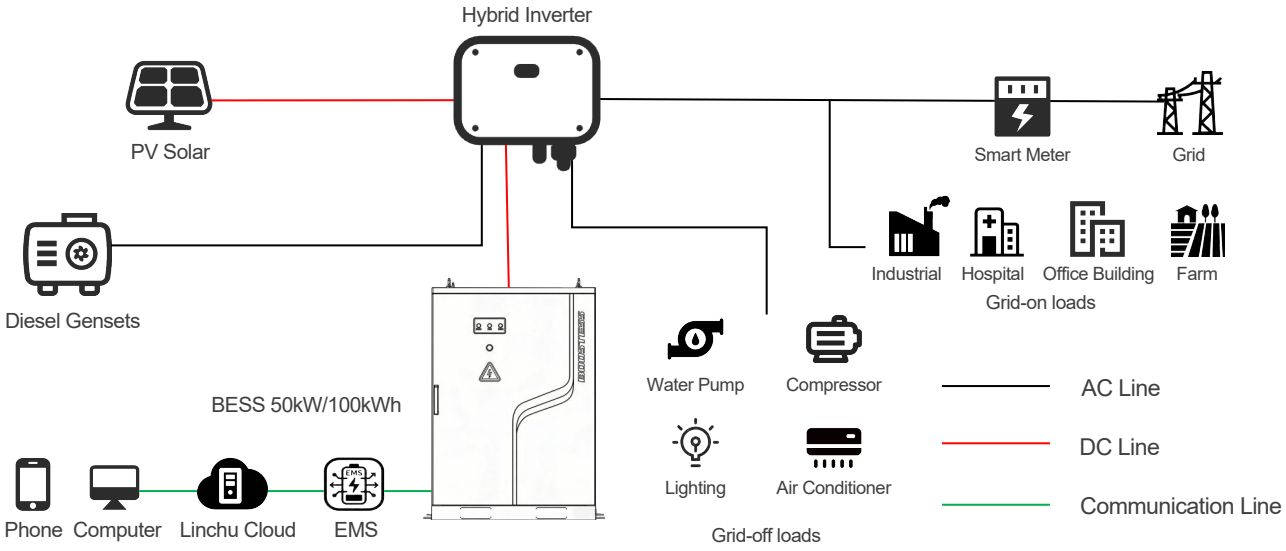

BESS SIDE

		DC Parameter	
Battery type	LFP	Operating Voltage Range	313.6V~408.8V
Combination Mode	1P112S	Charge/Discharge Current	140A/140A
Rated Capacity	280Ah	Cooling Mode	Air Conditioning Cooling
Rated Energy	100kWh	Battery Cycle	6000@25 ℃, 90%DOD0.5P
Rated Voltage	358.4V	Fire Protection System	Aerosol Extinguishing
Rated Power	50kW	Detector Type	Temperature / Smoke Sensor / Water Leak
		PV Parameter	
Max. Recommended PV array power	100kW	MPPT voltage range	150~850V
Max. usable PV input power	96kW	MPPT number	4
Max. PV input voltage	1000V	Max. input strings number	8
Start-up voltage	180V	Max. Input current per MPPT	4 * 40A
Rated PV input voltage	600V	Max. Short circuit current	4 * 60A
		AC Parameter	
Rated Output Power	50.0kW	Rated grid output current	76A / 72.2A
Max. Apparent output power	50.0kVh	Max. Output current	76A / 72.2A
Rated grid voltage	3/N/PE, 220V / 380V, 230V / 400V	Power factor	> 0.99 (0.8 leading - 0.8 lagging)
Rated grid frequency	50Hz/60Hz	THDi	< 3%
		System Parameter	
Operating Environment	-20℃~55℃ (Power derating 45℃+)	Class Of Protection	Cabinet: IP54, Inverter: IP66
Size (W*D*H mm)	1130*1000*1600	Allowable Relative Humidity	0-95%
Weight	About 1.4t	Allowable Altitude	≤4000m(Power derating 2000m)
Certification Standard	IEC62619, EN62477, IEC63056, IEC61000, UN38.3, IEC61727, EN50549-1, VDE-AR-N 4105, NTS631, TORErzeuger, AS4777.2, NRS097-2-1		
Units expansion	On-grid :up to 10 units in parallel Off-grid: up to 6 units in parallel		

INVERTER SIDE

		INPUT DC (PV side)	
Recommended max. PV array size	100kW	MPPT voltage range	150–850V
Max. usable PV input power	96kW	Max. input current	4 × 40A
Max. input voltage	1000V	Max. short circuit current	4 × 60A
Rated voltage	600V	MPPT number	4
Rated Voltage	180V	Max. input strings number	8
		Battery	
Battery type	Li-ion	Max. charge / discharge current	70A × 2①
Battery voltage range	150–800V	Number of battery ports	2
Max. charge / discharge power	55kW	Max. charge / discharge power	35kW
Communication	CAN / RS485		
		Output AC (Grid side)	
Rated Output Power	50 kW	Rated grid output current	76A / 72.2A
Max. apparent output power	50kVA	Max. output current	76A / 72.2A
Rated grid voltage	3/N/PE, 220/380V, 230/400V	Power factor	> 0.99 (0.8 lead–0.8 lag)
Rated grid frequency	50Hz / 60Hz	THDi	< 3%
		INPUT AC (Grid Side)	
Max. AC passthrough current	152A / 144.4A		
Rated input voltage	3/N/PE, 220/380V, 230/400V		
Rated input frequency	50Hz / 60Hz		
		Input Generator	
Max. input power	50kW		
Rated input current	76A / 72.2A		
Rated input voltage	3/N/PE, 220/380V, 230/400V		
Rated input frequency	50Hz / 60Hz		
		Output AC (Back-up)	
Rated Output Power	50kW		
Max. apparent output power	1.6 × rated power, 2s		
Back-up switch time	< 10ms		
Rated output voltage	3/N/PE, 220/380V, 230/400V		
Rated frequency	50Hz / 60Hz		
Rated output current	76A / 72.2A		
THDv (@linear load)	< 2%		

Efficiency			
Max. efficiency	97.8%	EU efficiency	98.5%
BAT charged by PV max. efficiency	97.4%	BAT charged / discharged to AC max. efficiency	97.5%
Protection			
Anti-islanding protection	Yes	DC reverse-polarity protection	Yes
Integrated DC switch	Yes	Short circuit protection	Yes
Output over current protection	Yes	Surge protection	DC Type II / AC Type II
Integrated AFCI 2.0	Optional		
General Data			
Dimensions (W × H × D)	530 × 880 × 290mm	Operating ambient temperature	-25 ~ +60°C
Weight	73kg	Relative humidity	0–100%
Topology	Transformerless	Ingress protection	IP66
Self-consumption (night)	< 35W	Cooling concept	Intelligent fan-cooling
Max. operation altitude	4000 m		
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN50549-1/-10		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN55011		
Connection and Communication			
PV Connection	MC4 Quick connection plug		
Battery Connection	Terminal connector		
AC Connection	Terminal Block		
Display	7.0" LCD display & Bluetooth + APP		
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN		

BATTERY PACK SIDE

Batery Pack Parameter	
Battery type	LFP 314Ah
Battery capacity	20.096kWh
Battery configuration	1P20S
Rated battery voltage	64V
Battery voltage range	56~72 V
Weight	135kg
Charge / Discharge rate	≤ 0.5C
Dimensions (W × H × D)	490*896.5*230 mm
Ingress protection	IP20