

1000kW / 1920kWh BESS

Container Energy Storage System

Power Is 



About us

Best Power Equipments India Pvt. Ltd. is industry leading electrical and power electronic product designer and manufacturer since 2000. located in Noida India.

BPE provides complete solutions for Data center infrastructure, Power solutions and Green energy storage sectors. The BESS products cover four main application: Industrial and commercial BESS, renewable integration, uninterrupted power lithium battery system and residential energy storage system.

"Sustainability Isn't an Option — It's a Commitment"

Excellent developer and supplier of innovative smart energy storage system

Best Power Equipments India Pvt. Ltd.

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BESS Container

BPE uses standard battery modules, PCS modules, BMS, EMS and other systems to form standard containers to build large-scale grid-side energy storage projects. The standardized container system can be configured with 1920kWh/1000kW energy storage system.

The standardized and prefabricated design reduces user customization time and construction costs, and reduces safety hazards caused by local installation differences and management risks. It meets the application needs of regional power grid peak shaving, frequency regulation, voltage regulation, emergency response, new energy consumption, etc., and ensures the normal operation of the power system.

Configuration



PCS

Bidirectional AC / DC converter can realize the bidirectional conversion from DC to AC and AC to DC. It can not only convert AC to DC to charge battery, but also convert DC to AC to supply power to load or feedback to power grid.



Battery System

The system mainly consists of safe, efficient and long-life lithium iron phosphate cells, which are connected in series to form battery modules, and multiple modules are connected in series to form battery clusters.



Air Conditioning

Air Conditioning (HVAC) system is configured to maintained an optimal temperature to maximize energy system operational life and efficiency.



Battery management system

The core components of the system can effectively protect the battery from overcharge, overdischarge and over-current. At the same time, the balanced management of the cells can ensure the safe, reliable and efficient operation of the whole system.



Power Management System

System operation data monitoring, operation strategy management, historical data record, system status record, etc.



Enclosure

Protection Degree IP54

| Safe and reliable |

- High quality LFP batteries for mobile use.
- Intelligent air conditioning design, small temperature fluctuation.
- Automatic induction of fire source; automatic fire extinguishing; sound and light alarm function.
- Container-mounted network camera with video surveillance function; (optional)
- IP54, safe and reliable operation in outdoor environment.
- Serially designed PCS and battery pack eliminates circulating current and improve system reliability.
- Integrated BMS, DC, AC multi-layer protection, maximum safety performance design.

| Efficient and Convenient |

- Container installation, high modularity, simple structure, easy installation and maintenance.
- All-in-one equipment, which can be fixed, vehicle-mounted, and easy to move.
- Enables remote monitoring, device management, remote troubleshooting and data analysis.

| Cost optimization |

- Improving and energy storage, etc.
- One investment, multiple benefits: Peak shaving, backup power supply, microgrid building, power quality.
- Long cycle life, low failure rate, reduce operation and maintenance investment.
- Maximize green energy utilization.

System application



Peak and frequency regulation, smoothing new energy generation.



User side backup power.



Industrial and commercial demand management, peak shaving.



Building microgrid system.

Specification

Model		BESS10001920C
AC Parameter (Grid)	Rated Power (kW)	1000
	Rated Grid Voltage (V)	3W+N+PE , 380V/400V
	Grid Voltage Range	-15%~+10%
	Rated Grid Frequency (Hz)	50Hz/60Hz
	Grid Frequency Range (Hz)	± 2Hz
	Output Current Harmonics	≤3% (Rated power)
	DC Component	< 0.5%In
	Power Factor Range	-0.9~+0.9
AC Parameter (No Grid)	Rated Output Power (kW)	1000
	Max. Output Power (kW)	1050
	Rated Output Voltage (V)	3W+N+PE , 380V/400V
	Output Voltage Harmonics	3%
	Rated Frequency (Hz)	50Hz/60Hz
	Overload Capacity	105% : Long-time Running 105%~120% : 10min 120%) : 1min
Battery Parameter	Cell Type	LFP
	Single cell module capacity (KWh)	241.152
	No. of Battery Cabinets	8
	Battery System Power (KWh)	1920
	Rated operation hours (h)	2 (Changeable number of battery modules with othertime options)
	Cycle Life	6000 (0.5C@25℃ Charge/Discharge@90%DOD , EOL80%)
Protection	AC Switch	YES
	PV Electric Operated AC Switch	YES
	Grid Monitor	YES
	Surge Protection	YES
Basic Parameter	Size (W*D*H) (mm)	12116*2438*2591
	Weight (kg)	28000
	Isolation Method	Isolation Transformer (built-in)
	NO/OFF Grid Switch Device	STS (Optional)
	IP Class	Outdoor IP54
	Working Temperature Range	-20℃~55℃ (Derated above 45° C)
	Relative Humidity	0%RH~95%RH , Non-condensing
	Temperature Control Method	Batterycabinet:air-conditioned;electricalcabinet:air-cooled
	Max. Working Altitude (m)	45℃ , 2000m ; 2000~4000m Derate
	Display	Touchscreen
	Communication Interface	RS485、LAN
	Communication Protocol	Modbus-RTU、Modbus-TCP

* Specifications are subject to change without any prior notice.

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