



## BESS-125KW/261 KWH

### BES-P125X261E / BES-P125X261U

The LIVOLTEK BES Series is a versatile solution applicable to charging stations, factories, industrial parks, and commercial buildings. Designed for power storage, models BES-P125X261 enable emergency power during outages, peak-load shifting, surplus energy trading, and virtual capacity enhancements. Boasting a high-density, modular design, this energy storage system minimize spatial needs, enhance transportability, and simplify installation and maintenance, ensuring top efficiency from deployment through operation.

#### High Performance

- Smaller size, high energy density
- Balanced between packs to improve energy utilization
- 3S fusion, short response time

#### Assured Safety

- Efficient liquid cooling temperature control to maintain optimal operating status
- With multi-level security architecture design such as cell level, PACK level, system level, cloud monitoring, etc.
- Multiple battery clusters are connected to independent modular PCS to achieve single cluster management of battery clusters and avoid capacity loss of parallel battery clusters

#### Intelligent Design

- Smart energy management cloud platform, cell-level refined monitoring and diagnosis
- All operating data of the energy storage system is connected to the cloud for real-time monitoring and unattended operation
- EMS supports 1-2 years of historical system data backup

#### Flexible Adaptability

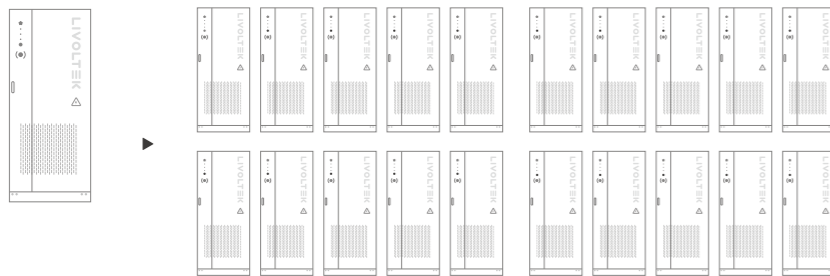
- All in one design, flexible system expansion
- Occupying an area of only 1.35m<sup>2</sup>, can be deployed in a dispersed manner, centrally dispatched, and convenient for flexible placement
- Pre-assembled at the factory, high system integration, simple transportation and deployment

## PRODUCT STRUCTURE



## PRODUCT EXPANSION

### On-grid Environment

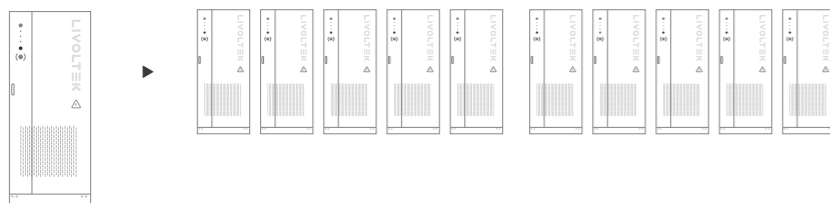


..... X 20

#### 20 \* BES-P125X261E/U

Maximum 20 units AC parallel  
Up to: 2.5MW/5.2MWh

### Off-grid Environment

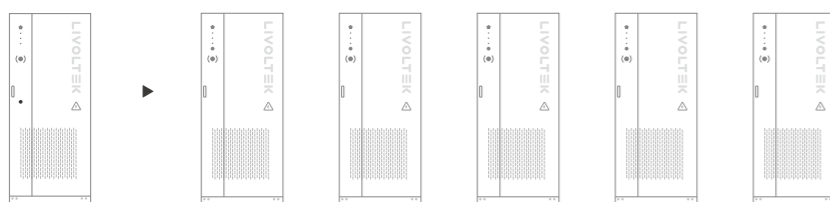


..... X 10

#### 10 \* BES-P125X261E/U

Maximum 10 units AC parallel  
Up to: 1.25MW/2.6MWh

### Grid-connected to Off-grid Transition Environment



..... X 5

#### 5 \* BES-P125X261E/U

Maximum 5 units AC parallel  
(seamless switching)  
Up to: 625kw/1.3MWh

# BESS-125KW/261KWH

BES-P125X261E / BES-P125X261U

BESS

Model	BES-P125X261E	BES-P125X261U
<b>Battery Parameters</b>		
Nominal DC Voltage	832 V	
Battery Voltage Range	624 ~ 949V	702 ~ 949V
Battery Type	LFP 314 Ah	
Battery Module Specification	IP52S 166.4V 314Ah 52.2kWh	
Nuber of Packs	5	
Total Energy	261.2 kWh	
Nominal Power	125kW	
Max power	137.5kW	
Rated Charge/Discharge Current	157 / 157 A	
Depth of Discharge	Max. DOD:100%; Recommend DOD:90%	
Operating Temperature	Charge: -20 ~ 55°C; Discharge: -20 ~ 55°C	
<b>AC Parameters @On-grid</b>		
Rated AC Power	125 kW	
Max. Output Power	137.5 kVA	
Rated Output Voltage	3L/N/PE, 3L/PE, 220/380, 230/400	3L/N/PE,3L/PE, 277/480
Voltage Range	340 ~ 460 V	408 ~ 528 V
Rated AC Frequency	50±5 / 60±5 Hz	
Adjustable Power Factor Range	-1 (Leading)-1 (Lagging)	
Rated AC Current	180.4 A	150.4 A
Max. AC Current	198.5 A	165.4 A
THDi(Rated power)	<3%	
<b>AC Parameters @Off-grid</b>		
Rated AC Power	125 kW	
Max. Output Power	137.5 kW	
Rated Output Voltage	3L/N/PE, 3L/PE, 220/380, 230/400	3L/N/PE,3L/PE, 277/480
THDi(Rated power)	±2%	
<b>General</b>		
System Efficiency	88%	
Dimension (W*H*D)	1000*2300*1300 mm	
Weight	2450 kg	
Operation Temperature	-20 ~ 55 °C (derating at 40°C)	
Relative Humidity	5% ~ 95%	
Max. Operating Altitude/m	4000 (>2000 derating)	
Cooling	Battery: Liquid Cooling; PCS: Fan Cooling	
Ingress Protection	IP55	
Anti-corrosion Level	C3/C5 optional	
Fire Protection	Aerosol	
Topology	Non-isolated	
Communication Interface	RS485 / CAN / Ethernet / 4G / WiFi	
Certificates and Approvals	IEC 61000, IEC 62619, IEC 63056, IEC 62477, IEC 62933, RoHs, UN38.3	

# ENERGY STORAGE PCS MODULE

PCS-125KG1 / PCS-125KMG1

PCS

Model	PCS-125KG1	PCS-125KMG1
<b>DC Input</b>		
Max. DC Voltage	1000 V	
Battery Voltage Range	580 ~ 950 V	700 ~ 950 V
Max. Continuous DC Current	211.5 A	188.9 A
<b>AC Output [On-grid]</b>		
Rated AC Power/kW	125 kW	125 kW
Max. Apparent Power	137.5 kVA	137.5 kVA
Rated Output Current	180.4 A	150.4 A
Max. Output Current	198.5 A	165.4 A
Rated AC Voltage	3L/N/PE, 3L/PE, 220/380, 230/400 V	3L/N/PE,3L/PE, 277/480 V
Rated Output Frequency	50±5 / 60±5 Hz	
Power Factor	-1 ~ 1	
Total Harmonic Distortion/THDI	<3% ( Rated Power)	
<b>AC Output [Off-grid]</b>		
Rated AC Power	125 kW	125 kW
Max. Output Power	137.5 kW	137.5 kW
Unbalanced Load Capacity	100%	100%
Rated AC Voltage	3L/N/PE,230/400 V	3L/N/PE, 277/480 V
Output Voltage Harmonics	≤2% (Resistive Full Load)	
<b>Efficiency</b>		
Max. Efficiency/%	99.00%	99.00%
Euro Efficiency/%	98.50%	98.50%
<b>Protection</b>		
Anti-islanding Protection	Integrated	
DC Short Circuit/Over Current Protection	Integrated	
AC Short Circuit/Over Current Protection	Integrated	
Residual Current Detection	Integrated	
Over/Under Frequency Protection	Integrated	
Over/Under Voltage Protection	Integrated	
Insulation Resistance Monitoring	Integrated	
Overtemperature Protection	Integrated	
DC Reverse-polarity Protection	Integrated	
<b>General Data</b>		
Operating Temperature	-30 ~ +60°C (>45 Power Derating)	
Ingress Protection	IP66	
Operating Altitude	4000m (>2000 Power Derating)	
Installation	Rack-mounted (Horizontal, Side-mounted)	
Noise	≤75 dB	
Cooling	Intelligent Air-cooled	
Dimension(W*H*D)	600*270*800 mm	
Weight	≤75 kg	
Interfaces	Ethernet / RS485 / CAN	
Communication	Ethernet / Modbus TCP / RS485 / CAN	

# BATTERY PACK MODULE

BHF-B166314

BATTERY

Model	BHF-B166314
Cell type	LFP
Memory	1P52S
Nominal Voltage	166.4 V
Operating Voltage Range	140.4 ~ 189.8 V
Rate Capacity	314 Ah
Cell Specification	3.2V 314Ah 1004.8Wh
Nuber of Cells	52
Total Energy	52.2 kWh
Usable Energy	47.0 kWh
Nominal Power	26.1 kW
Max Power	28.7 kW
Rate Charge/Discharge Current	157 / 157 A
Max charge/Discharge Current	172 / 172 A
Depth of Discharge	Max. DOD:100%; Recommend DOD:90%
Cooling	Liquid Cooling
Operating Temperature	Charge: 0 ~ 60°C; Discharge: -30 ~ 60°C
Operating Humidity	5%~95%
Operating Altitude	<4000m (>2000m derating)
Pack life	>15 years
Communication	CAN 2.0
Ingress Protection	IP67
Dimension	790*248.5*1130 mm
Weight	330 ±10 kg