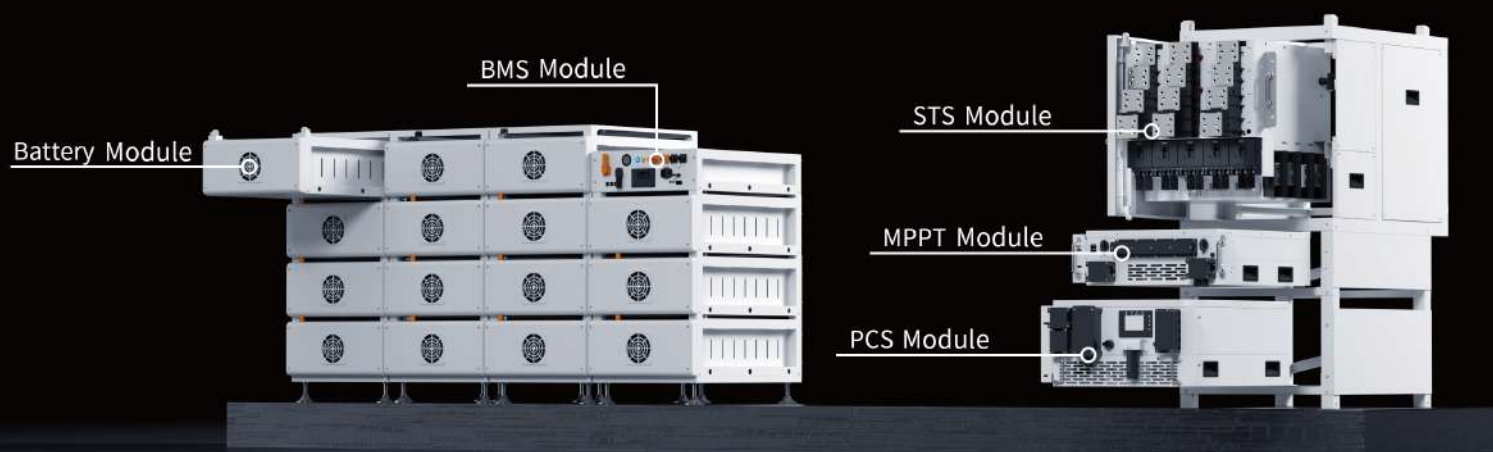


100KW-2.5MW C&I ESS SOLUTION

PCS+MPPT+STS

「BOS-B BATTERY」



Fast & Reliable Switching

- **Seamless Switching :**
STS module can switch between on-grid, off-grid, and diesel modes in <10ms.
- **Independent High-Power Paths :**
Diesel, load, and grid connections support 500kW/625kW each.



Advanced Energy Storage

- **Extended Backup :**
Up to 32 hours of backup with 16 racks per PCS.
- **Smart Balancing:**
Independent BMS ensures optimal charge distribution and extends battery life.



Intelligent Control

- **Integrated EMS :**
Supports zero-export and time-of-use charging/discharging.
- **Easy Management:**
Color touchscreen for local or remote cloud adjustments.



Efficient PV Integration

- **Wide MPPT Range :**
1000V PV system with 180-850V MPPT range.
- **High PV Input :**
Supports up to 200kW PV input with 8 MPPT channels (40A each).



Rugged & Reliable

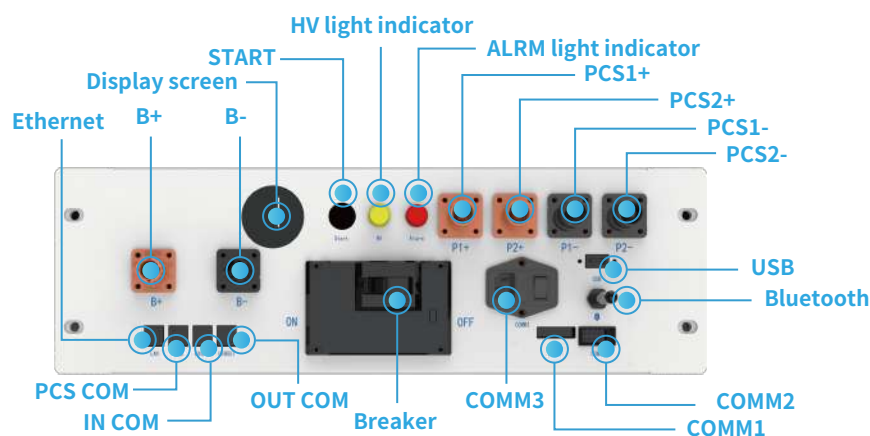
- **IP65 Protection :**
PCS and MPPT modules feature IP65-rated protection.
- **Overload & Peak Power Support :**
PCS supports 110% overload and peak power up to 170%.
- **LFP battery:**
BOS-B's robust design enhances the system's reliability.



High Performance & Scalability

- **Powerful Capacity :**
PCS offers 100kW/125kW, expandable up to 2MW/2.5MW with 20 units in parallel.
- **Large Energy Storage:**
BOS-B battery delivers 215kWh per cluster, supporting up to 16 packs per PCS.
- **High Efficiency :**
PCS reaches 98.5% efficiency, MPPT exceeds 99%.

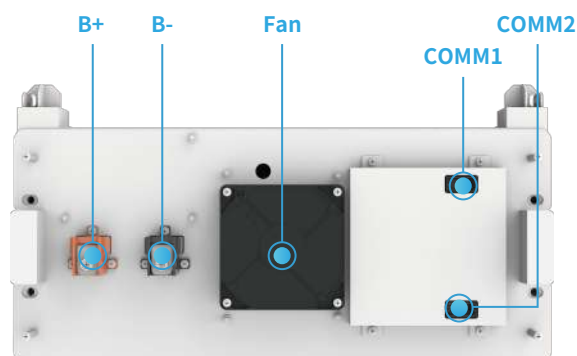
Model	BOS-B-PDU-2
Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	168A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	795.9×526×274.2(W×H×D),123kg



- ◎ Ethernet:Features not yet developed.
- ◎ PCS COM:PCS COM battery communication terminal: used to output battery information to the inverter.
- ◎ IN COM:Connection position with previous BOS-B-PDU-2 communication OUT COM .
- ◎ OUT COM:Connection position with next BOS-B-PDU-2 communication IN COM.
- ◎ Breaker:It is used to manually control the connection between the battery rack and external devices.

- ◎ COMM3:The product must be connected to the auxiliary power input AC200~240V-3A-50~60Hz when used.
- ◎ COMM1:Emergency power-off triggered the interface.
- ◎ COMM2:Communicative connection with the first battery module; and providing 12VDC power for the first battery module.
- ◎ Bluetooth:The mobile APP connects to the data acquisition rod of the energy storage system.
- ◎ B+:Battery common positive connection position (orange).
- ◎ B-:Battery common negative connection position (black).
- Display screen:Display SOC and fault codes.
- START:A start switch of 12VDC power inside the high-voltage control box.
- ◎ HV light indicator:High-voltage hazard indicator (yellow).
- ALRM light indicator:Battery system fault alarm indicator (red).
- ◎ PCS1+:First PCS positive connection position (orange).
- ◎ PCS2+:Second PCS positive terminal connection position (orange).
- ◎ PCS1-:First PCS negative connection position (black).
- ◎ PCS2-:Second PCS negative connection position (black).
- ◎ USB:BMS upgrade port and storage expansion port.

Model	BOS-B-Pack14.3
Nominal Capacity	280Ah
Nominal Energy	14.3kWh
Nominal Voltage	51.2Vdc
Nominal Charge/Discharge Current	168A
Ingress Protection	IP20
Operating Temperature(Charge)	0~55°C
Operating Temperature(Discharge)	-20~55°C
Storage Temperature	0~35°C
Details	788.6×526×167.2(W×H×D),32kg



- ◎ B+: Battery module positive pole (orange)
- ◎ B-: Battery module negative pole (black)
- ◎ Fan: Ventilation and heat dissipation.
- ◎ COMM1: Connection position of battery module communication and power supply input
- ◎ COMM2: Connection position of battery module communication and power supply output

STS Module		SUN-ST500L	
Grid Side Data			
Rated AC Input/Output Active Power （kW）	500		
Rated AC Input/Output Current （A）	725		
Rated Input/Output Voltage(V)	220/380, 230/400 (three phase)		
Grid Connection Form	3L/N/PE		
Rated Input/Output Grid Frequency	50Hz/60Hz		
Load Side Data			
Rated Output Active Power （kW）	500		
Rated Output Current （A）	725		
Rated Output Voltage(V)	220/380, 230/400 (three phase)		
Grid Connection Form	3L/N/PE		
Rated Output Grid Frequency	50Hz/60Hz		
GEN Side Data			
Rated AC Input Active Power （kW）	500		
Rated AC Input Current （A）	725		
Rated Input Voltage(V)	220/380, 230/400 (three phase)		
Grid Connection Form	3L/N/PE		
Rated Input Grid Frequency	50Hz/60Hz		
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
LCD/LED display	LCD		
Communication Interface	WIFI, RS485, CAN, Meter		
General Data			
Off grid switching time	<10ms		
Operating Temperature Range(°C)	-25°Cto +60°C,>45°C Derating		
Permissible Ambient Humidity	0-95%		
Permissible Altitude	4000m		
Ingress Protection(IP) Rating	IP 65(MPPT Module)	IP 65(PCS Module)	IP 20(STS Module)
Cabinet Size(W×H×D)[mm]	543×197.8×700(MPPT Module)	543×310×775(PCS Module)	543×575×866(STS Module)
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Type of Cooling	Intelligent Air Cooling		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105		
Safety/EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		



Model		BOS-B
Main Parameter		
Battery Module Energy (kWh)		14.3
Battery Module Nominal Voltage (V)		51.2
Battery Module Capacity (Ah)		280
Module Weight Approximate (kg)		122
Battery Module Qty In Series (Optional)		15
Scalability		5 ~ 15
System Nominal Voltage (V)		768
System Energy (kWh)		214.5
System Usable Energy (kWh)		193.05
Charge/Discharge Current (A)	Recommend	140
	Max	168
Other Parameter		
Operating Temperature (°C)	discharge : -20 ~ 55	charge : 0 ~ 55
Storage Temperature (°C)	0 ~ 35	
Thermal Management	Smart fan cooling	
LCD Display	SOC / Fault Code	
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm	
Communication Port	TCP / RS485 / CAN	
Communication With BMS	CAN	
Humidity	5% ~ 85%	
Altitude	≤3000m	
IP Rating of Enclosure	IP20	
Noise (dB)	TBD	
System Dimension (W × H × D, mm)	2150 × 1136 × 800	
System Weight Approximate (kg)	1850	
Installation Location	Rack Mounted	
Recommend Depth of Discharge	90%	
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000	
Warranty Period	10 years	
Certification	CE / IEC62619 / IEC62040 / UN38.3	