

INDOOR C&I ESS SOLUTION

DEYE SUMMER BOS SERIES



Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 1.1x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply



Scalable

- Support up to 20 units in parallel, maximum 2MW/4.3MWh



Easy Maintenance

- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support



Intelligent Control

- Peak-valley mgmt, anti-backflow, overload protection
- Load tracking, demand control, backup power, phase separation



Multi-Fusion

- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- Support off-grid backup



Safer

- LFP batteries
- Support aerosol fire extinguishing

≥6000

Cycles

5U

Standard Chassis

70%

EOL

5 years

Warranty



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	5 years	
Certification	UN38.3	

PCS Model		SUN-100K-PCSL01HP3
Battery Data		
Battery Type		Lithium-ion
Battery Voltage Range (V)		630-1000
Max. Charging Current (A)		175
Max. Discharging Current (A)		175
Charging Strategy for Li-ion Battery		Self-adaption to BMS
Number of Battery Input		1
AC Input/Output Data		
Rated AC Input/Output Active Power (kW)		100
Max. AC Input/Output Apparent Power (kVA)		110
Rated AC Input/Output Current (A)		166.7/159.5
Max. AC Input/Output Current (A)		151.6/145
Rated Input/Output Voltage/Range(V)		220/380V, 230/400V 0.85Un-1.1Un
Grid Connection Form		3L+N+PE
Rated Input/Output Grid Frequency/Range		50Hz/45Hz-55Hz 60Hz/55Hz-65Hz
Power Factor Adjustment Range		0.8 leading-0.8lagging
Total Current Harmonic Distortion THDi		<3% (of nominal power)
DC Injection Current		<0.5% In
Efficiency		
Max. Efficiency		98.5%
Euro Efficiency		98.0%
MPPT Efficiency		>99%
MPPT Module		SUN-MPPT-L01-EU-AM8
PV String Input Data		
Max. PV Input Power (kW)		200
Max. PV Input Voltage (V)		1000
Start-up Voltage (V)		200
MPPT Voltage Range (V)		180-850
Full Load MPPT Voltage Range (V)		450-850
Rated PV Input Voltage (V)		600
Max. Operating PV Input Current (A)		40+40+40+40+40+40+40+40
Max. Input Short-Circuit Current (A)		60+60+60+60+60+60+60+60
No. of MPP Trackers		8
Efficiency		
Max. Efficiency		>99%
MPPT Efficiency		>99.9%

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	<table><tr><td>IP 65(MPPT Module)</td><td>IP 65(PCS Module)</td><td>IP 20(STS Module)</td></tr><tr><td>543×660×198(MPPT Module)</td><td>543×775×310(PCS Module)</td><td>543×796×575(STS Module)</td></tr></table>				IP 65(MPPT Module)	IP 65(PCS Module)	IP 20(STS Module)	543×660×198(MPPT Module)	543×775×310(PCS Module)	543×796×575(STS Module)
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543×660×198(MPPT Module)	543×775×310(PCS Module)	543×796×575(STS Module)								
Cabinet Size(W×H×D)[mm]										
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									

Typical Application Scenarios

Backup Power Duration Plan

Hybrid inverter power

2 hours

100kW

4 hours

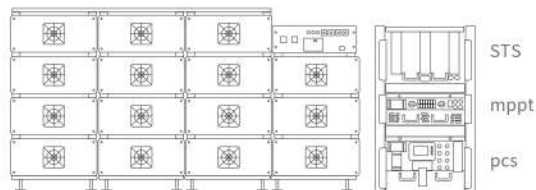
100kW

Battery model

BOS-B 215kWh

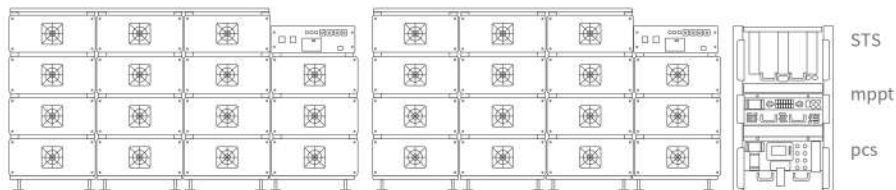
BOS-B 215kWh × 2

BOS-B 215kWh



2 hours

BOS-B 215kWh



4 hours

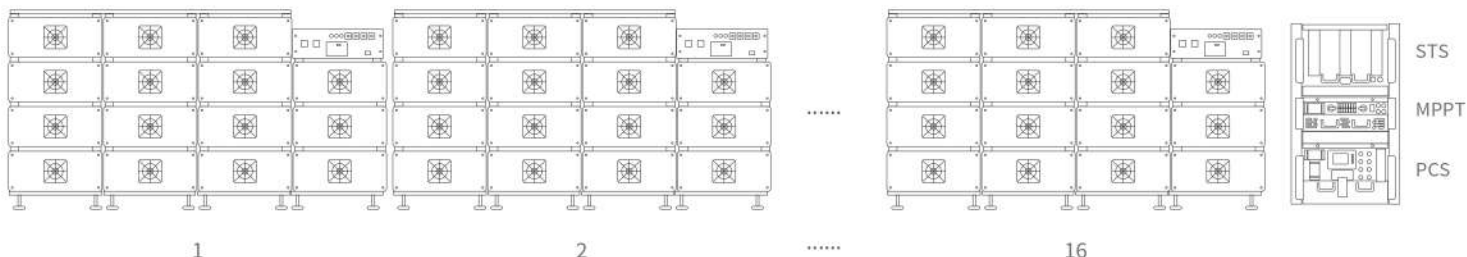
Typical Application Scenarios

Maximum support for 16 racks of batteries in parallel

BOS-B 215kWh

BOS-B 215kWh

BOS-B 215kWh

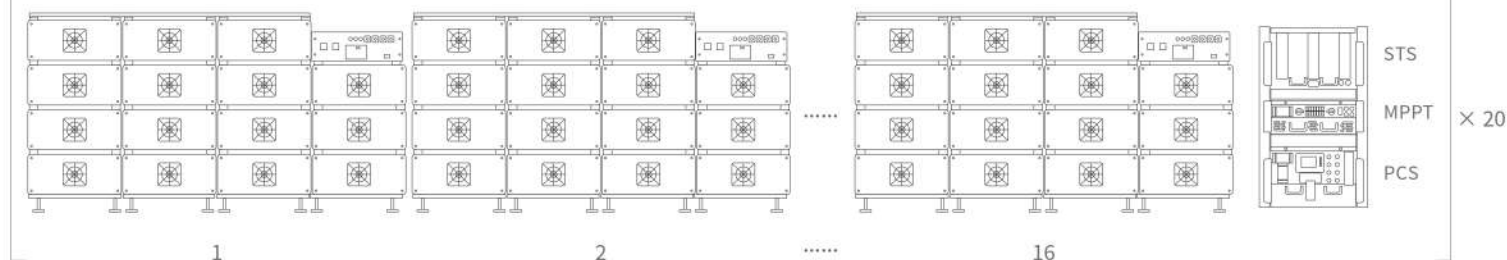


Maximum support for 20 inverters in AC parallel operation

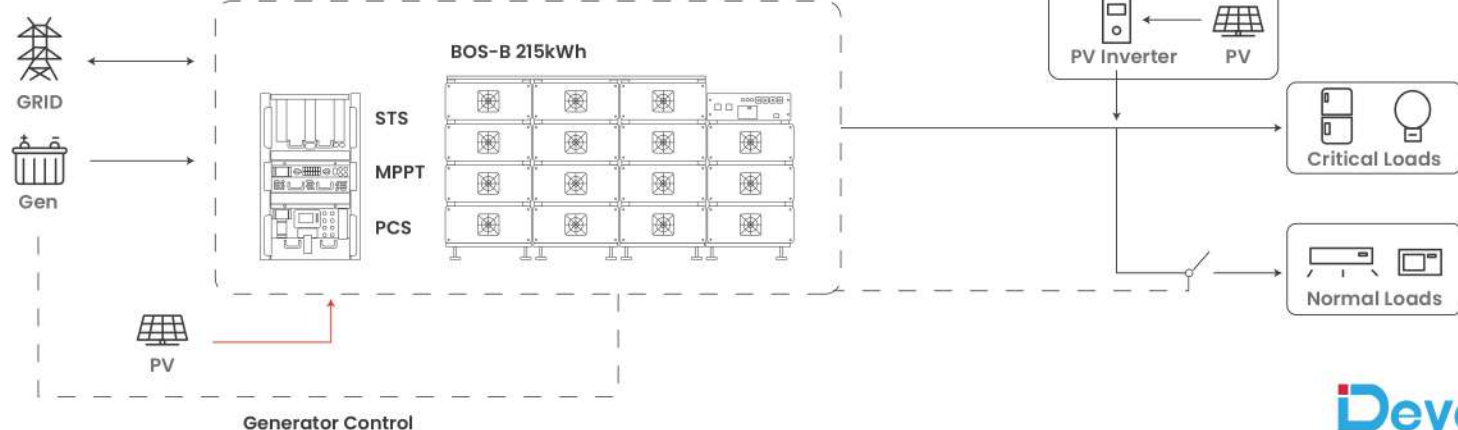
BOS-B 215kWh

BOS-B 215kWh

BOS-B 215kWh



AC → DC → Signal →





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