

SMALL-SCALE C&I ESS SOLUTION

DEYE SUMMER BOS SERIES



Intelligent Control

- ⊙ Protection against over-discharge, over-charge, over-current and extreme temperatures
- ⊙ Automatically manage charge / discharge
- ⊙ States and balances cell current voltage
- ⊙ Uploading of battery data via TCP protocol



Smart Operation

- ⊙ Cloud-based monitoring
- ⊙ Keep track of the operating status
- ⊙ Intelligent strategy control
- ⊙ Effectively saving on electricity bill



Flexible Expansion

- ⊙ Support 7 ~ 21 packs
- ⊙ Inverter 50 ~ 100kW, Battery 54 ~ 161kWh
- ⊙ Easy capacity expansion and save more budget



Easy Installation

- ⊙ 3U rack embedded design
- ⊙ A concise data display interface
- ⊙ Multiple battery modules can be in series for expanding
- ⊙ Dual power output plugins, each supports 100A
- ⊙ Connectable to two inverter DC interfaces
- ⊙ USB, Bluetooth connection



Safe and Reliable

- ⊙ Intelligent BMS
- ⊙ Firefighting module
- ⊙ Dual electrode disconnection design
- ⊙ Support up to 160A current output



Long Service Life

- ⊙ Full replacement warranty
- ⊙ 6000 cycles

≥6000

Cycles

3U

Standard Chassis

70%

EOL

10 years

Warranty

Rack-Mounted Battery (HV)



Model BOS-A

Main Parameter

Cell Chemistry	LiFePO ₄		
Module Energy (kWh)	7.68		
Module Nominal Voltage (V)	38.4		
Module Capacity (Ah)	200		
Module Dimension (W × D × H, mm)	601.5 × 520 × 135		
Module Weight Approximate (kg)	70		
Battery Module Qty In Series (Optional)	7	13	21
System Nominal Voltage (V)	268.8	499.2	806.4
System Operating Voltage (V)	235.2 ~ 306.6	436.8 ~ 569.4	705.6 ~ 919.8
System Energy (kWh)	53.76	99.84	161.28
System Usable Energy (kWh) ¹	48.38	89.85	145.15
Charge / Discharge ² Current (A)	Recommend Max		100 160
Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55		
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm		
Communication Port	CAN2.0		
Humidity	5% ~ 85%RH		
Altitude	≤3000m		
IP Rating of Enclosure	IP20		
Dimension (W × D × H, mm)	610 × 610 × 1900	610 × 610 × 2350	(610 × 610 × 1900) × 2
Weight Approximate (kg)	558	985	1586
Installation Location	Rack-Mounted		
Storage Temperature (°C)	0 ~ 35		
Recommend Depth of Discharge	90%		
Cycle Life	≥6000 (25±2°C, 0.5C / 0.5C, EOL70%)		
Warranty ³	10 years		
Certification	CE / IEC 62619 / IEC 62040 / UN38.3 / VDE-2510		

1. DC Usable Energy, test conditions : 90%DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

2. The current is affected by temperature and SOC.

3. The warranty is due whichever reached first of warranty period or life cycle power.



Rack-Mounted Battery (HV)

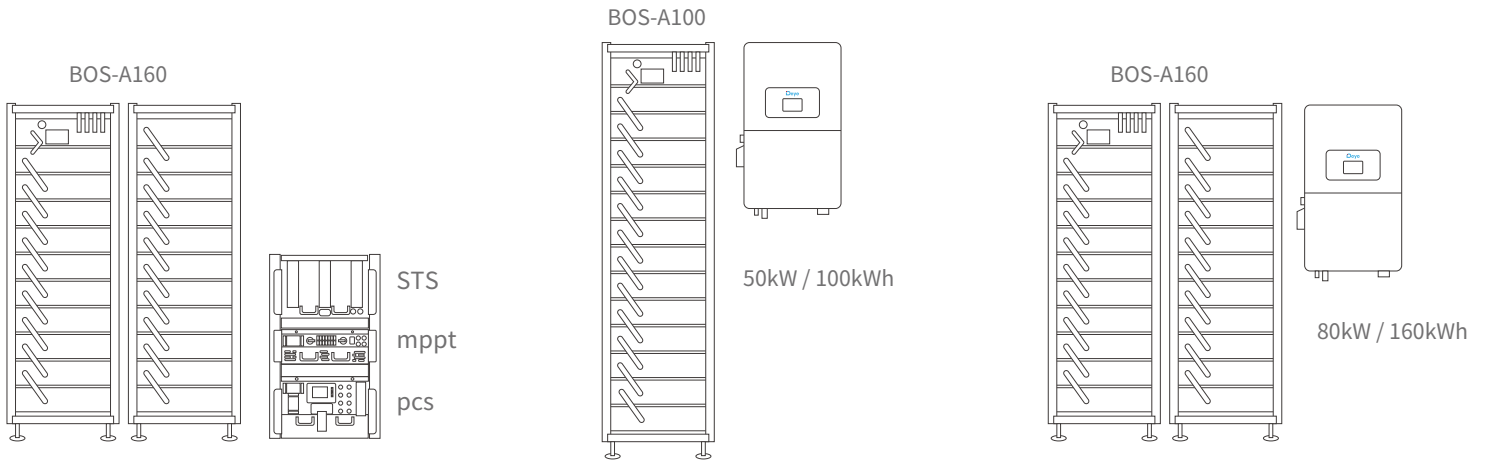
PCS Model	SUN-100K-PCSL01HP3
Battery Data	
Battery Type	Lithium-ion
Battery Voltage Range (V)	630-1000
Max. Charging Current (A)	175
Max. Discharging Current (A)	175
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Number of Battery Input	1
AC Input/Output Data	
Rated AC Input/Output Active 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	
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%



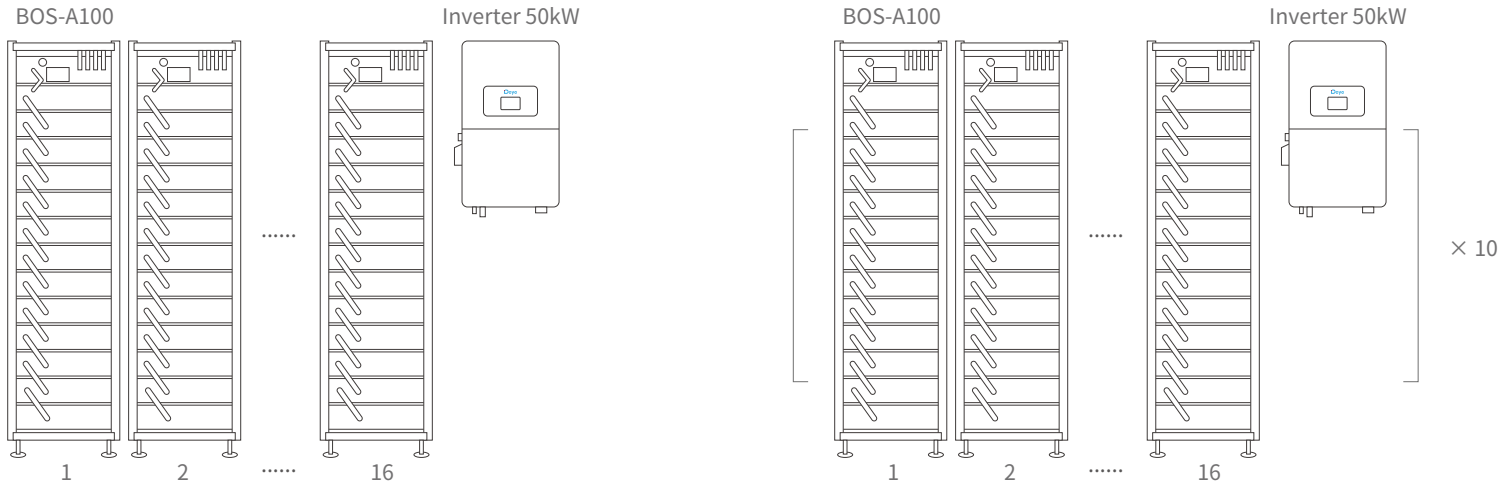
Rack-Mounted Battery (HV)

STS Module	SUN-STS500L		
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]	543×660×198(MPPT Module)	543×775×310(PCS Module)	543×796×575(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		

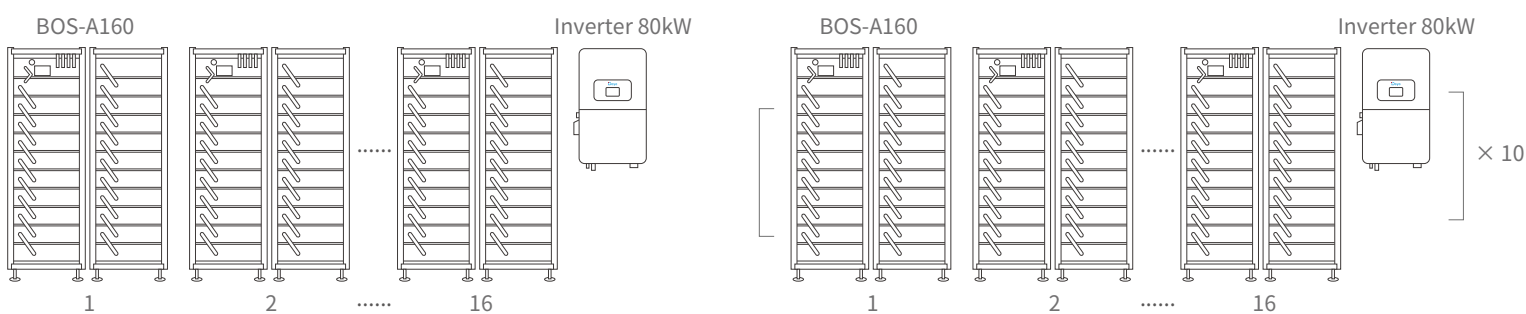
Backup Power Duration Plan	1.6 hours		2 hours		4 hours	
Hybrid inverter power	100kW		50kW	80kW	50kW	80kW
Battery model	BOS-A160		BOS-A100	BOS-A160	BOS-A100	BOS-A160
Number of batteries	1 pc		1 pc	1 pc	2 pcs	2 pcs



Typical Application Scenarios



Maximum support for 16 racks of batteries in parallel Maximum support for 10 inverters in AC parallel operation



Maximum support for 16 clusters of batteries in parallel Maximum support for 10 inverters in AC parallel operation



Supporting the establishment, data acquisition, data monitoring, one-stop operation maintenance and after-sales service of all new energy power stations.

Through the Deye smart cloud big data platform, all types of power stations with transparent management which improves the value of power stations comprehensively.

CONNECT, MONITOR, CONTROL

Seamlessly integrated with Deye devices for a smarter, more efficient energy experience.

- User-friendly interface demystifies complex settings.
- Clear menu hierarchy, key information at your finger tips.

