

OUTDOOR C&I ESS SOLUTION

BOS-B Pro-A3



3 ~ 4 hours
Recommended Solution

0 ~ 35°C
Recommended Operating
Ambient Temperature

BOS-B80 Pro-A3-Cabinet

Durable & Long-Lasting

- IP55 waterproof and C4 corrosion resistant, built to last over 10 years

Environmentally Friendly

- Free of heavy metals and non-polluting to the environment

Flexible

- Standard prefabricated cabinet for flexible on-demand deployment, suitable for multiple application scenarios

BOS-B Pro-A3

Intelligent Control

- Peak-valley mgmt, anti-backflow
- Overload protection, load tracking, demand control, backup power, phase separation

Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 1.1x overload capacity
- Balancing solutions extend battery life

Easy Maintenance

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

Scalable

- Support up to 16 units in parallel, maximum 2.2MW/3.8MWh

Safer

- LFP batteries
- Support aerosol fire extinguishing

Eco-friendly

- The whole module is non-toxic, non-polluting and environmentally friendly



Model

BOS-B-PDU-2-A (SKU: 10100303000210)

Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	180A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	526×788.6×167.2(W×D×H),32kg ①Positive Power Cable: 3AWG_3000mm*2 Negative Power Cable: 3AWG_3000mm*2 ②Positive Battery Power Cable: 1AWG_4000mm*1 Negative Battery Power Cable: 1AWG_230mm*1 ③4G antenna, user manual and other accessories
In package Accessories	



Model

BOS-B-Pack16-A3 (SKU: 10100203000206)

Nominal Capacity	314Ah
Nominal Energy	16.08kWh
Nominal Voltage	51.2Vdc
Max Charge/Discharge Current	180A
Ingress Protection	IP20
Operating Temperature(Charge)	0~55°C
Operating Temperature(Discharge)	-20~55°C
Storage Temperature	0~35°C
Details	526×795.9×274.2(W×D×H),116kg

Model

BOS-B80 Pro-A3-Cabinet

IP Rating of Enclosure	IP55
Bearing Capacity	Max.580kg
Weight Approximate	≈136kg
Dimension (W×D×H)	835×940×1290
Altitude	≤3000m
Recommended Operating Temperature ^[1]	Charge : 0 ~ 55°C; Discharge : -20 ~ 55°C
Warranty	10 years
Color	White (RAL9016)
Material	SGCC
Applicable to the Product ^[2]	BOS-B Pro-A3

[1]: Recommended System Operating Conditions: 0.25C Charging & Discharging, 25°C, 95% DOD, 70%EOL;

Recommended Environmental Conditions: Outdoor open air installation; avoid areas with strong corrosive gas, heavy salt spray, severe vibration and flood prone locations.

[2]: Accommodates max. 1×BOS-B-PDU-2-A + 4×BOS-B-Pack16-A3

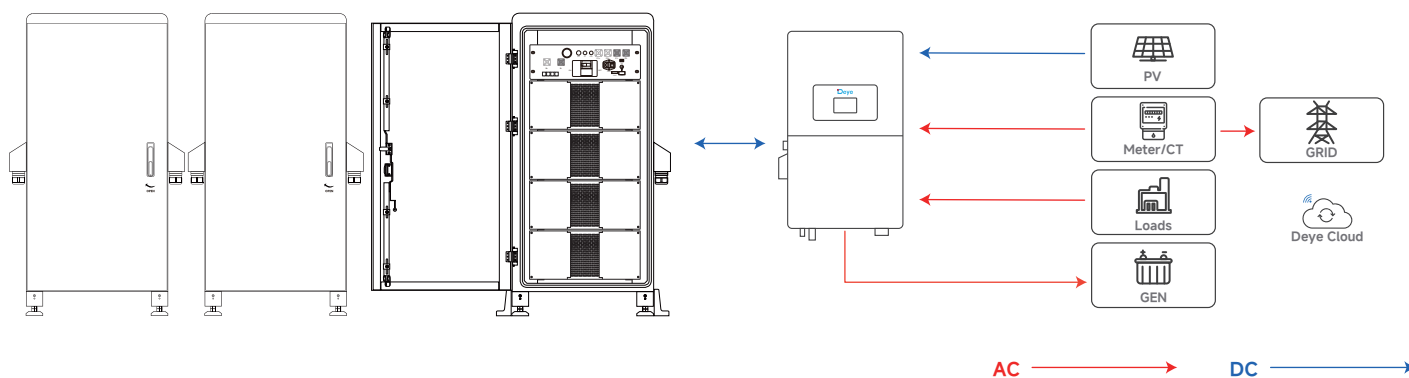
Model		BOS-B Pro-A3
Main Parameter		
Battery Module Energy (kWh)		16.08
Battery Module Nominal Voltage (V)		51.2
Battery Module Capacity (Ah)		314
Module Weight Approximate (kg)		126
Battery Module Qty In Series (Optional)		5~16
Max.System Nominal Voltage (V)		819.2
Max.System Energy (kWh)		257.2
Max.System Usable Energy (kWh)		231.5
Max.Charge/Discharge Current (A)		180
Other Parameter		
Operating Temperature (°C)	Charge : 0 ~ 55 Discharge : -20 ~ 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	
System Dimension (W × H × D, mm)	2150 × 1305 × 800	
System Weight Approximate (kg)	2240	
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	

Model	SUN-29.9K-SG01HP3 -AU-BM3	SUN-30K-SG01HP3 -AU-BM3	SUN-35K-SG01HP3 -AU-BM3	SUN-40K-SG01HP3 -AU-BM4	SUN-50K-SG01HP3 -AU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging/Discharging Current (A)	50+50				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV access power (W)	50000	60000	70000	80000	100000
Max. PV Input Power (W)	44850	45000	52500	60000	75000
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150-850				
Rated PV Input Voltage (V)	600				
Max. Operating PV Input Current (A)	36+36+36			36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55			55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2			4/2+2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Input/Output Apparent Power (VA)	29900	30000	35000	40000	50000
Rated AC Input/Output Current (A)	43.4	43.5	50.8	58	72.5
Max. AC Input/Output Current (A)	43.4	43.5	50.8	58	72.5
Max. Continuous AC Passthrough (grid to load) (A)	200				
Peak Power (off-grid) (W)	1.5 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated input/output voltage	230/400V 240/415V 0.85Un-1.1Un 3L+N+PE				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection(Active Frequency shift), DC Switch, Insulation Impedance Detection, Residual Current Detection				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
LCD/LED Display	LCD				
Communication Interface	WIFI,RS485,CAN				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	≤65				
Ingress Protection(IP) Rating	IP 65				
Protection Level	Class I				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Weight (kg)	80				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Typical Application Scenarios

Solution	Inverter model	Batteries Configuration	Outdoor Cabinet Configuration
4h	SUN-30K-SG01HP3-EU-BM3	8 units (BOS-B128 Pro-A3)	2 units (BOS-B80 Pro-A3-Cabinet*2)
	SUN-35K-SG01HP3-EU-BM3	9 units (BOS-B144 Pro-A3)	3 units (BOS-B80 Pro-A3-Cabinet*3)
	SUN-40K-SG01HP3-EU-BM4	10 units (BOS-B160 Pro-A3)	3 units (BOS-B80 Pro-A3-Cabinet*3)
	SUN-50K-SG01HP3-EU-BM4	12 units (BOS-B192 Pro-A3)	3 units (BOS-B80 Pro-A3-Cabinet*3)

BOS-B Pro-A3 192.92kWh and below



Deye Cloud

All-in-one Energy & Device Management Platform



Unlock significant savings



Individual Add-on for dynamic tariff



Intelligent charging/discharging strategies



Tailored solution to deye devices



Real-time equipment monitoring

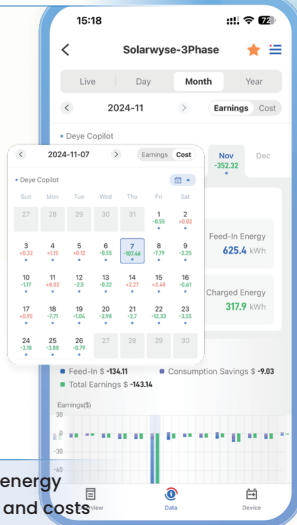


Best energy scheduling solutions by Deye Copilot algorithm



24/7 AI Assistant support

Switch flexibly
between autonomous
and manual control



Display energy
savings and costs



Support dynamic
tariff and flat-rate

AI Assistant



Offer response suggestions
and personalized support
experience

Support over 30
languages

Analyze dynamic pricing, predict power
load and PV generation to optimize energy
dispatch and minimize electricity costs



Deye Copilot

ToU



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Embrace a seamless, effortless energy experience that's both eco-friendly and budget-friendly with our intelligent assistant



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Manage your
energy effortlessly



Cloud-edge Collaboration

Faster and more
efficient



Accelerated Connection

Optimized for speed
and
performance



Localized Data Centers

Ensure data
sovereignty and
compliance in EU &
US



Deye Copilot

AI-powered energy
analysis and control



AI Assistant

24/7 support, fast,
efficient, in your
language