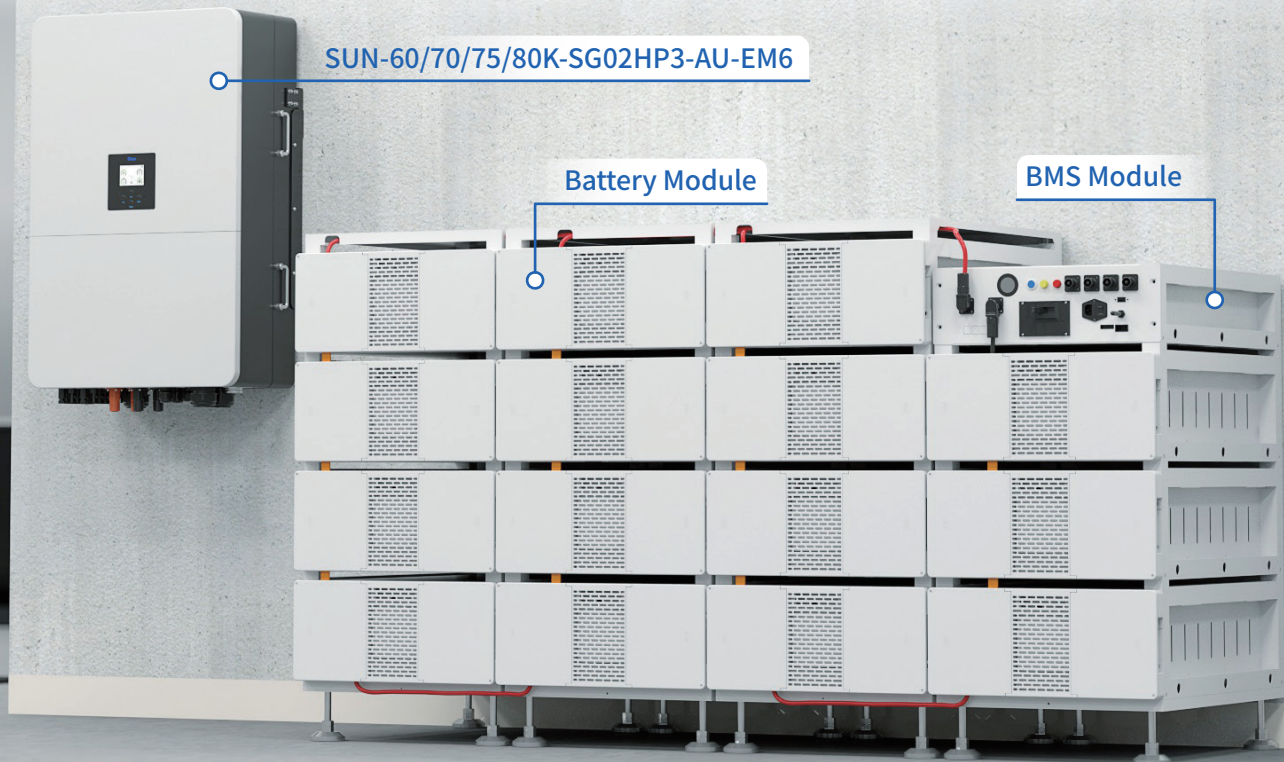


C&I ESS SOLUTION

BOS-B Pro-A3



SUN-29.9/35/40/50K-SG01HP3-AU-BM3/4 / SUN-60/70/75/80K-SG02HP3-AU-EM6



Practicality & Universal Compatibility

- 100% unbalanced output
- AC couple to retrofit existing solar system
- Dual Independent battery circuit



Versatile & High-Performance

- TOU function, Six time periods for battery charging/discharging
- Diesel generator-ready, VSG application



Reliability & Scalability

- Max. 10 pcs parallel for on-grid and off-grid operation
- Seamless switching between on-grid and off-grid modes in less than 10ms

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

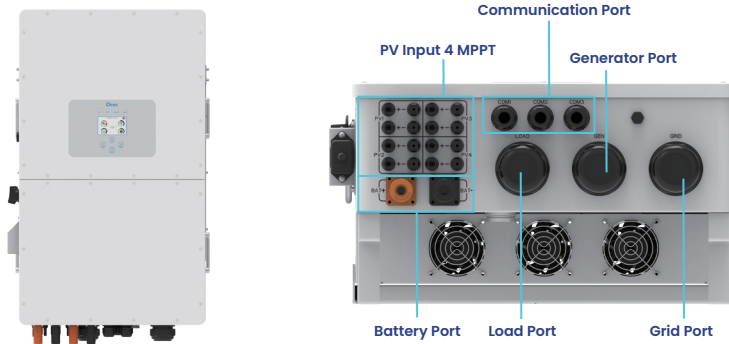
- LFP batteries
- Support aerosol fire extinguishing



Eco-friendly

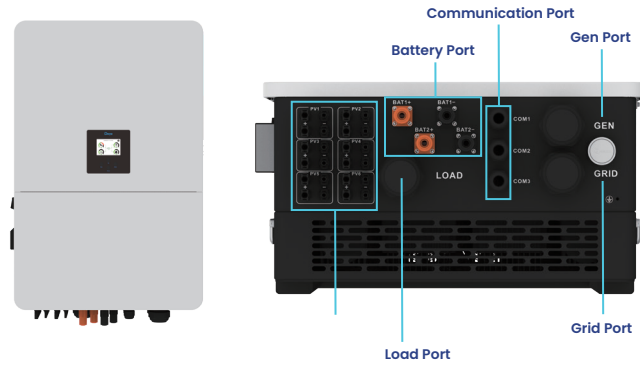
- The whole module is non-toxic, non-polluting and environmentally friendly

SUN-29.9/35/40/50K-SG01HP3-BM3/4



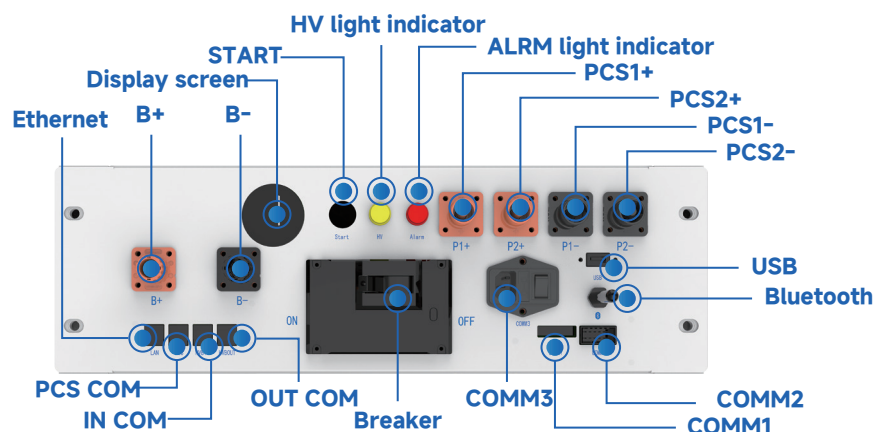
- ◎ Battery Port: Dual independent battery circuit port, supporting multiple brand battery connection and battery voltage range 160-800V.
- ◎ Communication Port: Serve as communicate with battery and data exchange between inverter and extra devices.
- ◎ Load Port: Offer AC power to connected loads.
- ◎ Grid Port: Connect to utility grid, for bidirectional power transfer: importing from and exporting to the grid.
- ◎ Generator Port: Connect to diesel generator for backup power supply during outages, also can connect with existing solar inverter for AC Coupling.
- ◎ PV Input: Connect to PV panels with 4 MPPTs.

SUN-60/70/75/80K-SG02HP3-EU-EM6



- ◎ Battery Port: Dual independent battery circuit port, supporting multiple brand battery connection and battery voltage range 160-1000V.
- ◎ Communication Port: Serve as communicate with battery and data exchange between inverter and extra devices.
- ◎ Load Port: Offer AC power to connected loads.
- ◎ Grid Port: Connect to utility grid, for bidirectional power transfer: importing from and exporting to the grid.
- ◎ Generator Port: Connect to diesel generator for backup power supply during outages, also can connect with existing solar inverter for AC Coupling.
- ◎ PV Input: Connect to PV panels with 6 MPPTs.

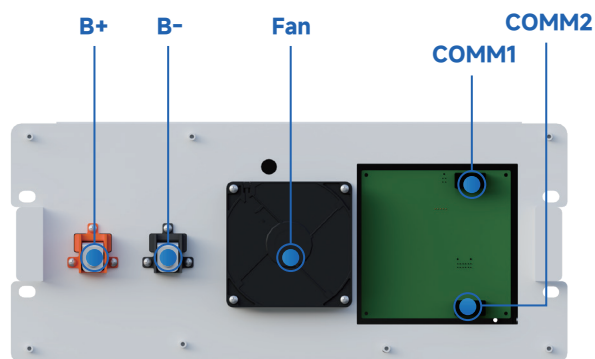
Model	BOS-B-PDU-2-A
Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	180A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	526×788.6×167.2(W×D×H),32kg



- ◎ 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. RS485-Enabled.
- ◎ 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-Pack16-A3
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),126kg



- ◎ 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

Model	BOS-B-AP-B
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This Accessories Package is designed for use with the 80kW Hybrid Inverter, and primarily includes the following cables:

Positive Power Cable: 3AWG_3000mm*2, 1AWG_2500mm*1, 1AWG_1000mm*1

Negative Power Cable: 3AWG_3000mm*2, 1AWG_240mm*1

PE Cable: 10AWG_600mm*1

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				

Model	SUN-60K-SG02HP3 -AU-EM6	SUN-70K-SG02HP3 -AU-EM6	SUN-75K-SG02HP3 -AU-EM6	SUN-80K-SG02HP3 -AU-EM6
Battery Input Data				
Battery Type	Lithium-ion			
Battery Voltage Range (V)	160-1000			
Max. Charging/Discharging Current (A)	80+80			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	2			
PV String Input Data				
Max. PV access power (W)	120000	140000	150000	160000
Max. PV Input Power (W)	96000	112000	120000	128000
Max. PV Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Voltage Range (V)	150-850			
Rated PV Input Voltage (V)	650			
Max. Operating PV Input Current (A)	36+36+36+36+36+36			
Max. Input Short-Circuit Current (A)	54+54+54+54+54+54			
No. of MPP Trackers/ No. of Strings MPP Tracker	6/2+2+2+2+2+2			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	60000	70000	75000	80000
Max. AC Input/Output Apparent Power (VA)	60000	70000	75000	80000
Rated AC Input/Output Current (A)	87	101.5	108.7	116.0
Max. AC Input/Output Current (A)	87	101.5	108.7	116.0
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	98.7%			
Euro Efficiency	98.1%			
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+LED			
Communication Interface	RS485, RS232, CAN			
General Data				
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	3000m			
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)	606×927×314 (Excluding Connectors and Brackets)			
Weight (kg)	105			
Type of Cooling	Smart 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			



Model	BOS-B Pro-A3
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Main Parameter	
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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

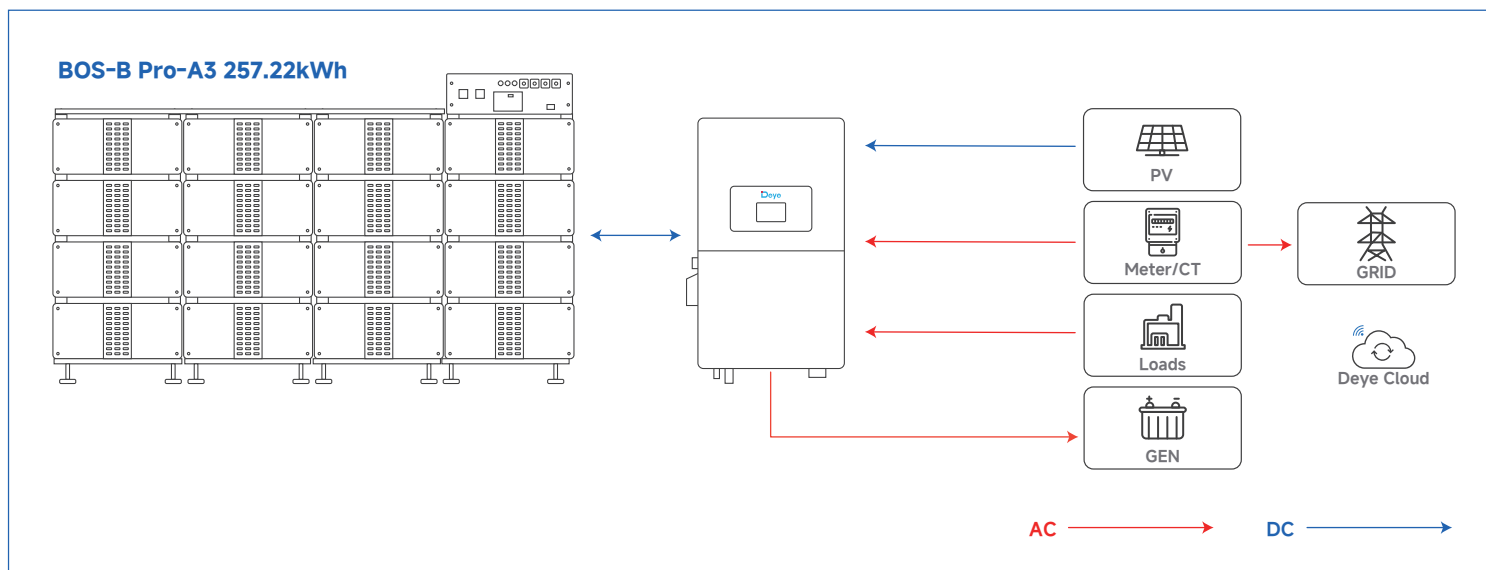
Other Parameter	
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Operating Temperature (°C)	Charge : 0 ~ 55 Discharge : -20 ~ 55
Storage Temperature (°C)	0 ~ 35
Thermal Management	Smart fan cooling
LCD Display	SOC / Fault Code
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery 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 / CEC

Typical Application Scenarios

Solution	Inverter model	Batteries Configuration
2h	SUN-80K-SG02HP3-AU-EM6*	10 units (BOS-B160 Pro-A3)
	SUN-75K-SG02HP3-AU-EM6*	10 units (BOS-B160 Pro-A3)
	SUN-70K-SG02HP3-AU-EM6*	9 units (BOS-B144 Pro-A3)
	SUN-60K-SG02HP3-AU-EM6*	8 units (BOS-B128 Pro-A3)
3h	SUN-50K-SG01HP3-AU-BM4	10 units (BOS-B160 Pro-A3)
	SUN-40K-SG01HP3-AU-BM4	8 units (BOS-B128 Pro-A3)
	SUN-35K-SG01HP3-AU-BM3	8 units (BOS-B112 Pro-A3)
	SUN-29.9K-SG01HP3-AU-BM3	8 units (BOS-B112 Pro-A3)
4h	SUN-60K-SG02HP3-AU-EM6*	15/16 units (BOS-B240/256 Pro-A3)
	SUN-50K-SG01HP3-AU-BM4	13 units (BOS-B208 Pro-A3)
	SUN-40K-SG01HP3-AU-BM4	10 units (BOS-B160 Pro-A3)
	SUN-35K-SG01HP3-AU-BM3	9 units (BOS-B144 Pro-A3)
	SUN-29.9K-SG01HP3-AU-BM3	8 units (BOS-B128 Pro-A3)

*CEC applying, coming soon



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

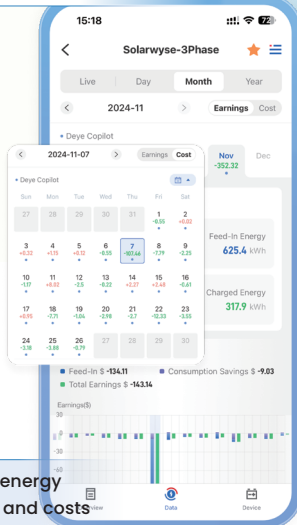


Best energy scheduling solutions by Deye Copilot algorithm

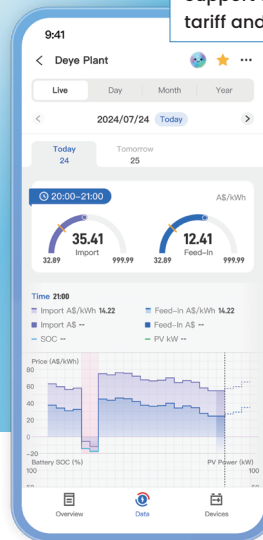


24/7 AI Assistant support

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



Smarten Up Your Home Energy

Download Deye Cloud APP to join us!

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



APP & Web

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