



- Cospowers Technology Co., Ltd.**
No.28, Dongqi Road, Dongying City, Shandong Province, PRC
- Harbin Coslight New Energy Co., Ltd.**
No.8 Taihunan Road, Jizhong Area, Yingbin Road, Development Zone, Harbin, PRC
- Shenzhen Coslight Technology Co., Ltd.**
No.2,Guangtian Road, No.3 Industrial Zone, Luotian Community, Yanluo Street, Baoan District, Shenzhen, Guangdong Province, PRC
- Changde Cospowers New Energy Technology Co., Ltd.**
NO.4,Songlin Road, Economic and Technological Development Zone, Changde City, Hunan Province,PRC
- Cospowers Technology Company limited Changsha Branch**
Building 13, Phase I, Zhongdian Software Park, Yuelu District, Changsha City, Hunan Province,PRC
- Anhui Cospowers New Energy Technology Co., Ltd.**
No.1, Jing18 Road, Tiankang Avenue, Tianchang City, Anhui Province, PRC

- Cospowers Company Ltd.**
909-15, Ganam-ro, Ganam-eup, Yeosu-si, Gyeonggi-do, Republic of Korea
- Cospowers America Inc.**
1438 martingale ct,san dimas,CA91773
- Cospowers GmbH**
Taufsteinstr. 1, 63477 Maintal, Germany
- Beijing Cospowers New Energy Co., Ltd.**
No.169,Jijiamiao Road, Fengtai District, Beijing,PRC
- Hongkong Cospower Technology Co., Ltd.**
Flat A, 12/F, MW Tower II, 5 Kimberley Street, TST Kowloon, Hongkong, PRC
- Lexel Battery (Shenzhen) Co., Ltd.**
No.2 Guangtian Road, No.3 Industrial Zone, Luotian Community, YanluoStreet, Baoan District, Shenzhen, PRC
- Dali Cospowers New Energy Technology Co., Ltd.**
Phase II, Shangdeng Industrial Park, Jingkai District, Dali City, Yunnan Province, PRC
- Guangdong Cospowers New Energy Co., LTD**
No.23,Gantang Avenue, Wujiang District, Shaoguan City, Guangdong Province, PRC
- Cospowers B.V.**
Prins Hendrikkade 21 E, 1012TL Amsterdam, Netherland
- India Cospower**
10-2-99/1, No 304, Sterling Grand CVK, West Marredpally, Hyderabad -500026 Telangana, India

COSPOWERS

HANDBOOK OF ELECTRIC
ENERGY STORAGE &COMMERCIAL
AND INDUSTRIAL ENERGY
STORAGE PRODUCTS

Cospowers Technology Co., Ltd.



ABOUT COSPOWERS

Cospowers Technology Co., LTD. is a high-tech enterprise focusing on the field of new energy storage. The technical team has been deeply engaged in the field of energy storage batteries for more than 30 years, with R & D, manufacturing, sales and service capabilities of materials, cells, battery management systems, energy management systems, system integration, etc., and has provided diversified products and systematic solutions in the fields of power storage, communication energy storage, network energy storage, household energy storage, and consumer batteries for more than 60 countries and regions around the world.

16GWh+

Cumulative global shipments

Tier1

BloombergNEF energy storage

850K m²

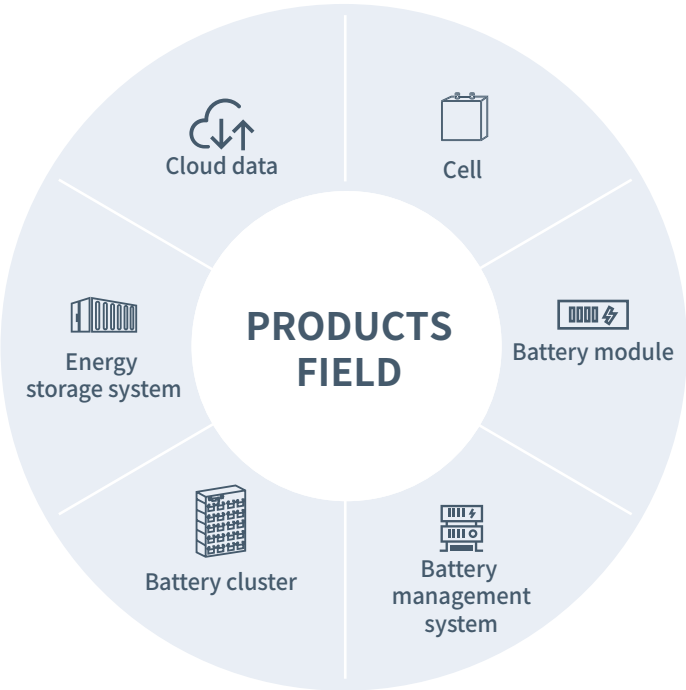
Factory area

400+

Patented technology and software

30+

Standard formulation participations



GLOBAL LAYOUT

Cospower always adheres to the brand concept of openness, innovation and responsibility and has established a perfect global marketing network, service network, supply chain network and logistic network system. With branch offices in 17 countries and regions worldwide, it has nearly 20 regional service centers and spare parts warehouses, covering business operations in over 60 countries and regions worldwide, and maintaining a foreign sales and after-sales service team of 200 people.

60+

Service coverage

16

Domestic and foreign subsidiary companies

7

Production Base
Harbin, Dongying, Changde, Dali,
Tianchang, Shenzhen, Shaoguan

5

R&D Centers
Harbin, Dongying, Changde,
Shenzhen, Changsha.



DEVELOPMENT HISTORY

2000

China's first batch of lithium-ion battery R&D and manufacturing enterprises;

2012

No.1 market share in the lithium ion energy storage of international communication base station;

2019

Cospowers was established; Changde Cospowers New Energy Co., Ltd was established;

2021

"Simple" series energy storage cell was released; Changde plant of 1.5GWh was put into operation; The United Nations supply chain light storage business was obtained, and the energy storage system went to sea for the first time; Smart lithium battery energy storage products was released;

2023

Dali plant of 1.5GWh was put into operation; The 720MWh energy storage system order bidding was won; Cospowers of Guangdong, Netherlands were established successively;

2007

China's first group of R&D and manufacturing of power lithium-ion battery enterprises;

2013

Shenzhen Coslight was established;

2020

Dongying factory of 3GWh was put into operation;

2022

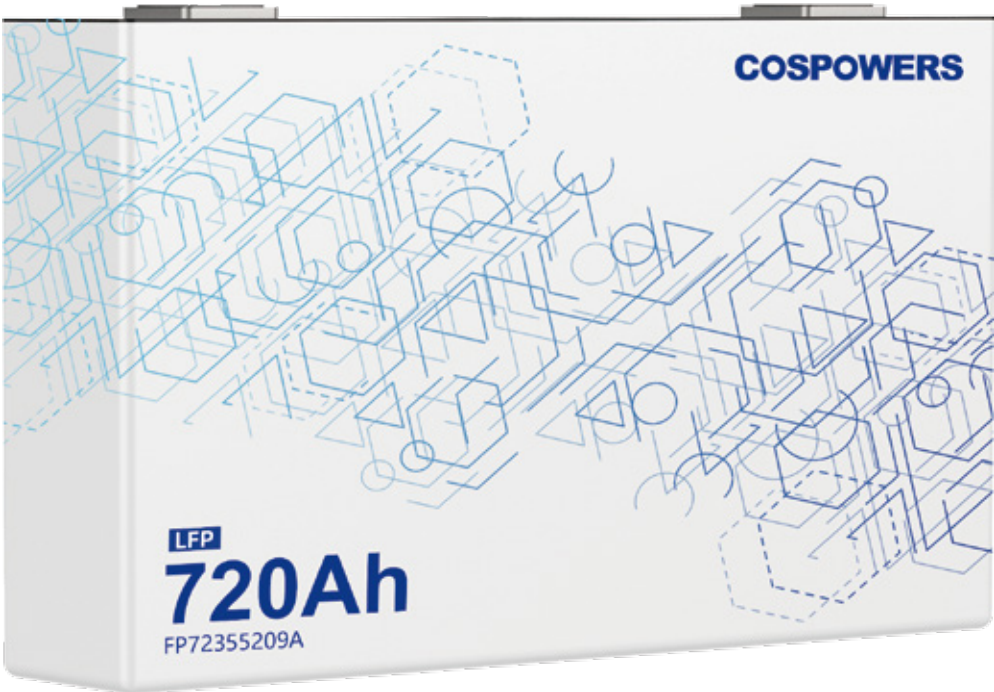
Cospowers of Beijing, Anhui, India, South Korea have been established successively; A single 100MWh+ energy storage system successfully connected to the grid; Changsha Technology Institute was established; The high energy liquid cooled energy storage system products was released, and the 80MWh system applications was realized;

2024

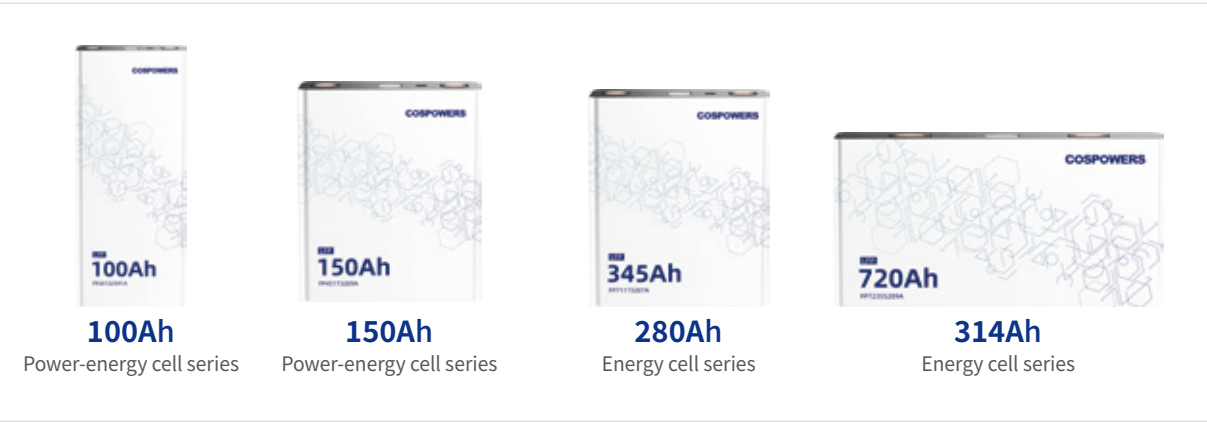
Cospowers Technology Co., Ltd was established; Changde 1.5GWh sodium battery production line started; Anhui plant of 1.5GWh was put into operation;

ENERGY STORAGE CELL

SMART LITHIUM BATTERY TOTAL SOLUTION PROVIDER



LITHIUM-ION BATTERY CELL



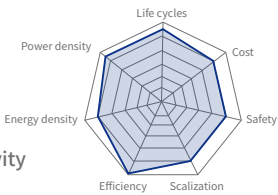
LFP material
Optimal energy storage
lithium-ion battery

Lamination design
Effectively improving battery
energy density



Prismatic battery
Multi-level battery
protection

Aluminum case
Excellent thermal conductivity
and cooling properties



THE THIRD GENERATION ‘SLIP’ SERIES CELLS WITH SPECIAL ENERGY STORAGE DESIGN OF NARROW AND LONG SHAPE

20%

Thinner and longer with space utilization rate reduced by 20%

25%

Customized development with energy density increased by 25%

High safety

Fire and explosion will not occur under high temperature, overcharging, extrusion, nail penetration test and other conditions

Better heat dissipation
Better heat dissipation performance during high-rate charge and discharge

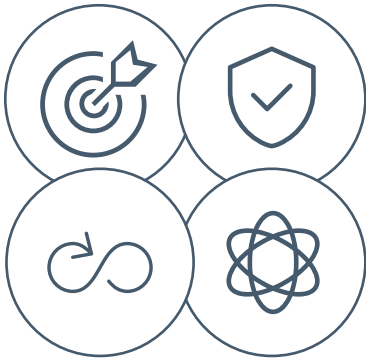


SODIUM-ION BATTERY CELL



More Professional Research Patent Technology Accumulation Cooperation with Famous Universities

Our technical team has been deeply involved in the battery field for over 20 years, with nearly 200 R&D patents, software copyrights, 4 major R&D centers and over 1000 research achievements. We have established cooperation with several famous universities, conducting extensive research in sodium material synthesis, sodium electrochemical principles and so on.



Longer Service Life High cycle count, fast charging with minimal impact

Cycle life exceeds 2000 times, negative electrode uses aluminum foil instead of copper foil, product electrolyte ion conductivity increased by 20%, and has better low temperature and rate performance.

Safer Products Independently Developed Cells, Wide Temperature Range, High Rate

Our energy storage units use independently developed sodium-ion cells, possessing the characteristics of a wide temperature range and high rate. The system does not require cooling or insulation measures when operating in environments ranging from -40°C to 50°C. Utilizing layered oxides as raw materials, it ensures thermal stability and superior safety performance.

Smarter Management Advanced Battery Management System, Wide Applicability

Utilizing an advanced smart battery management system, it has overcharge, overdischarge, overcurrent, temperature, and other alarm and protection functions, as well as historical data storage capabilities. It exhibits outstanding advantages in backup power supply, specific occasions, and high-rate discharge scenarios, making it suitable for widespread application in critical locations such as data and communication centers.

CELL PARAMETERS

S/N	Model	Rated capacity[Ah]	Nominal voltage[V]	Voltage range[V]	Max charge/discharge rate[C]
LFP-High-power cell series					
1	FP31136170A	50Ah	3.2V	2.5-3.65V	2C/6C
2	FP31136160A	60Ah	3.2V	2.5-3.65V	1C/4C
LFP-Power-energy cell series					
1	FP20106255A	40Ah	3.2V	2.5-3.65V	1C/3C
2	FP20106300A	50Ah	3.2V	2.5-3.65V	1C/3C
5	FP31136227A	80Ah	3.2V	2.5-3.65V	1C/3C
9	FP26122341A	100Ah	3.2V	2.5-3.65V	1C/3C
10	FP31136255A	100Ah	3.2V	2.5-3.65V	1C/3C
11	FP50160119A	100Ah	3.2V	2.5-3.65V	1C/1C
12	FP27122430A	150Ah	3.2V	2.5-3.65V	1C/3C
13	FP45173209A	150Ah	3.2V	2.5-3.65V	1C/3C
LFP-Energy cell series					
1	FP71173207A	280Ah	3.2V	2.5-3.65V	0.5P/1P
2	FP71173207A	314Ah	3.2V	2.5-3.65V	0.5P
3	FP71173207A	345Ah	3.2V	2.5-3.65V	0.5P/1P
4	FP72355209A	720Ah	3.2V	2.5-3.65V	0.25P/0.25P
Na-Sodium-ion cell series					
1	NA50160119A	50Ah	2.85V	1.5-3.4V	0.5C/3C
2	NA50160156A	75Ah	2.85V	1.5-3.4V	0.5C/3C
3	NA50160198A	100Ah	2.85V	1.5-3.4V	0.5C/3C
4	NA71173207A	170Ah	2.85V	1.5-3.4V	0.5P/0.5P
Product Certification					



APPLICATIONS OF ENERGY STORAGE



Energy Storage on the Power Generation Side

- Peak and Frequency Regulation (Traditional Power Generation Side)
- Smoothing the Fluctuations of New Energy and Increasing the Accommodation of New Energy
- Increasing the Standby Capacity of the Power Grid

Revenue Model

Reduce assessments or increase compensation;
Reduce the electricity price losses due to curtailment of wind and solar power;
Participate in grid frequency regulation and receive rightward frequency regulation compensation;
At the same time, it can obtain the benefits of increased power generation brought by priority dispatch.

Grid-side Energy Storage

- Improve Power Quality
- Frequency Regulation
- Increase Grid Standby Capacity
- Delay Equipment Expansion

Revenue Model

Utilize the functions of frequency regulation and peak load regulation to participate in grid services, enhance the stability of the power grid, and thereby obtain revenue.

User-side Energy Storage

- Distributed Energy Accommodation
- Peak Shaving and Valley Filling, Load Shifting
- Integrated Photovoltaic, Energy Storage, and Charging
- Backup Power

Revenue Model

Peak-Valley Price Arbitrage; Demand Response Subsidies;
Demand Control, Reducing or Slowing Down Grid Expansion Costs;
Backup Power, Improving Electricity Reliability, Reducing Power Outage Losses,
while also Reducing Traditional Emergency Standby Power Investment.

LIQUID COOLING SOLUTION



Cell		
Capacity	280Ah	314Ah
Life cycles	25°C, 12000 times@0.5C	
Operating voltage	2.5-3.65V (T>0°C) / 2.0-3.65V (T≤0°C)	
internal resistance	0.25mΩ	
Self-discharge per month	≤3.0%	
Energy density	≥160Wh/kg	≥179Wh/kg
Maximum Continuous Charge/Discharge Rate	0.5P/1P	0.5P
Peak current	2C (30s)	
Size (W*D*H)	72*174*207mm	



Module		
Rated capacity	46.59kWh	52.25kWh
Max continuous charge and discharge current	280A	157A
Size (W*D*H)	780*1118*254 (±2)mm	780*1118*254 (±2)mm
IP Class	IP67	IP67



Battery cluster		
Rated capacity	372.736kWh	418kWh
Max continuous charge and discharge current	280A	157A
Size (W*D*H)	890*1160*2510mm	890*1160*2510mm

AIR COOLING SOLUTION



Cell			
Capacity	100Ah	280Ah	314Ah
Life cycles	25°C, 8000 times@0.5C	25°C, 12000 times@0.5C	25°C, 12000 times@0.5C
Operating voltage	2.5-3.65V (T>0°C) / 2.0-3.65V (T≤0°C)		
internal resistance	≤1mΩ	≤0.25mΩ	≤0.25mΩ
Self-discharge per month	<3.0%	<3.0%	<3.0%
Energy density	>145Wh/Kg	>160Wh/Kg	>179Wh/kg
Maximum Continuous Charge/Discharge Rate	1C/1C	0.5P/1P	0.5P
Peak current	3C (30s)	2C (30s)	2C (30s)
Size (W*D*H)	26*122*314mm	72*174*207mm	72*174*207mm



Module			
Rated capacity	17.82kWh	17.92kWh	20.096kWh
Max continuous charge and discharge current	100A	280A	157A
Size (W*D*H)	295*880*361mm	420*880*235mm	420*880*235mm
IP Class	IP20	IP20	IP20



Battery cluster			
Rated capacity	362.88kWh	358.4kWh	401.92kWh
Max continuous charge and discharge current	100A	280A	157A
Size (W*D*H)	1400*855*2360mm	1500*930*1950mm	1500*930*1950mm

SODIUM BATTERY SOLUTION



Cell	
Capacity	168Ah
Life cycles	6000 times@0.5C
Operating voltage	2.9V
internal resistance	0.5mΩ
Self-discharge per month	10%
Energy density	97.44Wh/Kg
Max continuous discharge rate	1C
Peak current	504Ah
Size (W*D*H)	72.1*174*207.7mm



Module	
Rated capacity	25.33kWh
Max continuous charge and discharge current	168A
Size (W*D*H)	780*1118*254 (±2)mm
IP Class	IP67



Battery cluster	
Rated capacity	202.67kWh
Max continuous charge and discharge current	168A
Size (W*D*H)	890*1160*2510mm

DATA SERVICE PLATFORM



Condition
Diagnosis

Battery Performance/Health Status
Assessment, Real-time Battery Safety
Diagnosis, Battery Degradation, Cycle
Life Prediction, Equipment Operation
Status Diagnosis, System Operational
Efficiency Evaluation, Economic
Diagnosis and Analysis

Energy
Management

Local Energy Autonomy Management,
Ancillary Services, Electricity Trading

Data
Management

Real-time Data Monitoring, Display of
Data Reports, Information Push,
Preset Strategy Deployment,
Collaborative Fault Analysis, Trend
Analysis

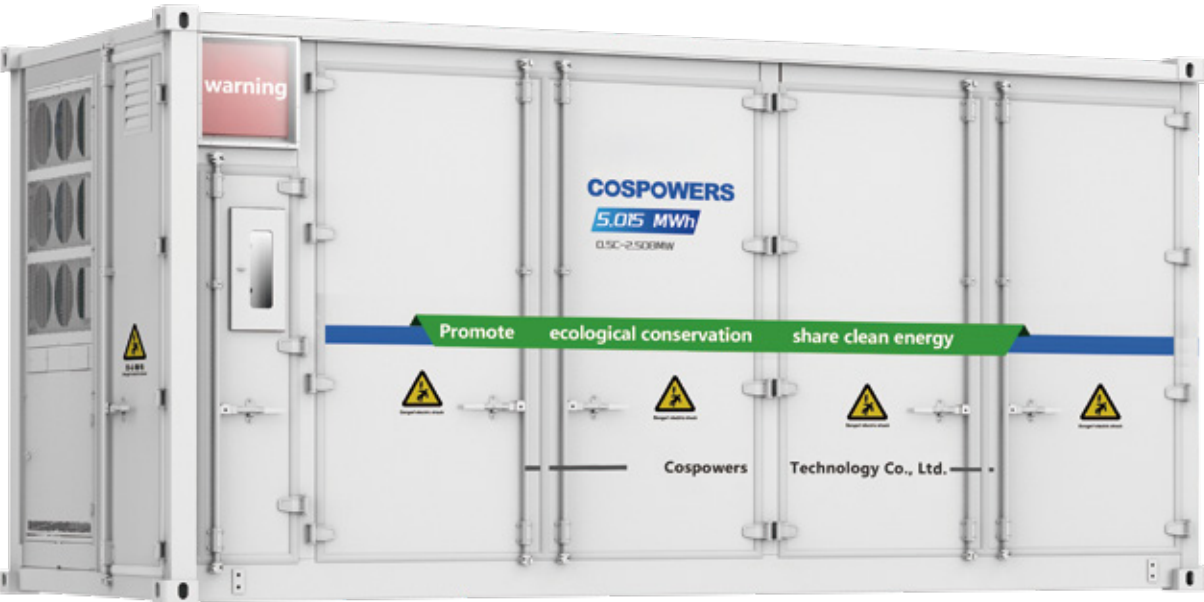
Intelligent
Operation
and Maintenance

Electrical Equipment Inspection,
Diagnosis, Offline Operation and
Maintenance Work Orders Pushed by
Battery System Operation and
Maintenance Strategy, Evaluation

A brand-new platform based on microservices architecture, with multi-tenant management capabilities Implementing the data flow closed loop of the light storage and charging system from data access to data monitoring, data mining, and data push, realizing the value mining and empowerment of data, and improving the operational efficiency of the system.

CONTAINER-TYPE ENERGY STORAGE PRODUCT

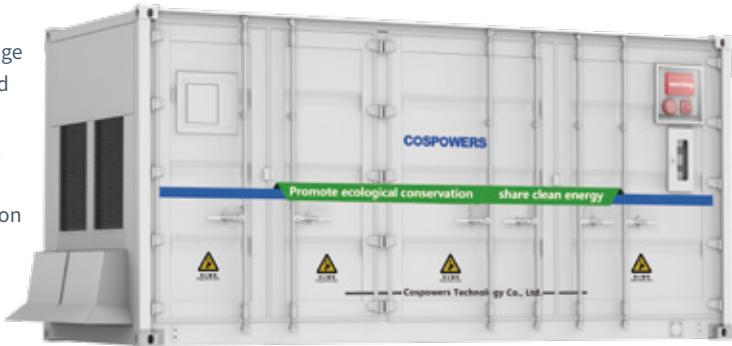
SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER



EnerGalactic-2280-0.5C EnerGalactic-2280-1C

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Temperature Difference
inside the Battery
Pack: <5°C



Triple-level Fire
Protection for
High Safety



High Energy Density
for Flexible Layout
and Expansion



Modular Prefabrication
No On-site Installation
Required

Parameters/ Model		EnerGalactic-2280-0.5C	EnerGalactic-2280-1C
Battery Module	Cell Capacity	100Ah(LFP)	
	Battery Pack	3P18S	
	Module Voltage	57.6V	
	Module Power	17.280kWh	
	IP Class	Air-cooled, no protection rating	
Battery Cluster	NOs.of Modules	22pcs	
	Cluster Nominal Voltage	DC1267.2V	
	Voltage Range	1108.8~1405.8V	
	Single Cluster Power	380.16kWh	
Battery Cabin	Nos. of Battery Clusters	6pcs	
	Battery system energy	2280kWh	
	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm	
	Weight	≤30t	
	Cooling Method	Air cooling	
	IP Class	IP54	
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3	

EnerGalactic-2418-Na^{NEW}

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Temperature Difference
inside the Battery
Pack: <5°C



Triple-level Fire
Protection for
High Safety



High Energy Density
for Flexible Layout
and Expansion



Modular Prefabrication
No On-site Installation
Required

Parameters/ Model		EnerGalactic-2418-Na
Battery Module	Cell Capacity	170Ah(Na ⁺)
	Battery Pack	1P52S
	Module Voltage	148.2V
	Module Power	25.194kWh
	IP Class	IP67
Battery Cluster	NOS.of Modules	8pcs
	Cluster Nominal Voltage	DC1185.6V
	Voltage Range	624~1456V
	Single Cluster Power	201.552kWh
Battery Cabin	Nos. of Battery Clusters	12pcs
	Battery system energy	2418kWh
	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm
	Weight	≤43t
	Cooling Method	Liquid cooling
	IP Class	IP54
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3

EnerGalactic-3727-1C^{NEW}

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Temperature Difference
inside the Battery
Pack: <5°C



Triple-level Fire
Protection for
High Safety



High Energy Density
for Flexible Layout
and Expansion



Modular Prefabrication
No On-site Installation
Required

Parameters/ Model		EnerGalactic-3727-1C
Battery Module	Cell Capacity	280Ah(LFP)
	Battery Pack	1P52S
	Module Voltage	166.4V
	Module Power	46.59kWh
	IP Class	IP67
Battery Cluster	NOS.of Modules	8pcs
	Cluster Nominal Voltage	DC1331.2V
	Voltage Range	1164.8~1476.8V
	Single Cluster Power	372.73kWh
Battery Cabin	Nos. of Battery Clusters	10pcs
	Battery system energy	3727kWh
	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm
	Weight	≤39t
	Cooling Method	Liquid Cooling
	IP Class	IP54
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3

EnerGalactic-5015-0.5C

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Temperature Difference
inside the Battery
Pack: <3°C



High Safety Fire
Protection at the
Pack Level



High Energy Density
for Flexible Layout
and Expansion



Modular Prefabrication
No On-site Installation
Required

Parameters/ Model		EnerGalactic-5015-0.5C	
Battery Module	Cell Capacity	314Ah(LFP)	
	Battery Pack	1P52S	1P104S
	Module Voltage	166.4V	332.8V
	Module Power	52.2496kWh	104.499kWh
	IP Class	IP67	
Battery Cluster	Nos.of Modules	8pcs	4pcs
	Cluster Nominal Voltage	DC1331.2V	
	Voltage Range	1164.8~1476.8V	
	Single Cluster Power	417.997kWh	
Battery Cabin	Nos. of Battery Clusters	12pcs	
	Battery system energy	5015kWh	
	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm	
	Weight	≤43t	
	Cooling Method	Liquid Cooling	
	IP Class	IP54	
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3	

Celestial Energy-2073-0.5C

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Modular Standard
Design



Multiple Protection
Systems



Efficient Installation
and Commissioning
of AC/DC Integrated Systems



Intelligent Operation
and Maintenance

Parameters/ Model		Celestial Energy-2073-0.5C	
DC side parameters	Cell Capacity	100Ah(LFP)	
	Module Structure	3P18S	
	Module quantity in single cluster	20pcs	
	Nos. of Battery Clusters	6pcs	
	Battery system power	2073kWh	
AC side parameters	Voltage Range	1008~1278V	
	Rated grid voltage	6*200kW	
	Wiring Mode	AC690V	
	Rated grid frequency	3W+PE	
System level parameters	Rated AC power	50/60Hz	
	solation mode	No isolation transformer	
	Operating temperature	-30~55°C	
	Ambient Humidity	0~95% (no condensation)	
	Working Altitude	2000m	
	Communication method	Ethernet, RS485, Optional 4G/5G Mobile Communication	
	Protection level	IP54	
	Cooling Method	Air cooling	
	Noise	≤75dB	
	Fire protection system	Heptafluoropropane/Perfluorohexanone compartment level/Aerosol ten water fire protection + combustible gas detection +explosion-proof ventilation system	
Compliant with Standards	Size(W*D*H)	6058*2438*2896mm	
	Weight	24t	
	Cluster	IEC62619、UL1973、UL9540A、UN38.3	
	PCS	UL1741、EN50549、VDE4110、VDE4120、VDE4130、GB/T34120、GB/T36547...	

Celestial Energy-3340-0.5C

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Modular Standard Design



Multiple Protection Systems



Efficient Installation and Commissioning of AC/DC Integrated Systems



Intelligent Operation and Maintenance

Parameters/ Model		Celestial Energy-3340-0.5C
DC side parameters	Cell Capacity	314Ah(LFP)
	Module Structure	1P52S
	Module quantity in single cluster	8pcs
	Nos. of Battery Clusters	8pcs
	Battery system power	3340kWh
	Voltage Range	1164.8~1476.8V
AC side parameters	Rated grid voltage	8*200kW
	Wiring Mode	AC690V
	Rated grid frequency	3W + PE
	Rated AC power	50/60Hz
	solation mode	No isolation transformer
System level parameters	Operating temperature	-30~55°C
	Ambient Humidity	0~95%(no condensation)
	Working Altitude	2000m
	Communication method	Ethernet, RS485, Optional 4G/5G Mobile Communication
	Protection level	IP54
	Cooling Method	Liquid cooling
	Noise	≤75dB
	Fire protection system	Heptafluoropropane/Perfluorohexanone compartment level/Aerosol ten water fire protection + combustible gas detection +explosion-proof ventilation system
	Size(W*D*H)	6058*2438*2896mm
	Weight	30t
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3
	PCS	UL1741、EN50549、VDE4110、VDE4120、VDE4130、GB/T34120、GB/T36547...

Celestial Energy-5015-0.5C

Application Field

- Post-meter electricity market, peak-valley arbitrage and backup power supply of C&I (commercial and industrial) energy storage on the customer side.
- Peak shaving and valley filling for smooth output of wind and solar new energy power stations.
- Grid frequency regulation and peak load regulation in the pre-meter electricity market, as well as capacity expansion of distribution network transformers.



Modular Standard Design



Multiple Protection Systems



Efficient Installation and Commissioning of AC/DC Integrated Systems



Intelligent Operation and Maintenance

Parameters/ Model		Celestial Energy-5015-0.5C
DC side parameters	Cell Capacity	314Ah(LFP)
	Module Structure	1P104S
	Module quantity in single cluster	4pcs
	Nos. of Battery Clusters	12pcs
	Battery system power	5015kWh
	Voltage Range	1164.8~1476.8V
AC side parameters	Rated grid voltage	12*215kW
	Wiring Mode	AC690V
	Rated grid frequency	3W + PE
	Rated AC power	50/60Hz
	solation mode	No isolation transformer
System level parameters	Operating temperature	-30~55°C
	Ambient Humidity	0~95%(no condensation)
	Working Altitude	2000m
	Communication method	Ethernet, RS485, Optional 4G/5G Mobile Communication
	Protection level	IP54
	Cooling Method	Liquid cooling
	Noise	≤75dB
	Fire protection system	Heptafluoropropane/ Novec 1230 compartment-level/ aerosol + water-based fire extinguishing + combustible gas detection + explosion-proof ventilation system
	Size(W*D*H)	6058*2438*2896mm
	Weight	44t
Compliant with Standards	Cluster	IEC62619、UL1973、UL9540A、UN38.3
	PCS	UL1741、EN50549、VDE4110、GB/T34120、GB/T36547

CABINET-TYPE ENERGY STORAGE PRODUCT

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER



INTEGRATED ENERGY CABINET^{NEW}

Application Field
Domestic Solar and Energy Storage
Charging Station、
Microgrid、Office、Building



Flexible configuration
compact size
suitable for multiple scenarios



PACK modular design
free combination
easy to maintain



Safety assurance with fire
protection water ingress
detection and thermal
management



LCD screen for intuitive
display supports
photovoltaic connection
management

Parameters/ Model		6kW/30kWh	10kW/30kWh	15kW/30kWh	15kW/50kWh
Solar Input parameters	Max. Input Voltage	1000Vdc			
	MPPT Voltage Range	180-850Vdc			
	Nominal Power	9kW	15kW	22.5kW	22.5kW
	MPPT Number	2			
AC grid connection parameters	Max. Apparent Output	6.6kVA	11kVA	16.5kVA	16.5kVA
	Max. Input Active Power	6kW	10kW	15kW	15kW
	Nominal Voltage	400Vac,3W+N+PE			
	Max. Input Current	9.5A	15.9A	23.8A	23.8A
	Nominal Input Frequency	50/60Hz			
AC off-grid parameters	Nominal Voltage	400Vac,3W+N+PE			
	Nominal Current	9.5A	15.9A	23.8A	23.8A
	Nominal Frequency	50/60Hz			
	Cell Capacity	100Ah (LFP)			
Battery parameters	Capacity	30kWh	30kWh	30kWh	50kWh
	Nominal Voltage	307.2V	307.2V	307.2V	512V
	Voltage Range	268.8~345.6V	268.8~345.6V	268.8~345.6V	448~560V
	C Rate	≤0.5C			
	Max Charging Current	50A			
System level parameters	HMI	7 Inch touch screen			
	Fire Safety	Perfluorohexanone			
	Cooling Method	Liquid Cooling			
	Operating Temp.	-20~55°C			
	IP Degree	IP54			
	Size(W*D*H)	<700*750*1350mm	<700*750*1350mm	<700*750*1350mm	<700*750*1885mm
	Weight	<500Kg	<500Kg	<500Kg	<800Kg
Others	Certification	Undergoing Certification			

PowerEco-50kW/102kWh

Application Field
Domestic Solar and Energy Storage
Charging Station, Microgrid, Office
Building



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-50kW/102kWh
Solar Input parameters	Max. Input Voltage	1000Vdc
	MPPT Voltage Range	300~750Vdc
	Nominal Power	75kW
	MPPT Number	3
AC grid connection parameters	Max. Apparent Output	55kVA
	Max. Input Active Power	50kW
	Nominal Voltage	400Vac, 3P3W+PE
	Max. Input Current	80A
	Nominal Input Frequency	50/60Hz
AC off-grid parameters	Nominal Voltage	400Vac, 3P3W+PE
	Nominal Current	80A
	Nominal Frequency	50/60Hz
Battery parameters	Cell Capacity	100Ah(LFP)
	Capacity	102kWh
	Nominal Voltage	512V
	Voltage Range	448~560V
	C Rate	≤0.5C
System level parameters	Max Charging Current	50A*2
	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
	Cooling Method	Air Conditioning
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1250*650*2000mm
Others	Weight	<1500Kg
	Certification	Undergoing Certification

PowerEco-60kW/125kWh

Application Field
Microgrid, Industrial Park,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-60kW/125kWh
DC side parameter	Max Voltage	900V
	Max Current	88A
	Voltage Range	200~900V
AC grid connection parameter	Max. Apparent Output	66kVA
	Max. Input Active Power	60kW
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max. Input Current	86A
	Nominal Input Frequency	50Hz
AC off-grid parameter	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max Output Current	86A
	Nominal Frequency	50Hz
Battery parameters	Cell Capacity	280Ah(LFP)
	Capacity	125kWh
	Nominal Voltage	448V
	Voltage Range	392~490V
	C Rate	≤0.5C
System level parameters	HMI	7 Inch touch screen
	Fire Safety	Aerosol fire extinguishing
	Cooling Method	Air Cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	1200*1200*2150mm
	Weight	<1600Kg
Others	MPPT	60kW (Optional)
	STS	120kW (Optional)
	Certification	IEC62619, CE-EMC, CE-LVD, CE-RED

PowerEco-100kW/200kWh

Application Field
Microgrid、Industrial Park、
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-100kW/200kWh
DC side parameter	Max Voltage	950V
	Max Current	171A
	Voltage Range	650~950V
AC grid connection parameter	Max. Apparent Output	115.5kVA
	Max. Input Active Power	105kW
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max. Input Current	167A
AC off-grid parameter	Nominal Input Frequency	50/60Hz
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max Output Current	167A
Battery parameters	Nominal Frequency	50/60Hz
	Cell Capacity	100Ah(LFP)
	Capacity	224kWh
	Nominal Voltage	748.8V
System level parameters	Voltage Range	655.2~819V
	C Rate	≤0.5C
	HMI	7 inch LCD touch screen
	Fire Safety	Aerosol fire extinguishing
	Cooling Method	Air cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
Others	Dimension(W*D*H)	<1600*1100*2200mm
	Weight	<2700Kg
	MPPT	100kW (Optional)
	STS	200kW (Optional)
	Certification	IEC62619、CE-EMC、CE-LVD、CE-RED

PowerEco-30kW/207kWh

Application Field
North American Region
General Commercial and Industrial
Energy Storage、Solar and Energy
Storage Microgrid



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-30kW/207kWh	PowerEco-60kW/207kWh
DC side parameters	Rated power	30kW	60kW
	Input voltage range	150~750V(350~750V @full load)	
	Max input current	90A	180A
AC grid connection parameters	Rated output power	30kW	60kW
	Max active power	33kW	66kW
	Rated grid voltage	480V (-15~15%)3P3W+PE	
	Rated frequency	60(±2.5)Hz	
	Rated output power	30kW	60kW
AC off-grid parameters	Max active power	33kW	66kW
	Rated grid voltage	3P3W+PE, 480 (±5% configurable) Vac	
	Rated frequency	60 (±5 configurable) Hz	
	Cell Capacity	100Ah(LFP)	
Battery parameters	Rated energy	207kWh	
	Nominal voltage	691.2V	
	Operating voltage range	604.8~756V	
	HMI	7 inch LCD touch screen	
System level parameters	Fire fighting system	Perfluorhexone fire protection	
	Heat dissipation system	Air cooling	
	Working temperature	-20~55°C	
	Protection level	IP54	
Others	Size (W*D*H)	1850*1100*2150mm	
	Weight	<3000Kg	
	MPPT	45kW (Optional)	
	STS	100kW (Optional)	
Others	Certification	UL1973, UL9540A, UL9540, FCC	

PowerEco-100kW/215kWh

Application Field
Commercial Building,
Industrial Park, Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-100kW/215kWh
DC side parameter	Max Voltage	950V
	Max Current	171A
	Voltage Range	650~950V
AC grid connection parameter	Max. Apparent Output	115.5kVA
	Max. Input Active Power	105kW
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max. Input Current	167A
	Nominal Input Frequency	50Hz/60Hz
AC off-grid parameter	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max Output Current	167A
	Nominal Frequency	50Hz/60Hz
Battery parameters	Cell Capacity	280Ah(LFP)
	Capacity	215kWh
	Nominal Voltage	768V
	Voltage Range	672~840V
	C Rate	≤0.5C
System level parameters	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
	Cooling Method	Air cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1700*1200*2150mm
	Weight	<3000Kg
Others	MPPT	100kW (Optional)
	STS	240kW (Optional)
	Certification	Undergoing Certification

PowerEco-100kW/232kWh

Application Field
Commercial Building, Industrial Park,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-100kW/232kWh
DC side parameter	Max Voltage	950V
	Max Current	170A
	Voltage Range	650~950V
AC grid connection parameter	Max. Apparent Output	115.5kVA
	Max. Input Active Power	105kW
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max. Input Current	167A
	Nominal Input Frequency	50/60Hz
AC off-grid parameter	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max Output Current	167A
	Nominal Frequency	50/60Hz
Battery parameters	Cell Capacity	280Ah(LFP)
	Capacity	232kWh
	Nominal Voltage	832V
	Voltage Range	728~910V
	C Rate	≤0.5C
System level parameters	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
	Cooling Method	Liquid Cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1100*1350*2350mm
	Weight	<2800Kg
Others	Certification	Domestic Type Test Report

PowerEco-125kW/241kWh

Application Field
Commercial Building, Industrial Park,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-125kW/241kWh
DC side parameter	Max Voltage	950V
	Max Current	203A
	Voltage Range	650~950V
AC grid connection parameter	Max. Apparent Output	138kVA
	Max. Input Active Power	125kW
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max. Input Current	200A
AC off-grid parameter	Nominal Input Frequency	50/60Hz
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
	Max Output Current	200A
	Nominal Frequency	50/60Hz
Battery parameters	Cell Capacity	314Ah(LFP)
	Capacity	241kWh
	Nominal Voltage	768V
	Voltage Range	672~840V
System level parameters	C Rate	≤0.5C
	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
	Cooling Method	Liquid Cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1100*1350*2350mm
	Weight	<2900Kg
Others	Certification	Domestic Type Test Report

PowerEco-125kW/261kWh

Application Field
Commercial Building,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-125kW/261kWh-CN	PowerEco-125kW/261kWh-EU
DC side parameter	Max Voltage	950V	
	Max Current	203A	
	Voltage Range	650~950V	
AC grid connection parameter	Max. Apparent Output	138kVA	
	Max. Input Active Power	125kW	
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
	Max. Input Current	200A	
AC off-grid parameter	Nominal Input Frequency	50/60Hz	
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
	Max Output Current	200A	
	Nominal Frequency	50/60Hz	
Battery parameters	Cell Capacity	314Ah (LFP)	
	Capacity	261kWh	
	Nominal Voltage	832V	
	Voltage Range	728~910V	
System level parameters	C Rate	≤0.5C	
	HMI	7 Inch touch screen	
	Fire Safety	Perfluorohexane fire protection/Aerosol	Aerosol fire suppression
	Cooling Method	Liquid Cooling	
	Operating Temp.	-20~55°C	
	IP Degree	IP54	
	Dimension(W*D*H)	<1100*1350*2350mm	<1700*1350*2200mm
	Weight	<2900Kg	<3500Kg
Others	MPPT	/	
	STS	/	
	Certification	Domestic Type Test Report	IEC62619, CE-EMC, CE-LVD, CE-RED

PowerEco-372kWh

PowerEco-417kWh

Application Field
Commercial Building, Industrial Park,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-372kWh	PowerEco-417kWh
Battery parameters	Cell Capacity	280Ah(LFP)	314Ah(LFP)
	Nominal Capacity	372kWh	417kWh
	Nominal Voltage	1331.2V	
	Operating Voltage Range	1164.8~1456V	
	C Rate	7 Inch touch screen	
	HMI	≤0.5C	
System level parameters	Fire Protection	Perfluoroketone Firefighting	
	Cooling Method	Liquid Cooling	
	Humidity	5~95%,RH	
	Working Temp.	-10~55°C	
	IP Class	IP54	
	Dimension	<1400*1400*2350mm	
	Weight	3500Kg	3600Kg
Others	Certification	Undergoing Certification	

PowerEco-250kW/464kWh

PowerEco-250kW/522kWh

Application Field
Commercial Building,
Industrial Park,
Large Industrial Park



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design AC and DC
integrated



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-250kW/464kWh	PowerEco-250kW/522kWh
DC side parameter	Max Voltage	950V	
	Max Current	340A	406A
	Voltage Range	650~950V	
AC grid connection parameter	Max. Apparent Output	275kW	
	Max. Input Active Power	250kW	
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
	Max. Input Current	400A	
AC off-grid parameter	Nominal Input Frequency	50/60Hz	
	Nominal Voltage	400V, 3P3W+PE/3P4W+PE	
	Max Output Current	416A	
Battery parameters	Nominal Frequency	50/60Hz	
	Cell Capacity	280Ah(LFP)	314Ah(LFP)
	Capacity	464kWh	522kWh
	Nominal Voltage	832V	
	Voltage Range	728~910V	
System level parameters	C Rate	≤0.5C	
	HMI	7 Inch touch screen	
	Fire Safety	Perfluorohexane fire protection/Aerosol	
	Cooling Method	Liquid Cooling	
	Operating Temp.	-20~55°C	
	IP Degree	IP54	
	Dimension(W*D*H)	2400*1400*2300mm	
Others	Weight	<4500Kg	<4600Kg
	MPPT	50kW*4 (Optional)	
	STS	/	
	Certification	Undergoing Certification	

PowerEco-100kW/200kWh-Na

Application Field
Commercial Building, Industrial Park,
Industrial Estate



flexible expansion, one machine
multi-effect matching a variety
of application scenarios



Multiple Protection
Systems



highly integrated
design



fingertip monitoring
cloud maintenance

Parameters/ Model		PowerEco-100kW/200kWh
DC side parameter	Max Voltage	1500V
	Max Current	212A
	Voltage Range	600~1500V
AC grid connection parameter	Max. Apparent Output	115kVA
	Max. Input Active Power	100kW
	Nominal Voltage	400 (±15%) Vac, 3P3W+PE
	Max. Input Current	198A
	Nominal Input Frequency	50Hz
AC off-grid parameter	Nominal Voltage	400V, 3P3W+PE
	Max Output Current	198A
	Nominal Frequency	50Hz
Battery parameters	Cell Capacity	170Ah (Na ⁺)
	Capacity	201kWh(170Ah)
	Nominal Voltage	1185.6V
	Voltage Range	624~1456V
	C Rate	≤0.5C
System level parameters	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexanone
	Cooling Method	Liquid Cooling
	Operating Temp.	-40~55℃
	IP Degree	IP54
	Dimension(W*D*H)	1400*1400*2350mm
	Weight	<3000Kg
Others	Certification	IEC62619、CE-EMC、CE-LVD、CE-RED

ELECTRIC ENERGY STORAGE APPLICATION CASES



Yichun,Jiangxi 100MW Fish-Light Complementary Power Generation 20MW/40MWh Energy Storage Project

· Project Time: 2024.01
· Project Location: Jiangxi



Tianchang,Anhui 200MW Fish-Light Complementary Power Generation Energy Storage Project

· Project Time: 2023.12
· Project Location: Anhui

ELECTRIC ENERGY STORAGE
APPLICATION CASES



Wuqia,Xinjiang 50MW Wind Power Generation 50MW/200MWh Energy Storage Project
· Project Time: 2023.10
· Project Location: Xinjiang



Weining,Guizhou 80MW/160MWh Wind Power Generation Energy Storage Project
· Project Time: 2023.10
· Project Location: Guizhou

ELECTRIC ENERGY STORAGE
APPLICATION CASES



Zhongwei,Ningxia 100MW/200MWh Photovoltaic Hybrid Energy Storage Project
· Project Time: 2023.09
· Project Location: Ningxia



Minle,Gansu 50MW Photovoltaic Power Generation 10MW/20MWh Energy Storage Project
· Project Time: 2022.12
· Project Location: Gansu

ELECTRIC ENERGY STORAGE
APPLICATION CASES



Linze,Gansu 500MW Photovoltaic Sand Control Power Generation 40MW/80MWh Energy Storage Project
· Project Time: 2022.11
· Project Location: Gansu



Xiantao,Hubei 200MW Fishery-Photovoltaic Hybrid Power Generation 57.5MW/115MWh Energy Storage Project
· Project Time: 2022.11
· Project Location: Hubei

ELECTRIC ENERGY STORAGE
APPLICATION CASES



Heilongjiang Yichun Tieliananfeng 20MW Wind Power Generation and Energy Storage Project
· Project Time: 2024.10
· Project Location: Heilongjiang



East Africa Regional Photovoltaic Power Generation and Energy Storage Project
· Project Time: 2022.3
· Project Location: East Africa

INDUSTRIAL&COMMERCIAL ENERGY
STORAGE APPLICATION CASES



Hunan Changde Integrated Photovoltaic and Energy Storage Charging Station for Commercial and Industrial Energy Storage Project

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Hunan



Shenzhen Pinghu Peak Shaving and Valley Filling Commercial and Industrial Energy Storage Project

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Shenzhen

INDUSTRIAL&COMMERCIAL ENERGY
STORAGE APPLICATION CASES



A Commercial and Industrial Energy Storage Project for a Garment Washing Factory in Taixing City, Jiangsu

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Jiangsu



Commercial and Industrial Energy Storage Projects in Myanmar

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Myanmar

INDUSTRIAL&COMMERCIAL ENERGY
STORAGE APPLICATION CASES



Mandalay SKG Toll Station Commercial and Industrial Energy Storage Project

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Mandalay



Mandalay Agricultural Market Commercial and Industrial Energy Storage Project

- Application Scenarios: Commercial and Industrial Energy Storage
- Project Location: Mandalay

AFTER-SALES
SERVICE



The guidance of Cospower is to improve customer satisfaction, to provide high quality, efficient and professional technical services for customers.



COOPERATIVE CUSTOMERS

