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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, Yeoju-si, Gyeonggi-do, Republic of Korea

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Hongkong Cospower Technology Co., Ltd.

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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.

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Guangdong Cospowers New Energy Co., LTD

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Cospowers B.V.

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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.



Cumulative global shipments



BloombergNEF energy storage



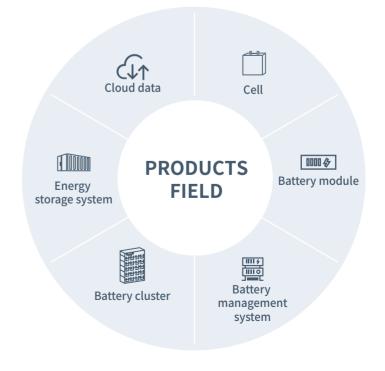
Factory area



Patented technology and software



Standard formulation paticipations



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GLOBAL

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.

Service coverage

Domestic and foreign subsidiary companies **Production Base**

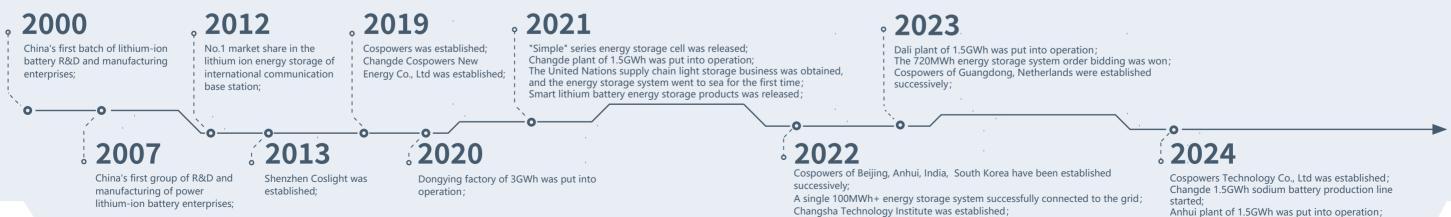
R&D Centers

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

Harbin,Dongying,Changde, Shenzhen,Changsha.



DEVELOPMENT HISTORY



The high energy liquid cooled energy storage system products was released, and the 80MWh system applications was realized;

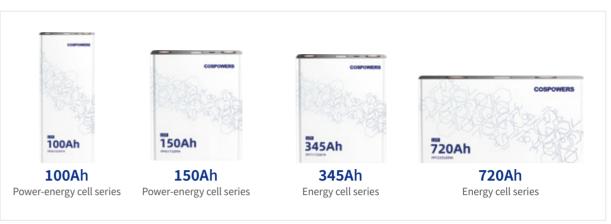
Anhui plant of 1.5GWh was put into operation;

ENERGY STORAGE CELL

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER



LITHIUM-ION BATTERY CELL





LFP material

Optimal energy storage lithium-ion battery



Advanced stacking process Effectively improving battery energy density



Prismatic battery Multi-level battery protection



rotection





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

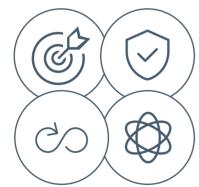
Patent Technology Accumulation Cooperation with Famous Universities

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.



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.

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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

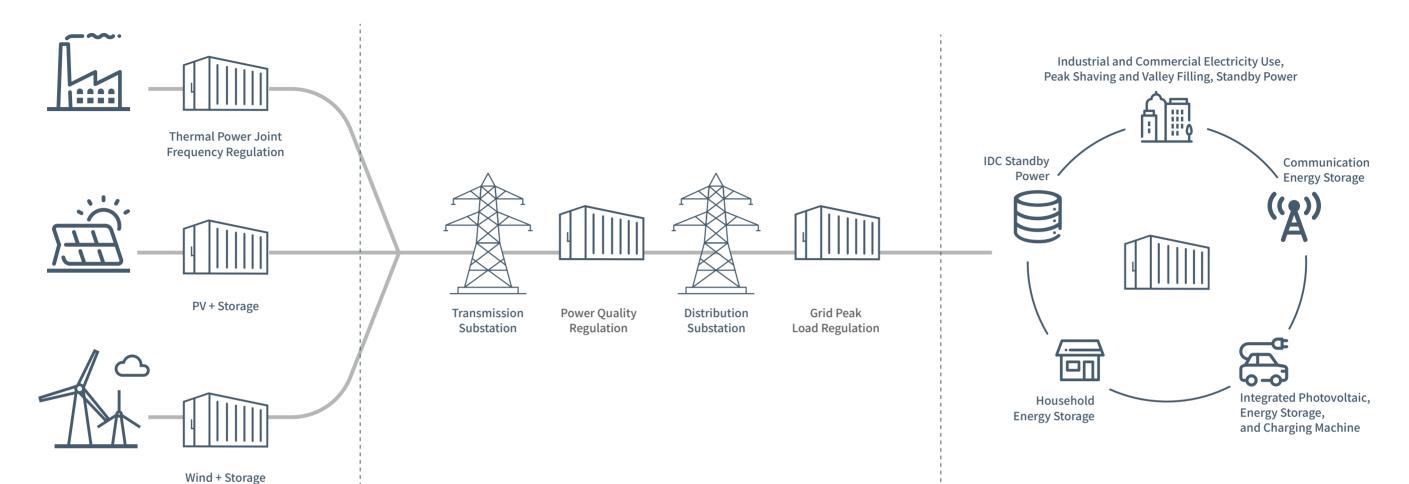
Utilizing an advanced smart battery management system, it has overcharge, overdischarge, overcurrent, temperature, and other alarm and protection functions, as well as historical data storage capabilities. It exhibits outstanding advantages in backup power supply, specific occasions, and high-rate discharge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

CELL PARAMETERS

S/N	Model Rated	d capacity[Ah]	Nominal voltage[V]	Voltage range[V]	Max charge/discha	rge rate[C]
LFP-Hi	igh-power cell serie	S				
1	FP31136170A	50Ah	3.2V	2.5-	3.65V	2C/6C
2	FP31136160A	60Ah	3.2V	2.5-	3.65V	1C/4C
LFP-Po	ower-energy cell ser	ries				
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-Er	nergy 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-So	dium-ion cell series					
1	NA50160119A	50Ah	2.85	V 1.5	-3.4V	0.5C/3C
2	NA50160156A	75Ah	2.85	V 1.5	-3.4V	0.5C/3C
3	NA50160198A	100Ah	2.85	V 1.5	-3.4V	0.5C/3C
4	NA71173207A	170Ah	2.85	V 1.5	-3.4V	0.5P/0.5P
Product Certification						
<u>UN38.</u>	3 Rous	<u>IEC</u>	<u>IEC</u>	EC. UL	(UL)	
UN38.3	3 RoHS	IEC62133	IEC62619 IEC	62620 UL1642	UL1973	UL954

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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.

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LIQUID COOLING SOLUTION



	Ce	ell
Capacity	280Ah	314Ah
Life cycles	25°C, 12000 times@0.5C	
Operating voltage	$2.5-3.65V(T>0^{\circ}C)/2.0-3.65V(T\leq0^{\circ}C)$	
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)/2.0-3.65	V(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



	В	attery cluste	r
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

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SODIUM BATTERY SOLUTION



	Cell
Capacity	168Ah
Life cycles	6000 times@0.5C
Operating voltage	2.9V
internal resistance	$0.5 m\Omega$
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



Energy Management



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

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

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

and Maintenance

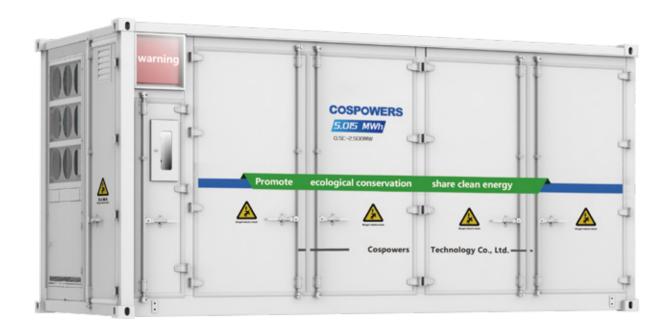
Intelligent Operation

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.

COSPOWERS

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	
	Cell Capacity	100Ah(LFP)		
	Battery Pack	3P18S		
Battery Module	Module Voltage	57.6V		
	Module Power	17.280kWh		
	IP Class	Air-cooled, no p	rotection rating	
	NOs.of Modules	221	ocs	
Battery	Cluster Nominal Voltage	DC1267.2V		
Cluster	Voltage Range	1108.8~1405.8V		
	Single Cluster Power	380.16kWh		
	Nos. of Battery Clusters	6р	ocs	
	Battery system energy 2280kWh		kWh	
Battery	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm		
Cabin	Weight	≤30t		
	Cooling Method	Air cooling		
	IP Class	IP54		
Compliant with Standards	Cluster	IEC62619, UL1973.	, UL9540A, UN38.3	

EnerGalactic-2418-Na

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.













High Energy Density for Flexible Layout and Expansion



Modular Prefabrication No On-site Installation Required

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

EnerGalactic-3727-1C_™

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

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	0	
	Parameters/ Model	EnerGalactic-3727-1C
	Cell Capacity	280Ah(LFP)
	Battery Pack	1P52S
Battery Module	Module Voltage	166.4V
	Module Power	46.59kWh
	IP Class	IP67
	NOs.of Modules	8pcs
Battery	Cluster Nominal Voltage	DC1331.2V
Cluster	Voltage Range	1164.8~1476.8V
	Single Cluster Power	372.73kWh
	Nos. of Battery Clusters	10pcs
	Battery system energy	3727kWh
Battery	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm
Cabin	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.









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	EnerGalaction	c-5015-0.5C
	Cell Capacity	314Ah(LFP)	
	Battery Pack	1P52S	1P104S
Battery Module	Module Voltage	166.4V	332.8V
	Module Power	52.2496kWh	104.499kWh
	IP Class	IPi	67
	NOs.of Modules	8pcs	4pcs
Battery	Cluster Nominal Voltage	DC1331.2V	
Cluster	Voltage Range	1164.8~1476.8V	
	Single Cluster Power	417.997kWh	
	Nos. of Battery Clusters	12pcs	
	Battery system energy	5015kWh	
Battery	Battery Cabin Dimension(W*D*H)	6058*2438*2896mm	
Cabin	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

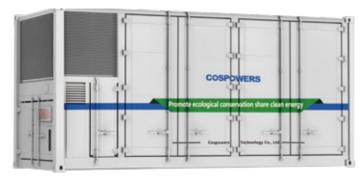
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	of AC/DC integrated Systems		
	Parameters/ Model	Celestial Energy-2073-0.5C	
	Cell Capacity	100Ah(LFP)	
	Module Structure	3P18S	
DC side	Module quantity in single cluster	20pcs	
parameters	Nos. of Battery Clusters	6pcs	
	Battery system power	2073kWh	
	Voltage Range	1008~1278V	
	Rated grid voltage	6*200kW	
	Wiring Mode	AC690V	
AC side parameters	Rated grid frequency	3W+PE	
	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	
System level parameters	Protection level	IP54	
parameters	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	
	Size(W*D*H)	6058*2438*2896mm	
	Weight	24t	
Compliant with	Cluster	IEC62619、UL1973、UL9540A、UN38.3	
Standards	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 M Design

Multiple Protection Systems

Efficient Installation and Commissioning of AC/DC Integrated Systems

Intelligent Operation and Maintenance

	Parameters/ Model	Celestial Energy-3340-0.5C	
	Cell Capacity	314Ah(LFP)	
DC side parameters	Module Structure	1P52S	
	Module quantity in single cluster	8pcs	
	Nos. of Battery Clusters	8pcs	
	Battery system power	3340kWh	
	Voltage Range	1164.8~1476.8V	
	Rated grid voltage	8*200kW	
	Wiring Mode	AC690V	
AC side parameters	Rated grid frequency	3W+PE	
	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	
System level parameters	Protection level	IP54	
parameters	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	Cluster	IEC62619、UL1973、UL9540A、UN38.3	
Standards	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

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		of AC/DC integrated Systems	
	Parameters/ Model	Celestial Energy-5015-0.5C	
	Cell Capacity	314Ah(LFP)	
DC side	Module Structure	1P104S	
	Module quantity in single cluster	4pcs	
parameters	Nos. of Battery Clusters	12pcs	
	Battery system power	5015kWh	
	Voltage Range	1164.8~1476.8V	
	Rated grid voltage	12*215kW	
	Wiring Mode	AC690V	
AC side parameters	Rated grid frequency	3W+PE	
	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	
System level parameters	Protection level	IP54	
parameters	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	Cluster	IEC62619、UL1973、UL9540A、UN38.3	
Standards	PCS	UL1741、EN50549、VDE4110、GB/T34120、GB/T36547	

INTEGRATED ENERGY CABINET

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

9 PM

LCD screen for intuitive display supports photovoltaic connection

	Parameters/ Model	6kW/30kWh	10kW/30kWh	15kW/30kWh	15kW/50kWh
	Max. Input Voltage	1000Vdc			
Solar Input	MPPT Voltage Range	180-850Vdc			
parameters	Nominal Power	9kW	15kW	22.5kW	22.5kW
	MPPT Number			2	
	Max. Apparent Output	6.6kVA	11kVA	16.5kVA	16.5kVA
AC grid	Max. Input Active Power	6kW	10kW	15kW	15kW
connection	Nominal Voltage		400Vac,3	W+N+PE	
parameters	Max. Input Current	9.5A	15.9A	23.8A	23.8A
	Nominal Input Frequency		50/6	60Hz	
	Nominal Voltage		400Vac,3	W+N+PE	
AC off-grid parameters	Nominal Current	9.5A	15.9A	23.8A	23.8A
parameters	Nominal Frequency	50/60Hz			
	Cell Capacity	100Ah (LFP)			
	Capacity	30kWh	30kWh	30kWh	50kWh
Datton	Nominal Voltage	307.2V	307.2V	307.2V	512V
Battery parameters	Voltage Range	268.8~345.6V	268.8~345.6V	268.8~345.6V	448~560V
	C Rate	≤0.5C			
	Max Charging Current		50)A	
	HMI		7 Inch tou	ch screen	
	Fire Safety	Perfluorohexanone			
System level	Cooling Method		Liquid	Cooling	
parameters	Operating Temp.		-20~	55°C	
'	IP Degree		IP	54	
	Size(W*D*H)	<700*750*1350mm	<700*750*1350mm	<700*750*1350mm	<700*750*1885mr
	Weight	<500Kg	<500Kg	<500Kg	<800Kg
Others	Certification	Undergoing Certification			

CABINET-TYPE ENERGY STORAGE PRODUCT

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER



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
	Max. Input Voltage	1000Vdc
Solar Input	MPPT Voltage Range	300~750Vdc
parameters	Nominal Power	75kW
	MPPT Number	3
	Max. Apparent Output	55kVA
AC grid	Max. Input Active Power	50kW
connection	Nominal Voltage	400Vac, 3P3W+PE
parameters	Max. Input Current	80A
	Nominal Input Frequency	50/60Hz
A.C. (1	Nominal Voltage	400Vac, 3P3W+PE
AC off-grid parameters	Nominal Current	80A
parameters	Nominal Frequency	50/60Hz
	Cell Capacity	100Ah(LFP)
	Capacity	102kWh
Battery	Nominal Voltage	512V
parameters	Voltage Range	448~560V
•	C Rate	≤0.5C
	Max Charging Current	50A*2
	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
System level	Cooling Method	Air Conditioning
parameters	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1250*650*2000mm
	Weight	<1500Kg
Others	Certification	Undergoing Certification

PowerEco-60kW/125kWh

Application Field Microgrid、Industrial Park、 Industrial Estate











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

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

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

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

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

PowerEco-30kW/207kWh PowerEco-60kW/207kWh

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











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

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

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	Parameters/ Model	PowerEco-30kW/207kWh	PowerEco-60kW/207kWh	
	Rated power	30kW	60kW	
DC side	Input voltage range	150~750V(350~750V @full load)		
parameters	Max input current	90A	180A	
	Rated output power	30kW	60kW	
	Max active power	33kW	66kW	
AC grid	Rated grid voltage	480V (-15~15°	%)3P3W+PE	
connection parameters	Rated frequency	60(±2	5)Hz	
parameters	Rated output power	30kW	60kW	
	Max active power	33kW	66kW	
	Rated grid voltage	3P3W+PE, 480 (±5% configurable) Vac		
	Rated frequency	60 (±5 configurable) Hz		
AC off-grid parameters	Cell Capacity	100Ah	(LFP)	
parameters	Rated energy	207k	Wh	
	Nominal voltage	691.2V		
	Operating voltage range	604.8~756V		
Battery	HMI	7 inch LCD touch screen		
parameters	Fire fighting system	Perfluorhexone fire protection		
	Heat dissipation system	Air cooling		
	Working temperature	-20~5	55°C	
System level	Protection level	IP54		
parameters	Size (W*D*H)	1850*1100*2150mm		
	Weight	<3000Kg		
	MPPT	45kW (Օր	otional)	
Others	STS	100kW(O	ptional)	
	Certification	UL1973, UL9540	A, 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

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

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

PowerEco-100kW/232kWh

Application Field

Commercial Building, Industrial Park, Industrial Estate











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

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

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	Parameters/ Model	PowerEco-100kW/232kWh
	Max Voltage	950V
DC side parameter	Max Current	170A
	Voltage Range	650~950V
	Max. Apparent Output	115.5kVA
AC arid	Max. Input Active Power	105kW
AC grid connection	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
parameter	Max. Input Current	167A
	Nominal Input Frequency	50/60Hz
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
AC off-grid	Max Output Current	167A
parameter	Nominal Frequency	50/60Hz
	Cell Capacity	280Ah(LFP)
	Capacity	232kWh
Battery parameters	Nominal Voltage	832V
parameters	Voltage Range	728~910V
	C Rate	≤0.5C
	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
	Cooling Method	Liquid Cooling
System level parameters	Operating Temp.	-20~55°C
parameters	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

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
	Max. Apparent Output	138kVA
AC grid	Max. Input Active Power	125kW
connection	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
parameter	Max. Input Current	200A
	Nominal Input Frequency	50/60Hz
	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE
AC off-grid parameter	Max Output Current	200A
parameter	Nominal Frequency	50/60Hz
	Cell Capacity	314Ah(LFP)
	Capacity	241kWh
Battery parameters	Nominal Voltage	768V
parameters	Voltage Range	672~840V
	C Rate	≤0.5C
	HMI	7 Inch touch screen
	Fire Safety	Perfluorohexane fire protection/Aerosol
Contain land	Cooling Method	Liquid Cooling
System level parameters	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 Multiple Protection multi-effect matching a variety of application scenarios

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	Max. Apparent Output	138kVA	
	Max. Input Active Power	125kW	
connection	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
parameter	Max. Input Current	200A	
	Nominal Input Frequency	50/60Hz	
۵ د د د د د د د د د د د د د د د د د د د	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
AC off-grid parameter	Max Output Current	200A	
parameter	Nominal Frequency	50/60Hz	
	Cell Capacity	314Ah (LFP)	
	Capacity	261kWh	
Battery	Nominal Voltage	832V	
parameters	Voltage Range	728~910V	
	C Rate	≤0.5C	
	HMI	7 Inch touch screen	
	Fire Safety	Perfluorohexane fire protection/Aerosol	Aerosol fire suppression
Custom laval	Cooling Method	Liquid Cooling	
System level parameters	Operating Temp.	-20~55°C	
	IP Degree	IP54	
	Dimension(W*D*H)	<1100*1350*2350mm	<1700*1350*2200mm
	Weight	<2900Kg	<3500Kg
Others	MPPT	/	100kW (Optional)
	STS	1	200kW (Optional)
	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

highly integrated

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 Multiple Protection multi-effect matching a variety of application scenarios

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	Max. Apparent Output	275kW	
	Max. Input Active Power	250kW	
connection	Nominal Voltage	400Vac, 3P3W+PE/3P4W+PE	
parameter	Max. Input Current	400A	
	Nominal Input Frequency	50/60Hz	
	Nominal Voltage	400V, 3P3W+PE/3P4W+PE	
AC off-grid parameter	Max Output Current	416A	
parameter	Nominal Frequency	50/60Hz	
	Cell Capacity	280Ah(LFP)	314Ah(LFP)
	Capacity	464kWh	522kWh
Battery	Nominal Voltage	832V	
parameters	Voltage Range	728~910V	
	C Rate	≤0.5C	
	HMI	7 Inch touch screen	
	Fire Safety	Perfluorohexane fire protection/Aerosol	
	Cooling Method	Liquid Cooling	
System level parameters	Operating Temp.	-20~55°C	
parameters	IP Degree	IP54	
	Dimension(W*D*H)	2400*1400*2300mm	
	Weight	<4500Kg	<4600Kg
Others	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	
	Max. Apparent Output	115kVA	
AC grid	Max. Input Active Power	100kW	
connection	Nominal Voltage	400 (±15%) Vac, 3P3W+PE	
parameter	Max. Input Current	198A	
	Nominal Input Frequency	50Hz	
AC off-grid parameter	Nominal Voltage	400V, 3P3W+PE	
	Max Output Current	198A	
	Nominal Frequency	50Hz	
	Cell Capacity	170Ah (Na ⁺)	
	Capacity	201kWh(170Ah)	
Battery parameters	Nominal Voltage	1185.6V	
parameters	Voltage Range	624~1456V	
	C Rate	≤0.5C	
	HMI	7 Inch touch screen	
System level parameters	Fire Safety	Perfluorohexanone	
	Cooling Method	Liquid Cooling	
	Operating Temp.	-40~55°C	
	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 Projec

· 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

Energy Storage Project
Project Time: 2022.11
Project Location: Hubei

ELECTRIC ENERGY STORAGE APPLICATION CASES



Heilongjiang Yichun Tielianianfeng 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



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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

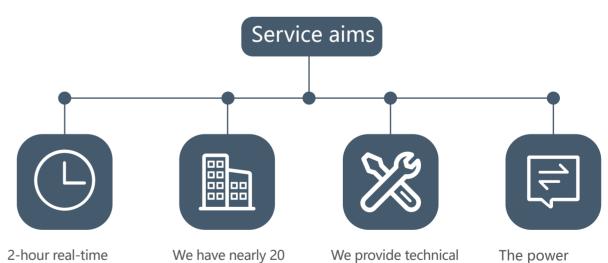


Mandalay Agricultural Market Commercial and Industrial Energy Storage Project

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



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