INNCOM
ENGINEERING

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Harbin Coslight New Energy Co., Ltd.
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Shenzhen Coslight Technology Co., Ltd.
No.2，Guangtian Road, No.3 Industrial Zone, Luotian Community, Yanluo Street, Baoan District, Shenzhen, Guangdong Province, P.R.C

Changde Cospowers New Energy Technology Co., Ltd.
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Dali Cospowers New Energy Technology Co., Ltd.
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Anhui Cospowers New Energy Technology Co., Ltd.
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Cospowers Company Ltd.
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Cospowers America Inc.
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Prins Hendrikkade 21 E, 1012TL Amsterdam, Netherland

COSPOWERS BATTERY

HANDBOOK OF ELECTRIC ENERGY STORAGE PRODUCTS

ABOUT COSPOWERS BATTERY MANUFACTURING

Dongying Cospower Technology Co. , LTD. (herein, , , er re, erred , o , s Cospower) w, s es, , blished in 2019 , nd is , n, , ion, l high-, ech en, erprise dedic, , ed , o , he developmen, o, li, hium energy s, or, ge indus, ry. The R&D , e, m o, Cospower h, s been deeply involved in , he field o, li, hium energy s, or, ge , or more , h, n 20 ye, rs, m, s, ering core , echnologies such , s cell R&D , nd m, nu, , c, uring, sys, em design , nd developmen, , sys, em in, egr, , ion , nd energy m, n, gemen, , providing diversified produc, s , nd one-s, op solu, ions , or , he glob, l , pplic, , ions o, new energy s, or, ge.

Cospower serves more , h, n 60 coun, ries , nd regions worldwide, , nd i, s produc, s , re used in v, rious , pplic, , ion scen, rios such , s power , uxili, ry services, renew, ble energy gener, , ion, indus, ri, l , nd commerci, l buildings, green energy-s, ving homes, d, , , cen, ers, 5G communic, , ion b, se s, , , ions, comprehensive p, rks , nd so on. Among , hem, , he energy s, or, ge business , or communic, , ion b, se s, , , ions h, s m, in, , ined , le, ding posi, ion in glob, l shipmen, s , or , long , ime.

Domestic and overseas branches & subsidiaries
17

The energy storage industry applications began in 2008.
14Years

Factory area
850000 ㎡

Annual production capacity
12GWh+

Global cumulative shipments exceed
10GWh

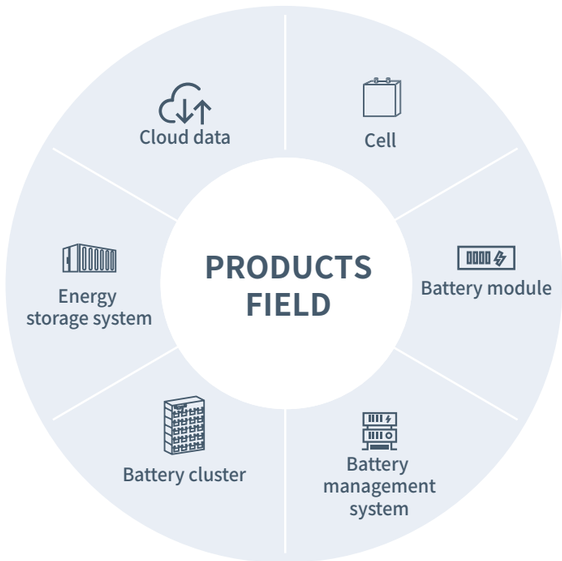
One of the first-batch lithium-ion battery R&D and manufacturing enterprises of in China
No.1

One of the first-batch lithium-ion battery manufacturing enterprises in China's new energy vehicle admission directory
No.1

The market share in the field of communication energy storage ranks first in the world.
No.1

patented technology and soft
1500+

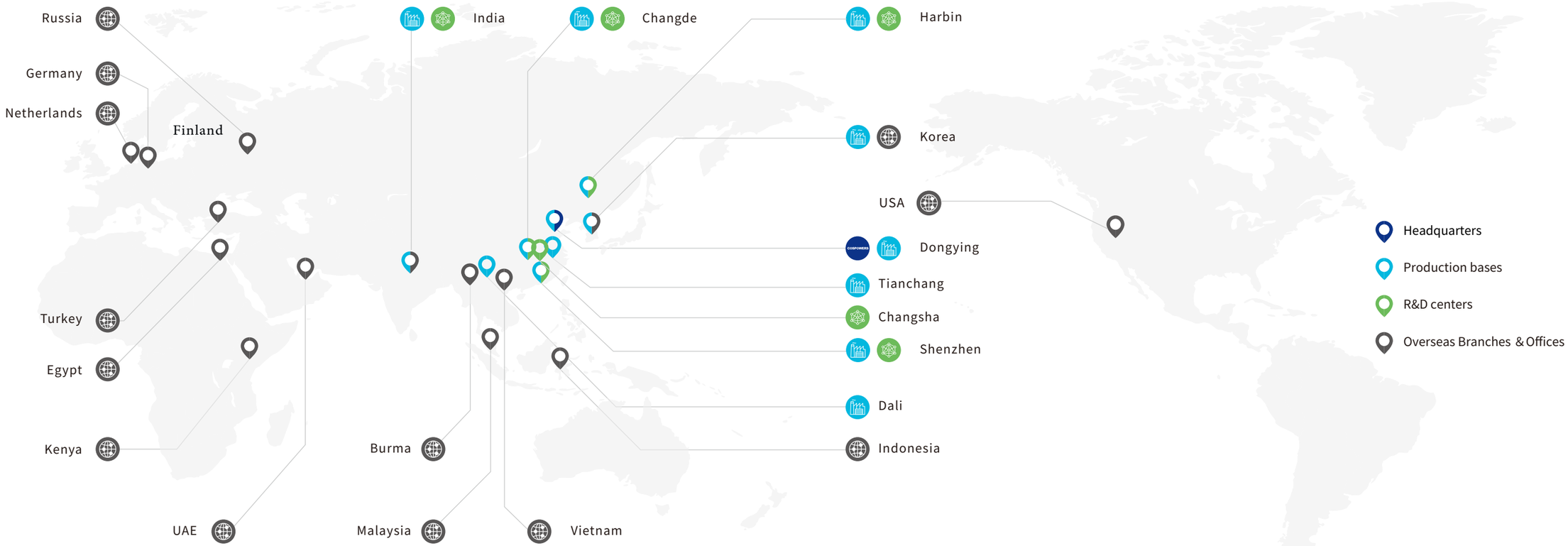
Standards formulated
10



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. The cumulative shipment of energy storage lithium battery products has exceeded 10GWh, with a global cumulative shipment of 1.3 million units of communication energy storage, UPS backup power and high-voltage energy storage lithium battery systems.

17 Oversea Branches&Subsidiaries | **6** Manufacturing Bases | **5** R&D Centers



DEVELOPMENT HISTORY

2000
One of the first-batch lithium-ion battery R&D and manufacturing enterprises in China

2007
One of the first-batch lithium-ion power battery R&D and manufacturing enterprises in China

2012
No.1 market share in the lithium-ion energy storage for communication base station in the world

2013
Shenzhen Cospower was established.

2019
Cospower was established. The subsidiaries in Harbin and Changde were also established successively.

2020
Dongying factory was put into operation;
Deepening "new infrastructure", focusing on base stations and data centers, and staying ahead of the game.

2021
"Slip" series of cells were released, thin and narrow especially for energy storage;
Changde cell factory was put into operation;
The United Nations supply chain PV energy storage business was obtained, with energy storage system going out of border for the first time;
Smart lithium-ion battery energy storage products were released;
Awarded as the Enterprise Technology Center of Heilongjiang Province;

2022
Anhui subsidiary was established;
The 100MWh+ energy storage system was successfully connected to the grid;
Changsha Research Institute was established;
The product of high energy liquid-cooled energy storage system was released, and the application of 80MWh system was realized.

2023
Dali factory was put into operation;
The first phase of Anhui factory has been capped and meets the conditions for production line entry;
The order of 720MWh energy storage system was won, with the amount of nearly 900 million yuan.

ENERGY STORAGE CELL

SMART LITHIUM BATTERY TOTAL SOLUTION PROVIDER

ENERGY STORAGE CELL-LFP

60Ah
High power cell series

100Ah
Power energy cell serie

280Ah
Energy cell series

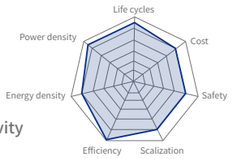
314Ah
Energy cell series

LFP material
Optimal energy storage lithium-ion battery

Prismatic battery
Multi-level battery protection

Lamination design
Effectively improving battery energy density

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

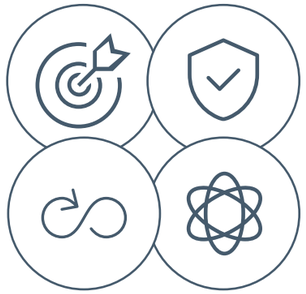
Better heat dissipation
Better heat dissipation performance during high-rate charge and discharge

ENERGY STORAGE CELL-Na

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

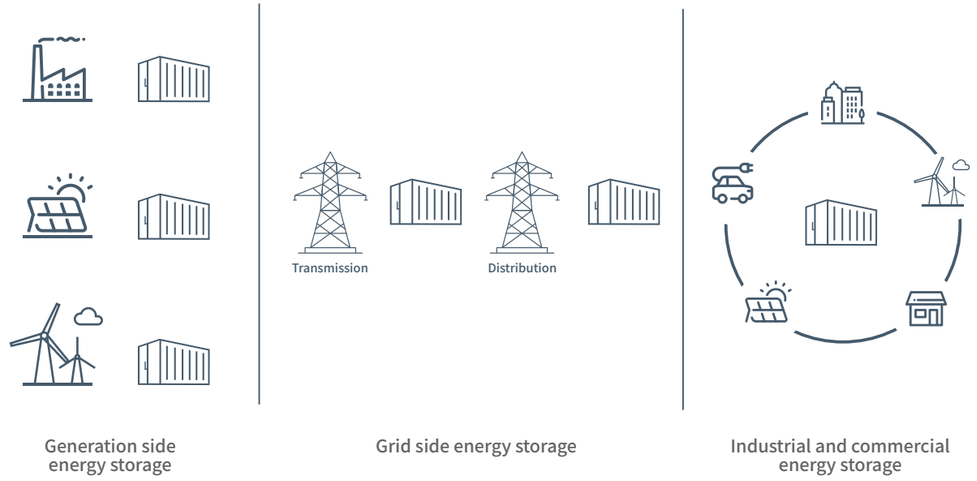
Advanced Battery Management System, Wide Applicability

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.

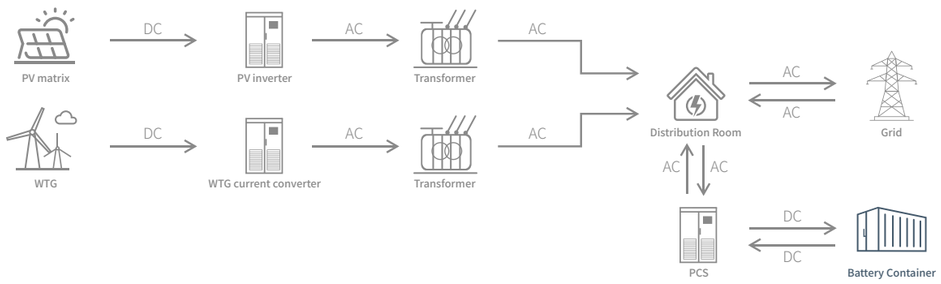
CELL PARAMETERS

S/N	Model	Rated capacity[Ah]	Nominal voltage[V]	Voltage range[V]	Max charge/discharge rate[C]
LFP - High power cell series					
1	FP1690200A	15Ah	3.2V	2.8-3.65V	2C/8C
2	FP31136170A	40Ah	3.2V	2.8-3.65V	2C/8C
3	FP31136170A	50Ah	3.2V	2.8-3.65V	2C/6C
4	FP26122260A	60Ah	3.2V	2.8-3.65V	2C/5C
5	FP31136227A	60Ah	3.2V	2.8-3.65V	2C/5C
LFP - Power energy cell series					
1	FP20106300A	50Ah	3.2V	2.8-3.65V	1C/3C
2	FP31136170A	50Ah	3.2V	2.8-3.65V	1C/3C
3	FP26122260A	75Ah	3.2V	2.8-3.65V	1C/3C
4	FP31136227A	75Ah	3.2V	2.8-3.65V	1C/3C
5	FP26122280A	80Ah	3.2V	2.8-3.65V	1C/3C
6	FP26122320A	100Ah	3.2V	2.8-3.65V	1C/3C
7	FP31136282A	100Ah	3.2V	2.8-3.65V	1C/3C
8	FP27122430A	150Ah	3.2V	2.8-3.65V	1C/3C
LFP - Energy cell series					
1	FP20106255A	40Ah	3.2V	2.8-3.65V	1C/1C
2	FP31136227A	80Ah	3.2V	2.8-3.65V	1C/1C
3	FP26122341A	100Ah	3.2V	2.8-3.65V	1C/1C
4	FP31136255A	100Ah	3.2V	2.8-3.65V	1C/1C
5	FP45173209A	150Ah	3.2V	2.8-3.65V	1C/1C
6	FP71173207A	280Ah	3.2V	2.8-3.65V	0.5C/1C
7	FP71173207A	305Ah	3.2V	2.8-3.65V	0.5C/1C
8	FP71173207A	314Ah	3.2V	2.8-3.65V	0.5C/1C
Na - Sodium ions cell series					
1	NA1690135A	10Ah	3.05V	1.5-3.95V	1C/3C
2	NA31136255A	80Ah	3.05V	1.5-3.95V	1C/3C
3	NA31136282A	95/100Ah	3.05V	1.5-3.95V	1C/3C
4	NA50160155A	100Ah	3.05V	1.5-3.95V	1C/3C

APPLICATIONS OF ENERGY STORAGE



Generation side energy storage



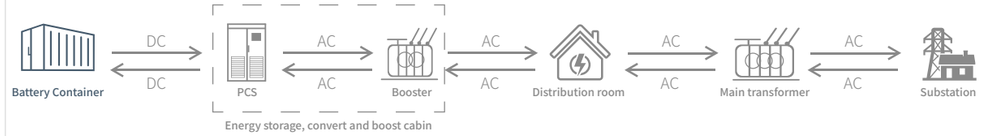
Energy storage functions

- Smoothing intermittent energy;
- Increasing the backup capacity of the power grid;
- Frequency modulation;
- Increasing the consumption of new energy;
- Combined frequency modulation of fire, PV, water and fuel energy storage;

Matching scheme

- 0.5C-1.548MW/3.097MWh
- 0.5C-1.736MW/3.473MWh
- 0.5C-1.677MW/3.355MWh
- 0.5C-1.881MW/3.762MWh
- 0.5C-2.508MW/5.016MWh
- 0.5C-2.509MW/5.018MWh
- 0.5C-2.813MW/5.627MWh
- 0.5C-1.270MW/2.540MWh
- 1C-3.011MW/3.011MWh
- 2C-3.318MW/1.659MWh

Grid side energy storage



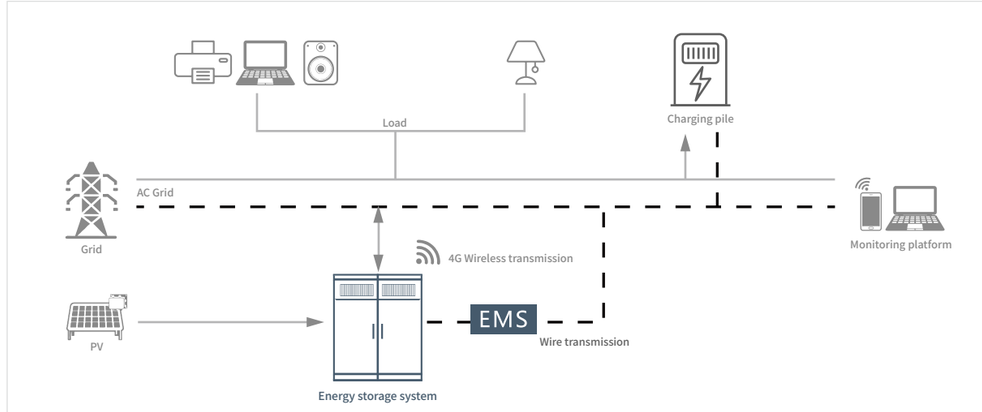
Energy storage functions

- Increasing energy quality;
- Reducing line energy consumption;
- Increasing the backup power capacity of the grid;
- Delaying capacity increase;

Matching scheme

- 0.5C-1.27MW/2.54MWh
- 0.5C-2.509MW/5.018MWh
- 0.5C-2.813MW/5.627MWh
- 0.5C-1.677MW/3.355MWh
- 0.5C-1.881MW/3.762MWh
- 0.5C-2.508MW/5.016MWh
- 1C-3.011MW/3.011MWh
- 1C-2.6MW/2.6MWh
- 2C-3.318MW/1.659MWh

Industrial and commercial energy storage



Energy storage functions

- Increasing distributed energy consumption;
- Improving reliability and power quality;
- Peak-load shifting, load transfer;
- Constructing micro-grid, improving self-use rate, demand management;

Matching scheme

- 30kW/207kWh
- 60kW/207kWh
- 50kW/102kWh
- 50kW/103kWh
- 100kW/224kWh
- 100kW/232kWh
- 100kW/215kWh
- 200kW/372kWh
- 200W/417kWh
- 1MW/2.073MWh
- 1.2MW/2.385MWh

LIQUID COOLING SOLUTION

Cell		
Capacity	280Ah	314Ah
Life cycles	25℃, 12000 times @0.5C	25℃, 12000 times @0.5C
Operating voltage	2.5-3.65V (T＞0℃) /2.0-3.65V (T≤0℃)	2.5-3.65V (T＞0℃) /2.0-3.65V (T≤0℃)
Battery internal resistance@1KHz	0.18±0.05mΩ	0.25±0.05mΩ
Self-discharge per month	≤3.0%	≤3.0%
Energy density	≥160Wh/kg	≥179Wh/kg
Max continuous discharge rate	1C/1C	1C/1C
Peak current	2C (30s)	2C (30s)
Battery dimension	71*173*207mm	72*174*207mm

Module		
Rated capacity	46.59kWh	52.25kWh
Max continuous charge and discharge current	280A	314A
Size	790*1160*245mm	790*1160*245mm
IP Class	IP67	IP67

Battery cluster		
Rated capacity	372.736kWh	418kWh
Max continuous charge and discharge current	280A	314A
Size	890*1160*2510mm	890*1160*2510mm

AIR COOLING SOLUTION

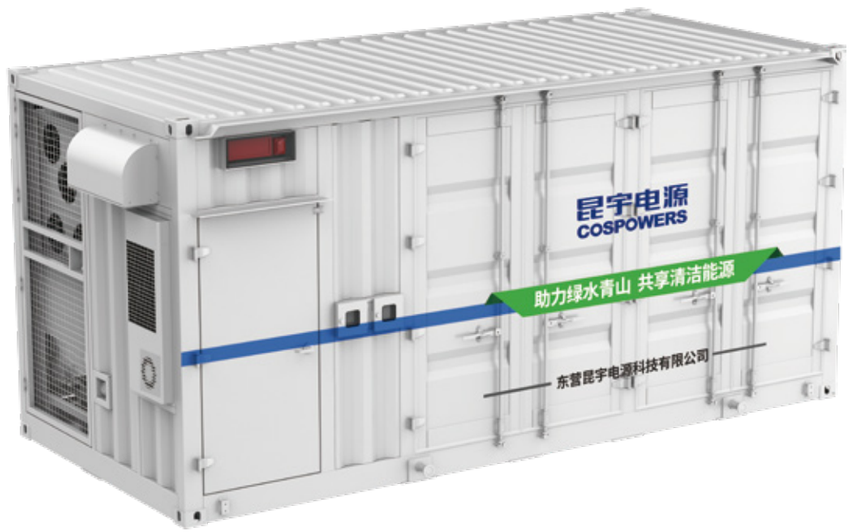
Cell			
Capacity	100Ah	280Ah	314Ah
Life cycles	25℃, 8000次@0.5C	25℃, 12000次@0.5C	25℃, 12000次@0.5C
Operating voltage	2.5-3.65V (T＞0℃) /2.0-3.65V (T≤0℃)		
Battery internal resistance@1KHz	0.50±0.05mΩ	0.25±0.05mΩ	0.18±0.05mΩ
Self-discharge per month	＜3.0%	＜3.0%	＜3.0%
Energy density	＞150Wh/Kg	＞160Wh/Kg	＞179Wh/kg
Max continuous discharge rate	1C/1C	1C/1C	1C/1C
Peak current	3C (30s)	2C (30s)	2C (30s)
Battery dimension	26*122*314mm	71*173*207mm	72*174*207mm

Module			
Rated capacity	17.82kWh	17.92kWh	20.096kWh
Max continuous charge and discharge current	100A	280A	314A
Size	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	314A
Size	1400*855*2360mm	1500*930*1950mm	1500*930*1950mm

LIQUID COOLING SMART ENERGY STORAGE PRODUCTS

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER



0.5C-1.548MW/3.097MWh
0.5C-1.736MW/3.473MWh

Temperature Difference inside the Battery Pack: <3°C

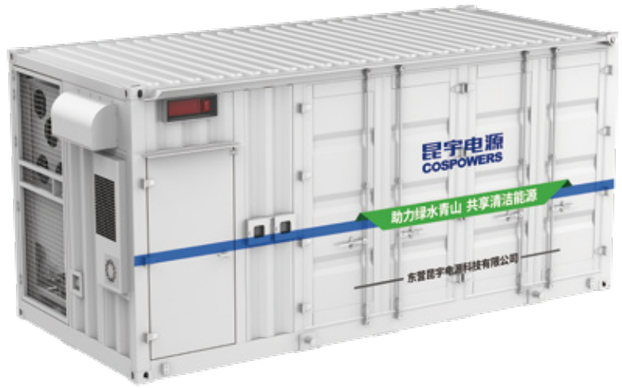
High Safety Fire Protection at the Pack Level

High Energy Density for Flexible Layout and Expansion

Modular Prefabrication No On-site Installation Required

PARAMETERS/ MODEL		1.548MW/3.097MWh-OS	1.736MW/3.473MWh-OS
Battery Module	Cell Capacity	280Ah	314Ah
	Battery Pack	1P48S	1P48S
	Module Voltage	153.6V	153.6V
	Module Power	43.008kWh	48.2304kWh
	Size	855*1102*252mm	855*1102*252mm
	IP Class	IP67	IP67
Battery Cluster	NOs.of Modules	8pcs	8pcs
	Cluster Nominal Voltage	1228.8V	1228.8V
	Voltage Range	1075.2~1401.6V	1075.2~1401.6V
	Single Cluster Power	344.064kWh	385.843kWh
	Battery Rack Dimension	972*1157*2480mm	972*1157*2480mm
Battery Cabin	Nos. of Battery Clusters	9pcs	9pcs
	Battery system energy	3.097MWh	3.473MWh
	Battery Cabin Dimension	20-foot Standard Shipping Container	20-foot Standard Shipping Container
	Cooling Method	Liquid cooling	Liquid cooling
	IP Class	IP54	IP54

0.5C-1.677MW/3.355MWh
0.5C-1.881MW/3.762MWh



Temperature Difference inside the Battery Pack: <3°C

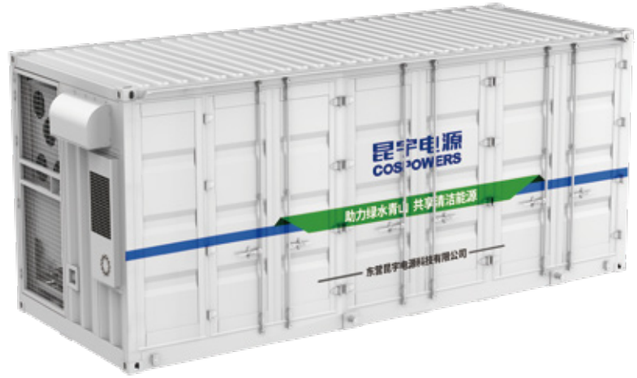
High Safety Fire Protection at the Pack Level

High Energy Density for Flexible Layout and Expansion

Modular Prefabrication No On-site Installation Required

PARAMETERS/ MODEL		1.677MW/3.355MWh	1.881MW/3.762MWh
Battery Module	Cell Capacity	280Ah	314Ah
	Battery Pack	1P52S	1P52S
	Module Voltage	166.4V	166.4V
	Module Power	46.592kWh	52.2496kWh
	Size	855*1157*252mm	855*1087*252mm
	IP Class	IP67	IP67
Battery Cluster	NOs.of Modules	8pcs	8pcs
	Cluster Nominal Voltage	1331.2V	1331.2V
	Voltage Range	1164.8~1476.8V	1164.8~1476.8V
	Single Cluster Power	372.736kWh	417.997kWh
	Battery Rack Dimension	972*1157*2480mm	972*1157*2480mm
Battery Cabin	Nos. of Battery Clusters	9pcs	9pcs
	Battery system energy	3.355MWh	3.762MWh
	Battery Cabin Dimension	20-foot	20-foot
	Cooling Method	Liquid cooling	Liquid cooling
	IP Class	IP54	IP54

0.5C-2.508MW/5.016MWh



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		2.508MW/5.016MWh
Battery Module	Cell Capacity	314Ah
	Battery Pack	1P52S
	Module Voltage	166.4V
	Module Power	52.2496kWh
	Size	855*1157*252mm
	IP Class	IP67
Battery Cluster	NOs.of Modules	8pcs
	Cluster Nominal Voltage	1331.2V
	Voltage Range	1164.8~1476.8V
	Single Cluster Power	417.997kWh
	Battery Rack Dimension	972*1157*2480mm
Battery Cabin	Nos. of Battery Clusters	12pcs
	Battery system energy	5.016MWh
	Battery Cabin Dimension	20-foot
	Cooling Method	Liquid cooling
	IP Class	IP54

AIR COOLING SMART ENERGY STORAGE PRODUCTS

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER

0.5C-2.509MW/5.018MWh

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		2.509MW/5.018MWh
Battery Module	Cell Capacity	280Ah
	Battery Pack	1P20S
	Module Voltage	64V
	Module Power	17.920kWh
	Size	420*880*235mm
Battery Cluster	NOs.of Modules	20pcs
	Cluster Nominal Voltage	1280V
	Voltage Range	1120.0~1420.0V
	Single Cluster Power	385.400kWh
	Battery Rack Dimension	1500*880*1834mm
Battery Cabin	Nos. of Battery Clusters	14pcs
	Battery system energy	5.018MWh
	Battery Cabin Dimension	45-foot
	Cooling Method	Air cooling
	IP Class	IP54

0.5C-2.813MW/5.627MWh

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		2.813MW/5.627MWh
Battery Module	Cell Capacity	314Ah
	Battery Pack	1P20S
	Module Voltage	64V
	Module Power	20.096kWh
	Size	420*880*235mm
Battery Cluster	NOs.of Modules	20pcs
	Cluster Nominal Voltage	1280V
	Voltage Range	1120.0~1420.0V
	Single Cluster Power	401.920kWh
	Battery Rack Dimension	972*1157*2480mm
Battery Cabin	Nos. of Battery Clusters	14pcs
	Battery system energy	5.627MWh
	Battery Cabin Dimension	40/45-foot
	Cooling Method	Air cooling
	IP Class	IP54

0.5C-1.270MW/2.540MWh

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		1.270MW/2.540MWh - OS
Battery Module	Cell Capacity	100Ah
	Battery Pack	3P18S
	Module Voltage	57.6V
	Module Power	17.280kWh
	Size	295*880*361mm
Battery Cluster	NOs.of Modules	21pcs
	Cluster Nominal Voltage	1209.6V
	Voltage Range	1058.4~1341.9V
	Single Cluster Power	362.880kWh
	Battery Rack Dimension	1400*855*2360mm
Battery Cabin	Nos. of Battery Clusters	7pcs
	Battery system energy	2.540MWh
	Battery Cabin Dimension	20-foot Standard Shipping Container
	Cooling Method	Air cooling
	IP Class	IP54

1C-3.011MW/3.011MWh

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		3.011MW/3.011MWh
Battery Module	Cell Capacity	100Ah
	Battery Pack	3P14S
	Module Voltage	44.8V
	Module Power	13.440kWh
	Size	295*689*361mm
Battery Cluster	NOs.of Modules	16pcs
	Cluster Nominal Voltage	716.8V
	Voltage Range	627.2~795.2V
	Single Cluster Power	215.040kWh
	Battery Rack Dimension	1200*702*2350mm
Battery Cabin	Nos. of Battery Clusters	14pcs
	Battery system energy	3.011MWh
	Battery Cabin Dimension	40-foot
	Cooling Method	Air cooling
	IP Class	IP54

2C-3.318MW/1.659MWh

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		3.318MW/1.659MWh
Battery Module	Cell Capacity	60Ah
	Battery Pack	2P20S
	Module Voltage	64V
	Module Power	7.680kWh
	Size	290*685*277mm
Battery Cluster	NOs.of Modules	12pcs
	Cluster Nominal Voltage	768.0V
	Voltage Range	672.0~852.0V
	Single Cluster Power	92.160kWh
	Battery Rack Dimension	900*671*2230mm
Battery Cabin	Nos. of Battery Clusters	18pcs
	Battery system energy	1.659MWh
	Battery Cabin Dimension	40-foot
	Cooling Method	Air cooling
	IP Class	IP54

INDUSTRIAL AND COMMERCIAL ENERGY STORAGE SMART ENERGY STORAGE PRODUCTS

SMART LITHIUM BATTERYTOTAL SOLUTION PROVIDER

ESS-30kW/207kWh-NA
ESS-60kW/207kWh-NA

AIR-COOLING LITHIUM BATTEY ENERGY STORAGE SYSTEM CABINET

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		30kW/207kWh	60kW/207kWh
DC side parameter	Rated power	45kW	90kW
	Input Voltage Range	700~830V	700~830V
	Maximum Input Current	32.5*2A	32.5*2A
AC grid connection parameter	Rated output power	30kW	60kW
	Maximum apparent power	33kVA	66kVA
	Maximum active power	33kW	66kW
	Rated grid voltage	3P3W+PE,480(±15%)V	3P3W+PE,480(±15%)V
	Rated frequency	60(±2.5)HZ	60(±2.5)HZ
	Current harmonic	＜3%	＜3%
AC off-grid parameter	Rated output power	30kW	60kW
	Maximum apparent power	33kVA	66kVA
	Maximum active power	33kW	66kW
	Rated grid voltage	3P3W+PE, 480 (±5% configurable) Vac	3P3W+PE, 480 (±5% configurable) Vac
	Rated frequency	60 (±5 configurable) Hz	60 (±5 configurable) Hz
Battery parameters	Battery Type	LFP	LFP
	Rated capacity	207kWh	207kWh
	Nominal voltage	691.2V	691.2V
	Operating voltage range	604.8~750V	604.8~750V
System parameters	HMI	8 inch LCD touch screen	8 inch LCD touch screen
	Fire protection system	Perfluorhexone fire protection	Perfluorhexone fire protection
	Cooling Method	Air cooling	Air cooling
	Operating temperature	0°C~55°C	0°C~55°C
	IP Class	IP54	IP54
	Size	1600*1100*2200mm	1600*1100*2200mm
	Weight	＜2500Kg	＜2600Kg
	Certification	UL1973, UL9540A, IEC62619, UL1741, FCC	

50kW/102kWh

OUTDOOR HYBRID SOLAR ENGERGY STORAGE SYSTEM

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

safe and reliable 1+1 redundancy design dual fire design

highly integrated design AC and DC integrated

fingertip monitoring cloud maintenance

PARAMETERS/ MODEL		50kW/102kWh
PV Input Parameters	Maximum Input Voltage	1000Vdc
	MPPT voltage range	300~750Vdc
	Rated power	75kW
	MPPT quantity	3
AC grid connection parameter	Maximum input apparent power	55kVA
	Maximum input active power	50kW
	Rated input voltage	220/400V, 3/N/PE
	Maximum continuous input current	72A
	Rated input frequency	50/60Hz
AC off-grid parameter	AC off-grid voltage	220/400V, 3/N/PE
	Maximum continuous output current	72A
	AC off-grid frequency	50/60Hz
Battery parameters	Battery Type	LFP
	Rated capacity	102kWh
	Nominal voltage	512V
	Operating voltage range	448~560V
	Charge/Discharge Rate	⩽0.5C
	Battery string	2 channel
	Maximum charging current	50A*2
System parameters	HMI	8 inch LCD touch screen
	Fire protection system	Perfluorhexone fire protection
	Cooling Method	Air cooling
	Operating temperature	0°C~55°C
	IP Class	IP54
	Size	＜1300*800*2000mm
	Weight	＜1500Kg

50kW/103kWh、100kW/224kWh

AIR-COOLING LITHIUM BATTEY ENERGY STORAGE SYSTEM CABINET

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		50kW/103kWh	100kW/224kWh
DC side parameter	DC branch	1 channel	1 channel
	DC busbar maximum voltage	1000V	1000V
	DC side maximum current	88A	165A
	DC voltage operating range	200~900V	650~1000V
AC grid connection parameter	Maximum input apparent power	50kVA	100kVA
	Maximum input active power	50kW	100kW
	Rated input voltage	220/380V, 3P4W+PE	220/380V, 3P4W+PE
	Maximum continuous input current	86A	152A
	Rated input frequency	50Hz	50Hz
AC off-grid parameter	AC off-grid voltage	220/380V, 3P4W+PE	220/380V, 3P4W+PE
	Maximum continuous output current	86A	152A
	AC off-grid frequency	50Hz	50Hz
Battery parameters	Battery Type	LFP	LFP
	Rated capacity	103kWh	224kWh
	Nominal voltage	345.6V	748.8V
	Operating voltage range	302~378V	655~819V
	Charge/Discharge Rate	⩽0.5C	⩽0.5C
System parameters	HMI	8 inch LCD touch screen	8 inch LCD touch screen
	Fire protection system	Perfluorhexone fire protection	Perfluorhexone fire protection
	Cooling Method	Air cooling	Air cooling
	Operating temperature	0°C~55°C	0°C~55°C
	IP Class	IP54	IP54
	Size	＜1200*1100*1850mm	＜1600*1100*2200mm
	Weight	＜1200Kg	＜2500Kg
	Certificates	CANS,CMA	

100kW/232kWh、100kW/215kWh

LIGUID-COOLING LITHIUM BATTER ENERGY STORAGE SYSTEM CABINET

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		100kW/232kWh - CN	100kW/215kWh - OS
DC side parameter	DC branch	1 channel	1 channel
	DC busbar maximum voltage	950V	950V
	DC side maximum current	165A	165A
	DC voltage operating range	650~950V	650~950V
AC grid connection parameter	Maximum input apparent power	110kVA	110kVA
	Maximum input active power	100kW	100kW
	Rated input voltage	220/380V，3P4W+PE	220/380V，3P4W+PE
	Maximum continuous input current	152A	152A
	Rated input frequency	50Hz	50Hz
AC off-grid parameter	AC off-grid voltage	220/380，3P4W+PE	220/380，3P4W+PE
	Maximum continuous output current	152A	152A
	AC off-grid frequency	50Hz	50Hz
Battery parameters	Battery Type	LFP	LFP
	Rated capacity	232kWh	215kWh
	Nominal voltage	832V	768V
	Operating voltage range	728~910V	672~840V
	Charge/Discharge Rate	⩽0.5C	⩽0.5C
System parameters	HMI	8 inch LCD touch screen	8 inch LCD touch screen
	Fire protection system	Perfluorhexone fire protection	Perfluorhexone fire protection
	Cooling Method	Liquid cooling	Liquid cooling
	Operating temperature	0°C~55°C	0°C~55°C
	IP Class	IP54	IP54
	Size	＜1100*1400*2350mm	＜1100*1400*2350mm
	Weight	＜2800kg	＜2800kg
	Certification	/	UL1973,UL9540A,IEC62619

200kW/372kWh、200kW/417kWh

LIGUID-COOLING LITHIUM BATTER ENERGY STORAGE SYSTEM CABINET

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		200kW/372kWh	200kW/417kWh
DC side parameter	DC branch	1 channel	1 channel
	DC busbar maximum voltage	1500V	1500V
	DC side maximum current	189A	189A
	DC voltage operating range	1060~1500V	1060~1500V
AC Side Parameters	Maximum input apparent power	220kVA	220kVA
	Maximum input active power	200kW	200kW
	Maximum continuous output current	690V	690V
	Maximum continuous input current	184A	184A
	Rated input frequency	50/60Hz	50/60Hz
Battery parameters	Battery Type	LFP	LFP
	Rated capacity	372kWh	417kWh
	Nominal voltage	1331.2V	1331.2V
	Operating voltage range	1164.8~1456V	1164.8~1456V
	Charge/Discharge Rate	⩽0.5C	⩽0.5C
System parameters	HMI	8 inch LCD touch screen	8 inch LCD touch screen
	Fire protection system	Perfluorhexone fire protection	Perfluorhexone fire protection
	Cooling Method	Liquid cooling	Liquid cooling
	Operating temperature	0°C~55°C	0°C~55°C
	IP Class	IP54	IP54
	Size	＜1400*1400*2350mm	＜1400*1400*2350mm
	Weight	＜3500Kg	＜3600Kg

Double Circuit 250kW/500kWh 500kW/1.066MWh、630kW/1.279MWh

INDUSTRIAL AND COMMERCIAL ENERGY STORAGE

Modular Standard Design

Multiple Protection Systems

Efficient Installation and Commissioning of AC/DC Integrated Systems

Intelligent Operation and Maintenance

	PARAMETERS/ MODEL	Double Circuit 250kW/500kWh	500kW/1.066MWh	630kW/1.279MWh
Battery Module	Cell Capacity	280Ah	280Ah	314Ah
	Module Voltage	44.8V	44.8V	44.8V
	Module Power	12.54kWh	12.54kWh	12.54kWh
	Size	420*645*235mm	420*645*235mm	420*645*235mm
Battery cluster	NOs.of Modules	14pcs	17pcs	17pcs
	Cluster Nominal Voltage	627.2V	761.6V	761.6V
	Voltage Range	548.8~695.8V	666.4~844.9V	666.4~844.9V
	Single Cluster Power	175.61kWh	213.24kWh	213.24kWh
	Battery Rack Dimension	1050*645*2090mm	1050*645*2090mm	1050*645*2090mm
Battery Cabin	Nos. of Battery Clusters	6pcs	5pcs	6pcs
	Battery system energy	250kW	500kW	630kW
	Battery Cabin Dimension	20-foot Standard Shipping Container		
	Cooling Method	Liquid cooling	Liquid cooling	Liquid cooling
	IP Class	IP54	IP54	IP54

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

ELECTRIC ENERGY STORAGE PROJECT CASE

[Universal] Weining Guizhou 80MW/160MWh wind power storage project	
Project time	2023.10
Project location	Weining,Guizhou

[High wind and sand] Wuqia Xinjiang 50MW/200MWh wind power storage project	
Project time	2023.10
Project location	Wuqia,Xinjiang

ELECTRIC ENERGY STORAGE PROJECT CASE

[High wind and sand] Zhongwei Ningxia 100MW/200MWh photovoltaic composite project	
Project time	2023.09
Project location	Zhongwei,Ningxia

[High wind and sand] Linze Gansu 40MW/80MWh photovoltaic sand control and energy storage project	
Project time	2022.12
Project location	Linze,Gansu

ELECTRIC ENERGY STORAGE PROJECT CASE

[High wind and sand] Minle Gansu 10MW/20MWh photovoltaic power generation and energy storage project

Project time	2022.11
Project location	Zhangye,Gansu

[Universal] Xiantao Hubei57.5MW/115MWh fishery and photovoltaic complementary power generation project

Project time	2022.10
Project location	Xiantao,Hubei

ELECTRIC ENERGY STORAGE PROJECT CASE

[High temperature] East Africa regional photovoltaic power generation and energy storage project

Project time	2022.03
Project location	East Africa

[Universal] Shandong Tengzhou 20MW/40MWh agricultural and photovoltaic complementary power generation project

Project time	2022.02
Project location	Zaozhuang, Shandong

ELECTRIC ENERGY STORAGE PROJECT CASE

[PV storage integration] Source-grid-load-storage intelligent microgrid project	
Project time	2022.01
Project location	Chengde,Hebei

[High altitude] Tibet Sangzhuzi District 20MW/40MWh agricultural and photovoltaic complementary energy storage project	
Project time	2020.12
Project location	Jiangdang Township, Sangzhuzi District, Xigaze City, Tibet

ELECTRIC ENERGY STORAGE PROJECT CASE

[High cold] Russian distributed energy storage project	
Project time	2020.12
Project location	Sakhalin, Russia

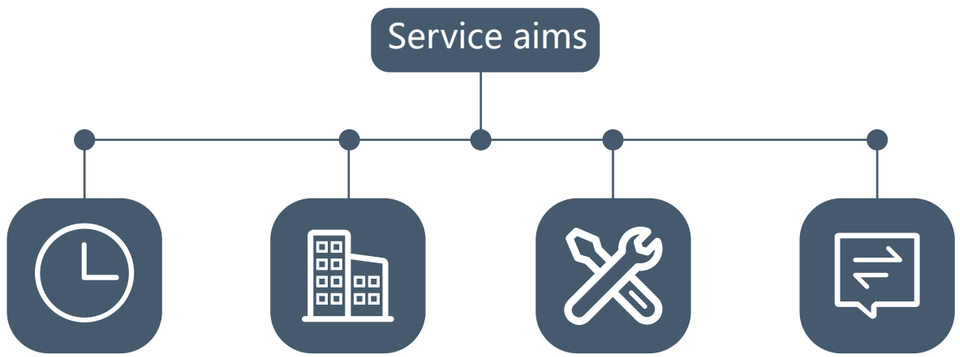
[High salt mist] Dongying Kenli Hongtai 20MW/40MWh fishery and photovoltaic complementary power generation project	
Project time	2020.12
Project location	Dongying,Shandong

COOPERATIVE CUSTOMERS

国家电网 STATE GRID	国家能源集团 CHN ENERGY	中国华电 CHD
中国国电 CHINA GUODIAN	中国华能 CHINA HUANENG	龙源电力技术有限公司
中国南方电网 CHINA SOUTHERN POWER GRID	山东能源集团有限公司	中广核 CGN
水发 SHUIFA	FGI XIN FENG GUANG	江投集团 江西赣能股份有限公司 JXIC JIANGXI GANNENG Co.,Ltd.
大唐集团公司 CHINA DATANG	兴能电力 XINGNENG ELECTRIC POWER	CETC 湖南红太阳光电科技有限公司
TBEA 特变电工	KGE	财金清洁能源
HONG SOLAR	...	

AFTER-SALES SERVICE

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



2-hour real-time response;
Arriving at the scene within 8 hours;
Solution within 24 hours;
Troubleshooting within 72 hours.

We have nearly 20 regional service centers and spare parts warehouses in 12 countries and regions around the world.

We provide technical services for large-scale projects 100+ times and on-site installation &maintenance train-ings 20+ times during the whole year.

The power stations of 10+ provinces are visited during the whole year.