



**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 NETWORK 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 m<sup>2</sup>

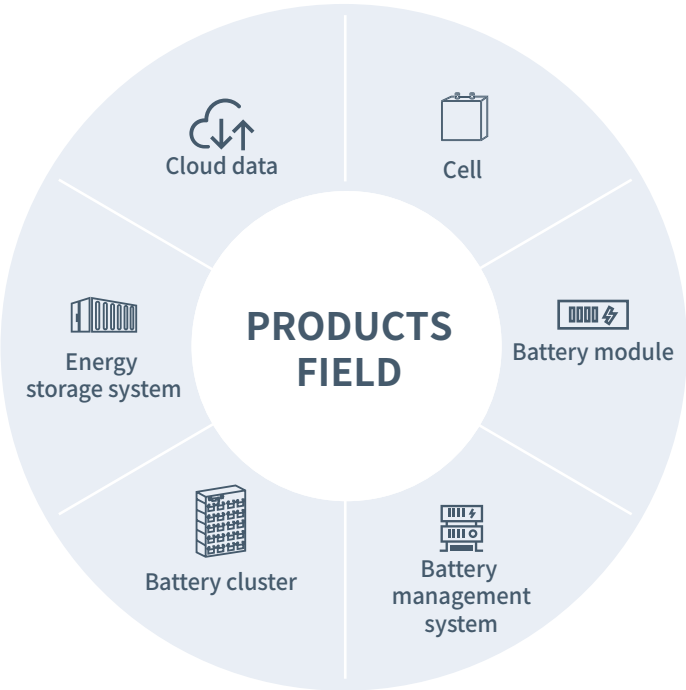
Factory area

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

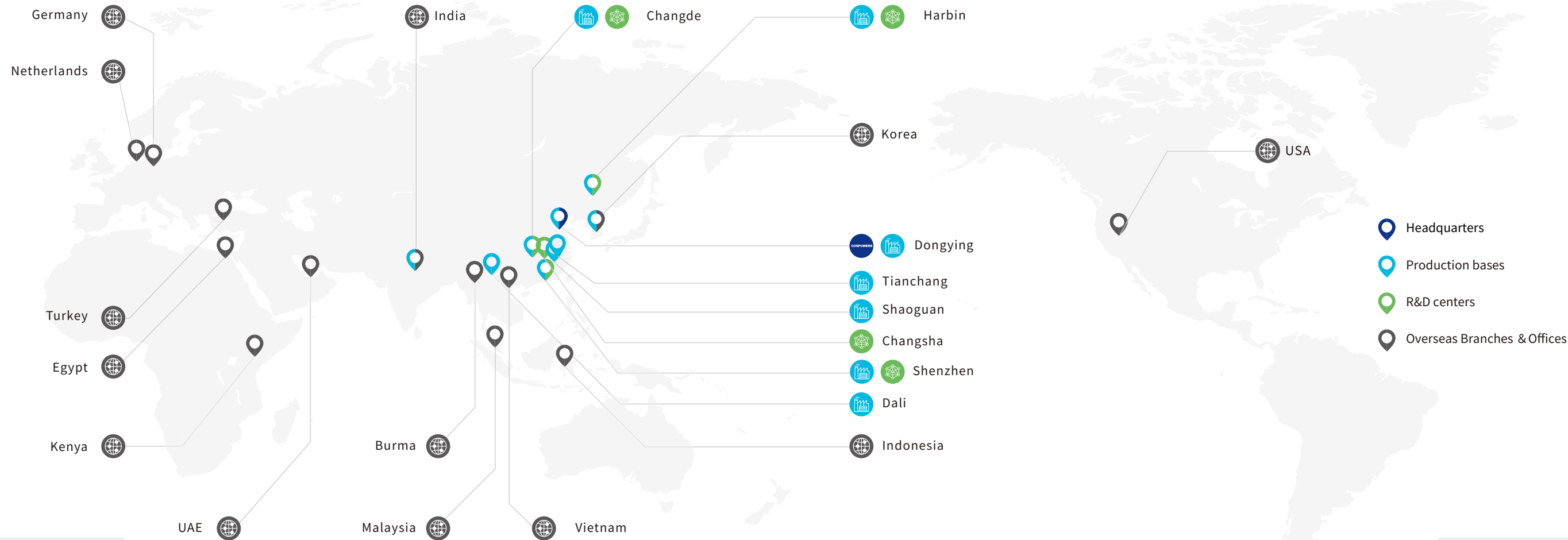
Production Base

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

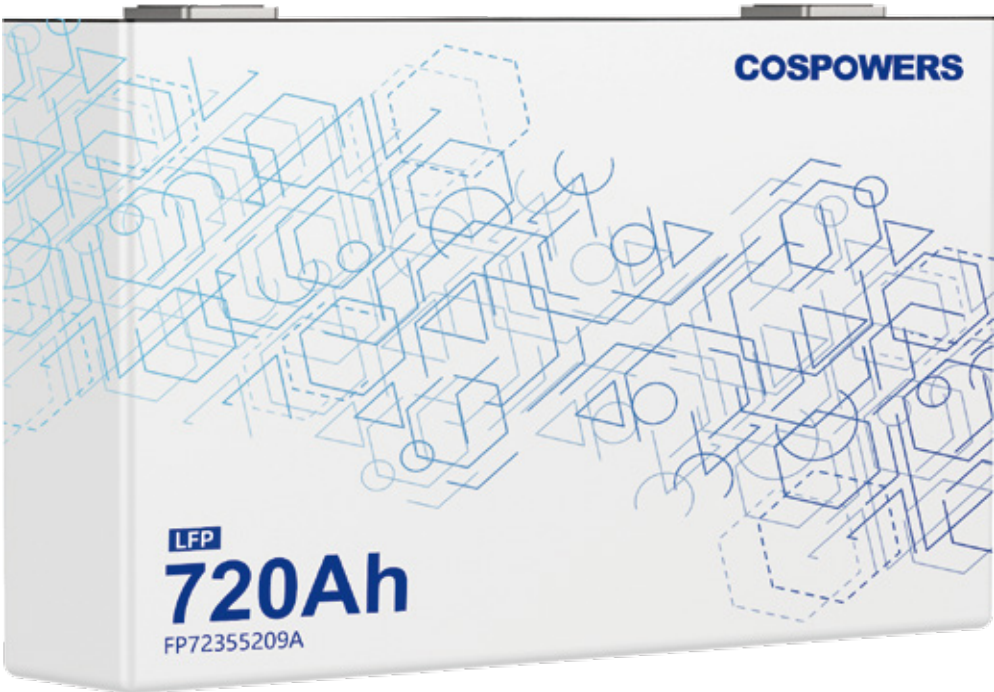
Cospowers of Beijing, Anhui, India, South Korea have been established successively; A single 100MWh+ energy storage system successfully connected to the grid; Changsha Technology Institute was established; The high energy liquid cooled energy storage system products was released, and the 80MWh system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

2024

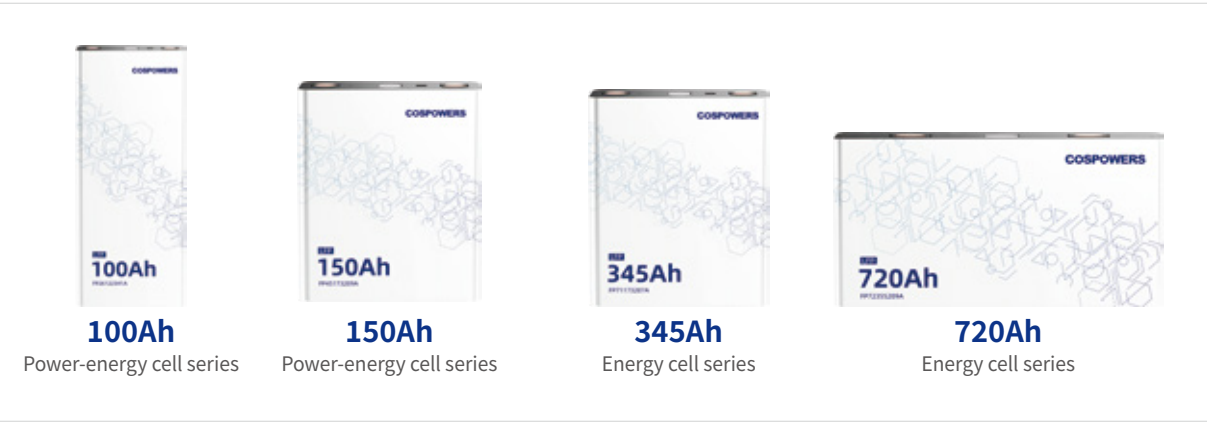
Cospowers Technology Co., Ltd was established; Changde 1.5GWh sodium battery production line started; Anhui plant of 1.5GWh was put into operation;

# ENERGY STORAGE CELL

SMART LITHIUM BATTERY TOTAL SOLUTION PROVIDER



# LITHIUM-ION BATTERY CELL



**LFP material**  
Optimal energy storage  
lithium-ion battery



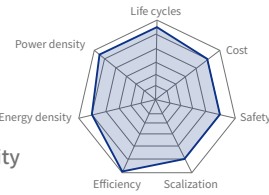
**Prismatic battery**  
Multi-level battery  
protection



**Advanced stacking process**  
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





# SODIUM-ION BATTERY CELL

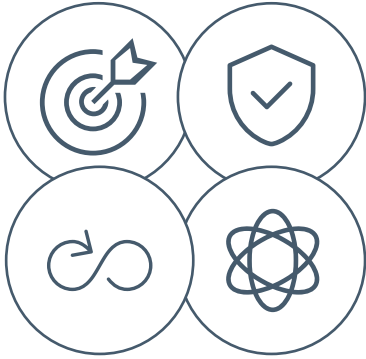


## More Professional Research Patent Technology Accumulation Cooperation with Famous Universities

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  $-40^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . 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]
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
3	FP31136227A	60Ah	3.2V	2.5-3.65V	2C/4C
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
3	FP31136170A	50Ah	3.2V	2.5-3.65V	1C/3C
4	FP31136227A	75Ah	3.2V	2.5-3.65V	1C/3C
5	FP31136227A	80Ah	3.2V	2.5-3.65V	1C/3C
6	FP26122320A	100Ah	3.2V	2.5-3.65V	1C/3C
7	FP31136282A	100Ah	3.2V	2.5-3.65V	1C/3C
8	FP26122300A	100Ah	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
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/1P
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
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





COMMUNICATION  
ENERGY STORAGE  
PRODUCTS

SMART LITHIUM BATTERY SERIES-3U  
CS48100T/CS48150T

Application Field: Urban Base Station、  
Remote Area Base Station、Emergency Communication Base Station、  
Mobile Base Station、Key Industry Base Station、High-load Base Station、  
Newly-built Base Station



Good performance in  
high-temperature  
environments  
Natural cooling at  
ambient  
temperature <50°C,  
saving energy



Intelligent Protection  
With voltage,  
current and temperature  
intelligent protection  
unctions



Easy for operation  
and maintenance  
Integrated BMS design,  
battery supports SOC  
self-management、  
SOH management  
and other functions



Anti-theft Function  
Multiple anti-theft  
functions can be  
selected



Operating Mode  
Self-management constant voltage discharging, power  
management of constant voltage discharge, battery characteristic  
discharging mode and constant power discharge, which realize  
the mixed use of different batteries and profiting from storing  
electricity during off-peak hours and discharging during peak  
hours according to the Peak-valley price.

BMS Introduction

	INTRODUCTION
Communication interface	RS485/CAN
Information sampling function	With each series-connected single cell voltage, external busbar voltage, total battery pack voltage, charging and discharging current, cell surface temperature, BMS single-board temperature sampling function
Battery Cell equalization function	The battery has a passive equalization function, which can be activated when the cell pressure difference exceeds a certain value during charging.
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection
Voltage acquisition accuracy	0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%
Current acquisition accuracy	Detection accuracy≤1% (0.5C charging/discharging)
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional
System component failure alarm	It has failure detection and alarm function for key components of BMS board. While it is detected with temperature sensor failure, voltage detection failures, charge and discharge MOS failure, an alarm will be generated and the charge and discharge loops will be disconnected (if the charge and discharge loop is damaged, it is not required to disconnect), the battery cannot recover automatically, and all the indicators flash to prompt.
History logs	500 historical records, 10000 historical records and life-cycle storage are optional; Independent storage space; BMS has power failure preservation capability; Historical data records include battery voltage, current, ambient temperature, SOC, SOH, cycle times, cumulative discharge capacity and other data

Module Specification and Parameters

Model	CS48100T	CS48150T
Connection method	1P15S	1P15S
Rated energy	4800Wh	7200Wh
Rated capacity	100Ah	150Ah
Rated voltage	48V	48V
Voltage range	42~58V	42~58V
Charging current	50A	50A
Discharge current	100A	100A
Operating temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C	
Self-discharging rate	≤3% (0~30°C/3 months)	≤3% (0~30°C/3 months)
Size(W*D*H)	440*420*130mm	440*525*130mm
Weight	42Kg	59Kg
Certification	IEC62619, IEC62620, UL1973, UN38.3, ROHS, TLC, EMC	IEC62619, IEC62620, UL1973, UN38.3, ROHS, TLC



# SMART LITHIUM BATTERY SERIES-5U CS48300T

Application Field: Urban Base Station,  
Remote Area Base Station, Emergency Communication Base Station,  
Mobile Base Station, Key Industry Base Station, High-load Base Station,  
Newly-built Base Station



**Good performance in high-temperature environments**  
Natural cooling at ambient temperature <50°C, saving energy



**Intelligent Protection**  
With voltage, current and temperature intelligent protection unctions



**Easy for operation and maintenance**  
Integrated BMS design, battery supports SOC self-management、SOH management and other functions



**Anti-theft Function**  
Multiple anti-theft functions can be selected



**Operating Mode**  
Self-management constant voltage discharging, power management of constant voltage discharge, battery characteristic discharging mode and constant power discharge, which realize the mixed use of different batteries and profiting from storing electricity during off-peak hours and discharging during peak hours according to the Peak-valley price.

## BMS Introduction

	INTRODUCTION
Communication interface	RS485/CAN
Information sampling function	With each series-connected single cell voltage, external busbar voltage, total battery pack voltage, charging and discharging current, cell surface temperature, BMS single-board temperature sampling function
Battery Cell equalization function	The battery has a passive equalization function, which can be activated when the cell pressure difference exceeds a certain value during charging.
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection
Voltage acquisition accuracy	0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%
Current acquisition accuracy	Detection accuracy≤1% (0.5C charging/discharging)
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional
System component failure alarm	It has failure detection and alarm function for key components of BMS board. While it is detected with temperature sensor failure, voltage detection failures, charge and discharge MOS failure, an alarm will be generated and the charge and discharge loops will be disconnected (if the charge and discharge loop is damaged, it is not required to disconnect), the battery cannot recover automatically, and all the indicators flash to prompt.
History logs	500 historical records, 10000 historical records and life-cycle storage are optional; independent storage space; BMS has power failure preservation capability; Historical data records include battery voltage, current, ambient temperature, SOC, SOH, cycle times, cumulative discharge capacity and other data

## Module Specification and Parameters

Model	CS48300T
Connection method	1P15S
Rated energy	14400Wh
Rated capacity	300Ah
Rated voltage	48V
Voltage range	42~58V
Charging current	100A
Discharge current	100A
Operating temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C
Self-discharging rate	≤3% (0~30°C/3 months)
Size(W*D*H)	442*545*222mm
Weight	105Kg
Certification	IEC62619、UL1973、UL9540A

# SMART SODIUM-ION BATTERY SERIES-4U/5U CN4875T/CN48100T

Application Field: Urban Base Station,  
Remote Area Base Station, Emergency Communication Base Station,  
Mobile Base Station, Key Industry Base Station, High-load Base Station,  
Newly-built Base Station



**Good performance in high-temperature environments**  
Natural cooling at ambient temperature <50°C, saving energy



**Intelligent Protection**  
With voltage, current and temperature intelligent protection unctions



**Easy for operation and maintenance**  
Integrated BMS design, battery supports SOC self-management、SOH management and other functions



**Anti-theft Function**  
Multiple anti-theft functions can be selected



**Operating Mode**  
Self-management constant voltage discharging, power management of constant voltage discharge, battery characteristic discharging mode and constant power discharge, which realize the mixed use of different batteries and profiting from storing electricity during off-peak hours and discharging during peak hours according to the Peak-valley price.

## BMS Introduction

	INTRODUCTION
Communication interface	RS485/CAN
Information sampling function	With each series-connected single cell voltage, external busbar voltage, total battery pack voltage, charging and discharging current, cell surface temperature, BMS single-board temperature sampling function
Battery Cell equalization function	The battery has a passive equalization function, which can be activated when the cell pressure difference exceeds a certain value during charging.
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection
Voltage acquisition accuracy	0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%
Current acquisition accuracy	Detection accuracy≤1% (0.5C charging/discharging)
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional
System component failure alarm	It has failure detection and alarm function for key components of BMS board. While it is detected with temperature sensor failure, voltage detection failures, charge and discharge MOS failure, an alarm will be generated and the charge and discharge loops will be disconnected (if the charge and discharge loop is damaged, it is not required to disconnect), the battery cannot recover automatically, and all the indicators flash to prompt.
History logs	500 historical records, 10000 historical records and life-cycle storage are optional; independent storage space; BMS has power failure preservation capability; Historical data records include battery voltage, current, ambient temperature, SOC, SOH, cycle times, cumulative discharge capacity and other data

## Module Specification and Parameters

Model	CN4875T	CN48100T
Connection method	1P15S	1P16S
Rated energy	3480Wh	4640Wh
Rated capacity	75Ah	100Ah
Rated voltage	46.4V	46.4V
Voltage range	40~58V(22~58V)	40~58V(22~58V)
Charging current	35A	50A
Discharge current	75A	100A
Operating temperature	charge:-10~50°C; discharge:-30~70°C; Storage:-30~45°C	charge:-10~50°C; discharge:-30~70°C; Storage:-30~45°C
Self-discharging rate	≤3% (0~30°C/3 months)	≤3% (0~30°C/3 months)
Size(W*D*H)	440*430*176mm	440*430*222mm
Weight	55Kg	76Kg
Life cycles	> 4000times @80%DOD,0.5C/0.5C	
Certification	YD2344.1-2023、UN383	



# EMBEDDED SERIES-2U

## CF4850T/CF48100T

Application Field: Urban Base Station,  
Remote Area Base Station, Emergency Communication Base Station,  
Mobile Base Station, Key Industry Base Station, High-load Base Station,  
Newly-built Base Station



- Good performance in high-temperature environments**  
Natural cooling at ambient temperature <50°C, saving energy
- Intelligent Protection**  
With voltage, current and temperature intelligent protection unctions
- Service life**  
25°C,1500times @0.5C
- Easy for operation and maintenance**  
Integrated BMS design, battery supports SOC self-management、SOH management and other functions
- Anti-theft function**  
Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional

Model	CF4850T		CF48100T
Connection method	1P15S	1P16S	1P15S
Rated energy	2400Wh	2560Wh	4800Wh
Rated capacity	50Ah	50Ah	100Ah
Rated voltage	48V	51.2V	48V
Voltage range	42~52.5V	43.2~56.8V	42~52.5V
Charging current	25A	25A	50A
Discharge current	50A	50A	100A
Operating Temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C		
Self-discharging rate	≤3% (0~30°C/3 months)		
Size(W*D*H)	440*390*88mm		440*530*88mm(19 inch) 492*525*88mm(21inch)
Weight	24Kg	25Kg	42Kg(19inch)/42.5Kg(21inch)
Communication interface	RS485/RS232/CAN		
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection		
Voltage acquisition accuracy	0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%		
Current acquisition accuracy	Detection accuracy≤1% (0.5C charging/discharging)		
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional		
Certification	IEC62619、UN38.3、TLC、ROHS		IEC62619、IEC62620、UL1973、UL9540A、UN38.3

# EMBEDDED SERIES-3U

## CF48100T/CF48150T

Application Field: Urban Base Station,  
Remote Area Base Station, Emergency Communication Base Station,  
Mobile Base Station, Key Industry Base Station, High-load Base Station,  
Newly-built Base Station




- Good performance in high-temperature environments**  
Natural cooling at ambient temperature <50°C, saving energy
- Intelligent Protection**  
With voltage, current and temperature intelligent protection unctions
- Service life**  
25°C,1500times @0.5C
- Easy for operation and maintenance**  
Integrated BMS design, battery supports SOC self-management、SOH management and other functions
- Anti-theft function**  
Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional


Model	CF48100T		CF48150T
Connection method	1P15S	1P16S	1P15S
Rated energy	4800Wh	5120Wh	7200Wh
Rated capacity	100Ah	100Ah	150Ah
Rated voltage	48V	51.2V	51.2V
Voltage range	42~52.5V	43.2~56.8V	43.2~56.8V
Charging current	50A	50A	75A
Discharge current	100A	100A	150A
Operating temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C		
Self-discharging rate	≤3% (0~30°C/3 months)		
Size(W*D*H)	440*420*130mm		440*525*130mm
Weight	41Kg	43Kg	56Kg
Communication interface	RS485/RS232/CAN		
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection		
Voltage acquisition accuracy	0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%		
Current acquisition accuracy	Detection accuracy≤1% (0.5C charging/discharging)		
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional		
Certification	IEC62619、IEC62620、UL1973、UL9540A、UN38.3、ROHS、TLC、EMC		IEC62619、IEC62620、UL1973、UN38.3、ROHS、EMC


# EMBEDDED SERIES-5U/6U CF48300T/CF48200T


Application Field: Urban Base Station、  
Remote Area Base Station、Emergency  
Communication Base Station、Mobile  
Base Station、Key Industry Base  
Station、High-load Base Station、  
Newly-built Base Station




- 

**Good performance in high-temperature environments**  
Natural cooling at ambient temperature <50°C, saving energy
- 

**Intelligent Protection**  
With voltage, current and temperature intelligent protection unctions
- 

**Service life**  
25°C,1500times @0.5C
- 

**Easy for operation and maintenance**  
Integrated BMS design, battery supports SOC self-management 、SOH management and other functions
- 


**Anti-theft function**  
Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional


Model	CF48300T		CF48200T	
Connection Method	1P15S		1P15S	1P16S
Rated Energy	14400Wh		9600Wh	10240Wh
Rated Capacity	300Ah		200Ah	200Ah
Rated Voltage	48V		48V	48V
Voltage Range	42~52.5V		42~52.5V	43.5~56.8V
Charging current	150A		150A	150A
Discharge current	150A		150A	150A
Operating temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C			
Self-discharging rate	≤3% (0~30°C/3 months)			
Size(W*D*H)	542*480*222mm 442*545*222mm		440*450*260mm	440*450*260mm
Weight	105Kg		83Kg	87Kg
Communication interface	RS485/RS232/CAN			
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection			
Voltage acquisition accuracy	0~5V , Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%			
Current acquisition accuracy	Detection accuracy≤1% （0.5C charging/discharging）			
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional			
Certification	IEC62619、IEC62620、UN38.3		IEC62619、IEC62620、UL1973、UN38.3、ROHS、EMC	


# OUTDOOR INTEGRATED SERIES CF4850Y


Application Field: Urban Base Station、  
Remote Area Base Station、Emergency  
Communication Base Station、  
Mobile Base Station、Key Industry Base  
Station、High-load Base Station、  
Newly-built Base Station




- 

**No Need Space**  
Various installations of hanging poles/walls/towers Saving space
- 

**Rapid Deployment**  
In 1 hour installation Installation time saved by 80%
- 

**Higher Security**  
P65 dustproof and waterproofintegrated outdoor anti-thunder protection
- 

**Maintenance Free**  
Fanless design, natural heat dissipationOutdoor environment adaptation, no daily maintenance during the life cycle
- 

**Widely Temperature Range**  
The operating temperature ranges from -40 ° C to +55 ° C

Model	CF4850Y	
Connection method	1P15S	1P16S
Rated energy	2400Wh	2560Wh
Rated capacity	50Ah	50Ah
Rated voltage	48V	51.2V
Voltage range	42~52.5V	43.2~56.8V
Charging current	50A	50A
Discharge current	50A	50A
Operating temperature	charge:0~50°C; discharge:-20~55°C; Storage:-30~45°C	
Self-discharging rate	≤3% (0~30°C/3 months)	
Size(W*D*H)	420*300*190mm	
Weight	29Kg	30Kg
Life span	3000times @80%DOD, 0.5C/0.5C	
Communication interface	RS485/RS232/CAN	
Charging current Limit function	With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection	
Voltage acquisition accuracy	0~5V , Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5%	
Current acquisition accuracy	Detection accuracy≤1% （0.5C charging/discharging）	
Anti-theft function	Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions are optional	
Certification	IEC62619、UL1973、UL9540A、UN38.8、ROHS、TLC	



# POWER SUPPLY SYSTEM CABINET

Application Field  
Energy Storage in  
Communication Base Stations  
for Peak Shaving and Valley  
Filling



MODEL	POWER SUPPLY SYSTEM CABINET	
Solar energy input	Maximum DC power	15000W
	Optimum operating voltage	120Vdc
	Maximum Input Current	200A
	MPPT voltage range	60~150Vdc
	MPPT Number of traced paths	5
AC Input	Rated input voltage	220Vac
	Input Voltage Range	85~300Vac
	Input Frequency	50/60Hz
	Max input current limit	≤55A (Single phase)
	Power factor	>99%
Battery configuration	Battery voltage range	43.2~56Vdc
	Rated battery voltage	51.2Vdc
	Battery charge/discharge power	5120W(charge)/10240W(discharge)
	Max charge/discharge current	100A(charge)/200A(discharge)
	Communication method	RS485
DC output (3 channels)	Output DC voltage range	42~58Vdc
	Output DC voltage	54.0Vdc
	Output DC current	0~200A
	Output efficiency	≥96%Pure electric mode, ≥95%Pure solar mode
	Output AC voltage	220Vac±2%
Inverter AC output (1 channel)	Output frequency	50/60Hz±1
	Max output power	4500W
	Operating temperature	-10~50°C
	Operating altitude	<2000m
	Storage temperature	-20~60°C
Application environment	Relative humidity	5%~90%RH
	Noise	<30dB
	Size	750*750*1671.5mm
	IP Class	IP43
Mechanical appearance	Cooling Method	Temperature controlled heat dissipation
	Installation method	Install on ground
	Communication method	WIFI,RS458

## DATA CENTER ENERGY PRODUCTS





# DATA CENTER ENERGY STORAGE SERIES

## 5-15mins



- 1

Good high-temperature performance, no need for air conditioning cooling below 40°C, saves energy.
- 2

The PACK module is designed with a modular standard, allowing for flexible combinations and easy maintenance.
- 3

It has a long cycle life, with 3000 cycles at 0.5C/0.5C, 80% DOD, at 25°C.
- 4

The touch LCD provides an intuitive display of various parameters, records, status, and alarms.
- 5

It supports parallel operation of multiple units and cabinet-level fire protection.
- 6

Supports second and third line designs, meeting the requirements of UPS models.
- 7

It features a three-level BMS management system, ensuring the safe and reliable operation of the system from the cell level to the system level.
- 8

It has a high energy density, saving 70% of the floor space compared to lead-acid batteries.

### Product parameters

PRODUCT MODEL	CF24050U	CF48050U	CF486100U	CF512100U
Cell material	LFP			
Nominal voltage	240Vdc	480Vdc	486.4Vdc	512Vdc
Rated charging voltage	262.5Vdc	525Vdc	532Vdc	560Vdc
Nominal capacity	50Ah/12kWh	50Ah/24kWh	100Ah/48.64kWh	100Ah/51.2kWh
Self-discharge rate	≤3% (0~30°C/3 months)			
Standard discharge current	50AContinuous discharge(1C)	50AContinuous discharge(1C)	100AContinuous discharge(1C)	100AContinuous discharge(1C)
Maximum discharge current	300AContinuous discharge(6C)	300AContinuous discharge(6C)	600AContinuous discharge(6C)	600AContinuous discharge(6C)
Standard charging current	25A(0.5C)	25A(0.5C)	50A(0.5C)	50A(0.5C)
Maximum charging current	50A(1C)	50A(1C)	100A(1C)	100A(1C)
Cycle life	3000 times @80%DOD, 0.5C/0.5C			
Communication interface	CAN; RS485; Dry contact			
Protection functions	Over-temperature, over-current, short circuit, over-charging, over-discharging, etc.			
Dimensions (W*D*H)	600*800*1400mm	600*800*2000mm	600*800*2200mm	600*800*2200mm
Certifications	UN			
Environment				
Storage temperature	0~40°C			
Transport temperature	-20~60°C			
Operating temperature	15~45°C (Recommended operating temperature: 20-25°C)			
Relative humidity	5~95%			
Altitude	≤2000m			
Cell Specifications				
Nominal capacity	50Ah	50Ah	50Ah	50Ah
Nominal voltage	3.2Vdc	3.2Vdc	3.2Vdc	3.2Vdc
Working voltage range	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc
Battery Module Specifications				
Configuration	1P15S	1P15S	2P20S/2P18S	2P20S
Nominal voltage	48Vdc	48Vdc	64/57.6Vdc	64Vdc
Working voltage range	42~52.5Vdc	42~52.5Vdc	56~70Vdc/50.4~63Vdc	56~70Vdc
Battery Pack Specifications				
Configuration	1P75S	1P150S	2P152S	2P160S
Nominal capacity	50Ah	50Ah	100Ah	100Ah
Nominal voltage	240Vdc	480Vdc	486.4Vdc	512Vdc
Working voltage range	210~262.5Vdc	420~525Vdc	425.6~532Vdc	448~560Vdc
Weight	290Kg	430Kg	790Kg	810Kg

# DATA CENTER ENERGY STORAGE SERIES

## 30-60 mins 1C series



- 1

Good high-temperature performance, no need for air conditioning cooling below 40°C, saves energy.
- 2

The PACK module is designed with a modular standard, allowing for flexible combinations and easy maintenance.
- 3

It has a long cycle life, with 3000 cycles at 0.5C/0.5C, 80% DOD, at 25°C.
- 4

The touch LCD provides an intuitive display of various parameters, records, status, and alarms.
- 5

It supports parallel operation of multiple units and cabinet-level fire protection.
- 6

Supports second and third line designs, meeting the requirements of UPS models.
- 7

It features a three-level BMS management system, ensuring the safe and reliable operation of the system from the cell level to the system level.
- 8

It has a high energy density, saving 70% of the floor space compared to lead-acid batteries.

### Product parameters

PRODUCT MODEL	CF22450U	CF192100U	CF224100U	CF384100U	CF480100U	CF512100U
Cell material	LFP					
Nominal voltage	224Vdc	192Vdc	224Vdc	384Vdc	480Vdc	512Vdc
Rated charging voltage	245Vdc	210Vdc	245Vdc	420Vdc	525Vdc	560Vdc
Nominal capacity	50Ah/11.2kWh	100Ah/19.2kWh	100Ah/22.4kWh	100Ah/38.4kWh	100Ah/48kWh	100Ah/51.2kWh
Self-discharge rate	≤3% (0-30°C/3 months)					
Standard discharge current	25AContinuous discharge(0.5C)	50AContinuous discharge(0.5C)				
Maximum discharge current	50AContinuous discharge(1C)	200AContinuous discharge(2C)				
Standard charging current	12.5A (0.25C)	25A (0.25C)	25A (0.25C)	25A (0.25C)	25A (0.25C)	25A (0.25C)
Maximum charging current	25A (0.5C)	50A (0.5C)	50A (0.5C)	50A (0.5C)	50A (0.5C)	50A (0.5C)
Cycle life	3000 times @80%DOD, 0.5C/0.5C					
Communication interface	CAN; RS485; Dry contact					
Protection functions	Over-temperature, over-current, short circuit, over-charging, over-discharging, etc.					
Dimensions (W*D*H)	600*800*1200mm	600*800*1200mm	600*800*1400mm	600*800*2000mm	600*800*2000mm	600*800*2000mm
Certifications	Certification in progress	UN				
Environment						
Storage temperature	0~40°C					
Transport temperature	-20~60°C					
Operating temperature	15~45°C (Recommended operating temperature: 20~25°C)					
Relative humidity	5~95%					
Altitude	≤2000m					
Cell Specifications						
Nominal capacity	50Ah	100Ah	100Ah	100Ah	100Ah	100Ah
Nominal voltage	3.2Vdc	3.2Vdc	3.2Vdc	3.2Vdc	3.2Vdc	3.2Vdc
Working voltage range	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc	2.5~3.6Vdc
Battery Module Specifications						
Configuration	1P14S	1P15S	1P14S	1P15S	1P15S	1P16S
Nominal voltage	44.8Vdc	48Vdc	44.8Vdc	48Vdc	48Vdc	51.2Vdc
Working voltage range	39.2~49Vdc	42~53.5Vdc	39.2~49Vdc	42~53.5Vdc	42~52.5Vdc	44.8~56Vdc
Battery Pack Specifications						
Configuration	1P70S	1P60S	1P70S	1P120S	1P150S	1P160S
Nominal capacity	50Ah	100Ah	100Ah	100Ah	100Ah	100Ah
Nominal voltage	224Vdc	192Vdc	224Vdc	384Vdc	480Vdc	512Vdc
Working voltage range	196~245Vdc	168~210Vdc	196~245Vdc	336~420Vdc	420~525Vdc	448~560Vdc
Weight	225Kg	300Kg	310Kg	490Kg	590Kg	610Kg





INDUSTRIAL AND  
COMMERCIAL  
ENERGY STORAGE

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

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			
Battery parameters	Cell Capacity	100Ah (LFP)			
	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
	Max Charging Current	50A*2
System level parameters	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
	Weight	<1500Kg
Others	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
	Nominal Input Frequency	50/60Hz
AC off-grid parameter	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
	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	<2900Kg
Others	Certification	Domestic Type Test Report

# PowerEco-125kW/261kWh

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/261kWh-CN
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
	Nominal Input Frequency	50/60Hz
AC off-grid parameter	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
	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	<2900Kg
Others	MPPT	/
	STS	/
	Certification	Domestic Type Test Report

# PowerEco-125kW/261kWh

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/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
	Nominal Input Frequency	50/60Hz
AC off-grid parameter	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
	C Rate	≤0.5C
System level parameters	HMI	7 Inch touch screen
	Fire Safety	Aerosol fire suppression
	Cooling Method	Liquid Cooling
	Operating Temp.	-20~55°C
	IP Degree	IP54
	Dimension(W*D*H)	<1700*1350*2200mm
	Weight	<3500Kg
Others	MPPT	100kW (Optional)
	STS	200kW (Optional)
	Certification	IEC62619、CE-EMC、CE-LVD、CE-RED

# PowerEco-372kWh

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	
	Nominal Input Frequency	50/60Hz	
AC off-grid parameter	Nominal Voltage	400V, 3P3W+PE/3P4W+PE	
	Max Output Current	416A	
	Nominal Frequency	50/60Hz	
Battery parameters	Cell Capacity	280Ah(LFP)	314Ah(LFP)
	Capacity	464kWh	522kWh
	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℃	
	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
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 <sup>+</sup> )
	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

# 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.

# DIGITAL ENERGY APPLICATION CASES



China Tower Zhejiang Smart Lithium Battery Project  
· Application Scenarios: Communication base station  
· Project Location: Zhejiang



China Mobile Hunan 5G Micro Station Integration Project  
· Application Scenarios: Communication base station  
· Project Location: Hunan



DIGITAL ENERGY  
APPLICATION CASES



China Mobile Shanxi Base Station Project

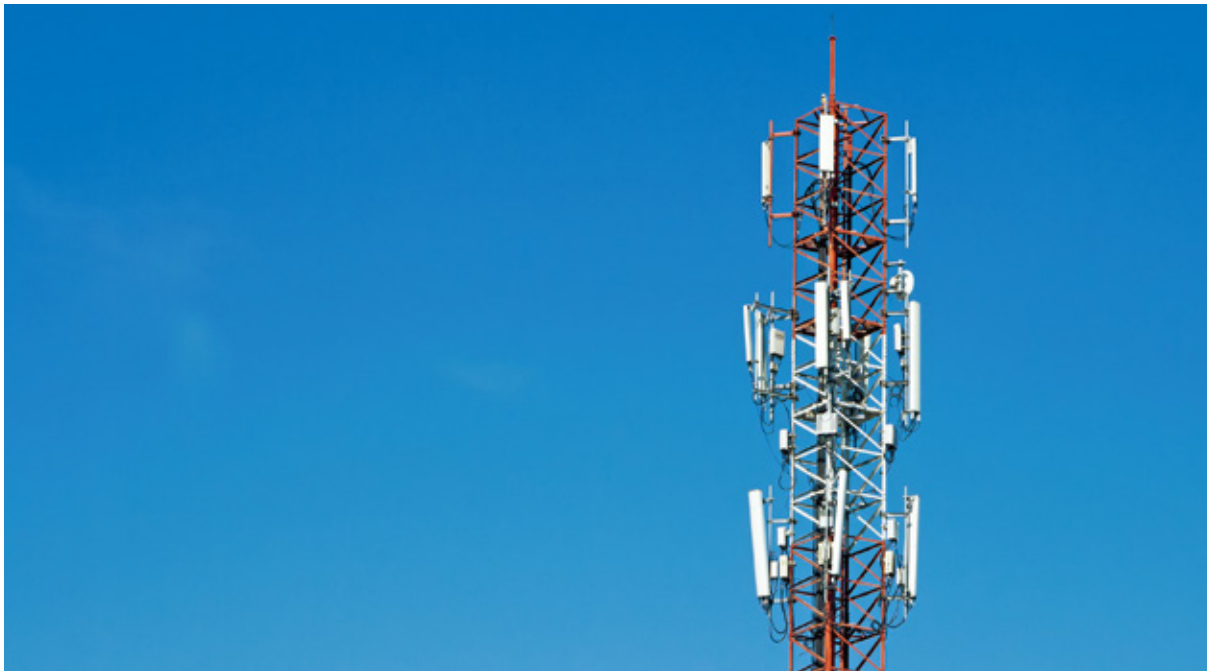
- Application Scenarios: Communication base station
- Project Location: Shanxi



China Mobile Heilongjiang Smart Sodium Battery Project

- Application Scenarios: Communication base station
- Project Location: Heilongjiang

DIGITAL ENERGY  
APPLICATION CASES



Cambodia Metfone Base Station Project

- Application Scenarios: Communication base station
- Project Location: Cambodia



Korea KT Telecom Base Station Project

- Application Scenarios: Communication base station
- Project Location: Korea



DIGITAL ENERGY  
APPLICATION CASES



Reliance AG3 Base Station Project  
· Application Scenarios: Communication base station  
· Project Location: India

DIGITAL ENERGY  
APPLICATION CASES



Data Center Projects in South Korea  
· Application Scenarios: Data Center  
· Project Location: Korea



Large-scale Data Center Project in India  
· Application Scenarios: Data Center  
· Project Location: India



China Unicom Shanxi Data Center Project  
· Application Scenarios: Data Center  
· Project Location: Shanxi



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: Changde



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



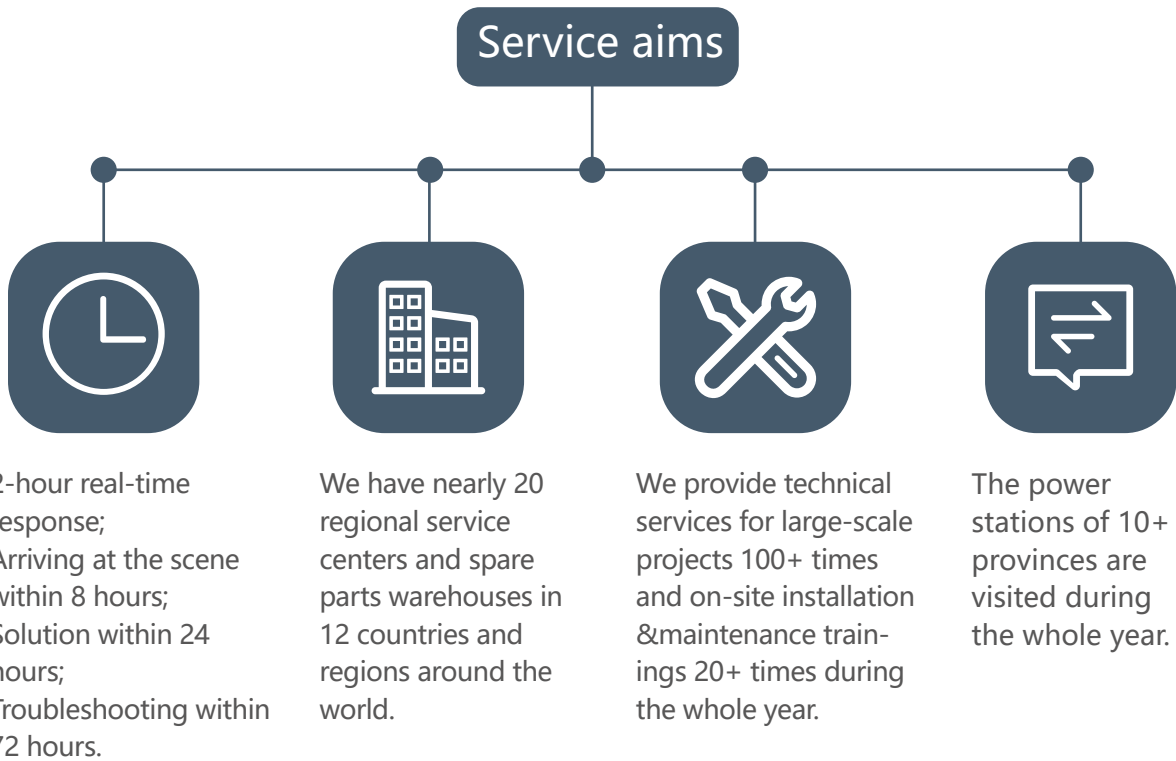
Mandalay Agricultural Market Commercial and Industrial Energy Storage Project

- 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

