ROYPOW Technology Co., Ltd.

First-Class Quality ESS Manufacturer

Top 10 ESS Brand in America

ROYPOW Europe

ROYPOW UK

ROYPOW Germany

ROYPOW South Africa

ROYPOW Korea

ROYPOW Japan

ROYPOW HQ

ROYPOW Shenzhen

ROYPOW Australia

USA HQ - California

ROYPOW USA

USA Office - Florida

USA Office - Indiana

USA Office - Texas

USA Office - Georgia

13 Major

Worldwide Subsidiaries & Offices

750+	200+	105,000 ㎡	2,500 ㎡	202
Employees	R&D People	Headquarters Floor Area	Testing Center	Patents

Revenue Compound Annual Growth Rate at 76%

2016

Nov. 2, 2016 with $800,000 initial investment,
Company founded.

2017

Preliminary setup of overseas marketing channels;

Revenue passing
$4 million.

2018

Established USA branch;

Revenue passing
$8 million.

2019

Became a national high-tech enterprise;

Revenue first passing
$16 million.

2020

Established UK branch;

Revenue passing
$36 million.

2021

Established Japan, Europe, Australia and South Africa branch; Established Shenzhen branch；

Revenue passing
$80 million.

2022

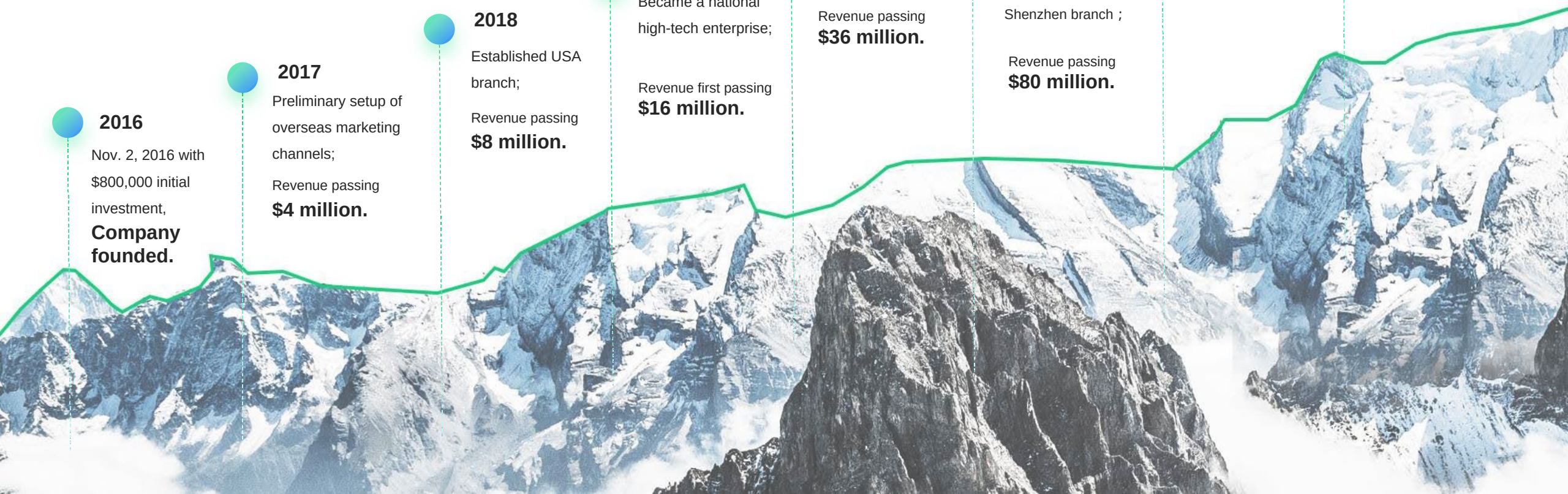
Groundbreaking of ROYPOW new headquarters；

Revenue passing
$120 million.

2023

ROYPOW new headquarters settled and put into operation；
Established Germany branch；

Revenue passing **$130 million.**



Residential Energy Storage System

Commercial & Industrial

Chargers

Vehicle-Mounted

ROYPOW | Residential ESS System

Euro-standard

Hybrid ESS System

LiFePO $_4$ Battery

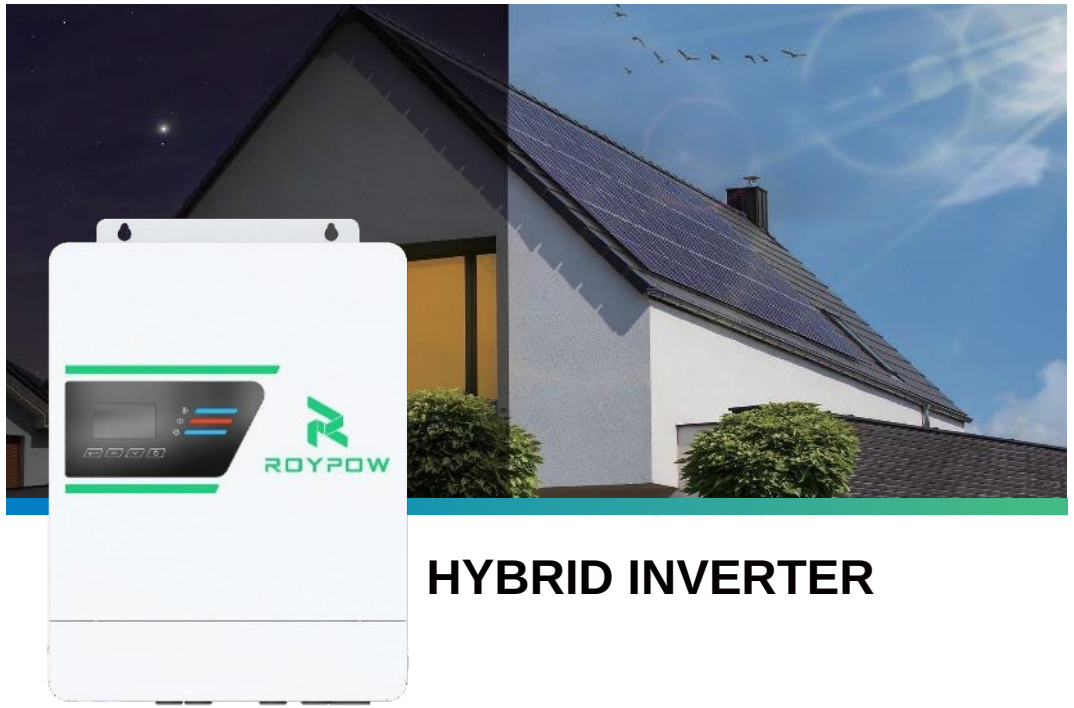
48 V / 5.1 ~ 40.8 kWh / 5.12 ~ 40.96 kWh / 10 ~ 80 kWh

- > **6,000** Times Cycle Life
- Up to **16** Flexible Expansion
- **Highly Compatible** with Leading Brands of Inverters

Solar Inverter

6 ~ 72 kW / 12 ~ 144 kW

- **Three-Phase** Connection via Parallel Connection
- Up to **12** Units Parallel Working
- **Easy Installation**



HYBRID INVERTER

98% Peak Efficiency

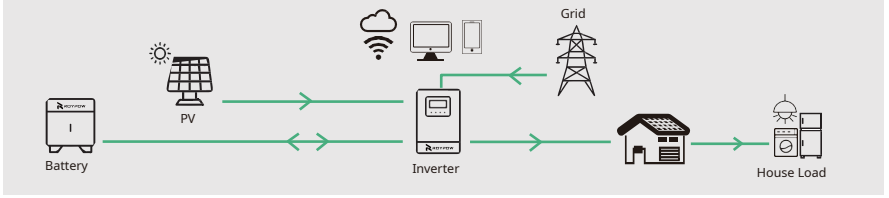
12 In Parallel

10 ms UPS Seamless Switch

Three-Phase Via Parallel Connection

5 Years Extended Warranty

- Pure Sine Wave Output
- Built-in BMS Communication
- Wide MPPT Operating Range
- Multiple Safe Protections



PV (DC Input)			
Recommended Max. PV Input Power (W)	6000	Max. Input Voltage (VOC) (V)	500
MPPT Operating Voltage Range(V)	85 V - 450 V (@75V Start up)		
Number of MPPT	1	Max. Number of Input Strings per MPPT	1
Max. Input Current per MPPT (A)	27	Max. Short-circuit Current per MPPT (A)	35
Grid (AC Input)			
Max. Input Power (W)	11500	Max. Input Current (A)	50
Rated Grid Voltage (Vac)	220 / 230 / 240	Rated Grid Frequency (Hz)	50 / 60
Acceptable Range	170 - 280 Vac (For UPS); 90 - 280 Vac (For Home Appliances		
Battery (Bi-direction)			
Battery Type	LiFePO4 / Lead-acid	Battery Voltage Range (Vdc)	40-60
Rated Battery Voltage (Vdc)	48	Max. Charge / Discharge Current (A)	120 / 130
BMS Communication Mode	RS485		
Backup Output (AC Output)			
Rated Output Power	6000W / 6000VA	Rated Output Current (A)	27.3
Rated Output Voltage / Frequency	220 / 230 / 240Vac 50 / 60Hz	Parallel Capacity	Max. 12 Units
Surge Power	12000 VA 5 s	THDv (@ Linear Load)	< 3%
Switch Time	10ms Typical (For UPS), 20ms Typical (For Home Appliances)		
Efficiency			
Peak Efficiency	98%	Max. MPPT Efficiency	99.90%
Protection			
Inner Protection	Output Short-circuit Protection, Output Overvoltage Protection		
Surge Protection	PV: Type III, AC: Type III	Ingress Rating	IP54
General Specifications			
Operating Temperature Range	-10℃ ~ 55℃	Relative Humidity Range	5% ~ 95%
Max. Operating Altitude	> 2,000 m / > 6,561.68 ft derating		
Standby Self-consumption (W)	< 10	Installation Type	Wall-mounted
Cooling Mode	Fan Cooling		
Communication	RS232/RS485/Dry Contact/Wi-Fi		
Warranty Period	3 years / 5 years (optional)		

HYBRID INVERTER

98% Max. MPPT Tracking Efficiency

6 In Parallel

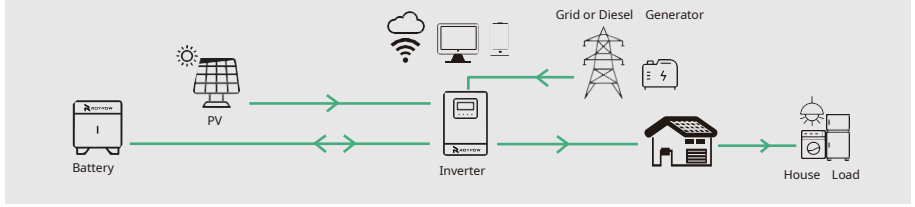
Three-Phase via Parallel Connection

10 Years Long Lifespan

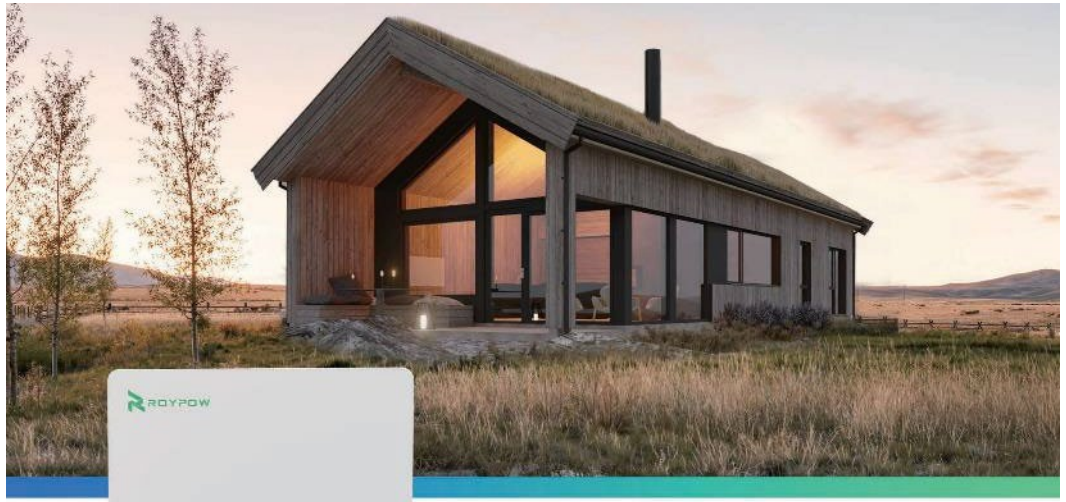
Up to **144** kW High Power

5 Years Extended Warranty

- Pure Sine Wave AC Power
- Wide MPPT Operating Range
- Comprehensive Safety Protections
- Easy Installation and Setup
- Intelligent Management via LCD Display and Wi-Fi
- Built-in Li-ion Battery BMS Communication



PV (DC Input)			
Recommended Max. PV Input Power (W)	12000	Max. Input Voltage (VOC) (V)	500
MPPT Operating Voltage Range(V)	85 V - 450 V (@75V Start up)		
Number of MPPT	2	Number of Strings per MPPT	1
Max.DC Current (A)	27/27	DC Terminal Type	TBD
Grid (AC Input)			
Max. Input Power (W)	20700	Max. Input Current (A)	90
Rated Grid Voltage (Vac)	220 / 230 / 240	Rated Grid Frequency (Hz)	50 / 60
THDi	< 3% (Linear Load)	Power Factor	1
Battery (Bi-direction)			
Battery Type	LiFePO4 / Lead-acid	Battery Voltage Range (Vdc)	40-60
Rated Battery Voltage (Vdc)	48	Max. Charge / Discharge Current (A)	210 / 230
Max. Charge Voltage	60	Current/Voltage Monitoring	Yes
AC Output			
Rated Output Power	12000	Rated Output Current (A)	27.3
Rated Output Voltage /	220 / 230 / 240Vac	Frequency	50 / 60Hz
Surge Power	12000 VA 5 s	THDV (Full Load)	< 3% (Linear Load)
Overload Capacity	105% < Load≤150%, Alarm and Shutdown after 10.5 s; Load≥150%, Alarm and Shutdown after 5.5 s		
Efficiency			
Max. Efficiency (Grid)	95%	Max. Efficiency (Battery)	93%
Protection			
Inner Protection	Over-/Under-Voltage Protection, Output Over-Current Protection, Output Short-Circuit Protection, Over-Temperature Protection		
General Specifications			
Operating Temperature Range	-10℃ ~ 55℃	Relative Humidity Range	5% ~ 95%
Max. Operating Altitude	> 2,000 m / > 6,561.68 ft derating		
Standby Self-consumption (W)	< 10W	Installation Type	Wall-mounted
Cooling Mode	Fan Cooling		
Communication	RS232/RS485/Dry Contact/Wi-Fi		
Warranty Period	3 years / 5 years (optional)		



Rbmax 5.1L-F Wall Mounted

5.12 ~ 81.6 kWh

1C
Charge/Discharge Rate

16
in Parallel

> 6,000
Cycle Life

10
Years Warranty

Safe
- Advanced Cobalt-free LiFePO Battery Technology
- Intelligent BMS with Multiple Protections

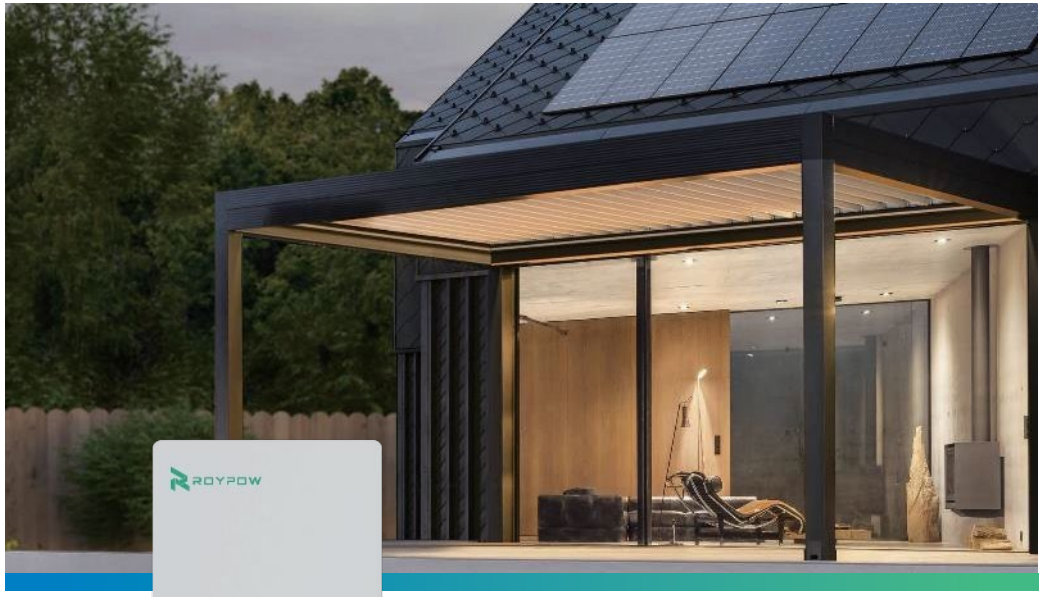
Reliable
- Long Design Life
- Zero Maintenance and No Frequent Swapping

Convenient
- Modular and Stacked Design for Easy Installation
- Ground-mounted or Wall-mounted Installation

System Specification

RBmax5.1L-F

Nominal Energy (kWh)	5.12
Usable Energy (kWh)	4.79
Nominal Voltage (V)	51.2
Operating Voltage Range (V)	44.8~56.8
Max. Continuous Charge/Discharge Current (A)	100/100
Weight (Kg / lbs.)	48 Kg / 105.8 lbs.
Dimensions (W × D × H) mm	500 x 167 x 490
Operating Temperature (℃)	0 ~ 55℃ (32 ~ 131℉) (Charge), -20 ~ 55℃ (4 ~ 131℉) (Discharge)
Storage Temperature (℃)	0 ~ 35℃ (32 ~ 95℉)
Relative Humidity	95%
Max. Altitude (m)	4000 m / 13,123 ft (> 2,000 m / > 6,561.68 ft derating)
Protection Degree	IP 20
Installation	Ground-Mounted/Wall-Mounted
Communication	CAN, RS485
Certification	CE, UN38.3
Warranty (Years)	10
Scalability (kWh	Max. 16 in parallel, Max. 81kWh
Nominal Charge/Discharge Current (A)	1~50/50, 2~100/100, 3~150/150,4~200/200
Max. Charge/Discharge Current (A)	1~100/100, 2~100/200, 3~150/300,4~200/400



RBmax10L-F

9.8 ~ 78 kWh

1C
Charge/Discharge Rate

8
in Parallel

> 6,000
Cycle Life

10
Years Warranty

Advanced LiFePO Technology
Safe Battery Cells from Global Top 3 Brands

High Compatibility
Compatible with Many Brands of Inverter Protocols

APP Support
Remote Monitoring of Battery Status

Intelligent BMS
Intelligent Monitoring & Multiple Protections

Fast Charging
Extended Uptime for Home Backup

Wake-up Function
Reactivate and Recharge Asleep Batteries

System Specification

	RBmax10L-F
Nominal Energy (kWh)	9.84
Usable Energy (kWh)	9.05
Nominal Voltage (V)	48
Rated Cpacity(Ah)	205
Operating Voltage Range (V)	40.5~54
Max. Continuous Charge/Discharge Current (A)	200/200
Weight (Kg / lbs.)	90 Kg / 198.42 lbs.
Dimensions (W × D × H) mm	500 x 180 x 800
Operating Temperature (℃)	0 ~ 55℃ (32 ~ 131℉) (Charge), -20 ~ 55℃ (4 ~ 131℉) (Discharge)
Storage Temperature (℃)	0 ~ 35℃ (32 ~ 95℉)
Relative Humidity	95%
Max. Altitude (m)	4000 m / 13,123 ft (> 2,000 m / > 6,561.68 ft derating)
Protection Degree	IP 20
Installation	Ground-Mounted/Wall-Mounted
Communication	CAN, RS485
Certification	CE, UN38.3
Warranty (Years)	10
Scalability (kWh	Max. 8 in parallel, Max. 78kWh
Nominal Charge/Discharge Current (A)	1~100/100, 2~200/200, 3~300/300,4~400/400
Max. Charge/Discharge Current (A)	1~200/200, 2~400/400, 3~400/400,4~400/400

Rbmax 5.1L-FX

9.8 ~ 78 kWh

1C
Charge/Discharge Rate

16
in Parallel

> 6,000
Cycle Life

10
Years Warranty

Safe
- ✓ Advanced Cobalt-free LiFePO Battery Technology
- ✓ Intelligent BMS with Multiple Protections

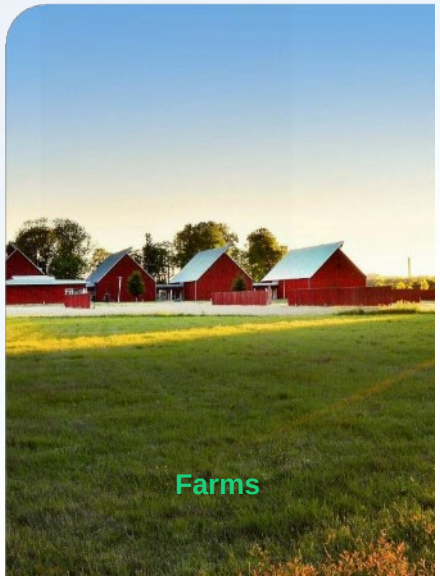
Reliable
- ✓ Long Design Life
- ✓ Zero Maintenance and No Frequent Swapping

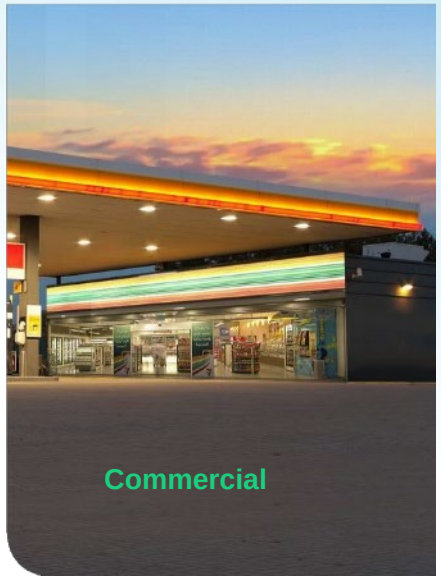
Convenient
- ✓ Modular and Stacked Design for Easy Installation
- ✓ Ground-mounted or Wall-mounted Installation

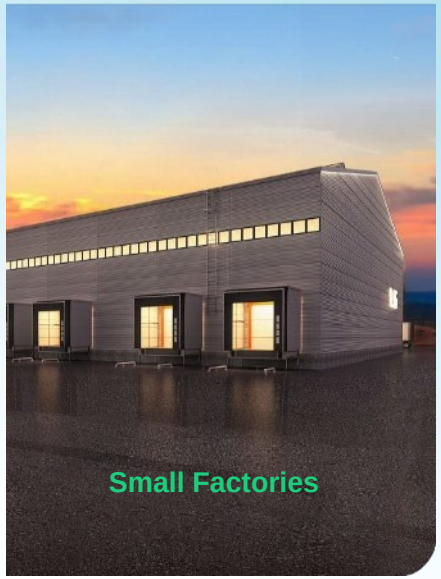
System Specification

RBmax5.1L-FX

Nominal Energy (kWh)	5.12
Usable Energy (kWh)	4.79
Nominal Voltage (V)	51.2
Operating Voltage Range (V)	44.8~56.8
Max. Continuous Charge/Discharge Current (A)	100/100
Weight (Kg / lbs.)	48 Kg / 105.8 lbs.
Dimensions (W × D × H) mm	500 x 167 x 490
Operating Temperature (℃)	0 ~ 55℃ (32 ~ 131℉) (Charge), -20 ~ 55℃ (4 ~ 131℉) (Discharge)
Storage Temperature (℃)	0 ~ 35℃ (32 ~ 95℉)
Relative Humidity	95%
Max. Altitude (m)	4000 m / 13,123 ft (> 2,000 m / > 6,561.68 ft derating)
Protection Degree	IP 20
Installation	Ground-Mounted/Wall-Mounted
Communication	CAN, RS485
Certification	CE, UN38.3
Warranty (Years)	10
Scalability (kWh	Max. 16 in parallel, Max. 81kWh
Nominal Charge/Discharge Current (A)	1~50/50, 2~100/100, 3~150/150,4~200/200
Max. Charge/Discharge Current (A)	1~100/100, 2~100/200, 3~150/300,4~200/400







ROYPOW C&I ESS

ROYPOW C&I 3060-E/H

All-in-One

System

Prestalled all-in-one design

6 in parallel, reaching 180kW/368.64kWh

20ms off-grid switch time

IP54

hot aerosol fire extinguishing system

Inverter Module

Three-phase output

Max. 99% PV-to-grid efficiency

Intelligent management via Bluetooth on the App

IP65 Ingress rating

Multiple safety protections, including anti-islanding, over-current, short-circuit, and over-voltage protection

Battery Module

10 years of warranty

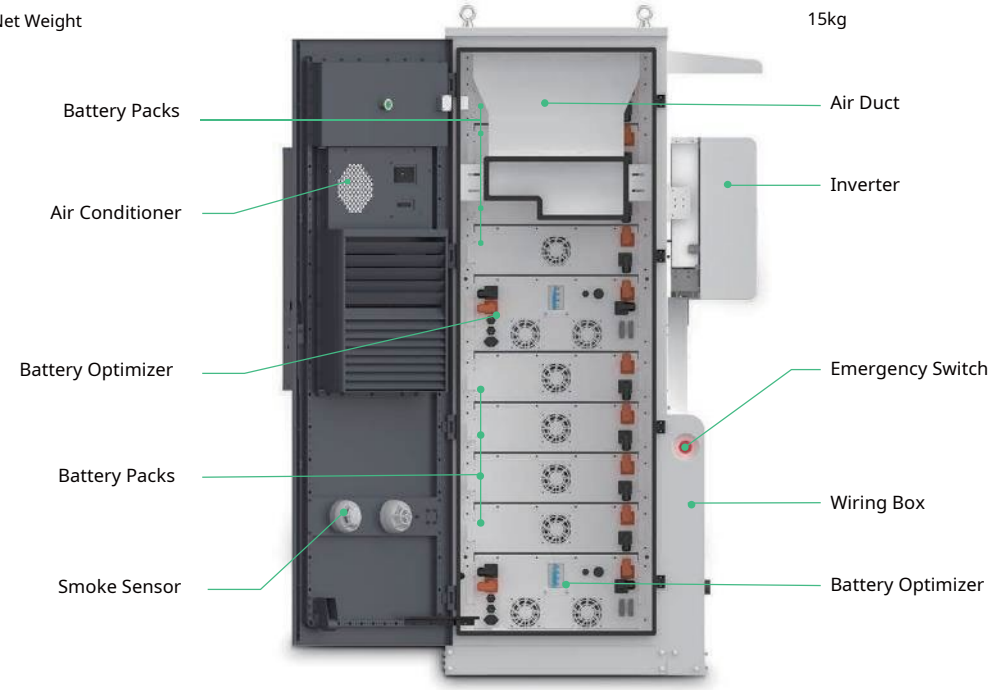
Advanced LFP cells with high safety, long life, stable and reliable characteristics

Long lifespan with over 6,000 times of cycle life

Multiple safety protections, including over-current, short-circuit, over-voltage, and output short-circuit protection

Technical Specifications

Model	CS2046-E/H	CS2560-E/H	CS3060-E/H
Battery Parameters			
Nominal Energy	46.08 kWh	61.44 kWh	61.44 kWh
Nominal Voltage/Voltage Range	230.4 V / 201.6 V ~262.8 V	307.2 V / 268.8 V ~350.4 V	307.2 V / 268.8 V ~350.4 V
Charge Discharge Rate		0.5P / 0.5P	
Number of Battery Optimizer	2	2	2
Number of Battery Pack	6	8	8
Battery Pack Model		RBmax7.6MH	
Nominal Energy		7.68 kWh (24S1P, 3.2 V 100 Ah)	
Nominal Voltage/Voltage Range		76.8 V / 67.2 - 87.6 V	
Max. Continuous Working Current		50 A	
Cycle Life		6000 @ 25℃,90% DOD, 0.5P /0.5P, 70% EOL	
Dimension (W×D×H)		500 x 760 x 148.3 mm	
Net Weight		65 kg	
Battery Optimizer Model		RMH95050	
DC Working Voltage		550 - 950 V	
Nominal Power		15kW	
Dimension (W×D×H)		650 x 250 x 250 mm	
Net Weight		15kg	



Inverter Model	SUN20000T-EI	CS2560-E/H	CS2560-E/H CS3060-E/H
Input (PV)			
Max. Power (W)	45000		
MPPT Range (Full Load) (V)	340 ~ 800	270 ~ 800	340 ~ 800
MPPT Range (V)		160 ~950	
Max. DC Voltage (V)		1000	
Start Voltage (V)		180	
Max. DC Current (A)	30 / 30	30 / 30 / 30	30 / 30 / 30
MPP Tracker No.	2	3	3
String No.	2+2	2+2+2	2+2+2
Input (DC BUS)			
Compatible Battery Type		Lithium-ion	
Bus Voltage Range (V)		550-950	
Max. Charge / Discharge Current (A)		50	
Lithium Battery Charge Curve		Self-adaption to BMS	
Output (On Grid)			
Max. Power (Output) (W)		45000	
Nom. Power (Output) (W)	20000	25000	30000
Maximum Power (Output) (W)	22000	27500	30000
Maximum Apparent Power (Output) (VA)	22000	27500	30000
Nominal Voltage (V)		380 / 400 V (Three Phase)	
Nominal AC Frequency (Hz)		50 / 60 Hz	
Nominal Current (Output) (A)	3 * 33.33 / 3 * 28.9	3*41.67/3*36.3	3*43.5/3*43.5
Maximum Current (Input) (A)		3*63	
Output (BackUp)			
Nom. Power (VA)	20000	25000	30000
Maximum Power (5min) (VA)	24000	30000	36000
Apparent Power (10s) (VA)	30000	37500	45000
Nom. Bypass Power (VA)		45000	
Nominal Back-up Voltage (V)		380 / 400 V (Three phase)	
Nominal Back-up Frequency (Hz)		50 / 60 Hz	
Nominal Back-up Current (A)	3* 33.33 / 3 * 28.9	3 * 41.67 / 3 * 36.3	3 * 43.5 / 3 * 43.5
THDV		<3% (R Load), 5% (RCD Load)	
Efficiency			
Max. Efficiency (PV to Grid)	98.80%	98.80%	98.80%
Eur. Efficiency (PV to Grid)	97.20%	97.90%	97.90%
Max. Charge Efficiency (PV to Battery)	98%	98%	98%
Max. Charge/Discharge Efficiency (Grid to Battery)	98%	98%	98%

General			
Temp.Range	-25~60℃	Noise Emission	45 dB
Max. Operation Altitude	4000 m	Humidity	0-100%
Topology	Transformerless	Cooling	Smart Fan
Protection	IP65		
HMI & COM			
Display	LED+APP (Bluetooth)		
Communication Interface	LED + APP (Bluetooth), BMS (CAN / RS485), Wi-Fi / GPRS / 4G / Ethernet (optional), DI (DRM / RCR), Meter (RS485), 1 * DO, USB (Firmware Upgrade)		
Protection			
Protection	Anti-islanding Protection, AC Over-current Protection, AC Short-circuit Protection, AC Over-voltage Protection, Insulation Detection, GFCI		
SPD	DC Type 2, AC Type 2	AFCI	Optional
RSD	Optional		
Mechanical			
W x H x D	650 x 500 x 265 mm	Weight	40 kg
DC Switch	Internal		
Compliance			
Grid	EN 50549-1	Safety	IEC 62109-1/2, IEC 62040, IEC 62477
Overvoltage Cat.	DC Input: OVC II, AC Output: OVC III	EMC Emission	DC Input: OVC II, AC Output: OVC III
EMC Emission	IEC / EN 61000-6-3, IEC 61000-3-11, IEC 61000-3-12		
EMI EMC Immunity	IEC / EN 61000-6-2		
System Parameters			
Ambient Temperature	-20℃~50℃ (>45℃ Derating)	Parallel	6
Storage Environment Temperature	0℃~40℃		
Relative Humidity of Working Environment	5~95%, Non-condensing		
Cooling Method	Intelligent Air-cooled Air conditioner		
Noise Level	60dB		
Working Altitude	4000m (>2000m Derating)		
Installation Method	Floor-to-ceiling Installation		
Communication Model	RS485, CAN, Dry, WI-FI		
Ingress Rating	IP54		
Weight	<1000kg		
Size (L x W x H)	1100 x 970 x 2000 mm		
Standards & Certification	IEC/EN 61000-6-2/4, IEC62477-1, IEC62619, UN38.3		

DG + ESS Solutions

Makes Diesel Generator Set Energy Saving and Efficient

Saving

30%+ Fuel Consumption

Why DG Mate Series?

High Power Motors

have been widely used in industries, such as construction, mechanical manufacturing, mining, rail transit, petrochemical, etc.

How to choose a DG

Assumed load: **Peak Power:** 530 kW , **Rated power:** 200 kW

Traditional Proposal

If a Diesel Generator is adopted as power source:

Initial Overpurchase for a high power DG is necessary to match the maximum starting current of the motors

High Fuel Consumption is certain because of frequent motor starts and long-term operation at low power

Capacity Expansion is not possible for the conventional diesel generators

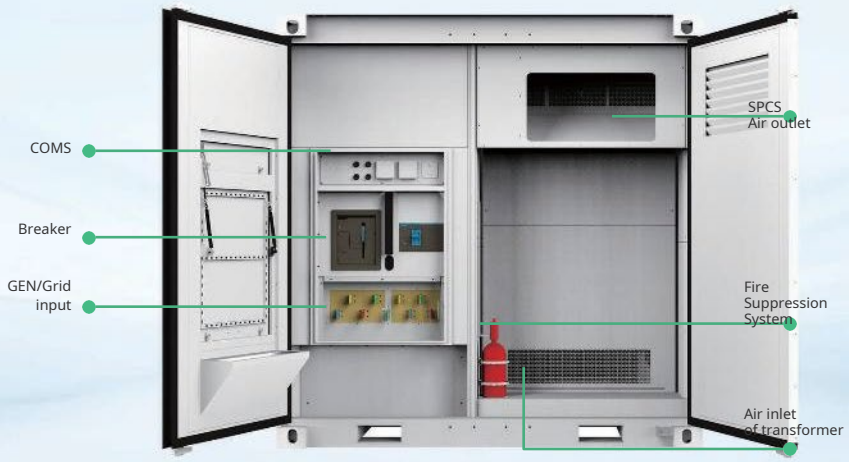
High Maintenance Costs due to frequent motor starts and high inrush current

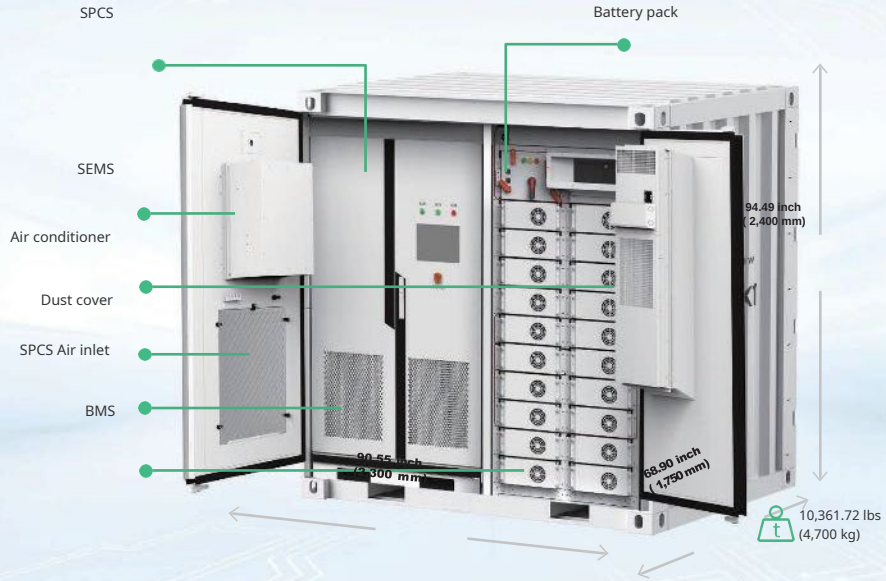
Not suitable due to the high starting current of the load

ROYPOW Proposal

No need to purchase high capacity DG due to the mutual power output from X250KT

- Lower initial investment for a low-power DG
- Lower fuel consumption
- Support multiple DGs working in parallel
- Lower maintenance costs

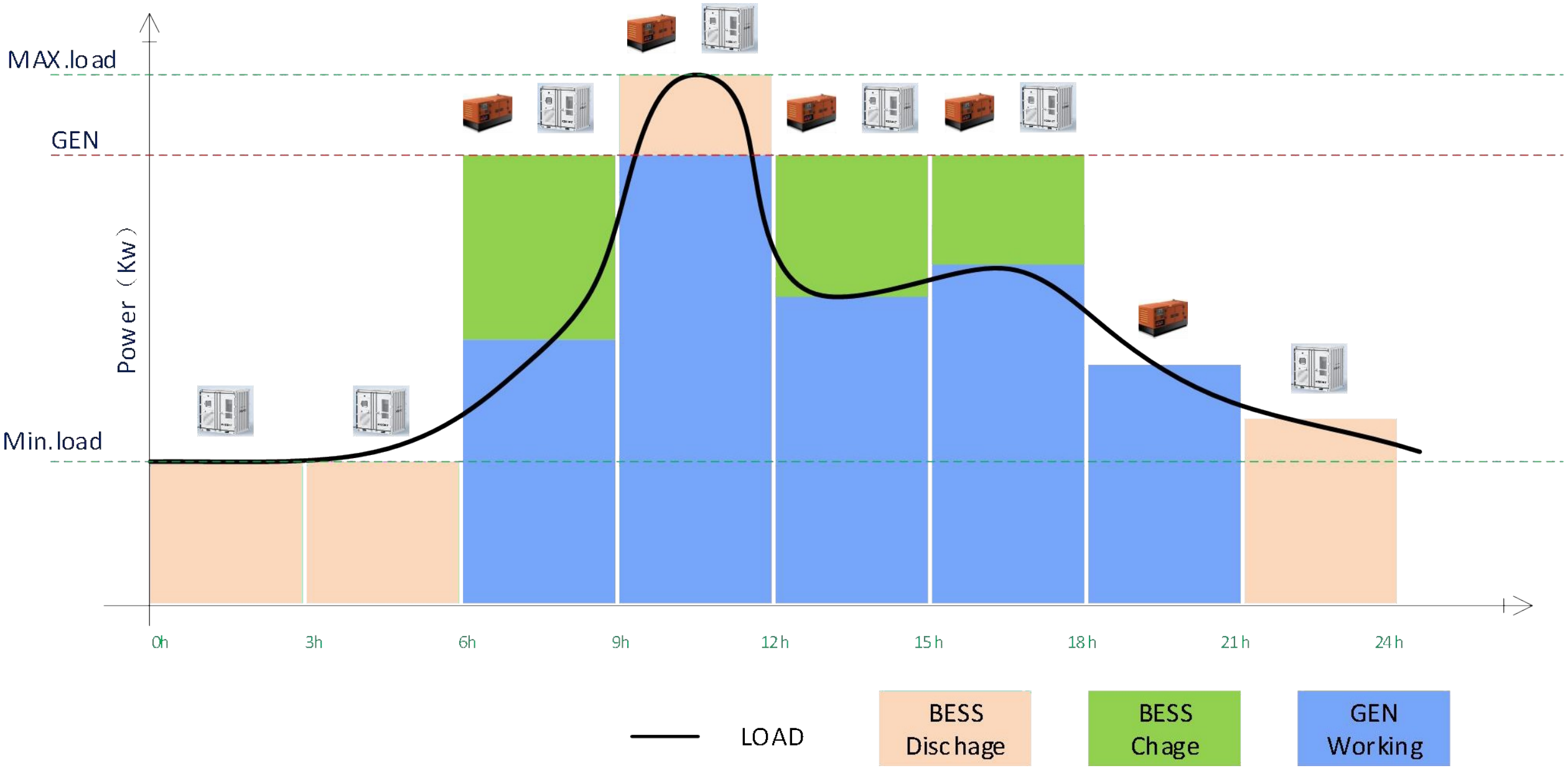




Technical Specifications

Orange/ Yellow / Gray Optional

Model	X250KT-U/A	X250KT-E/A
AC Output Data (On-grid Mode)		
Rated Power	150 kW	150kW
Max. Rated / Apparent Power	250 kW / 280 kVA [1]	250 kW / 280 kVA [1]
Rated Voltage	480 V (±15%)	400 V (±15%)
Rated Current	183A	220 A
Grid Frequency	60 Hz	50 Hz
AC Connection	3 W +N	3 W +N
THDI	≤3%	≤3%
Power Factor	-1~+1	-1~+1
AC Output Data (Off-grid Mode)		
Rated Power	250 kW	250 kW
Max. Rated / Apparent Power	250 kW /250 kVA [1]	250 kW /250 kVA [1]
Rated Voltage / Frequency	480 V /60 Hz	400 V /50 Hz
THDV (Linear Load)	≤3%	≤3%
Battery Data		
Battery Chemistry	LiFePO 4	LiFePO 4
Nominal Energy	153.6kWh	153.6kWh
Working Voltage Range	600V ~876V	600 V ~876 V
Nominal Charging Current	100 A	100 A
Nominal Discharging Current	200 A	200 A
Max. Discharging Current	300 A	300 A
DOD	90%	90%
Compatible Diesel Generator		
Rated Power	≤400 kVA	≤400 kVA
Rated Voltage	480 V	400 V
Rated Frequency	60 Hz	50 Hz
General		
Parallel Capable	Yes (Up to 4)	Yes (Up to 4)
EMS	SEMS3000 12 inch LCD Touch Panel	SEMS3000 12 inch LCD Touch Panel
Ingress Rating	NEMA 3R	IP54
Topology	Transformer	Transformer
Working Temperature	-4 ~131°F(-20 ~55°C)	-4 ~122°F (-20 ~50°C)
Storage Temperature	-40 ~149°F (-40 ~65°C)	-40 ~149°F (-40 ~65°C)
Relative Humidity	5 ~95% (No condensing)	5 ~95% (No condensing)
System Noise	<65 dB	<65dB
Cooling	Intelligent temperature control (Battery room) Air cooling (Inverter room)	
Fire Suppression System	Included	Included
Altitude	5,000 (>3,000 derating)	5,000 (>3,000 derating)
Certifications	UL1973 / UL1741 / UL9540A / FCC Part 15Class B / UN38.3	CE / UN38.3
Dimensions, LxWxH	90.55 x 68.90 x 94.49 inch (2,300 x 1,750 x 2,400 mm)	
Weight	10,361.72 lbs (4,700 kg)	


MAX.load
GEN
Min.load
Power（Kw）
0h
3h
6h
9h
12h
15h
18h
21h
24h
LOAD
BESS Dischage
BESS Chage
GEN Working

Hunan, China

Quarry

DG: 4 x 400 kW

ESS: 250 kW / 140 kWh

Microgrid

Guangdong, China

Expressway

DG: 400 kW

ESS: 250 kW / 140 kWh

Microgrid

Guangdong, China

Construction Site

DG: 2 x 400kW

ESS: 250kW/140kWhz

Temporary electricity usage

PC15KT

Mobile Energy Storage System

Ideal for microgrids, load shifting, renewable energy consumption, energy buffers, off-grid power supply, backup power applications, etc.

All-in-one
Mobile battery system, hybrid inverter, solar MPPT, 4G modem, fire extinguishing system, distribution system, LCD screen, and smart EMS.

Flexible Configuration
Adjustable configurations to achieve optimal cost-effectiveness. Up to 6 batteries in parallel for capacity expansion. Up to 6 cabinets for parallel use.

Intelligent Management
Integrated EMS & 4G LTE modem, supporting remote monitoring of devices through web and app.

Plug and Play
The system is pre-installed. Just make simple settings to use.

High Safety Standard
Using high-safety performance lithium iron phosphate batteries. Meets standards such as NFPA855, EN50549, and UL.

Enhanced Reliability
The battery offers excellent vibration resistance, and the inverter has been reinforced for added durability.

Three-phase Power Output
Supports three-phase and single-phase power charging and three-phase and single-phase power output.

Generator Connection
Can be connected to diesel/gasoline generators. Support automatic control, starting charging when low and shutting off once fully charged.

From 15 kW / 30 kWh
to 90 kW / 180 kWh

Specifications

Model	PC15KT
AC Output (Discharging)	
Rated Power	15kW (90kW / 6 in Parallel)
Rated Voltage / Frequency	380 V / 400 V 50 / 60 Hz
Rated Current	3 x 21.8A
Single-Phase	220 / 230 VAC
Apparent Power	22500 kVA
AC Connection	3W+N
Overload Capacity	120%@10min / 200%@10S
AC Input (Charging)	
Rated Power	15kW
Rated Voltage / Current	380 V / 400 V 22.5A
Single Phase / Current	220V /230V 22A
THDI	≤3%
AC Connection	3W+N
Battery	
Battery Chemistry	LiFePO
DoD	90%
Rated Capacity	30 kWh (Max. 180 kWh /6 in Parallel)
Voltage	550-950VDC
DC Input (PV)	
Max. Power	30 kW
Number of MPPT / Number of MPPT Input	2-2
Max. Input Current	30 A / 30 A
MPPT Voltage Range	160~950 V
Number of String per MPPT	2 / 2
Start-up Voltage	180 V
Physical	
Ingress Rating	IP54
Scalability	Max. 6 in Parallel
Relative Humidity	0 ~100%Non-condensing
Fire Suppression System	Hot Aerosol (Cell & Cabinet)
Max. Efficiency	98%(PV to AC); 94.5%(BAT to AC)
Topology Operating Ambient	Transformerless
Temperature	-20 ~50 ℃(-4 ~122 ℉)
Noise Emission (dB)	≤70
Cooling	Natural Cooling
Altitude (m)	4000 (>2000 Derating)
Weight (kg)	≤350KG
Dimensions (LxWxH)	1100x 1100x 1000 mm
Standard Compliance	EN50549, AS4777.2, VDE4105, G99, IEEE1547, NB/T 32004, IEC62109,NB/T 32004, UL1741,IEC61000, NB/T 32004

Patents and Awards

Comprehensive IP and Protection System Established

In total
202

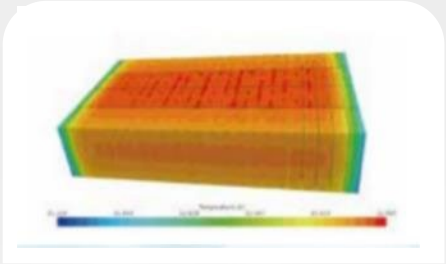
Invention patents	Utility models	Industrial designs	Software copyrights
52	87	23	40

CERTIFICATES

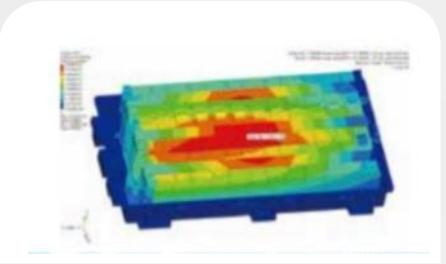
Virtual Reality Simulation Applications

The 3D substance resulting from the fusion and interaction of multi-source information is simulated using the computer simulation system to perform **comprehensive data analysis of product performance and mathematics** throughout the entire process.

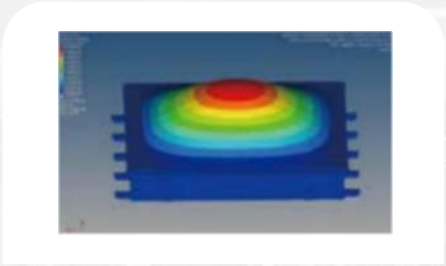
With **CAE structural optimization, CFD thermal balance and thermal control,** to implement lightweight structure and smart thermal management, guaranteeing product reliability.



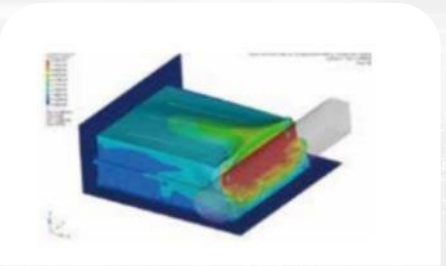
Modular Thermal Simulation



Static Simulation

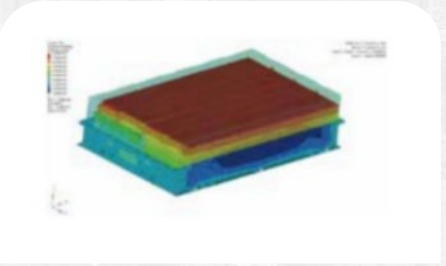


Modal Analysis



Extrusion Analysis

Mechanical Shock Analysis



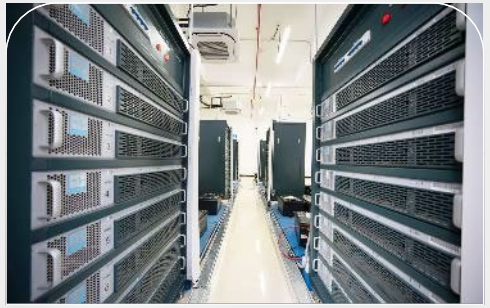
Vibration Analysis

Comprehensive Testing & Proven Quality

- Equipped with high-precision measuring instruments and equipment with **200** units in total
- Complied with international & North American standards, such as **IEC / ISO / UL**, etc.
- Rigorous tests are carried out to ensure high a level of performance, reliability and safety

Testing capability

- Battery Cell Testing
- Battery System Testing
- BMS Testing
- Material Testing
- Charger Testing
- Energy Storage Testing
- DC-DC Testing
- Alternator Testing
- Hybrid Inverter Testing



All Designed in House

Energy Management System (EMS)

Power Conversion System (PCS)

Battery Management System (BMS)

Automotive-Grade Batteries Manufacturing System and QC System

Advanced MES system, IATF16949 system and informatization system to ensure stable and reliable quality

Automatic Production Line

Laser Welding Equipment

SMT

Grade A Cell from REPT

Flexibility: OEM, ODM, SKD

Compatible with most Inverter Brand

Service: Training, After-sale service within 2-3days

Inverters Compatible With:

victron energy BLUE POWER

Deye

GROWATT

Voltronic Power Advancing Power

LUX POWER TEK

solis

SMA

Schneider Electric

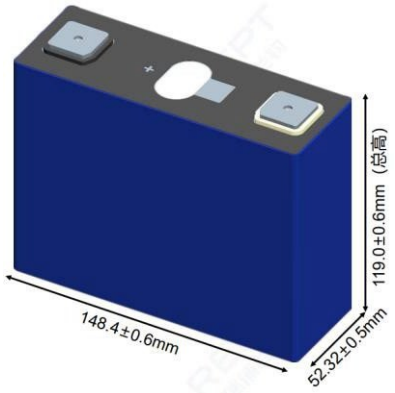
GOODWE

MEGAREVO

Afore

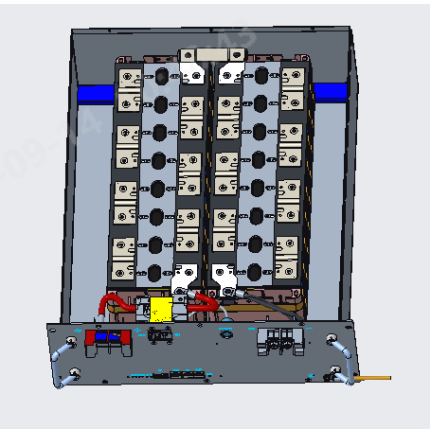
SOFAR

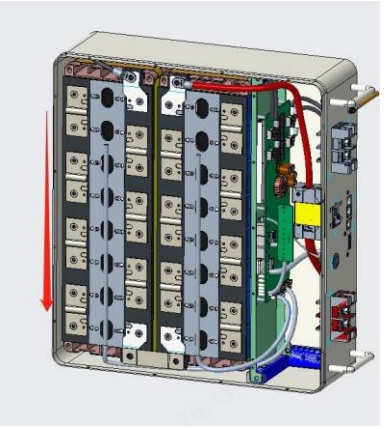
REPT CELL FOR RESS



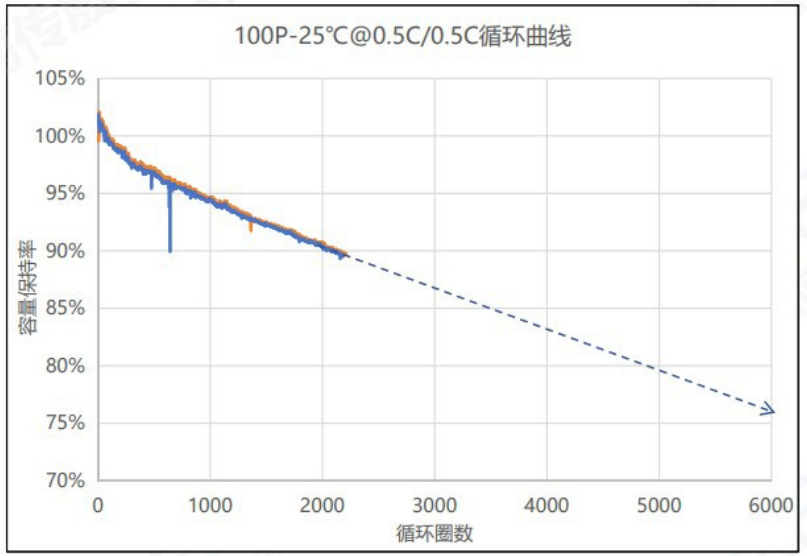
- CB56-100Ah
- 3.2V100Ah

- **25℃, 90%DOD , 0.5C/0.5C 6000cls @ 70% EOL**
- **10years warranty**

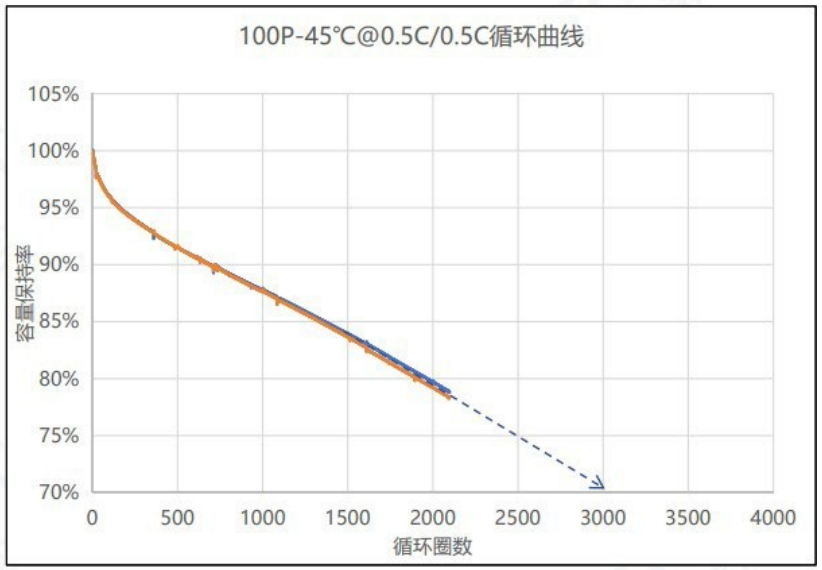




25℃
45℃



- 25℃, 100%DOD , 0.5C/0.5C
  2184cls @ 88.16% EOL



- 45℃, 100%DOD , 0.5C/0.5C
  2107cls @ 78.85% capacity retention

TOYOTA

HYUNDAI

Sumitomo

MITSUBISHI

JLG

CLARK
THE FORKLIFT

CROWN

YAMAHA

瑞浦能源
REPT

THANKS