LEOCH BATTERY

LEOCH LITHIUM PRODUCT & SOLUTIONS

Provide Reliable and Innovative Power Supply

www.leochlithium.com

2026

LEOCH BATTERY

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Visit **www.leochlithium.com** for more information.

*Data above is recommended and the picture is only show as reference, the real product outlook might be slightly vary. The outlook shall refer to final product specs, LEOCH reserve the final right of explanation.

LB-LI-PB-EN-V5.8-202602

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Company Profile

Founded in 1999, LEOCH BATTERY (stock code: 00842.HK) is a leading provider of advanced battery power & energy management solutions, delivering reliable & efficient energy to industries, data centers, cities and infrastructure across the world.

Headquartered in Singapore, we operate 21 state-of-the-art manufacturing facilities and maintain a global network of 80+ service companies, serving clients in over 150 countries. Our team of 15,000 professionals, including 1,500+ R&D and technical experts, drives innovation and ensures the highest standards of quality and reliability.

Expertise in Battery Power & Smart Energy Solutions

At LEOCH, we deliver quality power solutions built to perform across industrial and commercial applications. Our expertise includes:

Battery Energy Storage Systems (BESS): Industrial, commercial, residential, grid-side, and renewable energy solutions.

Telecom & Data Centre Backup Power Solutions: Reliable & quality power for mission-critical network power, UPS and AI data center power applications.

Automotive Power Solutions: Start-stop, lighting and ignition batteries for ICE & EV cars, motorcycles, etc.

Motive Power Solutions: Golf cart, bicycle & tricycle, material handling and forklifts.

Battery Recycling: Sustainable recycling solutions for a greener future.

At LEOCH BATTERY, we are committed to innovation, reliability, and sustainability, ensuring that our clients and partners across the globe receive reliable and efficient power and smart energy solutions.

1500+
R&D Staff

20+
Years of Industrial Experience

8
R&D Centers

60+
Standard Settings

1000+
Patents

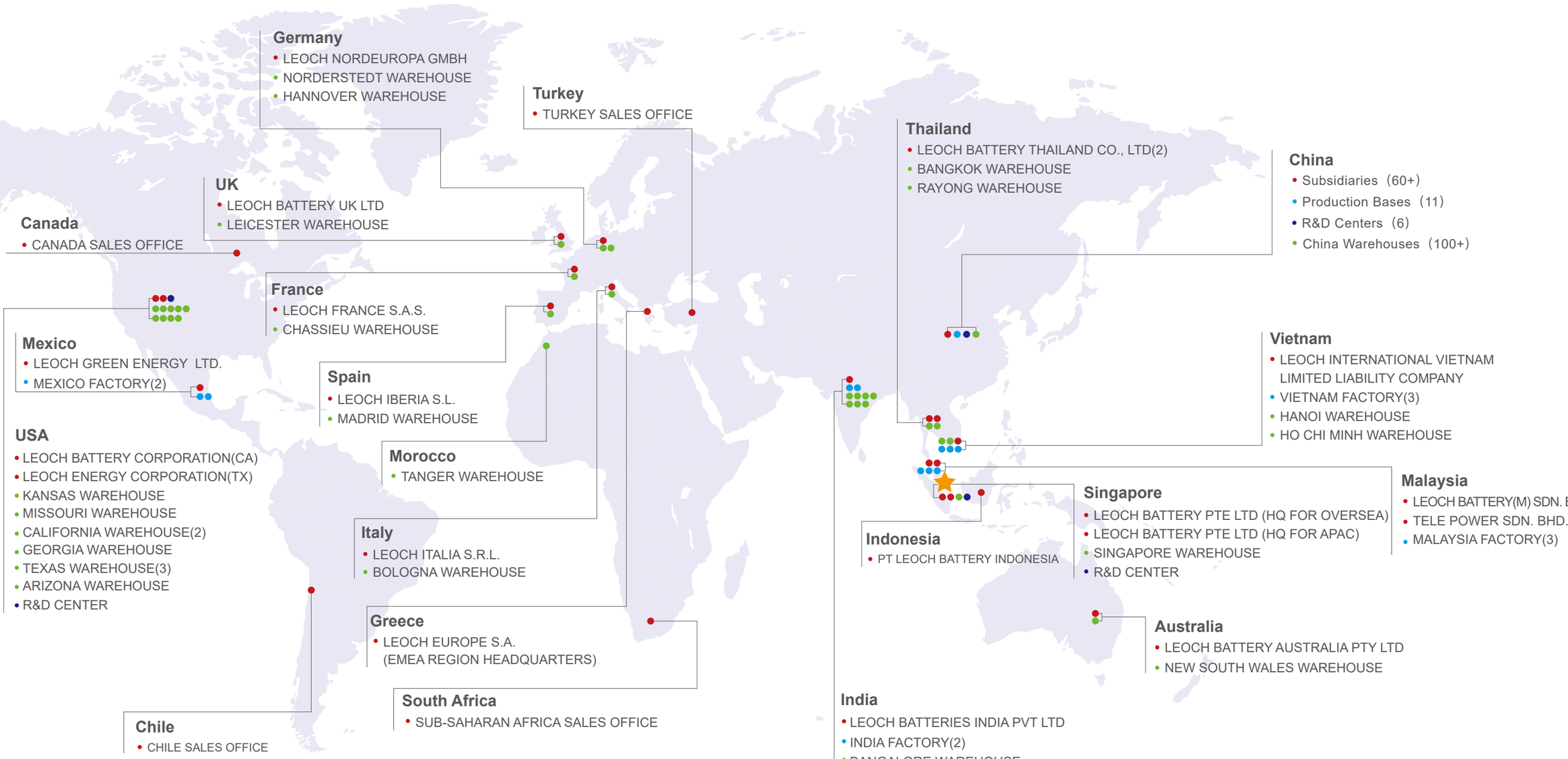
Large scale automated production line

Leoch manufacturing team has experience in large-scale lithium battery manufacturing and the ability of long-term stable product delivery. The company's lithium battery production line has achieved a high degree of automation and intelligence in production. By Introducing a new EMS intelligent system and integrating data acquisition channels (RFID, PLC, IPC, PC, etc.) to cover the entire factory manufacturing site, it can ensue real-time, accurate, and comprehensive collection of big data, multi-dimensional protection of product stability, consistency, service, which helps customers establish safe and reliable energy storage systems.

Test Center

Since its establishment, Leoch testing and verification center has been operating strictly accordance with the requirements of CNAS. It has industry-leading testing and verification equipments and a high-level tester team, and has professional testing and verification capabilities for lithium battery products, including material testing, performance testing, and safety and reliability testing,which is able to ensure the quality of battery products is safe and reliable.

Leoch Global Network



Global Subsidiaries, Production Bases, Warehouses, R&D Centers/Distribution in Worldwide Regions (as of September 2025)

● Subsidiaries (80+) ● Production Bases (21) ● Warehouses (Overseas30, China 100+) ● R&D Centers (8)

Product Series:

48V Communication Lithium Battery

48V Intelligent Lithium Battery

48V GPS Communication Lithium Battery

Telecom Power Solutions

Leoch manufactures a wide range of Lithium Network Power Batteries to cover any telecommunications requirement. Aiming to deliver an unprecedented value to your needs, these solutions offer exceptional performance, long life, high energy density, ease of installation, and hassle-free operation for a broad spectrum of telecom applications.

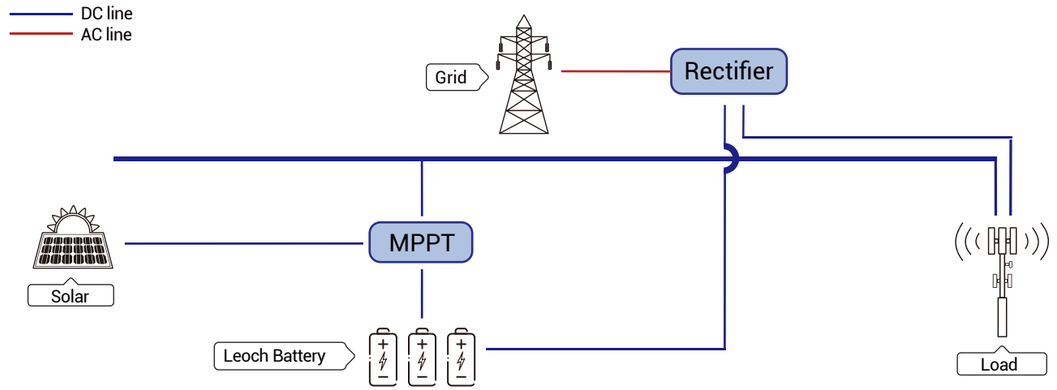
High Energy Density

6000cycles at 80%DOD

Excellent high-temperature performance

Outdoor airport station

Communication room



Telecom Battery

High Energy Density

Easy To Install And Upgrade

Remote Control And Diagnosis

15 Years Life Time Design

Product Feature

More reliable and safety

- Support gyroscope anti-theft

Advanced monitoring control

- Optimized monitoring strategy through remote control and diagnosis

Wide working temperature

- Excellent high-temperature performance with a working environment temperature of -20-60 Celsius degrees

Easy operation

- Friendly human-machine interface for easy operation

More compatible to monitoring system

- Support RS232 and RS485 communication to be connected to the power environment monitoring system

Telecom Battery

Model	LFELI-4850	LFELI-48100	LFELI-48150	LFELI-48200
Rated Capacity(@25°C, 0.2C)	50Ah	100Ah	150Ah	200Ah
Nominal Voltage	48V	48V	48V	48V
Discharge Ending Voltage	40.5V	40.5V	40.5V	40.5V
Recom.average charging voltage/ float charging voltage	54/51.75	54/51.75	54/51.75	54/51.75
Max. Charging Current	50A	100A	100A	100A
Max. Continue Discharging Current	50A	100A	100A	100A
Weight	Approx. 26Kg	Approx. 40Kg	Approx. 59Kg	Approx.80Kg
Display	Yes	Yes	Yes	Yes
Max Parallel Quantity	15	15	15	15
Dimensions (W*D*H) mm	442 * 442 * 132	442 * 450 * 132	442*520*198	442 * 520 * 244
Containing Cell	3.2V 50Ah	3.2V 100Ah	3.2V 150Ah	3.2V 200Ah
Design Life	≥15 years			
Cycle Life	6000 cycles			
IP Class	IP30			
Outer Package Material	SPCC			
Temp Range	Charging: 0°C ~55°C Discharging: -20°C ~60°C Storage: -20°C ~60°C			
Recom. Temp. Range	Charging: 15°C ~35°C Discharging: 15°C ~35°C Storage: -10°C ~35°C			

48V Intelligent Telecom Battery

Outstanding Compatibility To Battery And Dc Power

Data Transmission And TV Signal Transmission

Bureaus (stations), Switching Stations

Emergency Power Supply Wired Communication

Product Feature

Outstanding compatibility to battery and DC power

• Compatible with existing DC power system and mixed batteries

Auxiliary power supply

• Save the expansion costs for base station

Boost power supply

• Compensating for the drop voltage and reducing the investment cost for booster

Up to 32 groups in parallel connection

• Expandable battery capacity to cater for different level demand

48V Intelligent Telecom Battery

Model	LFELI-48100ZN	LFELI-48150ZN
Rated Capacity(@25°C, 0.2C)	100Ah	150Ah
Nominal Voltage	48V	48V
Discharge Ending Voltage	40.5V	40.5V
Recom.average charging voltage/ float charging voltage	54/51.75	54/51.75
Max. Charging Current	100A	100A
Max. Continue Discharging Current	100A	100A
Weight	Approx. 40.5Kg	Approx. 60Kg
Display	No	
Max Parallel Quantity	15	
Dimensions (W*D*H) mm	442 * 450* 133	442 * 560* 133
Containing Cell	3.2V 100Ah	3.2V 150Ah
Design Life	≥15 years	
Cycle Life	6000 cycles	
IP Class	IP30	
Outer Package Material	SPCC(Aluminum Alloy panel)	
Temp Range	Charging: 0°C ~55°C Discharging: -20°C ~60°C Storage: -20°C ~60°C	
Recom. Temp. Range	Charging: 15°C ~35°C Discharging: 15°C ~35°C Storage: -10°C ~35°C	

48V GPS Telecom Battery

Field Base Stations

Data Transmission And Tv Signal Transmission

Bureaus (Stations) Switching Stations

Emergency Power Supply Wired Communication

Product Feature

- Real-time monitoring and detection by GPS
- Abnormal battery status indication
- History footprint track and playback
- Maintenance by nearby staff to improve the service efficiency

48V GPS Telecom Battery

Model	LFELI-48100 G	LFELI-48150 G	LFELI-48200 G
Rated Capacity(@25°C, 0.2C)	100Ah	150Ah	200Ah
Nominal Voltage	48V	48V	48V
Discharge Ending Voltage	40.5V	40.5V	40.5V
Recom.average charging voltage/ float charging voltage	54/51.75	54/51.75	54/51.75
Max. Charging Current	100A	100A	100A
Max. Continue Discharging Current	100A	100A	100A
Weight	Approx. 40.5Kg	Approx. 59Kg	Approx. 77Kg
Display	Yes		
Max Parallel Quantity	15		
Dimensions (W*D*H) mm	442 * 450 * 132	442 * 550 * 177	442 * 520 * 244
Anti-theft Feature	T-Sensor & GPS		
Cell	3.2V 100Ah	3.2V 150Ah	3.2V 200Ah
Design life	≥15 years		
Cycle Life	6000 cycles		
IP Class	IP30		
Outer Package Material	SPCC		
Temp Range	Charging: 0°C ~55°C Discharging: -20°C ~60°C Storage: -20°C ~60°C		
Recom. Temp. Range	Charging: 15°C ~35°C Discharging: 15°C ~35°C Storage: -10°C ~35°C		

Product Series:

PU Short-time Backup Power Series

BU Long-time Backup Power Series

DU DC Power Panel Backup Power Series

UPS & DATA Center Solutions

In the ICT and industrial sectors, LEOCH offers modular lithium battery products. Using high-performance LFP unit, high-precision three-level BMS, vertical and horizontal grid software control management, dual fire prevention, prevention and elimination combination, to meet customer needs. The system is easy to install, safe and reliable, small footprint, long service life and so on. Can significantly improve the customer experience.

High Safety and Stability

No fire when thermal runaway

High Unit Discharge Power

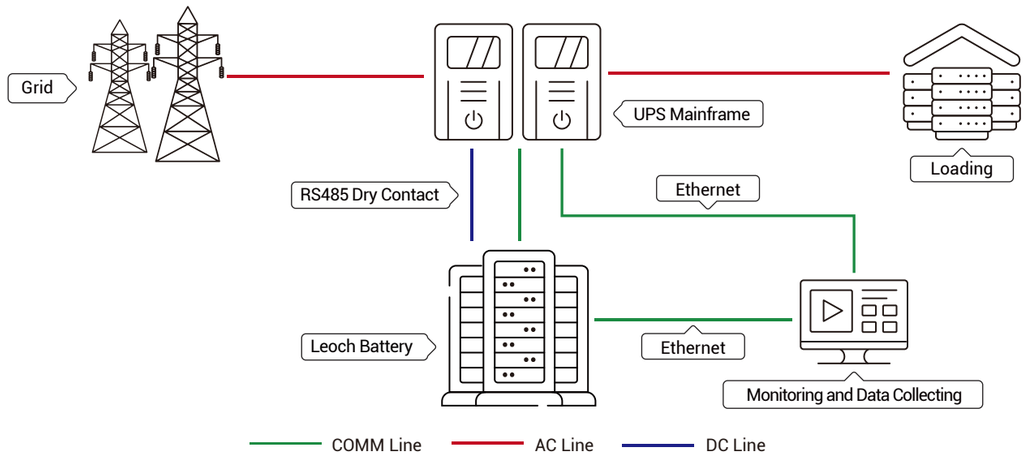
It can meet the backup power requirements of more than 3Mins

High Energy Density

The occupation area is 70% less than lead acid battery.

Three-Level BMS management

The system can provide power normally



PU Short-time Backup Power Series(5min)

PU80/PU160

Safety and Reliability
Safe high-energy-density LFP batteries

High Compatibility
Replace lead-acid batteries without replacing the UPS

Modular Design
Adopt modular design for convenient installation and maintenance

Intelligent Monitoring
Three-level BMS management system for real-time battery status monitoring

Product Feature

Flexible Configuration
• Adaptable to various voltage levels, supporting multi-unit parallel expansion

Intelligent Operation and Maintenance
• Smart display screen for data presentation and statistics, providing clear insights into battery operation

Fire Protection System
• Pack-level + cabinet-level fire protection system (optional)

Short-Duration Power Backup
• High-rate discharge, suitable for 5-minute power backup scenarios

Item						
Model	PU384V80	PU448V80	PU512V80	PU384V160	PU448V160	PU512V160
Nominal Voltage/V	384	448	512	384	448	512
Nominal Capacity/Ah	80			160		
Nominal Energy/kWh	30.7	35.8	40.9	61.4	71.6	81.9
Cell Type	LFP					
Dimensions(W*D*H)/mm	600*1000*2200					
Weight/kg	640	690	740	1000	1100	1250
Max Output Power	213.75kW@5min	249.37kW@5min	285kW@5min	427.5kW@5min	498.75kW@5min	570kW@5min
Operate Voltage Range/V	336~414	392~483	448~552	336~414	392~483	448~552
Max Charge Current/A	80			160		
Operate Temperature	Charge: 5~45°C, Discharge: -15~50°C, Storage: -10~45°C					
Operate Humidity	5-95%RH					
Thermal Management	Nature Cooling					
Max number of parallel units	15					
Fire Protection	Pack-level + cabinet-level fire protection, Optional					
Communication	RS485, TCP, CAN, Dry contact					
Certificate	UN38.3, RoHS, REACH, EMC, UL9540A, UL1973					

* The Company reserves the right to revise technical specifications and performance parameters of the Product as necessary.

PU Short-time Backup Power Series(15min)

PU50/PU100

Safety and Reliability
Safe high-energy-density LFP batteries

High Compatibility
Replace lead-acid batteries without replacing the UPS

Modular Design
Adopt modular design for convenient installation and maintenance

Intelligent Monitoring
Three-level BMS management system for real-time battery status monitoring

Product Feature

Flexible Configuration
• Adaptable to various voltage levels, supporting multi-unit parallel expansion

Intelligent Operation and Maintenance
• Smart display screen for data presentation and statistics, providing clear insights into battery operation

Fire Protection System
• Pack-level + cabinet-level fire protection system (optional)

Short-Duration Power Backup
• High-rate discharge, suitable for 15-minute power backup scenarios

PU50 Series

Model	PU204V50	PU256V50	PU307V50	PU358V50	PU409V50	PU460V50	PU512V50	PU614V50
Nominal Voltage/V	204.8	256	307.2	358.4	409.6	460.8	512	614.4
Nominal Capacity/Ah	50							
Nominal Energy/kWh	10.24	12.8	15.36	17.92	20.48	23.04	25.6	30.72
Cell Type	LFP							
Dimensions(W*D*H)/mm	600*1000*1165		600*1000*1500			600*1000*2000		
Weight/kg	250	285	350	385	420	515	550	625
Max Output Power	40kW @15min	50kW @15min	60kW @15min	70kW @15min	80kW @15min	90kW @15min	100kW @15min	120kW @15min
Operate Voltage Range/V	179~220	224~276	268~331	313~386	358~441	403~496	448~552	537~662
Max Charge Current/A	50							
Operate Temperature	Charge: 0~45°C, Discharge: -20~65°C, Storage: -5~35°C							
Operate Humidity	5-95%RH							
Thermal Management	Air cooling							
Max number of parallel units	15							
Fire Protection	Pack-level + cabinet-level fire protection, Optional							
Communication	RS485, TCP, CAN, Dry contact							
Certificate	UN38.3, EMC, REACH, ROHS							

PU100 Series

Model	PU204V100	PU256V100	PU307V100	PU358V100	PU409V100	PU460V100	PU512V100
Nominal Voltage/V	204.8	256	307.2	358.4	409.6	460.8	512
Nominal Capacity/Ah	100						
Nominal Energy/kWh	20.48	25.6	30.72	35.84	40.96	46.08	51.2
Cell Type	LFP						
Dimensions(W*D*H)/mm	600*1000*1200		600*1000*1500			600*1000*2000	
Weight/kg	379	417	471	510	563	600	655
Max Output Power	74.4kW @15min	93kW @15min	111.6kW @15min	130.2kW @15min	148.8kW @15min	167.4kW @15min	186kW @15min
Operate Voltage Range/V	179~220	224~276	268~331	313~386	358~441	403~496	448~552
Max Charge Current/A	100						
Operate Temperature	Charge: 0~45°C, Discharge: -20~65°C, Storage: -5~45°C						
Operate Humidity	5-95%RH						
Thermal Management	Air cooling						
Max number of parallel units	15						
Fire Protection	Pack-level + cabinet-level fire protection, Optional						
Communication	RS485, TCP, CAN, Dry contact						
Certificate	UN38.3, RoHS, REACH, EMC						

* The Company reserves the right to revise technical specifications and performance parameters of the Product as necessary.

BU Long-time Backup Power Series

Safety and Reliability
Safe high-energy-density LFP batteries

High Compatibility
Replace lead-acid batteries without replacing the UPS

Modular Design
Adopt modular design for convenient installation and maintenance

Intelligent Monitoring
Three-level BMS management system for real-time battery status monitoring

Product Feature

Flexible Configuration
• Adaptable to various voltage levels, supporting multi-unit parallel expansion

Intelligent Operation and Maintenance
• Smart display screen for data presentation and statistics, providing clear insights into battery operation

Fire Protection System
• Pack-level + cabinet-level fire protection system (optional)

Abundant energy
• Seamless switching to ensure uninterrupted power supply for critical loads

BU100 Series

Model	BU256V100	BU307V100	BU358V100	BU409V100	BU460V100	BU512V100	BU563V100	BU614V100	BU665V100	BU716V100	BU768V100
Nominal Voltage/V	256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768
Nominal Capacity/Ah	100										
Nominal Energy/kWh	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44	66.56	71.68	76.8
Cell Type	LFP										
Dimensions(W*D*H)/mm	600*1000*1165	600*1000*1500		600*1000*2000					600*1000*2300		1150*1000*1500
Weight/kg	340	390	430	545	590	640	685	730	780	824	940
Max Output Power	49KW @30min	58.8KW @30min	68.6KW @30min	78.4KW @30min	88.2KW @30min	98KW @30min	107.8KW @30min	117.6KW @30min	127.4KW @30min	137.2KW @30min	147KW @30min
Operate Voltage Range/V	224~276	268~331	313~386	358~441	403~496	448~552	492~607	537~662	582~717	627~772	672~828
Max Charge Current/A	100										
Operate Temperature	Charge: 0~45°C, Discharge: -20~65°C, Storage: -5~35°C										
Operate Humidity	5-95%RH										
Thermal Management	Air cooling										
Max number of parallel units	15										
Fire Protection	Pack-level + cabinet-level fire protection, Optional										
Communication	RS485, TCP, CAN, Dry contact										

BU200 Series

Model	BU256V200	BU307V200	BU358V200	BU409V200	BU460V200	BU512V200	BU563V200	BU614V200	BU665V200	BU716V200
Nominal Voltage/V	256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8
Nominal Capacity/Ah	200									
Nominal Energy/kWh	51.2	61.44	71.68	81.92	92.16	102.4	112.6	122.8	133.1	143.3
Cell Type	LFP									
Dimensions(W*D*H)/mm	600*1000*1165	600*1000*1500		600*1000*2000					600*1000*2300	
Weight/kg	545	680	760	890	970	1050	1130	1210	1290	1370
Max Output Power	50kW @60min	60kW @60min	70.9kW @60min	81kW @60min	91.17kW @60min	101.3kW @60min	111.4kW @60min	121.5kW @60min	131.7kW @60min	141.8kW @60min
Operate Voltage Range/V	224~276	268~331	313~386	358~441	403~496	448~552	492~607	537~662	582~717	627~772
Max Charge Current/A	100									
Operate Temperature	Charge: 0~45°C, Discharge: -20~65°C, Storage: -5~35°C									
Operate Humidity	5-95%RH									
Thermal Management	Air cooling									
Max number of parallel units	15									
Fire Protection	Pack-level + cabinet-level fire protection, Optional									
Communication	RS485, TCP, CAN, Dry contact									

* The Company reserves the right to revise technical specifications and performance parameters of the Product as necessary.

DU DC Power Panel Backup Power Series

Safety and Reliability
Safe high-energy-density LFP batteries

High Compatibility
Replace lead-acid batteries without replacing the UPS

Modular Design
Adopt modular design for convenient installation and maintenance

Intelligent Monitoring
Three-level BMS management system for real-time battery status monitoring

Product Feature

Flexible Configuration
• Adaptable to various voltage levels, supporting multi-unit parallel expansion

Abundant energy
• Seamless switching to ensure uninterrupted power supply for critical loads

Fire Protection System
• Pack-level + cabinet-level fire protection system (optional)

Item						
Model	DU115V100	DU115V150	DU115V200	DU230V100	DU230V150	DU230V200
Nominal Voltage/V	115.2			230.4		
Nominal Capacity/Ah	100	150	200	100	150	200
Nominal Energy/kWh	11.52	17.28	23.04	23.04	34.56	46.08
Cell Type	LFP					
Dimensions(W*D*H)/mm	800*600*2260					
Weight/kg	285	320	375	380	440	570
Max Output Power	11.52kW @60min	17.28kW @60min	23.04kW @60min	23.04kW @60min	34.56kW @60min	46.08kW @60min
Operate Voltage Range/V	100.8~124.2			201.6~248.4		
Operate Temperature	Charge: 0~55°C, Discharge: -10~60°C, Storage: 5~35°C					
Operate Humidity	5-95%RH					
Thermal Management	Natural cooling					
Max number of parallel units	15					
Fire Protection	Pack-level, Optional					
Communication	RS485, CAN, Dry contact					

* The Company reserves the right to revise technical specifications and performance parameters of the Product as necessary.

Residential Energy Storage Solutions

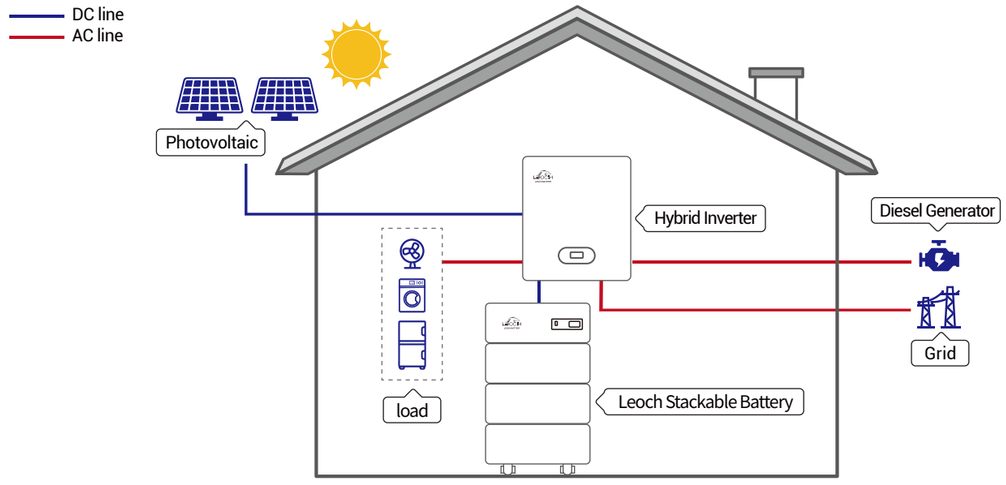
With the deepening of the low-carbon concept and the improvement of the economic benefits of energy storage; Residential energy storage systems are increasingly widely used. Based on a thorough understanding of market and industry trends, Leoch has developed household energy storage products that can flexibly adapt to multiple scenarios, making it easier and more efficient for users to use electricity.

High-end villas

Residential areas

Nomadic farms

Communication base stations



Residential Energy Storage Battery (Rack-mounted)

High Efficiency
Max.efficiency95%

Eco-Friendly
Clean energy

Long Lifespan
Sustainable long cycles

Built-in BMS
Charge & discharge protetion

Product Introduction

- Up to 15 groups of parallel connections, flexible capacity expansion
- Compatible with mainstream inverters in the market, providing more options
- LCD display for voltage, current, temperature, convenient for users to query
- Built-in BMS provides multiple protection functions

Item	Parameters			
Model	LR24-100	LR24-200	LR51.2-100	LR51.2-200
Nominal voltage/V	25.6	25.6	51.2	51.2
Rated capacity/Ah	100	200	100	200
Cell Type	LFP($LiFePO_4$)	LFP($LiFePO_4$)	LFP($LiFePO_4$)	LFP($LiFePO_4$)
Energy/kWh	2.56	5.12	5.12	10.24
Maximum charge current/A	100	100	100	150
Maximum discharge current/A	100	100	100	150
Discharge voltage/Maximum charge/V	21.6/29.2	21.6/29.2	43.2/58.4	43.2/58.4
Weight/KG	26	43	43	82
Dimensions(W*D*H)(mm)	442 *350 *177	442 *450 *177	442 *431 *177	442 *550 *177
Cycle life	≥6000 cycles @ 80% DOD			
Max number of parallel connections	15			
Display	With display screen			
BMS communication types	RS485, RS232, CAN			
IP Class	IP31			
Design Life	15 years			
Operate Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C			
Optional function	WiFi, Bluetooth			

Residential Energy Storage Battery (Wall-mounted)

High Efficiency
Max. efficiency 95%

Eco-Friendly
Clean energy

Long Lifespan
Sustainable long cycles

Built-in BMS
Charge & discharge protetion

Product Introduction

- Up to 15 groups of parallel connections, flexible capacity expansion
- Compatible with mainstream inverters in the market, providing more options
- LCD display for voltage, current, temperature, convenient for users to query
- Built-in BMS provides multiple protection functions

Item	Parameters			
Model	**LW25.6-100**	**LW25.6-200**	**LW51.2-100**	**LW51.2-200**
Nominal voltage/V	25.6	25.6	51.2	51.2
Rated capacity/Ah	100	200	100	200
Cell Type	LFP($LiFePO_4$)	LFP($LiFePO_4$)	LFP($LiFePO_4$)	LFP($LiFePO_4$)
Energy/kWh	2.56	5.12	5.12	10.24
Maximum charge current/A	100	100	100	100
Maximum discharge current/A	100	100	100	100
Discharge voltage/Maximum charge/V	21.6/29.2	21.6/29.2	43.2/58.4	43.2/58.4
Weight/KG	29	52	50	94
Dimensions(W*D*H)(mm)	375 *500*165	510 *400 *240	450 *500 *140	500*620 *245
Cycle life	≥6000 cycles @ 80% DOD			
Max number of parallel connections	15			
Display	With display screen			
BMS communication types	RS485, RS232, CAN			
IP Class	IP31			
Design Life	15 years			
Operate Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C			
Optional function	WiFi, Bluetooth			

Residential Energy Storage Battery (Floor-mounted)

High Efficiency
Max. efficiency 95%

Eco-Friendly
Clean energy

Long Lifespan
Sustainable long cycles

Built-in BMS
Charge & discharge protetion

Product Introduction

- Up to 15 groups of parallel connections, flexible capacity expansion
- Compatible with mainstream inverters in the market, providing more options
- LCD display for voltage, current, temperature, convenient for users to query
- Built-in BMS provides multiple protection functions

Residential Energy Storage Battery (Floor-mounted)

Item	Parameters		
Model	**LF51.2-300**	**LF51.2-400**	**LF51.2-600**
Nominal voltage/V	51.2	51.2	51.2
Rated capacity/Ah	314	400	600
Cell Type	LFP($LiFePO_4$)	LFP($LiFePO_4$)	LFP($LiFePO_4$)
Energy/kWh	16.08	20.48	30.72
Maximum charge current/A	100	200	200
Maximum discharge current/A	200	200	200
Discharge voltage/Maximum charge/V	43.2/58.4	43.2/58.4	43.2/58.4
Weight/KG	118	173	255
Dimensions(W*D*H)(mm)	390 *256.5*882	540 *280 *940	680*280 *940
Cycle life	≥6000 cycles @ 80% DOD		
Max number of parallel connections	15		
Display	With display screen		
BMS communication types	RS485, RS232, CAN		
IP Class	IP31		
Design Life	15 years		
Operate Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C		
Optional function	WiFi, Bluetooth		

Residential Energy Storage Battery
(Low Voltage & Stackable)

High Efficiency
Max. efficiency 94%

Easy installation
45 Kg Battery modules

Safe and Reliable
Lithium iron phosphate battery cells

Perfect Compatibility
Work with leading branded inverters

Product Introduction

- Scalable from 5 kWh to 60 kWh
- LFP battery, safest and long cycle life
- Compatible with a variety of mainstream inverter
- Stackable design,effortlessly installation
- Maximum Flexibility for any Applications with up to 12 Modules Connected in Parallel
- Capable of High-Powered Emergency-Backup and Off-Grid Function

Battery Module

- 5.12 kWh per Module
- Modular and Stack Installation Design to simplify the maintenance
- Connect up to 12 module in parallel for a maximum size of 60 kWh.

Flexible, Efficient, Simple

Plug Connection
No Additional Wiring Required

5-60kWh
Tailored Sizing for Each Application

Extend Anytime
Easily Adapts to New Requirements

High Power
Power for Every Application

Technical Parameters

Battery Module	SOL-5L-B	SOL-10L-B	SOL-15L-B	SOL-20L-B
External Structure				
Rated Capacity/Ah	100	200	300	400
Overall Size /mm	680x429x320	680x429x540	680x429x750	680x429x970
Weight /Kg	65±1	115±1	165±1	215±1
Combination Method (single battery pack)	16S1P			
Nominal Voltage/V	51.2			
Limited Discharge Voltage /V	43.2			
Limited Charging Voltage /V	57.6			
Internal Resistance (single battery pack)	≤20mΩ			
Max Continuous Charging current /A	100			
Max Continuous Discharging Current /A	100			
Operation Temperature Range	Charge:0~50°C; Discharge: -10~50°C			
Storage Temperature Range	- 20~+60°C, Recommend: ≤60±25%RH storage humidity			
Single Module Size/weight	680*429*215mm /50Kg±1Kg			

Residential Energy Storage System
(Low Voltage & Stackable)

High Efficiency
Max. efficiency 94%

Easy installation
45 Kg Battery modules

Safe and Reliable
Lithium iron phosphate battery cells

Perfect Compatibility
Work with leading branded inverters

Product Introduction

- Scalable from 5 kWh to 60 kWh
- Self-Consumption Optimization
- Maximum Flexibility for any Applications with up to 12 Modules Connected in Parallel
- Integrated with inverter to avoid the compatibility problem
- LFP battery, safest and long cycle life
- Stackable design,effortlessly installation
- Capable of High-Powered Emergency-Backup and Off-Grid Function

Battery Module

- 5.12 kWh per Module
- Modular and Stack Installation Design to simplify the maintenance
- Connect up to 12 module in parallel for a maximum size of 60 kWh.

Flexible, Efficient, Simple

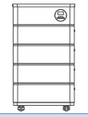
Plug Connection
No Additional Wiring Required

5-60kWh
Tailored Sizing for Each Application

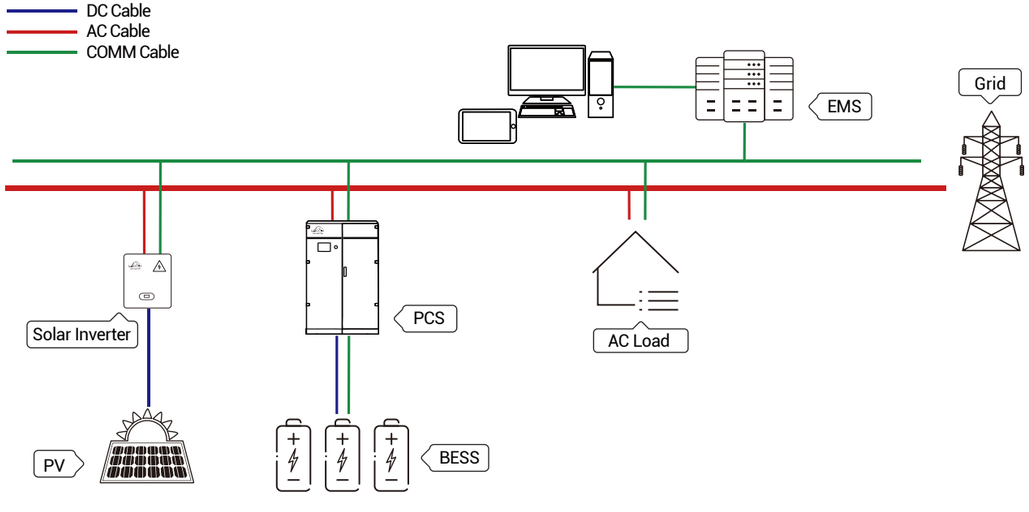
Extend Anytime
Easily Adapts to New Requirements

High Power
Power for Every Application

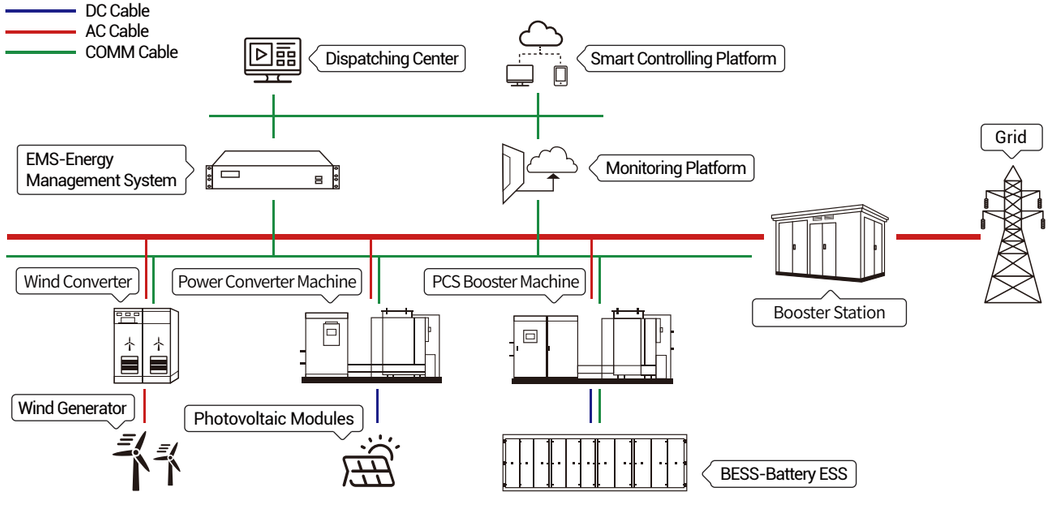
Technical Parameters

Model	SOL-5-5.6LS	SOL-10-5.6LS	SOL-15-5.6LS	SOL-20-5.6LS
System structure				
Inverter	SOL-5.6KL-S			
Rated Power	5600W			
Maximum PV Array Open Circuit voltage	500VDC			
MPPT Voltage Range	120-450V			
Nomial Output Voltage	220/230/240VAC			
Output Voltage Range	184-265VAC			
Nominal Output Current	25.5A/24.3A/23.3A			
Efficiency	Up to 93.5%			
Grid Output Voltage Range	120-280VAC			
Grid Frequency	50/60Hz(Auto Sensing)			
Maximum AC Charge Current	120A			
Maximum Solar Charge Current	120A			
Nominal DC Voltage	48VDC			
Battery Model	SOL-51.2/100-L (*1)	SOL-51.2/100-L (*2)	SOL-51.2/100-L (*3)	SOL-51.2/100-L (*4)
Rated Capacity/Ah	100	200	300	400
Overall Size /mm	680*429*540	680*429*750	680*429*980	680*429*1185
Weight /Kg	85±1	135±1	185±1	235±1
Nominal Voltage/V	51.2			
Limited Discharge Voltage /V	43.2			
Limited Charging Voltage /V	57.6			
Internal Resistance(single battery pack)	≤20mΩ			
Max Continuous Charging Current /A	100			
Max Continuous Discharging Current /A	100			
Operation Temperature Range	Charge:0~50°C; Discharge: -10~50°C			
Storage Temperature Range	- 20~+60°C, Recommend: ≤60±25%RH storage humidity			
Single Module Size/weight	680*429*215mm /50Kg±1Kg			

C&I Energy Storage Systems Solutions



Large-scale Energy Storage Systems Solutions



Outdoor Cabinet Liquid-cooled PV Energy Storage System

Titan-S105/232/100-LS & Titan-S105/261/100-LS

Industrial and Commercial Energy, Microgrids

Platform Energy Storage

Optical Storage Charging Station

Emergency Standby Power

Product Feature

Extreme Temperature Control

• Intelligent liquid cooling, reduce the temperature difference, improve battery performance, so that the system efficiency is higher and the life longer.

Safe And Reliable

• Multiple fire-fighting designs, core level temperature detection + PACK level + cabinet level aerosol fire-fighting + water fire-fighting + explosion-proof pressure relief to ensure the safe and reliable operation of the system.

Rich Configuration

• More flexible configuration, support for multiple parallel expansion, support and off-grid automatic switching, fast response, to ensure that the key loads continue uninterrupted power supply.

• Support load, battery, grid or diesel generator, photovoltaic access at the same time.

Intelligent Operation and Maintenance

• Visible and manageable network, improve system reliability, stability and O&M efficiency, optimize system performance.

• Intelligent switching of multi-mode energy regulation strategies, including peak shaving and valley filling, demand response, and virtual power plant.

Outdoor Cabinet Liquid-cooled PV Energy Storage System

System model	Titan-S105/232/100-LS	Titan-S105/261/100-LS
Battery Parameters		
Cell Type	LFP3.2V /280Ah	LFP3.2V / 314Ah
Nominal Energy	232kWh	261kWh
Battery PACK Type	1P52S	
Cluster Configuration	1P260S	
Battery Voltage Range	728V ~ 936V	
AC parameters(Grid mode)		
Rated Power	105kW	
Rated Voltage	400V, 3P4W	
Rated Current	152A	
Overload Capacity	110% long term	
Rated Grid Frequency	50Hz / 60Hz	
Power Factor	0.99	
Power Factor Range	1 (lead) ~ 1 (lag)	
Current Distortion Rate	< 3% (Rated power)	
DC Component	0.5%	
AC parameters(Islanded Mode)		
Rated Power	105kW	
Rated Voltage	400V, 3P4W	
Rated Current	152A	
Rated Frequency	50Hz / 60Hz	
THDu	≤ 3% (linear load)	
Three-phase Unbalance	100%	
System Parameters		
Charge and Discharge Rate	≤ 0.5C	
Dimensions (W*D*H)	1570*1360*2335 (mm)	
Weight	About 2969 kg	
IP Level	IP55	
Altitude	2000 meters (> 2000m derate for use)	
Operating Temperature	-20°C ~ 55°C (> 45°C derate for use)	
Relative Humidity	0 ~ 95% (no condensation)	
Operating Noise	≤ 75dB	
Cooling Method (PCS)	Intelligent air cooling	
Cooling Method (Battery Compartment)	Intelligent liquid cooling	
Fire Fighting System	PACK level + cabinet level aerosol fire extinguishing + waterfire fighting + explosion- proof pressure relief	
Communication Interface	RS485, CAN, Ethernet, Dry contact	
Certifications	IEC61000, IEC62619, IEC62477, UN38.3	UN38.3
STS Parameters (Optional)		
Rated Power	200kW (grid side 200kW, load side 100kW)	
Switching Time	≤ 20ms	
Photovoltaic Parameters (Optional)		
Maximum Photovoltaic Input Power	50kW / 100kW	
MPPT Voltage Range	200 ~ 720V	
Number of MPPTs	1 / 2	
Number of Photovoltaic Input Channels	1 / 2	
Maximum Input Current	100A per circuit	

Outdoor Cabinet Liquid-cooled Energy Storage System

Titan-S125/261-L

* The appearance of the product is for reference only

Product Feature

Highly Integrated

• ALL-in-one integrated design, simple installation and maintenance, saving space and cost.

Safe and Reliable

• Multiple fire protection design, Cabinet level aerosol fire extinguishing + water fire fighting + explosion- proof pressure relief + explosion-proof exhaust system.

Modular Design

• More flexible configuration, multiple parallel connections, fast response.

Intelligent Operation and Maintenance

• The entire network's energy storage is visible and manageable, improving system reliability, stability, operation and maintenance efficiency, and optimizing system performance.

Extreme Temperature Control

• Liquid-cooled precise temperature control. This system boasts higher efficiency and a longer service life.

System Model	Titan-S125/261-L
Battery Parameters	
Cell Type	LFP3.2V/314Ah
Battery PACK Type	1P52S
Cluster Configuration	1P260S
Nominal Energy	261kWh
Battery Voltage Range	728V～936V
AC parameters(Grid mode)	
Rated Power	125kW
Rated Voltage	400V,3P4W
Rated Current	180A
Overload Capacity	110% long term
Rated Grid Frequency	50Hz/60Hz
Power Factor	0.99
Power Factor Range	1 (lead) ~ 1 (lag)
Current Distortion rate	<3% (Rated power)
DC Component	0.50%
AC parameters（Islanded Mode）	
Rated Power	125kW
Rated Voltage	400V，3P4W
Rated Current	180A
Rated Frequency	50Hz/60Hz
THDu	≤3% (linear load)
Three-phase unbalance	100%
System Parameters	
Charge and Discharge Rate	≤0.5C
Dimensions (W*D*H)	1000*1300*2392mm
Weight	≤ 3000kg
IP Level	Electrical compartment：IP54, battery compartment： IP55
Altitude	2000 meters (>2000m derate for use)
Operating Temperature	-20℃~55℃ (>45℃ derate for use)
Relative Humidity	5～95% (no condensation)
Operating Noise	≤75dB
Cooling method (PCS)	Intelligent air cooling
Cooling method (battery compartment)	Intelligent liquid cooling
Fire Fighting System	Cabinet level aerosol fire extinguishing + water fire fighting + explosion- proof pressure relief + explosion-proof exhaust system
Communication Interface	RS485, CAN, Ethernet, Dry contact

Outdoor Cabinet Air-cooled PV Energy Storage System

Titan-S50/160/100-WS

* The appearance of the product is for reference only

Product Feature

Easy to Install

• Plug and play, instant use; The battery cabinet has IP55 protection grade and C3 corrosion protection grade, and can be deployed outdoors.

Safe And Reliable

• Multi-fire design, unit level temperature detection + Cabinet level aerosol fire extinguishing + explosion- proof pressure relief + water fire fighting.

Flexible Deployment

• Modular design, flexible expansion, parallel design of multiple machines, supporting rapid expansion to megawatt scale system.

Rich Configuration

• It supports the simultaneous access of load, battery, grid and diesel generator and photovoltaic.

System Model	Titan-S50/160/100-WS
Battery Parameters	
Cell Type	LFP3.2V/314Ah
Battery PACK Type	1P20S
Cluster Configuration	1P160S
Nominal Energy	160kWh
Nominal Battery Voltage	512V
Battery Voltage Range	448V~576V
Charge and Discharge Rate	0.5C
AC parameters	
Type of Grid Connection	3L/N/PE
Rated Power	50kW
Rated Voltage	AC 400V
Rated Current	72A
Rated Grid Frequency	50/60Hz
THD	≤3%
System Parameters	
Dimensions (W*D*H)	Battery : 800*1330*2360 (mm) ; Hybrid inverter : 530*290*880 (mm)
Weight	About73kg (Hybrid inverter) ; About1450kg (Battery)
IP Level	IP66 (Hybrid inverter); IP55 (Battery)
Cooling Method	Intelligent fan (Hybrid inverter); Air conditioner (Battery)
Fire Fighting System	Cabinet level aerosol fire extinguishing + explosion- proof pressure relief + water fire fighting
Grade of Corrosion Protection	C3
Relative Humidity	0-95%(no condensation)
Operating Temperature	-20°C~50°C
Altitude	< 2000 m
Communication Interface	RS485， Ethernet
Communication Protocol	Modbus RTU, Modbus TCP/IP
PV Parameters	
PV Input Power	100kW
MPPT Voltage Range	150V-850V
Number of MPPTs	4
Number of PV Input Channels	8
Hybrid Inverter Automatic Switching Function Between On-grid And Off-grid	
Switching Time	<10ms

Outdoor Cabinet Air Cooling Battery System

Titan-B80~160-W

* The appearance of the product is for reference only

Product Feature

Easy to Install

• Plug and play, instant use; The battery cabinet has IP55 protection grade and C3 corrosion protection grade, and can be deployed outdoors.

Safe And Reliable

• Multi-fire design, unit level temperature detection + Cabinet level aerosol fire extinguishing + explosion- proof pressure relief + water fire fighting.

Multiple Configurations

• Modular design, flexible expansion, parallel design of multiple machines, support rapid expansion to megawatt-scale DC system.

Flexible Application

• It can match AC sides such as hybrid inverters or PCS to meet application scenarios such as optical storage microgrid, peak cutting and valley filling, and emergency backup power.

Outdoor Cabinet Air Cooling Battery System

System Model	Titan-B80-W	Titan-B100-W	Titan-B120-W	Titan-B140-W	Titan-B160-W
Battery Parameters					
Cell Type	LFP3.2V/314Ah				
Battery PACK Type	1P20S				
Cluster Configuration	1P80S	1P100S	1P120S	1P140S	1P160S
Nominal Energy	80kWh	100kWh	120kWh	140kWh	160kWh
Nominal Battery Voltage	256V	320V	384V	448V	512V
Battery Voltage Range	224V~288V	280V~360V	336V~432V	392V~504V	448V~576V
Charge and Discharge Rate	0.5C				
System Parameters					
Dimensions (W*D*H)	800*1330*2360 (mm)				
Weight	About 900 kg	About 1025 kg	About 1200 kg	About 1325 kg	About 1450 kg
IP Level	IP55				
Cooling Method	Air conditioner				
Fire Fighting System	Cabinet level aerosol fire extinguishing + explosion - proof pressure relief + water fire fighting				
Grade of Corrosion Protection	C3				
Relative Humidity	0-95%（no condensation）				
Operating Temperature	-20°C~50°C				
Altitude	< 2000 m				
Operating Temperature	≤75dB				
Communication Interface	RS485, Ethernet				
Communication Protocol	Modbus RTU, Modbus TCP/IP				

Outdoor Cabinet Air Cooling Battery System

Titan-B180~241-W

* The appearance of the product is for reference

Product Feature

Easy to Install

• Plug and play, instant use; The battery cabinet has IP55 protection grade and C3 corrosion protection grade, and can be deployed outdoors.

Safe And Reliable

• Multi-fire design, unit level temperature detection + Cabinet level aerosol fire extinguishing + explosion- proof pressure relief + water fire fighting.

Multiple Configurations

• Modular design, flexible expansion, parallel design of multiple machines, support rapid expansion to megawatt-scale DC system.

Flexible Application

• It can match AC sides such as hybrid inverters or PCS to meet application scenarios such as optical storage microgrid, peak cutting and valley filling, and emergency backup power.

System Model	Titan-B180-W	Titan-B200-W	Titan-B221-W	Titan-B241-W
Battery Parameters				
Cell Type	LFP3.2V/314Ah			
Battery PACK Type	1P20S			
Cluster Configuration	1P180S	1P200S	1P220S	1P240S
Nominal Energy	180kWh	200kWh	221kWh	241kWh
Nominal Battery Voltage	576V	640V	704V	768V
Battery Voltage Range	504V~648V	560V~720V	616V~792V	672V~864V
Charge and Discharge Rate	0.5C			
Maximum Operating Current	157A			
System Parameters				
Dimensions (W*D*H)	1170*1456*2100 (mm)			
Weight	About 1625 kg	About 1750 kg	About 1875 kg	About 1875 kg
IP Level	IP55			
Cooling Method	Air conditioner			
Fire Fighting System	Cabinet level aerosol fire extinguishing + explosion - proof pressure relief + water fire fighting			
Grade of Corrosion Protection	C3			
Relative Humidity	0-95%（no condensation）			
Operating Temperature	-20°C~50°C			
Altitude	< 2000 m			
Operating Temperature	≤75dB			
Communication Interface	RS485, Ethernet			
Communication Protocol	Modbus RTU, Modbus TCP/IP			

Outdoor Cabinet Liquid-cooled Battery System

Quark-B261~417-L

*The appearance of the product is for reference

Product Feature

Complete certification

• IEC62619, IEC62477, IEC61000, IEC62933-5-2, UL1973, UL9540A.

Safe And Reliable

• Multi-fire design, unit level temperature detection + Cabinet level aerosol fire extinguishing + explosion- proof pressure relief + water fire fighting.

Flexible Configuration

• Modular design, flexible expansion, multi machine parallel design, supporting rapid expansion to megawatt level DC systems.

Extreme Temperature Control

• Precise liquid cooling temperature control, system temperature difference ≤ 3±1.5 ℃.The system has higher efficiency and longer service life.

Outdoor Cabinet Liquid-cooled Battery System

System Model	Quark-B261-L	Quark-B313-L	Quark-B365-L	Quark-B417-L
Battery Parameters				
Cell Type	LFP3.2V/314Ah			
Battery PACK Type	1P52S			
Cluster Configuration	1P260S (5 PACK)	1P312S (6 PACK)	1P364S (7 PACK)	1P416S (8 PACK)
Nominal Energy	261kWh	313kWh	365kWh	417kWh
Nominal Voltage Range	832V	998.4V	1164.8V	1331.2V
Battery Voltage Range	728V~936V	873.6V~1123.2V	1019.2V~1310.4V	1164.8V~1497.6V
System Parameters				
Dimensions (W*D*H)	1360*1350*2400 (mm)			
Weight	About 2865 kg	About 3215 kg	About 3565 kg	About 3915 kg
IP Level	IP55 (battery compartment)			
Corrosion protection Level	C3			
Altitude	2000 meters (>2000m derate for use)			
Operating Temperature	-20°C~50°C			
Relative Humidity	0~95% (no condensation)			
Balancing Mode	Passive equilibrium			
Cooling method	Intelligent liquid cooling			
Fire Fighting System	Cabinet level aerosol fire extinguishing + explosion- proof pressure relief			
Communication Interface	RS485, CAN, Ethernet			
Certifications	**System:** UL1973, UL9540A, IEC62619, IEC62477, UN38.3 **PACK:** UL9540A, IEC60529 (IP67), (EU) 2023 1542			**System:** IEC61000, IEC62619, IEC62933-5-2, IEC62477, UL9540A, UL1973, UN38.3 **PACK:** UL9540A, IEC60529 (IP67), (EU) 2023 1542

Indoor Rack Type High Voltage Lithium Battery System

CF-15S-1P16S-314W0.5

*The product image shows 15 PACK

Product Feature

High Voltage & High Efficiency

• Efficiency ≥94%

Safe & Long Lifespan

• More than 6000 cycles

Standard Design

• Fit to 19-inch rack & easy to install

Active Balancing

• Monitor cells and adjust balance accordingly to protect them and maintain consistency

System model	CF-15S-1P16S-314W0.5
PACK Specifications	
Cell Type	LFP
Nominal Voltage	51.2V
Nominal Capacity	314Ah
Nominal Power Energy	16kWh
Net Weight (approximate)	~121kg
Dimension (W×D×H)	482×770×227mm ±3mm
Charging Temperature Range	0~55°C
Discharge Temperature Range	-20°C~55°C
Cooling Mode	Intelligent Air Cooling
Communication Interface	CAN
IP level	IP20
RACK Specifications	
PACK Quantity	15
Nominal Voltage	768V
Nominal Capacity	314Ah
Nominal Power Energy	241kWh
Operating Voltage Range	672～864V
Charging Current	≤157A
Discharging Current	≤157A
Life Cycles	≥6000 times (25°C, 0.5C/0.5C, SOH 70%)
Working Altitude	2000m(Derate above 2000m)
Ambient Humidity	5～95% (non-condensing)
Net Weight (approximate)	~2084kg
Dimension (W×D×H)	1110×780×2100 ± 5mm
Communication Interface	RS485, CAN, Ethernet, Dry contacts
Compatible Inverters	Sinexcel / Victron / SMA etc.
BMS Self Powered	Yes

* This product supports 1~17 PACK in series and can be customized according to needs. For more information, please contact our technical team.

Containerized Battery System

Epoch-B5015-20L

Product Feature

Safe and Reliable

- High safety battery, complete certification.
- Highly dustproof and waterproof, IP55 guarantees the safety and reliability of electrical components and equipment.
- Cells, packs and clusters have passed the world's most stringent UL9540A thermal runaway spreading test.
- Class B functional safety, double fault protection.
- Refined fire protection design for fire suppression.
- High safety, one cluster, one management, no loop current.

High Efficiency

- Single-cluster DC charging and discharging energy efficiency >95%.

Easy installation

- Modular design, easy to maintain.

Long Lifespan

- Battery cycle times up to 8000.
- 10 years design life under standard working conditions.
- Intelligent charge/discharge management to extend system life.
- Intelligent thermal management design, battery cycle life increased by 30%.

High Yield

- High energy density design cost savings, lower cost of kWh.
- Highly integrated, saves footprint, saves costs.
- High life cycle yield.

System model	Epoch-B5015-20L
DC side parameters	
Cell Type	LFP314
Module Configurations	1P52S
Cluster Configuration	1P416S /8 modules
System configuration	12*1P416S
Nominal Battery Capacity	5015kWh
Battery Voltage Range	1164.8~1476.8Vdc
Charge/Discharge Ratio	0.5C
Anti-corrosion Grade	C3~C5
Dimension（W*D*H）	6058*2438*2896mm
Weight	43.5t
IP Level	IP55
Altitude	2000m(Derating over 2000 meters)
Operating Temperature	-20°C~55°C
Cooling Method	Intelligent Liquid Cooling
Fire Protection System	Aerosol Fire Fighting + Natural Gas Detection + Sprinkler Fire Fighting + Ventilation and Explosion Relief System
Communication Interface	LAN, RS485, CAN
Standards-Compliant	UL1973,UL9540A,FCC,IEC62619,IEC 62477-1,CE-EMC,(EU)2023/1542,UN3536,IP67, IP55,UN38.3,IEC63056,IEC62933-5-2