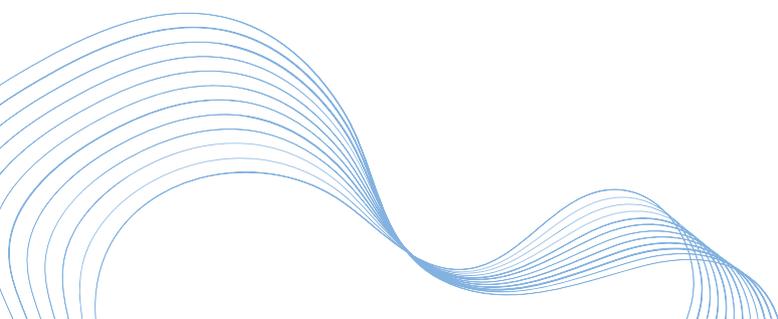




Battery Energy Storage System



ROBUST
The Future to Trust

Comprehensive Solutions



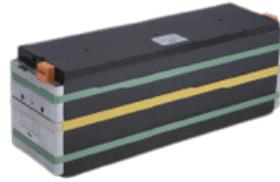
Battery Module

Prismatic LFP Module
 Prismatic NMC Module
 Cylindrical LFP Module
 Customized Modules Service

System

ESS Battery Pack
 ESS Battery Rack Portable Power
 Station Customized Systems Service
 Mobile Charging Unit

Prismatic LFP Module



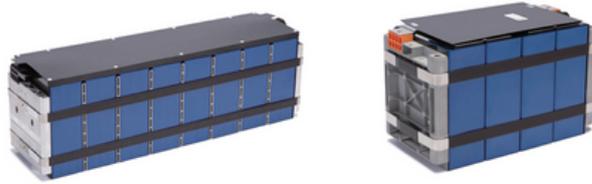
Specifications

- Laser welding manufacturing techniques to guarantee stable electronic connection
- Reliable structural strength and stability
- Suitable for all kinds of industrial voltage platform, easy maintenance
- Excellent cooling conditions and homogeneity of temperature
- UN38.3, MSDS compliant

Model List

Cell	Configuration	Nominal Capacity Ah	Voltage V	Nominal Energy kWh	Weight Kg	Dimensions (W, H,mm)
LFP125	1P13S	125	41.6	5.2	33	516.5*175*182.5
	1P24S	125	76.8	9.6	61	916*177.7*181.7
	1P26S	125	83.2	10.4	65.1	989*181.7*181.7
LFP163	1P8S	163	25.6	4.173	29.65	720*240*107
	1P15S	163	48	7.824	48.7	590*178*236
	1P16S	163	51.2	8.346	51.75	624*178*236
	1P20S	163	64.4	10.497	64	770*178.8*224.5
	2P10S	326	32.2	10.497	64	770*178.8*224.5
	1P24S	163	77.28	12.597	76.6	916*178.8*224.5
	2P12S	326	38.64	12.597	76.6	916*178.8*224.5
	4P4S	652	12.8	8.346	52	624*178*236
	LFP173	1P11S	173	35.42	6.128	39.4
1P12S		173	38.64	6.685	42.87	541.8*178.9*213.9
1P14S		173	45.08	7.799	49.97	625.2*180*215
LFP230	1P6S	230	19.6	4.508	26.7	363*176.9*211.5
	1P8S	230	25.6	5.888	35.21	473.9*177.9*230
	1P13S	230	41.6	9.568	58.26	743.9*179.3*230
	1P16S	230	51.2	11.776	67.29	905.9*179.9*230
	2P8S	460	25.6	11.776	69.33	905.9*177.9*230

Prismatic LFP Module

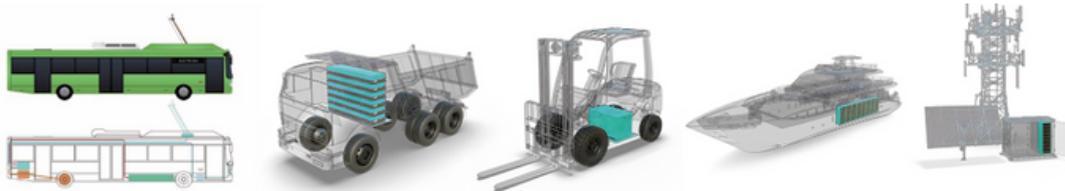


Model List

Cell	Configuration	Nominal Capacity Ah	Voltage V	Nominal Energy kWh	Weight Kg	Dimensions (W, H,mm)
LFP280	1P4S	280	12.8	3.584	25	333.5*178*213
	1P5S	280	16	4.48	25.8	486*177.6*215.6
	1P8S	280	25.6	7.168	45.15	629*178.5*215
	1P12S	280	38.4	10.752	67	913.6*178.5*213.9
	1P13S	280	41.6	11.64	73.1	970*177*211
LFP304	1P4S	304	12.8	3.891	23.7	329.5*177.7*230
	1P8S	304	25.6	7.782	46.08	617.7*177.7*230
	1P10S	304	32	9.728	59.3	761.7*179.3*230
	1P12S	304	38.4	11.673	70.83	905.7*179.3*230
LFP306	1P13S	306	41.6	12.73	73.1	970*177*211
LFP314	1P13S	314	41.6	13.06	73.1	970*177*211

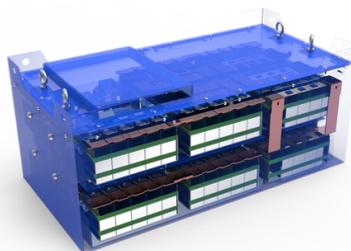
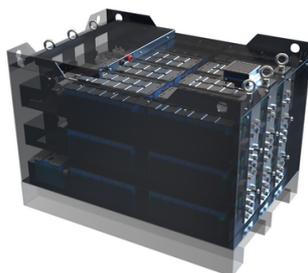
Applications

- Industrial and Recreational Applications, Electrical Bus, Caravan, Backup Power, Marine, ESS, Traction Power, Portable Battery and Others



Customizable

- Can be customized with shape, size, capacity as per client's request.



Cylindrical LFP Module



Specifications

- Laser welding manufacturing techniques to guarantee stable electronic connection
- Reliable structural strength and stability
- Excellent cooling conditions and homogeneity of temperature
- Advanced automatic production to ensure high quality of products and competitive price

Model List

Cell	Configuration	Nominal Capacity Ah	Voltage V	Nominal Energy kWh	Weight Kg	Dimensions (W, H, mm)
40135	4P16S	80	51.2	4.096	26	352*329*175

Applications

- Low-speed Electric Vehicle
- Energy Storage System
- Backup Power



Customizable

- Can be customized with shape, size, capacity as per client's request.

ESS Battery Pack



Specifications

- Balanced heat transfer performance, excellent cooling conditions and homogeneity of temperature
- Developed with LFP cell to ensure the highest safety
- Intelligent temperature control to adjust temperature automatically to cope with cold and heat
- Multi-physics simulation technology and thermal runaway prevention technology are applied
- The integrated liquid-cooled units selected are featured in adaptive adjustment of the operating state, reducing the auxiliary loss by 30%

Model List

Type	ESS	ESS
Cooling Method	Fan cooling	Liquid cooling
Model	48-280-F	153-280-L
Configuration	1P15S	1P48S
Capacity (Ah)	280	280
Voltage(V)	48	153.6
Energy(kWh)	13.44	43
Dimensions(mm)	W510*D647*H240	W858*D1067*H240
Communication	CAN	CAN/Daisy chain
Weight	100kg±5kg	300kg±8kg
IP level	IP20	IP67

Applications

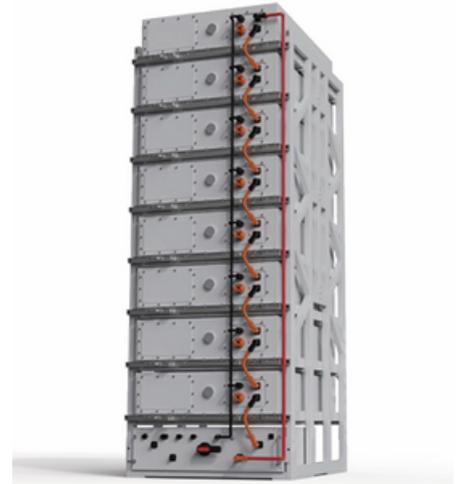
- Distributed Energy Storage System
- Micro-grid Energy Storage System
- Charging-Discharging Storage Integrated Station
- Urban Energy Storage Station
- Commercial Energy Storage



ESS Battery Rack

Specifications

- Balanced heat transfer performance, excellent cooling conditions and homogeneity of temperature
- Multi-physics simulation technology and thermal runaway prevention technology are applied
- 24-h monitoring, big data-based early warning, strong compatibility with Grid/Off-grid
- Intelligent temperature control to adjust temperature automatically to cope with cold and heat
- The integrated liquid-cooled units selected are featured in adaptive adjustment of the operating state, reducing the auxiliary loss by 30%
- Modular structure design is able to compose varieties of electric voltage platform flexibly, all kinds of capacity level systems, and easy to maintain or repair



Model List

Cooling Method	Fan Cooling	Liquid Cooling
Model	720-280-F	1228.8-280-L
Configuration	1P225S	1P384S
Capacity	280Ah	280Ah
Nominal Voltage	720V	1228.8V
Voltage Range	630V-810V	1075.2V-1382.4V
Standard Charge/Discharge Power	100kW	172kW
Operation Temperature	Charge: 0°C-55°C	Charge: 0°C-55°C
	Discharge: -20°C-55°C	Discharge: -20°C-55°C
Self-discharge Rate	≤3%/month	≤3%/month
Energy	201 kWh	344 kWh
Dimensions	W1170*D655*H2240mm	W862*D1074*H2339mm
Communication	CAN2.0	CAN2.0
Weight	1800kg	2700kg
Storage Humidity	<75% RH, No Condensation	<75% RH, No Condensation
IP level	IP20	IP54

Applications

- Distributed Energy Storage System
- Micro-grid Energy Storage System
- Charging-Discharging Storage Integrated Station
- Urban Energy Storage Station
- Commercial Energy Storage

Company Introduction

Robust is a pioneer in delivering clean and reliable energy solutions. Our expert team, a diverse blend of multi-disciplinary engineers and experienced industry professionals, specializes in sustainable and efficient energy storage systems. Operating from our state-of-the-art facility in the innovative hub of Dubai's Jebel Ali Freezone, we are committed to excellence and environmental sustainability, setting new benchmarks in the energy sector.

Robust is here to pioneer a future we can all trust – a world where clean, reliable energy isn't just a distant ideal but an everyday reality, effortlessly flowing and accessible to everyone, everywhere. Robust works tirelessly to turn this vision into today's reality, fostering a sustainable and efficient energy ecosystem, revolutionizing energy utilization and redefining energy management.

Robust is dedicated to addressing the critical global energy challenges of our time. Our mission centers on reducing carbon emissions, meeting the rising demand for power, and navigating the volatility of energy markets. Our efforts are geared towards enhancing grid stability and reliability through the integration of advanced storage systems and diverse renewable energy sources. We specialize in seamlessly integrating renewable sources into the electricity network, delivering a consistent supply of clean, reliable power. Embracing pioneering energy technologies and smart management solutions, we efficiently balance supply and demand, optimizing energy usage, and reducing costs.

