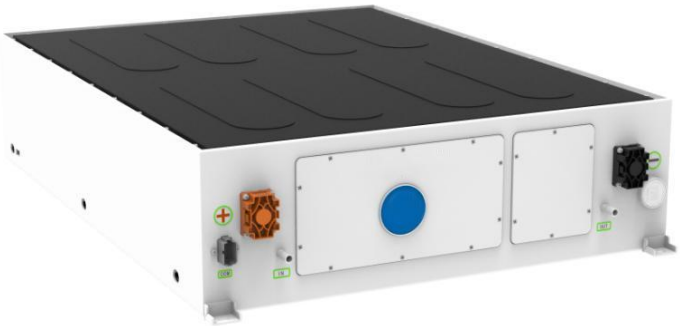
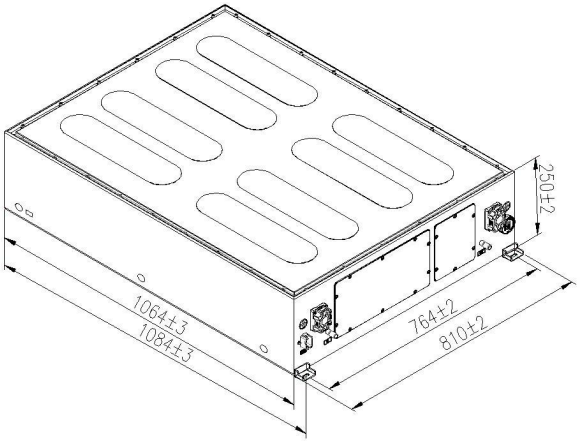
High Voltage Lithium-Ion Phosphate Battery storage system 143.6V280Ah(Liquid cooling)





Module	**153.6V280AH**(0.5C)
Basic Parameters	
Capacity(kWh)	43.008
Nominal Voltage(Vdc)	143.6
Nominal Capacity(AH)	280
Voltage Range(Vdc)	134.4~170.4
Depth of Discharge	90%
Dimension(W* D* H,mm)	810*1084*250
Design Life	15+ years (25℃)
Cycle Life	> 6000 (25℃)
Communication	CANBUS/Modbus RTU/TCP/IP
Protection Class	IP20
Weight(kg)	300kg±3kg
Operation Temperature	0~50℃
Storage Temperature	-20~60℃
Product Certificate	UN38.3

SUNRANGE

Main Controller：1500V200A

Module	1500V200A
Basic Parameters	
Related Product	1500V200A
AC Supply	---
System Operation Voltage (Vdc)	0~1500
Operation Current (Max.) (A)	200
Self-consumption Power(W)	8
Dimension (W* D* H, mm)	885mm*434mm*238.2mm（±5）
Communication	MODBUS RTU/CAN
Protection Class	IP20
Weight(kg)	20
Operation Life	15+
Operation Temperature	-20~65
Storage Temperature	-40~80

BMS Function

Protection and Alarm

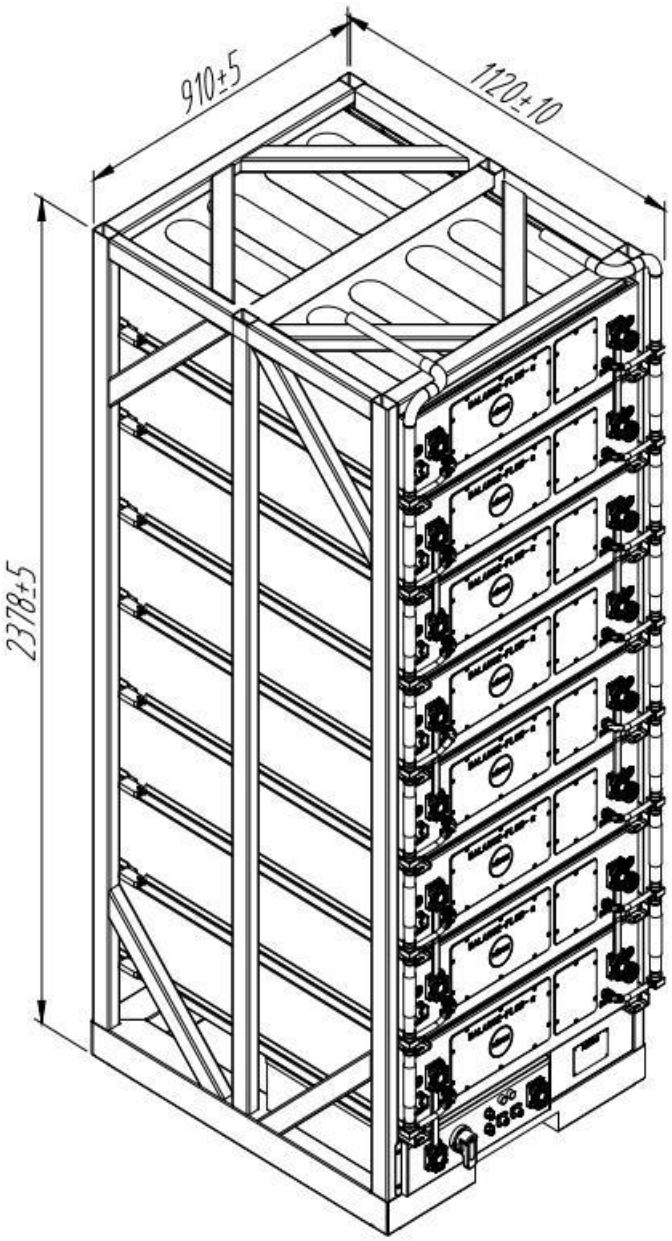
Charge/Discharge End
Charge Over Voltage
Charge/Discharge Over Current
High/Low Temperature
Operation Record
Administrator Monitor: Current, Voltage, Temperature, SOC&SOH.

Management and Monitor

Cells Balance
Intelligent Charge Model
Capacity Retention Calculate
Isolation and Protection
Alarm and Protection

SUNRANGE

Standard Battery cluster 1331.2V 280AH



Standard cluster	**1228.8V280AH**
Basic Parameters	
Battery System Capacity (kWh)	344.064
Battery System Voltage (Vdc)	1228.8
Battery System Capacity (AH)	280
Battery Module	153.6V280Ah
Battery Capacity(kWh)	43.008
Battery Modules Qty.	8
Battery System Charge Upper-Voltage	1363.2V
Standard Operation Current(A)	140
Normal Operation Current(A)	140
Max. Operation Current(A)	180
Battery System Discharge lower-Voltage	1075.2
Round-trip efficiency（@0.5C-rate）	95%
Depth of Discharge	90%
Dimension(W* D* H, mm)	910*1120*2378
Communication	CANBUS/Modbus RTU/TCP/IP
Weight (kg)	~2600
Operation Life	15+Years
Operation Temperature	10~40℃
Storage Temperature	-20~60℃
Humidity	5 – 95%(without condensing)
Altitude (m)	<4000
Product Certificate	IEC62619/CE/UN38.3

Control and confluence cabinet

The bus cabinet is the dc side bus control unit of the energy storage battery system, which is connected with the high voltage box and storage.
Intermediate unit capable of converter; The power pool system (stack) is installed in the bus cabinet.
Switch off/circuit breaker (optional), three-level BMS (ESMU), and UPS power supply. Confluence ark.
The electrical characteristics, heat dissipation performance and safety performance of each component have been fully considered in the design.
And operation and maintenance, reasonable space layout, with compact structure, flexible configuration, security.
Full reliability and other characteristics. Three stage BMS module (ESMU) in the bus cabinet, with CAN,
Rs-485, RJ45 Ethernet communication interface, can be realized with high voltage box, PCS/UPS or
The communication function between EMS realizes the data communication and control of the energy storage battery management system and protection.

No	Item	Para Range	Quantity	Function	Remark
1	DC Breaker	630/1500/1250A	1	Main loop protection	
2	BMS	ESMU-10 II	1	Display communication contro	
3	Switching power supply	35W/75W 24V	1	Power Supply	
4	Miniature circuit breaker	S202-C64/20/10	/	Switch	
5	Emergency stop switch	LA38-22ZS	1	scram protection	
6	Repeaters	CR-MX024DC2L	/	Signal control and conversion	
7	LED instruction	ED16-22DSR(G/Y/R)	/	status indicator	
8	Surge protective devices (spd)	Ex9UEP 20 3P	1	Lightning protection bus	
9	Fuse	DC1500/1000V 300A	1	protection	
10	Terminal strip		/	Communication power signal conversion	

Eamil:info@sunrangeenergy.com
Tel:+86 199 0966 3060
Website:www.sunrangeenergy.com
Add:8th Floor, Block G, Phase lll,1201 Huafeng Road Shushan District,230031 Hefei, China