U5

51.2V RACK BATTERY

The 51.2V 100Ah rack battery pack is made of lithium iron phosphate cells. The module design gives the user the freedom to select the power capacity, providing up to 322Kwh with a maximum power of 63 in parallel.

Safety Certified via:
ISO9001/14001, UL1973, UL9540A,IEC62619,UKCA

Energy	Weight	10 Years
51.2V 100Ah (5.12KWh)	46KG	Warranty

CCS

CCS integrates 1-2 FPCs (Insulating film, conductor, adhesive), copper and aluminum bars and other structural parts. It has outstanding advantages in terms of safety, light weight, and regular layout due to its insulation and high integration, ultra-thin thickness, and ultra-softness.

BMS

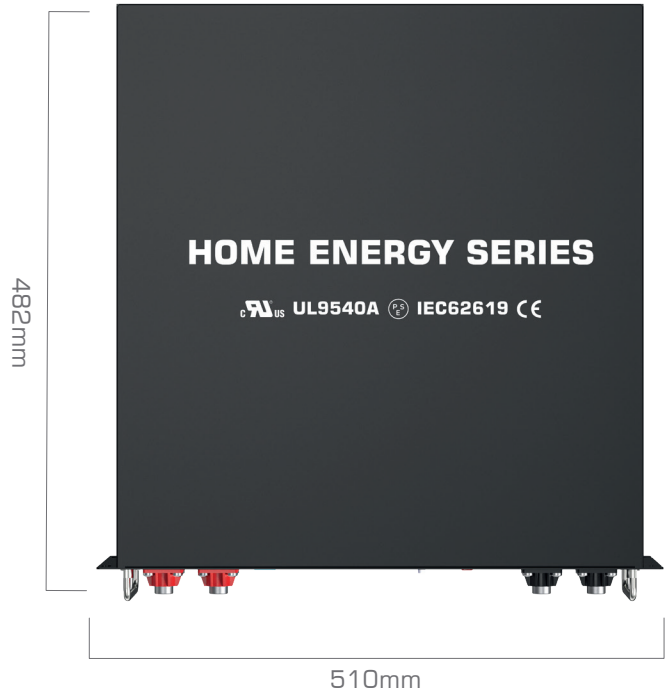
Lithium batteries manufactured by wirentech are optimized by its battery BMS, through monitoring cells, to provide protection against overcharge, over discharge, short circuit.
The BMS helps to ensure safe and accurate operation.

HEAVY DUTY BUSBAR / INTERNAL WIRING

Copper busbar, which expands the contact area between copper bar, breaker and module, adopts the technique of high-temperature chemical nickel plating. It performs bett erin electrical and thermal conduc tivi-ty, corrosion resistance and low internal resistance and ensures stable performance, large space and simple repair.

U5

DIMENSIONS





Electronics Specification Sheet

Technical Specification	U5(51.2V100Ah)
Operation Voltage	44 . 8V~ 57.5V
Dimensions	482*510*138mm
Weight	46KG
Warranty	10 Years
LiFe Time	15 Years @ 68°F
Cycle life	6000+
Energy	51.2V 100Ah (5.12KWh)
Max. Charge Voltage	58.4V(Adjustable)
Rated Charge Current	50A (2.56KW) @77°F
Rated Discharge Current	100A (5.12KW) @77°F
Energy Scalable	Max. 63 units in parallel (tested)
Enclose Protection Rate	IP22
Communication	RS232/RS485→ PC software CAN/RS485 → Inverters
Storage	Recommended stored at above 50% SOC, test @ 90 Days, recharge if below 52V

BMS Parameters

Charge	Spec	Delay	Recovery
Cell Voltage Protection	3.65V	1 sec	3.50V
Module Voltage Protection	58.4V	1 sec	56.00V
Enable Current Limiting	>62A		
Current After Being Restricted	20A		
Temperature Protection	<-5°C or >65°C	1 sec	>0°C or <60°C
Discharge			
Cell Voltage Protection	2.85V	1 sec	3.0V
Module Voltage Protection	44V	1 sec	47.50V
Over Discharging Current 1	>110A	1sec	
Over Discharging Current 2	>150A	0.3 sec	
Short-Circuit	>350A	0.5 mS	
Temperature Protection	<-20°C or >70°C	4sec	-15°C or <65°C

BMS	Parameter		Condition
PCB Temperature Protection	>90°C	4 sec	<85°C
Temperature Accuracy	≤2℃	Cycle Measurement	Measuring Range -40 to 100°C
Voltage Accuracy	10mV（cell）	Cycle Measurement	For Cells & Module
Current Accuracy	2%	Cycle Measurement	Measuring Range -200 to 200°C
SOC	5%		Integral Calculation
Power Consumption - Sleep/Off Mode	<330uA	Sleep & Off Mode	Storage/Transport
Power Consumption - Operating Mode	<80mA	Operating Mode	Charging/Discharging

*Note,For more technical concerns,please reach https://www.wirenergy.net / for assistance.

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