

# V5<sup>o</sup> 0.75-1C Battery

- More Powerful
- Smarter
- More Adaptable
- More Scalable



**Part 1 Introduction**

**Part 2 Features**

**Part 3 Q & A**

# Part 1 Introduction

# Introduction Specification



## Features



Higher Charge/Discharge Rate



Higher Energy Density



Wider Operation Temperature



Greater scalability



Remote Monitoring and Upgrading

## Certifications

IEC62629

CE

MSDS, UN38.3

CEI with Afore, Hoymiles

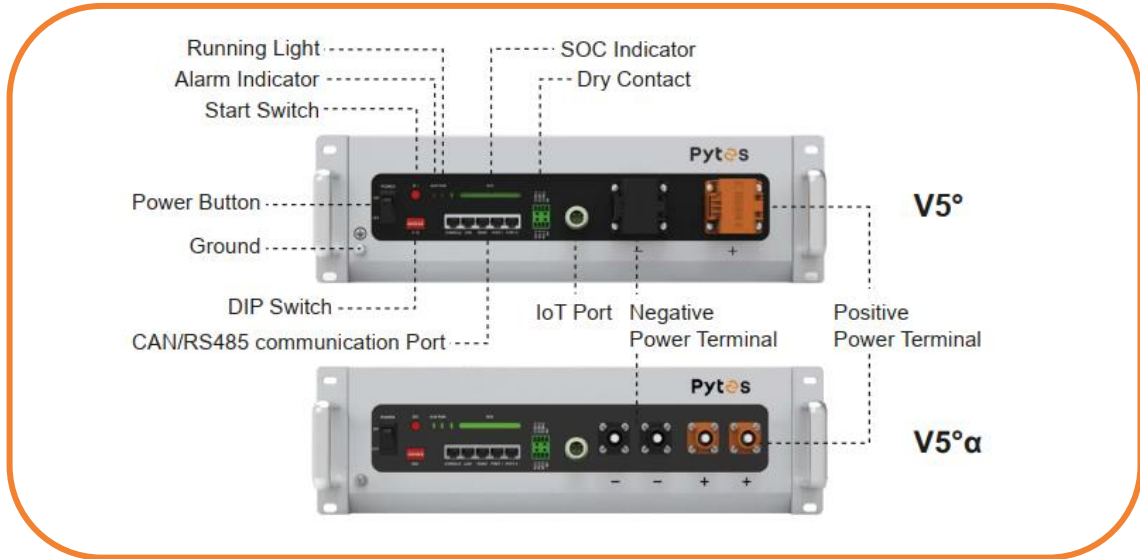
## Specifications

### Electrical

Nominal Voltage	51.2V
Voltage Range	47.5V~57.6V
Nominal Energy	5.12kWh
Nominal Capacity	100Ah
Recommended Charge/Discharge Current	75A
Maximum Charge/Discharge Current	100A
Peak Discharge Current	101A~120A(3min) ; 121A~180A(15sec)

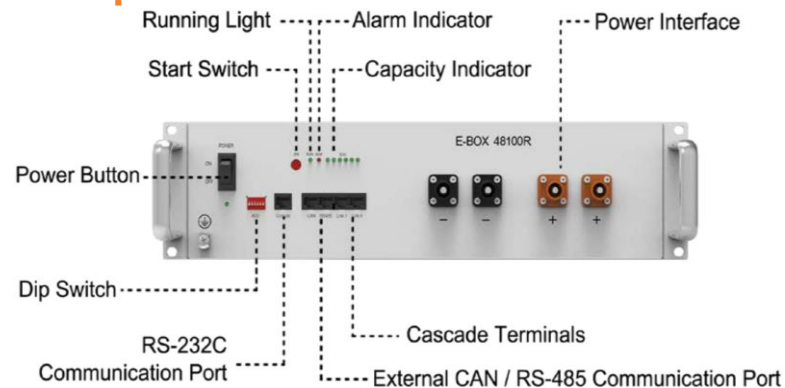
### General

Chemistry	LFP
Communication Protocol	CAN/RS485
Dimensions (L*W*H)	17.32*20.87*5.51 inch (3.2U)
Weight	97lbs
Ambient Temperature	14°F~131°F
Round-Trip Efficiency	≥95%
Cycle Life	6000cycle
Warranty	10 Years



17.3\*20.9\*5.5 in

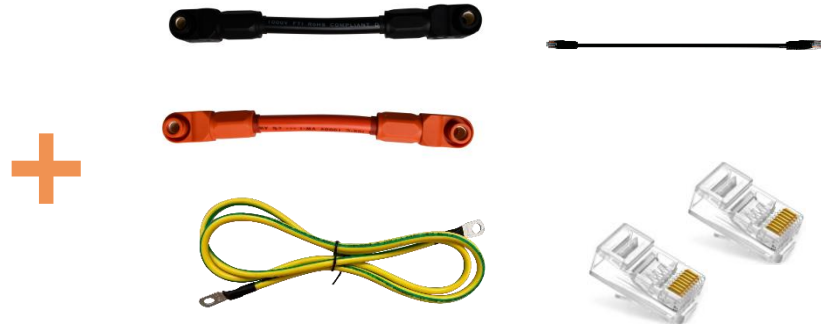
## E-BOX-48100R



17.3\*24.4\*4.6 in

- ✓ Precise SOC Display
- ✓ IoT Interface for remote monitoring device
- ✓ Amphenol or Phoenix terminals with higher ampacity
- ✓ More refined appearance
- ✓ Smaller size and lighter weight – CCS (7kg lighter)
- ✓ Dry contact for function expansion
- ✓ 48V battery - 5.12kWh capacity
- ✓ CAN/RS485 communication port
- ✓ Console port for debugging
- ✓ 10 years warranty

# >>> Introduction Packing List



Serial Number	Name	Specification	Quantity
110402100134	V5° α Battery	51.2V 100Ah LFP Battery	1
161412101030	DC Power Cable-Positive	1/0AWG-0.2m-Orange-Amphonel 8.00mm*2, 150A	1
161412101034	DC Power Cable-Negative	1AWG-0.2m-Black-Amphonel 8.00mm*2, 150A	1
161412101043	Communication Cable C350	CAT6 Shielded Twisted Pair 8-Core Cord-350mm-Blue-RJ45 Connector*2	1
161412100230	1m Ground Cable	Green/1015-10AWG/1m/TL6-6*2	1
161508100019	Registered Jack	RJ45	2



Serial Number	Name	Specification
161412100461/462	0000AWG Power Cable	UL10269--4/0AWG--2000mm—DTF120-10*2, 350A
161412100465/466	00AWG Power Cable	UL10269--2/0AWG--2000mm—SC70-10*2, 200A
161412101071	Communication Cables 3500mm	Compatible with: Afore, Hoymiles, Luxpower, Growatt, APSystems, SMA, Studer
110409100001	Hub	Enables communication with multiple groups of batteries
161506100003	300A Busbar	300A/6*M5+2*M10 Terminals
110409100027	600A Busbar	600A/6*M10+2*M8 Terminals
162002100019	Smart Monitor	LSW-5 data acquisition stick-aviation plug female M16

# Part 2 Features



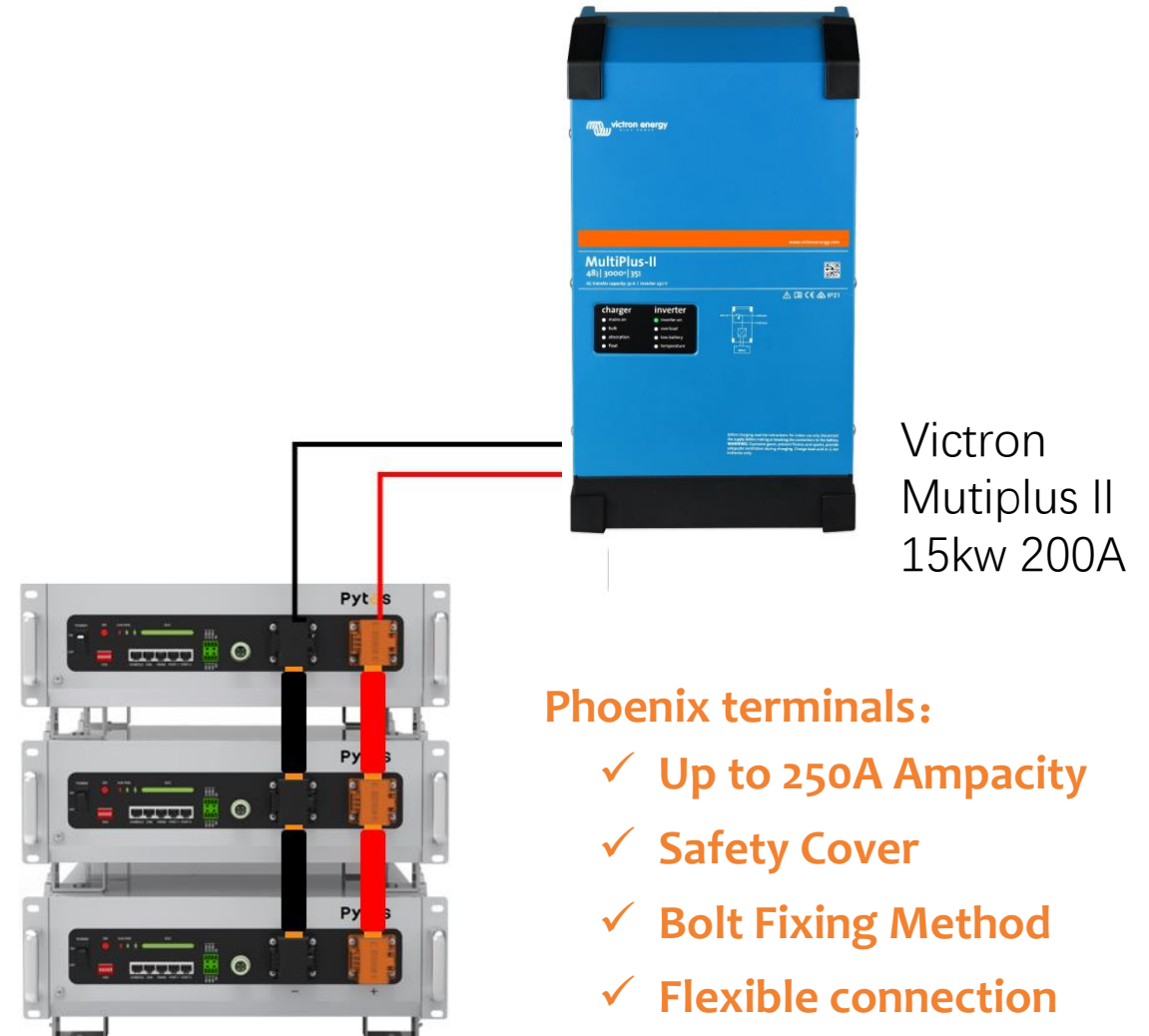
## >>> Feature Higher Charge/Discharge Rate

### Charge Specifications

Recommended Charge Current	75A
Maximum Charge Current	100A
Recommended Discharge Current	75A
Maximum Discharge Current	100A
Peak Discharge Current	101~120A (3min)
Peak Discharge Current	121~180A(15sec)

### Multiple Protection

<b>BMS</b>	Over Current Alarm
	Short Current Protection
<b>FUSE</b>	320A



## >>> Feature Wider Operation Temperature

### Heating State Switching Rules

Default	Non-heating
Minimum Cell Temperature $\leq 41^{\circ}\text{F} / 5^{\circ}\text{C}$	Heating on
Minimum Cell Temperature $\geq 50^{\circ}\text{F} / 10^{\circ}\text{C}$	Heating off
Minimum Cell Temperature $< -4^{\circ}\text{F} / -20^{\circ}\text{C}$	Heating never on
External Power Disconnect	Heating never on

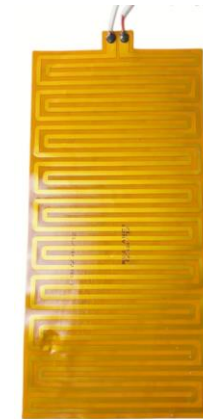
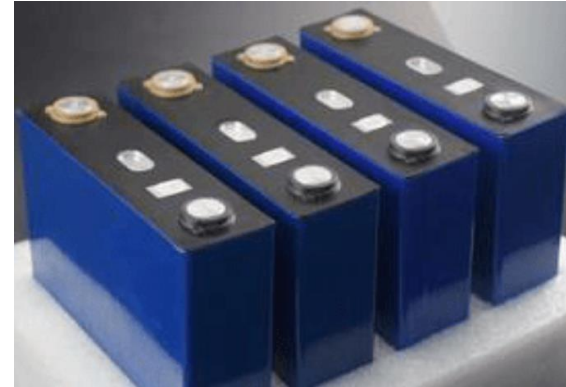
Heating Module Minimum Temperature:  $-0.4^{\circ}\text{F} (-18^{\circ}\text{C})$

#### Alarm

- No temperature change -- 30 min
- Work in non-heating state -- 15 min

#### Protection (never heat in 1 h)

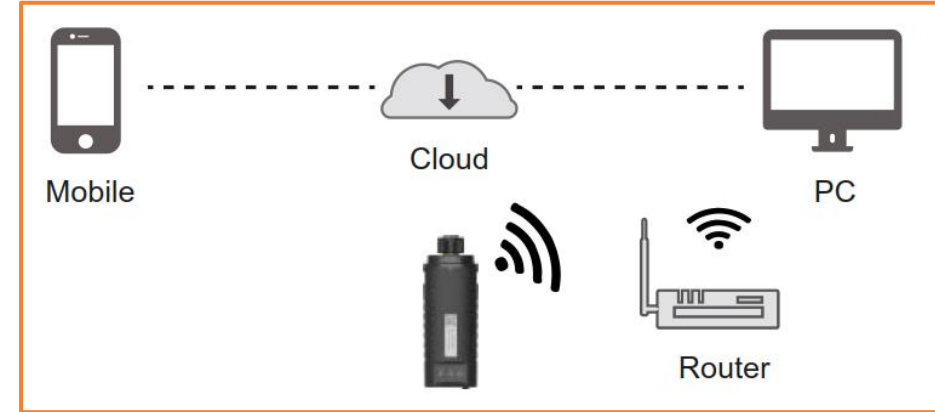
- Long running -- 3h
- Frequent starts and stops within 1m -- 5 times



### Heating System

- ✓ Keep the Battery Working in the Optimal Temperature Range
- ✓ Wider Battery Operating Temperature Range
- ✓ Multiple Protections -- Software & Hardware
- ✓ Low Power Consumption – 170W
- ✓ Over 10 Years Design Life

# Feature More Intelligent Upgrade



## WEB/APP

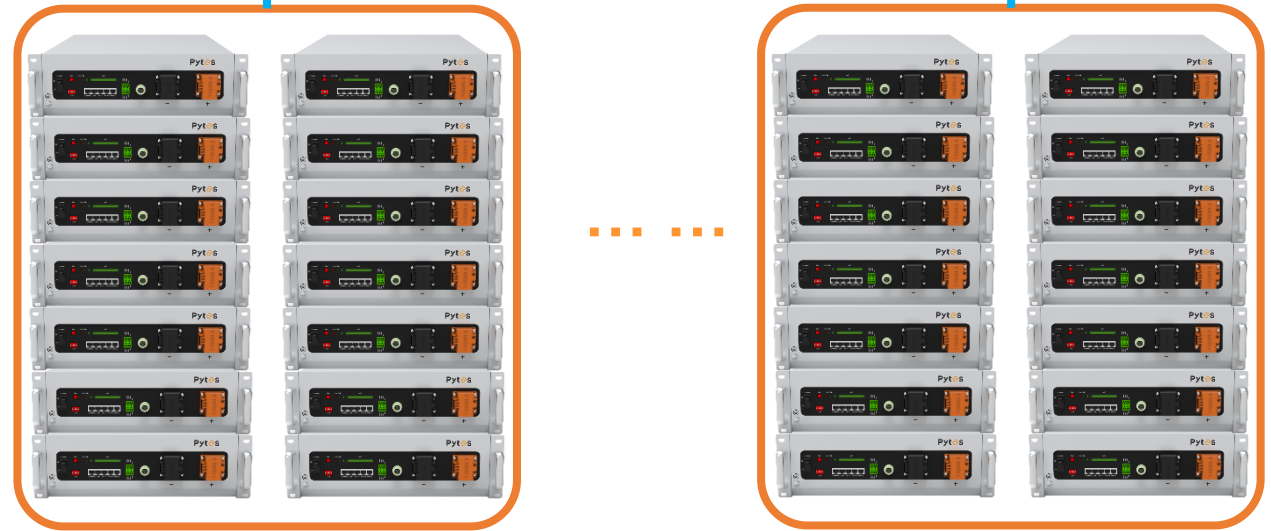
- ✓ Real-time Monitoring
- ✓ Remote Upgrading
- ✓ Alarm Notification
- ✓ Data Visualization
- ✓ Error Detection



# Feature Stronger Scalability



Max 14pcs in one group(without hub)



Max 6 groups(with hub)

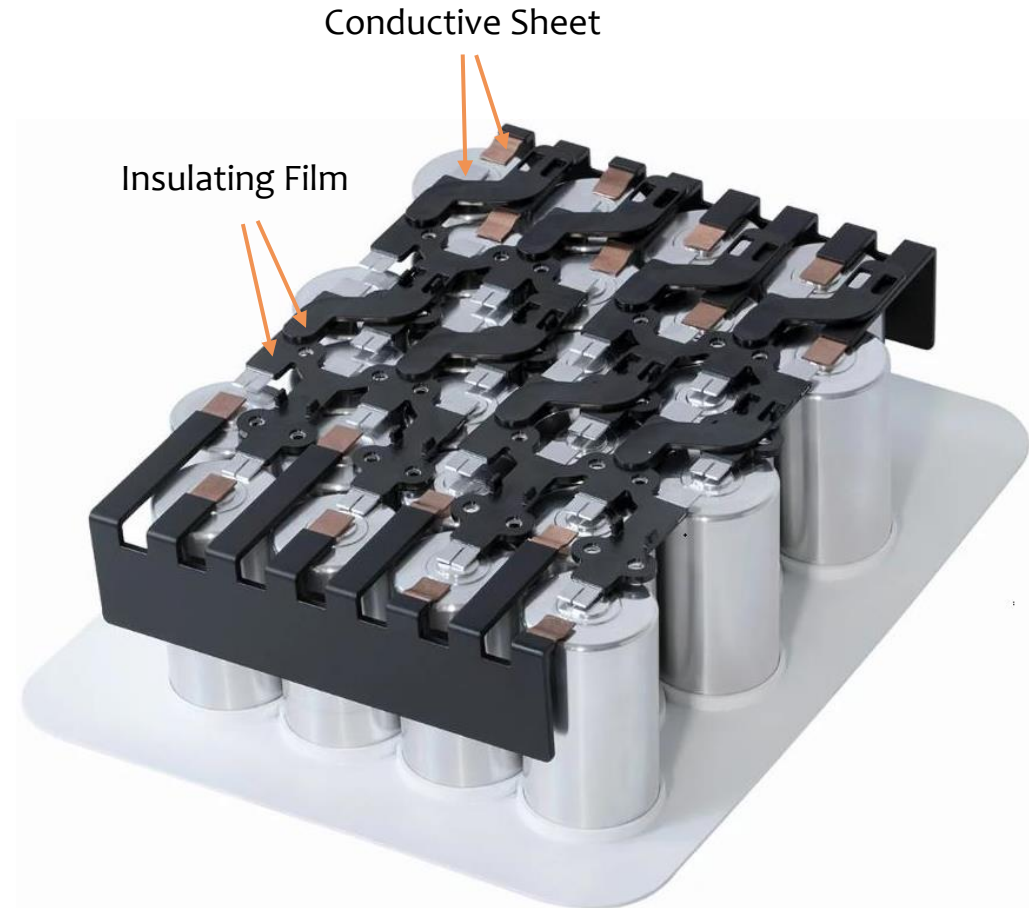
84pcs(430kWh) in total

### CCS (Cell Contact System)

It is mainly composed of signal acquisition components (FPC/PCB/FFC, etc.), plastic structural parts, copper and aluminum bars, etc., to realize high-voltage series-parallel connection of batteries, as well as battery temperature sampling and battery voltage sampling functions, through FPC/PCB and connectors. The components provide temperature and voltage to the BMS system and are part of the BMS system.

### Advantages

- ✓ High Reliability
- ✓ Highly Integrated
- ✓ High Energy Density
- ✓ High Security



# >>> Battery Enclosures Various Choose

## Indoor



Bracket-V5° (Up to 4pcs)



R-BOX-IC(Up to 6pcs)

## Outdoor IP55



V-BOX-OC (Up to 4pcs)

Tips: V-box (wall mounting 2 pcs) is in designing, will release on the April

## >>> Compatibility Inverter List

- ✓ The same communication protocol with E-BOX-48100R
- ✓ Similar protection and control logic with E-BOX-48100R

The logo for LUX POWER TEK, featuring the word "LUX" in a green circle, "POWER" in black, and "TEK" in a smaller font.The logo for houmiles, with "houmiles" in a blue sans-serif font and a green circular graphic element.The logo for Schneider Electric, with "Schneider" in green and "Electric" in a smaller font below it, accompanied by a green circular icon.The logo for GROWATT, with "GROWATT" in a green sans-serif font.The logo for victron energy, featuring a blue circular icon with white lines and the text "victron energy" in black, with "BLUE POWER" in smaller letters below.The logo for Afore, with "Afore" in a bold black font and a red sunburst graphic above the letter "o".The logo for SMA, with "SMA" in white on a blue rectangular background with a red wave at the bottom.The logo for APsystems, with an orange circular icon and the text "APsystems" in black, with "ALTENERGY POWER" in smaller letters below.The logo for MEGAREVO, with a stylized blue and orange "M" icon and the text "MEGAREVO" in blue.The logo for phocos, with "phocos" in a lowercase orange font and a small orange circle to the right.The logo for SRNE, with a red and orange circular icon and the text "SRNE" in black.The logo for STUDER, with a blue circular icon and the text "STUDER" in blue.The logo for Voltronic Power, with a green circular icon and the text "Voltronic Power" in black, with "Advancing Power" in a smaller font below.The logo for MPP Solar, with "MPP" in blue and "Solar" in orange.



# Part 4 Q&A