



# Creating Undertaking & Sharing



Shanghai PYTES Energy Co, LTD  
BATTERY EXPERT-GREEN ENERGY PROVIDER

## LI-ION BATTERY FOR ENERGY STORAGE



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As a leading lithium battery solution provider, Pytes is committed to providing energy storage solutions. Started in 2004, with continuous support and technical experience, more than 1,000 Pytes employees are now working to build a greener future.

Grasping the general trend of globalization, Pytes not only has multiple production bases in China, but also runs branches, offices and factories in North America, Europe, Vietnam and other sites to achieve multi-regional coverage of the service network, with faster delivery and quicker response.

Creating, Undertaking, Sharing, we practice our philosophy and fulfill the mission that to deliver safe, reliable and affordable clean energy to home and community for a more carbon-free future.



**\$125M**

Total Asset

**19 Years**

Industry experience



**Pytes**  
Since 2004

**1000+**

Employee

**3.95Gwh**

Annual capacity



# Global Marketing & Service

## North America

PYTES USA office & Warehouse  
(Los Angeles)



## Europe

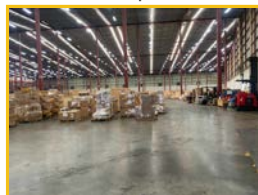
PYTES EU office  
(The Netherlands)

PYTES EU office  
in France

PYTES EU office in Germany



PYTES USA warehouse  
(Dallas)



PYTES Panama Warehouse



PYTES Factory in Hungary



Shandong PYTES New Energy Technology



Shandong PYTES Electronics



**China**



Headquarter/  
Factory in Shanghai

**Vietnam**



Factory in Ho Chi Minh City

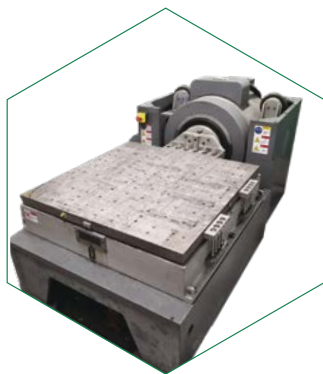


# SGS, TÜV, BV, DEKRA

## Accredited Cooperative Testing Labs

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### Mechanical Tests



Vibration Test



Drop Test



Shocking Test



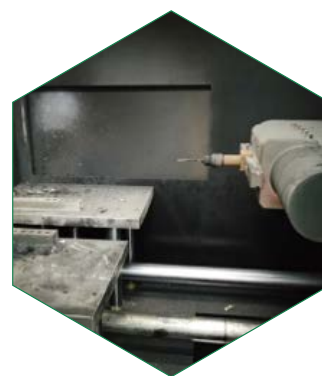
## Safety Tests



Short Circuit Test



Impact Test



Needle Test

## Environmental Tests



Altitude Simulation



Thermal Shock

## Electrical Tests



## Qualification & Certification



UL9540



UL9540A



UL1973



UL1642



IEC62619



CE



UN38.3



RoHS



REACH



KC



ISO9001:2015



ISO14001:2015



**Standard Products**

**Introduction**



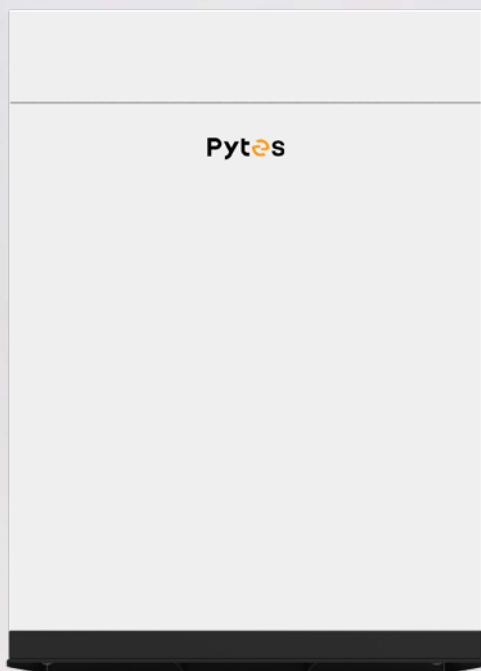
E-BOX 4850G



V5°α



E-BOX 12100



R-BOX

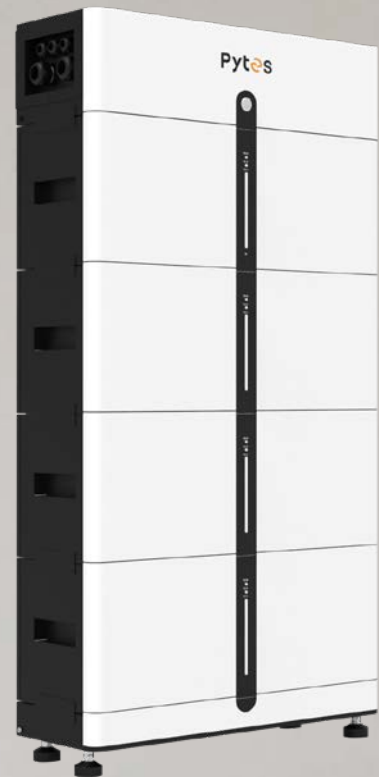


V-BOX-OC





HV48100

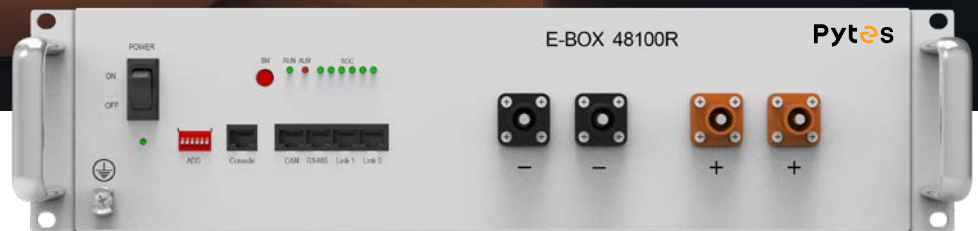


Pi LV1



E-BOX 48100R on R-Bracket

# E-BOX 48100R



## Features



### Scalable

- From 5.12kWh to 245.76kWh



### Compact, Flexible and Easy Install



### Long-lasting

- $\geq 6000$  cycles @ 90%DOD



### Wide Compatibility



### Safe & Reliable

- Tier 1 Automotive Grade A LiFePO<sub>4</sub> cells
- Self-designed & Field-proven BMS

10 Years Warranty



UN38.3



CEC

SGIP

# E-Box 48100R Specs

---

## Electrical

|                                          |                   |
|------------------------------------------|-------------------|
| Nominal Voltage                          | 51.2V             |
| Voltage Range                            | 47.5V~57.6V       |
| Nominal Capacity                         | 100Ah             |
| Nominal Energy                           | 5.12kWh           |
| Recommended Charge/<br>Discharge Current | 50A (2.56kW DC)   |
| Maximum Charge/<br>Discharge Current     | 50A (2.56kW DC)   |
| Peak Discharge Current                   | 102A (5.22kW@15s) |

## General

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Chemistry              | LFP                                                         |
| Communication Protocol | CAN/RS485                                                   |
| Dimensions (L*W*H)     | 440 * 620 * 117mm (2.6U) /<br>17.3 * 24.4 * 4.6 inch (2.6U) |
| Weight                 | 51 kg / 112.5 lbs                                           |
| Ambient Temperature    | -10°C~50°C / 14°F~122°F                                     |
| Round-Trip Efficiency  | ≥95%                                                        |
| Cycle Life*            | ≥6000cycle                                                  |
| Warranty               | 10 Years                                                    |

\* Test Condition 0.5C, 25°C @90%DOD

## Certifications

UL9540 Ed.2 (2020), UL9540A, UL1973, CEC, SGIP, CE, IEC62619, UN38.3

# R-BOX



Pytes

## R-Box Specs

### Mechanical

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Load capacity      | 2*E-Box 48100R                                                                            |
| Dimensions(L*W*H)  | 280 * 510 * 700 mm (780 mm H w/holder)/<br>11.0 * 20.1 * 27.5 inch (30.8 inch H w/holder) |
| Weight             | 17 kg / 37.5 lbs                                                                          |
| Mount              | Wall / Floor mount                                                                        |
| Enclosure rating   | IP20                                                                                      |
| Enclosure material | Cool-rolled steel                                                                         |
| Cooling            | Natural convection                                                                        |

# R-BOX-OC



## R-Box-OC Specs

### Mechanical

|                    |                                               |
|--------------------|-----------------------------------------------|
| Load capacity      | 4*E-Box 48100R                                |
| Structure          | Busbar & DC Circuit Breaker Integrated        |
| Dimensions(L*W*H)  | 800 * 330 * 1575 mm / 31.5 * 13.0 * 62.0 inch |
| Weight             | 80 kg / 176.4 lbs                             |
| Mount              | Floor mount                                   |
| Enclosure rating   | IP55                                          |
| Enclosure material | SGCC(Galvanized steel)                        |
| Cooling            | Natural convection                            |

# Forest-RB Plus



## Forest-RB Plus Specs

### Mechanical

Load capacity

6\*E-Box 48100R

Structure

Busbar Integrated

Dimensions(L\*W\*H)

720 \* 400 \* 1150 mm / 28.3 \* 15.7 \* 45.3 inch

Weight

68 kg / 150 lbs

Mount

Floor mount

Enclosure rating

IP20

Enclosure material

SGCC(Galvanized steel)

Cooling

Natural convection



# E-Box 4850G



## Features



### Scalable

- From 2.4kWh to 115.2kWh



### Long-lasting

- $\geq 6000$  cycles @ 80%DOD



### Safe & Reliable

- Tier 1 Automotive Grade A LiFePO<sub>4</sub> cells
- Self-designed & Field-proven BMS



### Compact, Flexible and Easy Install



### Wide Compatibility

10 Years Warranty

CE UN38.3

# E-Box 4850G Specs

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## Electrical

|                                          |         |
|------------------------------------------|---------|
| Nominal Voltage                          | 48V     |
| Voltage Range                            | 45V-54V |
| Nominal Capacity                         | 50Ah    |
| Nominal Energy                           | 2.4kWh  |
| Recommended Charge/<br>Discharge Current | 25A     |
| Maximum Charge/<br>Discharge Current     | 50A     |

## General

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Chemistry              | LFP                                                                        |
| Communication Protocol | CAN/RS485                                                                  |
| Dimensions (L*W*H)     | 440 * 450 * 80 mm /<br>17.3 * 17.7 * 3.2 inch                              |
| Weight                 | 23.5 kg / 51.8 lbs                                                         |
| Ambient Temperature    | Charge: 0°C~45°C<br>Discharge: -10°C~50°C                                  |
| Round-Trip Efficiency  | ≥ 95%                                                                      |
| Cycle Life*            | ≥ 6000 cycle                                                               |
| Warranty               | 10 Years                                                                   |
| Connect style          | Parallel                                                                   |
| Storage Temperature    | Within 1 month: -20~45°C,<br>1-3 months: -20~35°C,<br>3-12 months: 20~25°C |

\* Test Condition 0.5C, 25°C @80%DOD

## Certifications

UN38.3, CE, IEC62619

# E-Box 4850



## Features



### Scalable

- From 2.4kWh to 115.2kWh



### Long-lasting

- ≥6000 cycles @ 80%DOD



### Safe & Reliable

- Tier 1 Automotive Grade A LiFePO4 cells
- Self-designed & Field-proven BMS



### Compact, Flexible and Easy Install



### Wide Compatibility

10 Years Warranty

  **UN38.3**

# E-Box 4850 Specs

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## Electrical

|                                          |         |
|------------------------------------------|---------|
| Nominal Voltage                          | 48V     |
| Voltage Range                            | 45V-54V |
| Nominal Capacity                         | 50Ah    |
| Nominal Energy                           | 2.4kWh  |
| Recommended Charge/<br>Discharge Current | 25A     |
| Maximum Charge/<br>Discharge Current     | 50A     |

## General

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| Chemistry              | LFP                                                                   |
| Communication Protocol | RS485/CAN                                                             |
| Dimensions (L*W*H)     | 440 * 410 * 89 mm (2U) /<br>17.3 * 16.1 * 3.5 inch                    |
| Weight                 | 25 kg / 55.1 lbs                                                      |
| Ambient Temperature    | -10°C~50°C                                                            |
| Round-Trip Efficiency  | ≥95%                                                                  |
| Cycle Life*            | ≥6000cycle                                                            |
| Warranty               | 10 Years                                                              |
| Connect style          | Parallel                                                              |
| Storage Temperature    | Within 1month: -20~55°C,<br>1-3months: 0~35°C,<br>3-12months: 20~25°C |

\* Test Condition 0.5C, 25°C @80%DOD

## Certifications

UN38.3, CE, IEC62619, KC

# V5° / V5°α



## Features



Remote Monitoring and Upgrading



Higher Charge/Discharge Rate



Wider Operation Temperature



Higher Energy Density



Greater scalability

10 Years Warranty



UN38.3



CEC SGIP

# V5°/ V5°α Specs

## Electrical

|                                                            |                                                          |
|------------------------------------------------------------|----------------------------------------------------------|
| Nominal Voltage                                            | 51.2V                                                    |
| Voltage Range                                              | 47.5V~57.6V                                              |
| Nominal Capacity                                           | 100Ah                                                    |
| Nominal Energy                                             | 5.12kWh                                                  |
| Recommended Charge/<br>Discharge Current <sup>[1]</sup>    | 75A                                                      |
| Max Continuous Charge/<br>Discharge Current <sup>[2]</sup> | 100A                                                     |
| Peak Charge/Discharge Current                              | 101A~120A(3min) ; 121A~180A(15sec)                       |
| Connection Options                                         | V5°: PHOENIX M6 Bolt<br>V5°α: Amphenol SurLok Plus 8.0mm |

[1], [2]: The recommended and Max continuous charge and discharge current is for a battery cell temperature within 10°C~40°C(50°F~104°F) to consider. It will result in a derating on current if out of the temperature range.

## General

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| Chemistry                 | LFP                                                          |
| Communication Protocol    | CAN / RS485                                                  |
| Dimensions (L*W*H)        | 424 * 530 * 140 mm (3.2U) /<br>16.7 * 20.9 * 5.5 inch (3.2U) |
| Weight                    | 44 kg / 97 lbs                                               |
| Ambient Temperature       | -10°C~50°C/14°F~122°F                                        |
| Round-Trip Efficiency     | ≥95%                                                         |
| Cycle Life <sup>[3]</sup> | ≥6000cycle                                                   |
| Warranty                  | 10 Years                                                     |

[3]: Test conditions 0.2C Charging/Discharging, @25°C(77°F), 90% DOD.

## Add-on Functionalities

|                 |                                                                                   |
|-----------------|-----------------------------------------------------------------------------------|
| WIFI Connection | Remote monitoring and upgrade                                                     |
| Heating Pad     | Temperature Rise: 10°C/ h/18°F/h<br>Operation Temperature: -18°C~10°C/-0.4°F~50°F |
| Scalability     | 14 pcs (71.68kWh) in a group<br>6 groups (430.08kWh) in a system w / a Hub        |

## Certifications (On-going)

UL9540 Ed.2 (2020), UL9540A, UL1973, CEC, SGIP, CE, IEC62619, UN38.3

# V-BOX-OC



## V-Box-OC Specs

### Mechanical

|                    |                                               |
|--------------------|-----------------------------------------------|
| Load capacity      | 4*V5°/4*V5°α                                  |
| Structure          | Busbar & DC Circuit Breaker Integrated        |
| Dimensions(L*W*H)  | 645 * 395 * 1395 mm / 25.4 * 15.6 * 54.9 inch |
| Weight             | 88 kg / 194 lbs                               |
| Mount              | Floor mount                                   |
| Enclosure rating   | IP55                                          |
| Enclosure material | SGCC(Galvanized steel)                        |
| Cooling            | Natural convection                            |

# SMART MONITOR

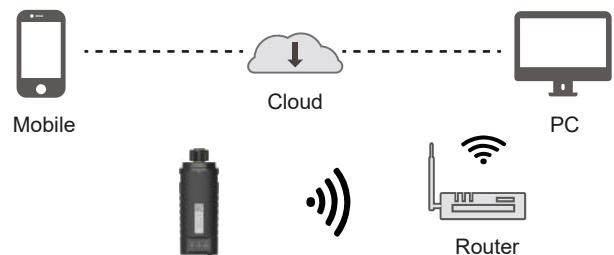


## Smart Monitor feature

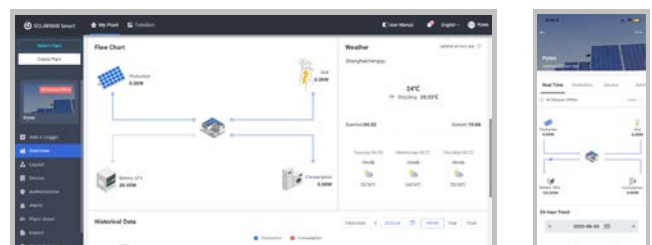
- Real-time Monitoring
- Data Visualization
- Remote Upgrading
- Error Detection
- Alarm Notification



## Diagram



## WEB/APP



# V-BOX-IC



## V-BOX-IC Specs

### Mechanical

|                    |                                              |
|--------------------|----------------------------------------------|
| Load capacity      | 3 * V5° / 3 * V5°α                           |
| Dimensions(L*W*H)  | 533 × 616 × 650 mm / 21.0 × 24.3 x 25.6 inch |
| Weight             | 42.2 kg / 93 lbs                             |
| Mount              | Floor mount                                  |
| Enclosure rating   | IP20                                         |
| Enclosure material | SGCC(Galvanized steel)                       |
| Cooling            | Natural convection                           |

# Effortless to Upgrade Your System in 3 minutes



## Features



Easy to install with minimal tools required



Scalable to meet demands



Capable of easy mobility and secure fixation



Less footprint

## Multi Combinations Customized



Basic Rack



Mobile Cabinet



Scalable System

# Pi LV1



## Features



### Safe

- LFP Chemistry, Field-Proven BMS Integrated in Individual Module, DC Breaker & Fuse Adapted



### Powerful

- Up to 14.08kW Continuous Output and 25.6kW Surge



### Plug-and-play (15-min installation)

- Quick Connectors, Hand-wiring Free



### Scalable on Demand

- Flexible Configuration from 10.24 to 30.72 kWh per Stack, Up to 4 Stacks



### Outdoor Rated Enclosure

- Water & Dust proof for Both Indoor and Outdoor



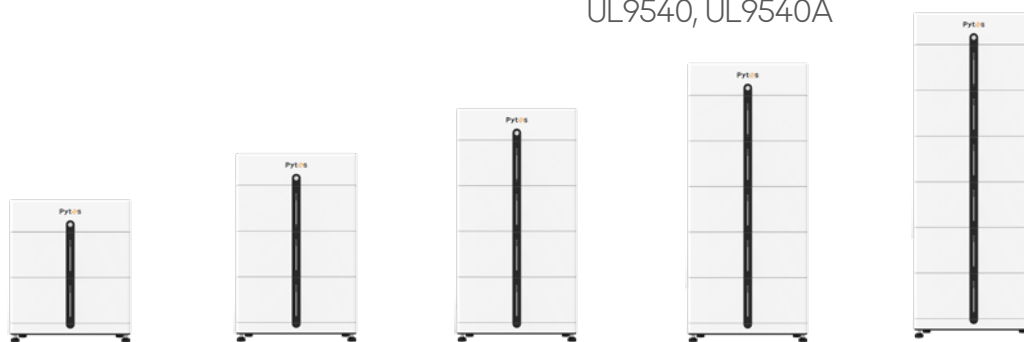
### Smart

- Remote Upgrading & Monitoring

# Pi LV1

## Battery Module Unit:

|                                             |                                               |
|---------------------------------------------|-----------------------------------------------|
| Cell Type                                   | LFP                                           |
| Nominal Energy                              | 5.12kWh                                       |
| Nominal Voltage                             | 51.2V                                         |
| Voltage Range                               | 44.8V~57.6V                                   |
| Nominal Capacity                            | 100Ah                                         |
| Recommended Continuous Discharge Current    | 50A                                           |
| Recommended Continuous Charge Current       | 50A                                           |
| Maximum Continuous Discharge/Charge Current | 60A                                           |
| Peak Charge/Discharge Current               | 90A                                           |
| Certifications                              | CE, IEC62619, UL1973, UN38.3, UL9540, UL9540A |



| Model                           | 2                                                                                                                 | 3                             | 4                             | 5                             | 6                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Cell Type                       | LFP                                                                                                               |                               |                               |                               |                               |
| Nominal Voltage                 | 51.2V                                                                                                             |                               |                               |                               |                               |
| Voltage Range                   | 44.8V~57.6V                                                                                                       |                               |                               |                               |                               |
| Nominal Capacity                | 100Ah                                                                                                             |                               |                               |                               |                               |
| Nominal Energy                  | 10.24kWh                                                                                                          | 15.36 kWh                     | 20.48 kWh                     | 25.6 kWh                      | 30.72 kWh                     |
| Recommended Power               | 5.12kW                                                                                                            | 7.68kW                        | 10.24kW                       | 10.24kW                       | 10.24kW                       |
| Maximum Power                   | 6.14kW                                                                                                            | 9.22kW                        | 12.29kW                       | 14.08kW                       | 14.08kW                       |
| Peak Power                      | 15.36kW                                                                                                           | 20.48kW                       | 25.6kW                        | 25.6kW                        | 25.6kW                        |
| Dimensions (L*W*H)<br>(mm/inch) | 681*242*800<br>26.8*9.5*31.5                                                                                      | 681*242*1060<br>26.8*9.5*41.7 | 681*242*1320<br>26.8*9.5*52.0 | 681*242*1580<br>26.8*9.5*62.2 | 681*242*1840<br>26.8*9.5*72.4 |
| Weight(kg/lbs)                  | 130/285.5                                                                                                         | 187/411.2                     | 244/536.8                     | 301/662.5                     | 358/788.2                     |
| Communication                   | CAN, RS485                                                                                                        |                               |                               |                               |                               |
| Cycle Life                      | ≥6000 cycles                                                                                                      |                               |                               |                               |                               |
| Protection level                | IP55                                                                                                              |                               |                               |                               |                               |
| Ambient Temperature             | -10°C~55°C / 14°F~131°F                                                                                           |                               |                               |                               |                               |
| Storage Temperature             | Within 1 month: -20°C~55°C / -4°F~131°F<br>1~3 months: 0°C~35°C / 32°F~95°F<br>4~12 months: 20°C~25°C / 68°F~77°F |                               |                               |                               |                               |

\* The maximum power and peak power are tested based on an ambient temperature of 25 °C.

\* The duration of maximum power must not exceed 30 mins.

\* The duration of peak power must not exceed 15s.

# E-Box 12100



## Features



### Powerful

- 1C Discharge Rate, Continuous Output Power



### Reliable

- Upgraded BMS
- Heating Pad Integrated for Wider Operation Temperature



### Long-lasting

- $\geq 4000$  Cycles @ 80%DOD



### Scalable

- Easy to Expand Up to 19.2kWh, Maximum 2 in Series per 8 in Parallel



### Smart

- Remote Monitoring & Upgrading



### Wide Applicability

- High Protection Level Enriches More Applications

**5 Years Warranty**

**CE UN38.3**

# E-Box 12100 Specs

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## Electrical

|                                      |                      |
|--------------------------------------|----------------------|
| Nominal Capacity                     | 100Ah                |
| Nominal Voltage                      | 12.8V                |
| Voltage Range                        | 10.8V~14.4V          |
| Maximum Continuous Charging Current  | 50A                  |
| Maximum Continuous Discharge Current | 100A                 |
| Cycle Life                           | 4000 cycle (@80%DOD) |

## Environment

|                             |                                                                                                                     |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------|
| Working Temperature         | -10°C~55°C / 14°F~131°F                                                                                             |
| Storage Temperature         | Within 1 month: -20°C~55°C / -4°F~131°F,<br>1-3 months: 0°C~35°C / 32°F~95°F,<br>3-12 months: 20°C~25°C / 68°F~77°F |
| Operating Relative Humidity | 0%~95%RH No Condensation                                                                                            |

## Structure

|                   |                                            |
|-------------------|--------------------------------------------|
| Dimension(W*D*H)  | 320 * 166 * 200 mm / 12.6 * 6.5 * 7.9 inch |
| Weight            | 15.2 kg / 33.6 lbs                         |
| BMS Communication | RS485 / CAN                                |
| System Connection | Up to 2S8P                                 |
| Heating           | Supported                                  |

## Certification

UN38.3, CE, IEC62619

## Warranty

5 Years

# HV48100



## Features



**Higher Energy Density**



**Lower Resistive Losses**



**Superior Performance**



**Remote Upgrading & Monitoring**



**Enhanced Safety Features**

**10 Years Warranty**

**CE UN38.3**



# HV48100 Specs

## HV48100 BCU

|                            |                                     |
|----------------------------|-------------------------------------|
| Controller Working Voltage | 200V~870V                           |
| Self-consumption Power     | 7.56W                               |
| Dimensions (W*D*H)         | 484*510*140 mm / 19.1*20.1*5.5 inch |
| Weight                     | 13.3 kg / 29.3 lbs                  |
| Communication              | CAN, RS485, Dry Contact, WiFi       |

## HV48100 BMU

|                                         |                                     |
|-----------------------------------------|-------------------------------------|
| Cell Type                               | LFP                                 |
| Nominal Energy                          | 5.12kWh                             |
| Nominal Voltage                         | 51.2V                               |
| Nominal Capacity                        | 100Ah                               |
| Continuous Discharging/Charging Current | 50Adc                               |
| Voltage Range                           | 45.5~58V                            |
| Depth of Discharge                      | 80%                                 |
| Dimensions (W*D*H)                      | 484*530*140 mm / 19.1*20.9*5.5 inch |
| Weight                                  | 43 kg / 94.8 lbs                    |
| Communication                           | CAN, RS485                          |
| Cycle Life                              | ≥6000 cycles                        |
| Operation Temperature                   | -20°C~60°C / -4°F~140°F             |
| Storage Temperature                     | -30°C~60°C / -22°F~140°F            |

## HV48100 System

|                                          |                                                                    |
|------------------------------------------|--------------------------------------------------------------------|
| System Energy                            | 5.12kWh*n                                                          |
| System Voltage                           | 51.2V*n                                                            |
| System Capacity                          | 100Ah                                                              |
| Battery System Charge Upper-Voltage      | 58V*n                                                              |
| Battery System Discharge lower-Voltage   | 45.5V*n                                                            |
| Continuous Discharging/ Charging Current | 50Adc                                                              |
| BCU Model                                | HV48100 BCU                                                        |
| BMU Model                                | HV48100 BMU                                                        |
| BMU Qty. (Optional)                      | 5~15                                                               |
| Depth of Discharge                       | 80%                                                                |
| Dimensions (W*D*H)                       | 600 * 640 * 1555 mm /<br>23.6 * 25.2 * 61.2 inch                   |
| Weight                                   | 89.6 kg + 13.3 kg + 43 kg*n /<br>197.5 lbs + 29.3 lbs + 94.8 lbs*n |
| Communication                            | CAN, RS485, Dry Contact, WiFi                                      |
| Cycle Life                               | ≥6000 cycles                                                       |
| Operation Temperature                    | -20°C~60°C / -4°F~140°F                                            |
| Storage Temperature                      | -30°C~60°C / -22°F~140°F                                           |
| Operation Humidity                       | 0~95%, No Condensation                                             |
| Protection level                         | IP20                                                               |

## Certifications

CE, IEC62619, UL1973, UN38.3, (TBD: UL9540, UL9540A)

# HV4850



## Features



**Higher Energy Density**



**Lower Resistive Losses**



**Superior Performance**



**Remote Upgrading & Monitoring**



**Enhanced Safety Features**

**10 Years Warranty**

**CE UN38.3**

# HV4850 Specs

## HV4850 BCU

|               |                                  |
|---------------|----------------------------------|
| Voltage Range | 200V~900V                        |
| Communication | RS232/RS485/CAN/Dry Contact/WiFi |
| Dimensions    | W440mm*D450mm*H120mm             |
| Weight        | 13KG                             |

## HV4850 BMU

|                             |                     |
|-----------------------------|---------------------|
| Cell Type                   | LFP                 |
| Nominal Energy              | 2.4KWH              |
| Nominal Voltage             | 48VDC               |
| Nominal Capacity            | 50Ah                |
| Charging Voltage            | 53.5V               |
| Discharging Cut-off Voltage | 44.5V               |
| Communication               | RS232/RS485/CAN     |
| Charging Temperature        | 0~55°C              |
| Discharging Temperature     | -10~55°C            |
| Storage Temperature         | -20~45°C            |
| Cycle Life*                 | 6000 cycles         |
| Dimensions                  | W440mm*D450mm*H80mm |
| Weight                      | 23KG                |

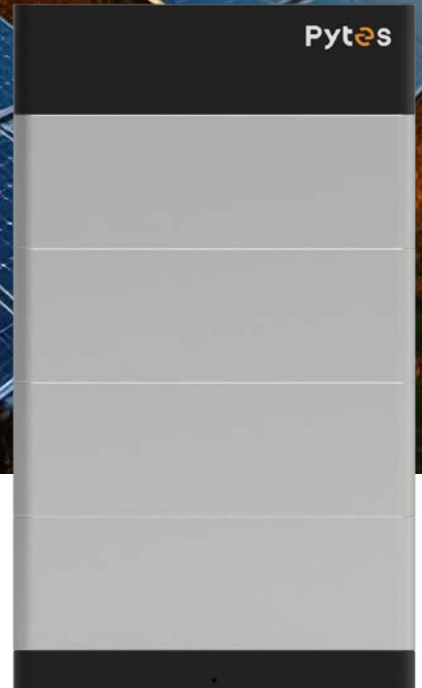
## HV4850 System

|                                         |                            |
|-----------------------------------------|----------------------------|
| Cell Type                               | LFP                        |
| Expansion                               | 16                         |
| Nominal Energy                          | 38.4KWH                    |
| Nominal Voltage                         | 768VDC                     |
| Nominal Capacity                        | 50Ah                       |
| Battery System Charging Voltage         | 852VDC                     |
| Discharging Cut-off Voltage             | 712VDC                     |
| Continuous Charging/Discharging Current | 25A (0.5C)                 |
| Max Charging/Discharging Current        | 50A(1C)                    |
| Peak Discharging Current                | 100A@15S                   |
| Depth of Discharge                      | 80%                        |
| Round-trip Efficiency                   | 96%                        |
| External Communication                  | RS485/CAN/Dry Contact/Wifi |
| Monitoring Communication                | RS232                      |
| Charging Temperature                    | 0~55°C                     |
| Discharging Temperature                 | -10~55°C                   |
| Storage Temperature                     | -20~45°C                   |
| * Cycle Life                            | 6000 Cycles                |
| Warranty                                | 10 Years                   |
| Rack Dimensions                         | W536mm*D513mm*H940mm       |
| System Weight                           | 381KG                      |
| Protection level                        | IP20                       |
| Certifications                          | CE/IEC62619/UN38.3         |

## Certifications

UN38.3, CE, IEC62619

# ST20



## Features



### Smart

- Energy Control Box on Top



### Scalable

- Up to 20 kWh (4 modules) per Stack



### Compact

- Brick-shaped Modular Design, Easy Installation, Save Labor Costs



### Elegant

- Modern design, High Protection Suitable for Indoor & Outdoor Installation



### Cost-effective

- Especially Applicable to High Electricity Price Areas & High Subsidy Areas

**10 Years Warranty**

**CE UN38.3**

# ST20

## Module

|                                                     |                                                  |
|-----------------------------------------------------|--------------------------------------------------|
| Number of modules                                   | 4                                                |
| Total Energy<br>(25 ± 2°C, 0.5C, New Battery State) | 20.48 kWh                                        |
| Nominal Voltage                                     | 409.6 V                                          |
| Operating Voltage Range                             | 320~467.2 V                                      |
| Communication                                       | CAN                                              |
| Dimensions (W/D/H)                                  | 600 * 390 * 1025 mm /<br>23.6 * 15.4 * 40.4 inch |
| Weight                                              | 228 ± 4 kg / 502.7 ± 8.8 lbs                     |
| Operating Temperature                               | Charge: 0°C~50°C<br>Discharge: -20°C~55°C        |
| Cell Type                                           | LFP                                              |
| Standard Capacity                                   | 50Ah (25 ± 2°C, 0.5C, New Battery State)         |
| Nominal Capacity                                    | 5.12kWh                                          |
| Depth of Discharge                                  | 80%(Recommend)、100%(Max)                         |
| Operating Voltage                                   | 80~116.8V                                        |
| Nominal Voltage                                     | 102.4V                                           |
| Charge /Discharge Current                           | Recommend 25A(0.5C), Max 45A(1C)                 |
| Weight                                              | 51 ± 2 kg / 112.4 ± 4.4 lbs                      |
| Dimensions (W*D*H)                                  | 600 * 390 * 229 mm / 23.6 * 15.4 * 9.1 inch      |
| Recommend Storage Temperature                       | 5°C ~ 35°C / 41°F~95°F                           |
| Humidity                                            | 5%~95%                                           |
| Altitude                                            | ≤4000m                                           |
| Warranty                                            | 10 years                                         |

## Energy Control Box

|                    |                                             |
|--------------------|---------------------------------------------|
| Dimensions (W*D*H) | 600 * 390 * 165 mm / 23.6 * 15.4 * 6.5 inch |
| Weight             | 16 ± 1 kg / 35.3 ± 2.2 lbs                  |

## Certifications

UN 38.3 / IEC62619 / CE-EMC

# Accessories

## Brackets



### Brackets for E-Box 48100R

150219100018 & 150219100019

#### F. & B. Bracket



110409100019

#### R-Bracket (Single Rack)

Single Bracket for 1 pc E-Box 48100R

Easy to expand up to 8 layers

110409100020

#### R-Bracket (8-in-1)

8 layers for holding 8 pcs E-Box 48100R



### Brackets for V5°

150208100001

#### V-Bracket



### Brackets for E-Box 4850

150208100010 & 150208100011

#### F. & B. Bracket

## Equipments



### HUB

110409100001

#### Hub

Enables communication with multiple groups of batteries



## Busbar:

161506100003

### 300A Junction Box

300A/6\*M5+2\*M10 Terminals

110409100026

### 300A Busbar

300A/12\*M6+2\*M8 Terminals

110409100027

### 600A Busbar

600A/6\*M10+2\*M8 Terminals

## Cables



## Power Cables

161412100244 & 161412100245

### 4AWG/2000mm/Amphenol to M8 Bolt

161412100251 & 161412100252

### 4AWG/160mm/both Amphenol ends

161412100467 & 161412100468

### 4AWG/2000mm/Amphenol to M10 Bolt

161412100461 & 161412100462

### 4/0AWG/2000mm/both M10 ends

161412100465 & 161412100466

### 2/0AWG/2000mm/both M10 ends

## Communication Cables

161412101071

### Standard Communication Cable

Compatible with: Sol Ark, Megarevo, Luxpower, Growatt, APsystems, SMA, Studer

1614121010XX

### Customized Communication Cable

Customized for: Victron, Voltronic, Phocos, MPP, SRNE

161412100916

### Console Cable

USB to RJ45 cable for monitoring & upgrading





Netherlands



Netherlands



Germany



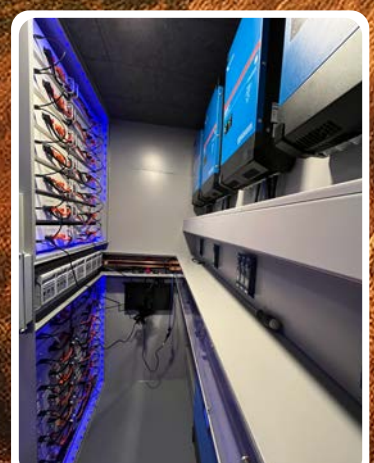
Africa



Germany



Austria



Austria



  
**Curacao**



  
**Puerto Rico**



  
**Dominican Republic**



  
**Indiana**



  
**Puerto Rico**

## Compatibility List of PYTES ESS and Inverters

### Low Voltage



### High Voltage



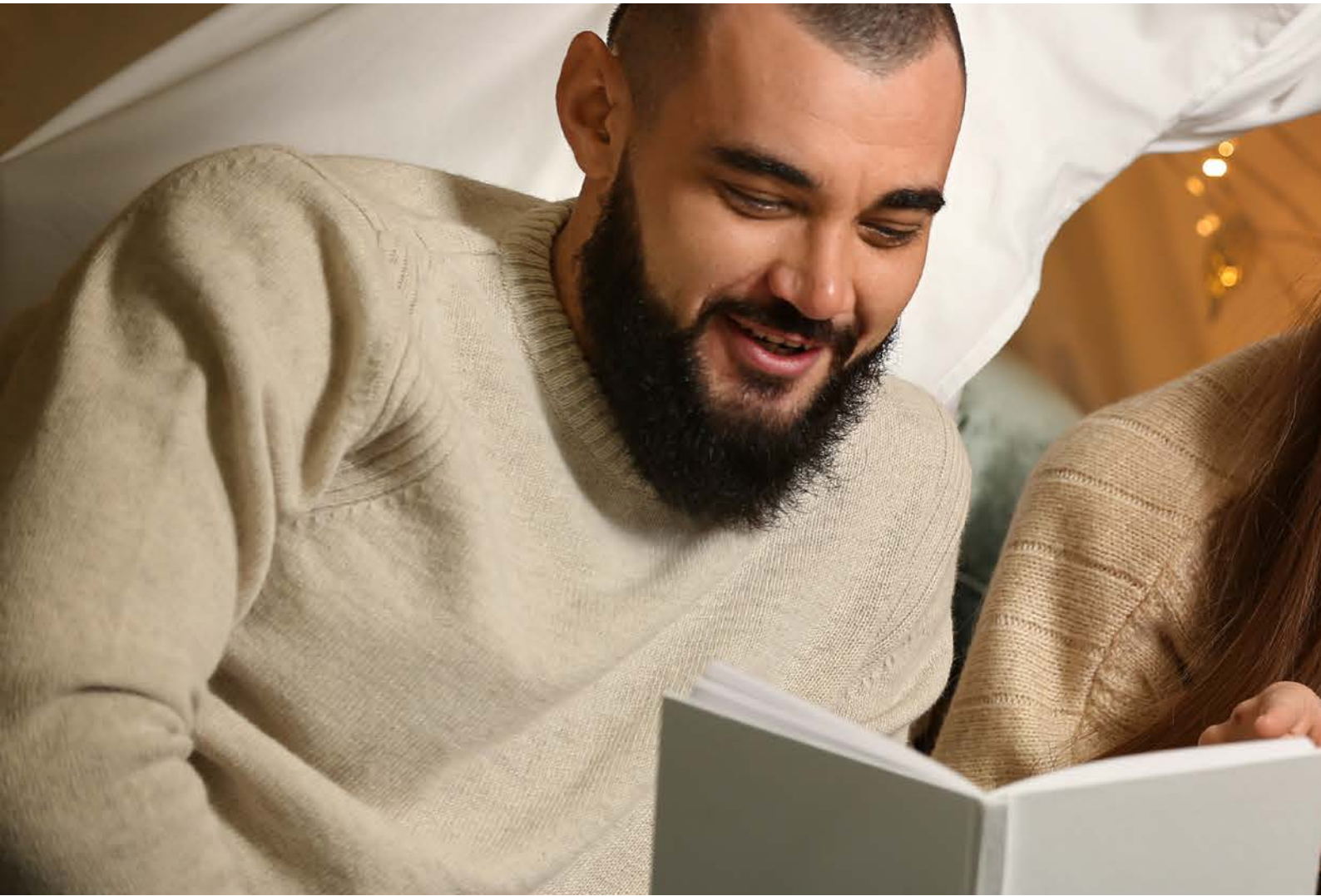


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More Catalogs  



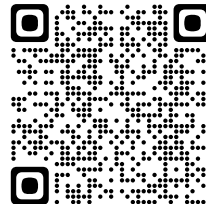

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