

## 2. Introduction

UP2500 lithium iron phosphate battery is one of new energy storage products developed and produced by Pylontech, it can be used to support reliable power for various types of equipment and systems. UP2500 is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

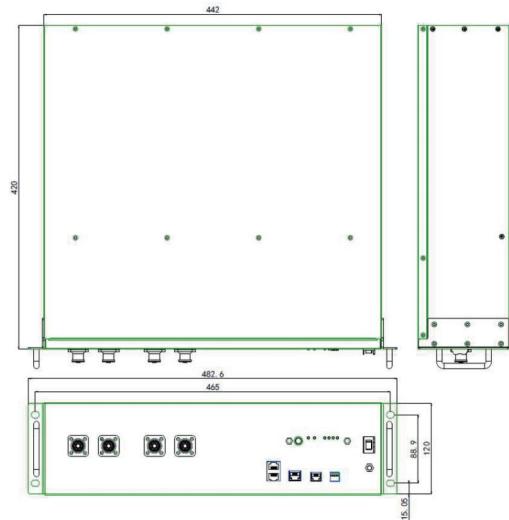
UP2500 has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature, further provide protection base on above information. The BMS can also balance cells during charging to extend cycle life.

Multiple batteries can connect in parallel to expand capacity and power in parallel for larger capacity and longer power supporting duration requirements.

### 2.1 features:

- The whole module is non-toxic, non-polluting and environmentally friendly;
- Cathode material is made from LiFePO<sub>4</sub> with safety performance and long cycle life;
- Battery management system (BMS) has protection functions including over-discharge, over-charge, over-current and high/low temperature;
- The system can automatically manage charge and discharge state and balance current and voltage of each cell;
- Flexible configuration, multiple battery modules can be in parallel for expanding capacity and power
- Adopted self-cooling mode rapidly reduced system entire noise;  
The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge;
- Working temperature range is from -10°C to 55°C, (Charging 0~55°C; discharging -10~55°C) with excellent discharge performance and cycle life;
- Small size and light weight, standard of 19-inch embedded designed module is comfortable for installation and maintenance.

## 2.2 Specifications



| Basic Parameters                        | UP2500                       |
|-----------------------------------------|------------------------------|
| Nominal Voltage (V)                     | 25.6                         |
| Nominal Capacity (Wh)                   | 2840                         |
| Usable Capacity (Wh)                    | 2550                         |
| Dimension (mm)                          | 442*420*120                  |
| Weight (Kg)                             | 26.5                         |
| Discharge Voltage (V)                   | 23.2 ~ 28.5                  |
| Charge Voltage (V)                      | 28.2 ~ 28.5                  |
| Recommend Charge/Discharge Current (A)  | 55                           |
| Max. Charge/Discharge Current (A)       | 85                           |
| Peak Charge/Discharge Current (A)       | 100A@15sec                   |
| Communication                           | RS485 / CAN                  |
| Configuration (max. in 1 battery group) | 20pcs                        |
| Working Temperature                     | 0℃~55℃ Charge                |
|                                         | -10℃~55℃ Discharge           |
| Shelf Temperature                       | -20℃~45℃                     |
| Ingress Protection                      | IP20                         |
| Humidity                                | 5% ~ 95% (RH)                |
| Altitude                                | <2000m                       |
| Certification                           | IEC62619 / CE/ RoHS / UN38.3 |
| Design life                             | 10+ Years (25℃/77°F)         |