

2. Introduction

US3000 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 equipments and systems. US3000 is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

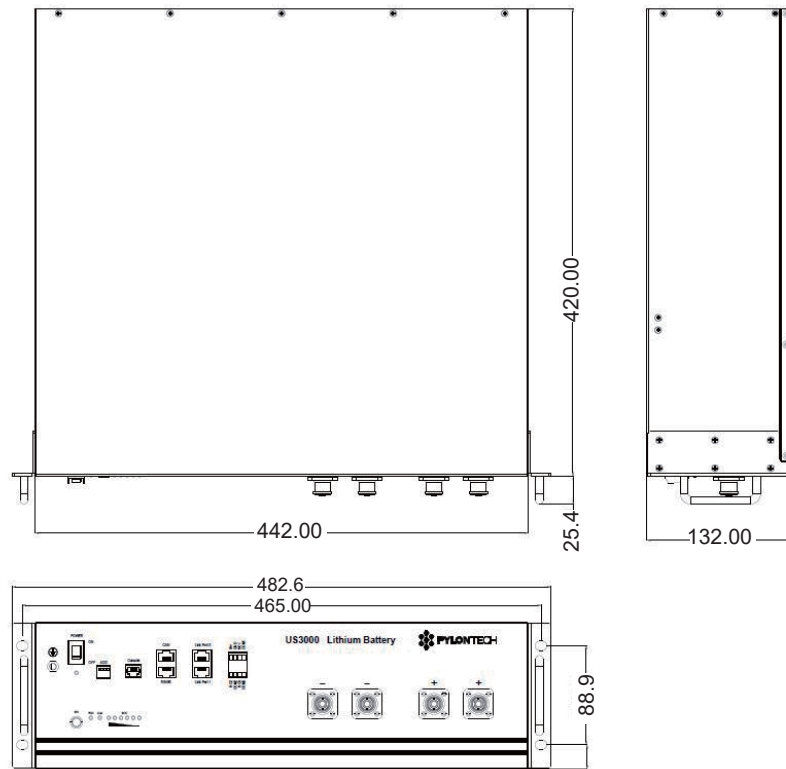
US3000 has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging and discharging to extend cycle life.

Multiple batteries can connected 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_4 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 50°C , (Charging $0\sim 50^{\circ}\text{C}$; discharging $-10\sim 50^{\circ}\text{C}$) 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	US3000
Nominal Voltage (V)	48
Nominal Capacity (Wh)	3552
Usable Capacity (Wh)	3375
Dimension (mm)	442*420*132
Weight (Kg)	32
Discharge Voltage (V)	45 ~ 53.5
Charge Voltage (V)	52.5 ~ 53.5
Recommend Charge/Discharge Current (A)	37
Max. Charge/Discharge Current (A)	74@60sec
Peak Charge/Discharge Current (A)	100@15sec
Communication	RS485, CAN
Configuration (max. in 1 battery group)	8pcs
Working Temperature	0℃~50℃ Charge
	-10℃~50℃ Discharge
Shelf Temperature	-20℃~60℃
Protective class	IP20
Cooling type	Natural Cooling
IP rating of enclosure	IP20
Humidity	5% ~ 85%
Certification	IEC62619/ CE / UN38.3
Design life	10+ Years (25℃/77°F)
Cycle Life	>6,000 25℃
Reference to standards	IEC62619, IEC62040, IEC62477-, IEC61000-6-2, IEC61000-3, UN38.3