

Lithium storage unit

US5000

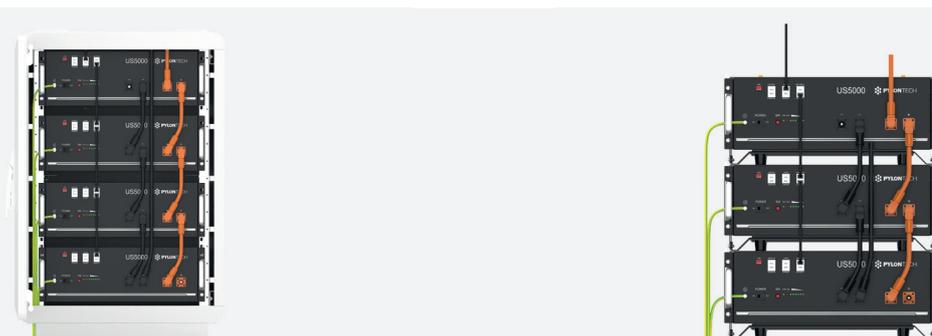
Solar Lithium storage unit 48 V / 4,8 kWh

The US5000 is a state-of-the-art lithium storage system: With the highest level of safety and a long service life - even with regular deep discharge - it meets the high demands placed on solar storage systems. The fast charging and discharging properties typical of lithium batteries make it possible to store or release a large amount of energy in a short period of time. This predestines the US5000 for use in solar storage solutions for private households.



Characteristics

- NEU** Higher cycle stability than its predecessor with now over 6000 charge / discharge cycles
- NEU** Higher depth of discharge (DoD) up to 95% @ 25°C
- NEU** Design life up to 15 years
- NEU** Built-in soft start function to avoid power surges when the inverter starts up
- NEU** Automatic address setting when connected in multi-group mode
- Absolutely failsafe lithium technology - lithium iron phosphate / LiFePo4
- Very high storage capacity ratio – lightweight and compact design
- Horizontal or vertical set-up, optionally also 19"-rack mounting
- Integrated battery management system (BMS)
- Compatible with Series AX solar inverters in the EFFEKTA range
- Modular system for individual scaling
- 7 years warranty



US5000 can be easily expanded freely or in a 19" cabinet like a modular system

The storage modules comprise a lithium iron phosphate (LiFePo4) accumulator and an integrated battery management system (BMS) which constantly monitors the status of individual cells and also provides protection against excessive levels of charge, voltage and temperature. This is how the BMS prevents an accumulator from failing prematurely as a result of ambient factors or operator error.

The modular layout permits individual configuration of the storage system to achieve the required capacity level, simply by connecting the desired number of modules together.

US5000 as ideal energy storage in interaction with the EFFEKTA AX PV solar inverters. It is ideally suited as storage solutions for solar or island operation with battery support.

Consumers are supplied with electricity from the PV modules on a priority basis. In the first instance, if the PV power supply fails or is insufficient, the batteries deliver the required power. Once the batteries have discharged, the AC source (public power grid) cuts in. Surplus power from the PV modules is used to charge the batteries. Whenever the PV and AC power supply fails, consumers continue to be supplied by batteries.



Specifications

| Modell | US5000 |
|--|---|
| Technology | Lithium iron phosphate (LiFePo4) |
| Nominal voltage | 48 V |
| Rated capacity | 100 Ah / 4,8 kWh |
| Discharge voltage range | 45,5 ... 53,2 V |
| Charging voltage range | 52.5 ... 53,2 V |
| Recommended charge / discharge current | 80 A |
| Communication | RS485, CAN |
| Weight | 39,7 kg |
| Dimensions | 442 x 420 x 161 mm |
| Temperature range at charge | +0... +50°C |
| Temperature range during discharge | -10... 50°C |
| Design life | over 15 years @ 25°C |
| Cycle life | > 6000 @ 25°C |
| BMS / monitoring | Integrated battery management system in each module |
| Certification | CE / UN38.3 |