

Lithium storage unit

Pylontech US2000C/3000C

Solar lithium storage unit 48V / 2.4kWh (US2000C) / 3.5kWh (US3000C)

The Pylontech US2000C and US3000C are state-of-the-art lithium storage systems: With the highest level of safety and a long service life – even with regular deep discharge – they meet the high demands placed on solar storage systems. The fast charging and discharging properties typical of lithium batteries allow to store or release a large amount of energy in a short period of time. This predestines the US2000C and US3000C for use in solar storage solutions for private households.



Characteristics

- Higher cycle stability than its predecessors with now over 8000 charge / discharge cycles*
- Higher depth of discharge (DoD) up to 95% @ 25°C
- Design life up to 15 years
- Built-in soft start function to avoid power surges when the inverter starts up
- 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 setup, optionally also 19"-rack mounting
- High peak charge and discharge ratings of up to 4.3 kW per module can be achieved
- Integrated battery management system
- Compatible with Series AX solar inverters in the EFFEKTA range
- Modular system for individual scaling
- 7 years manufacturer warranty  **PYLONTECH**



US2000C and US3000C 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 monitors the status of the individual cells.

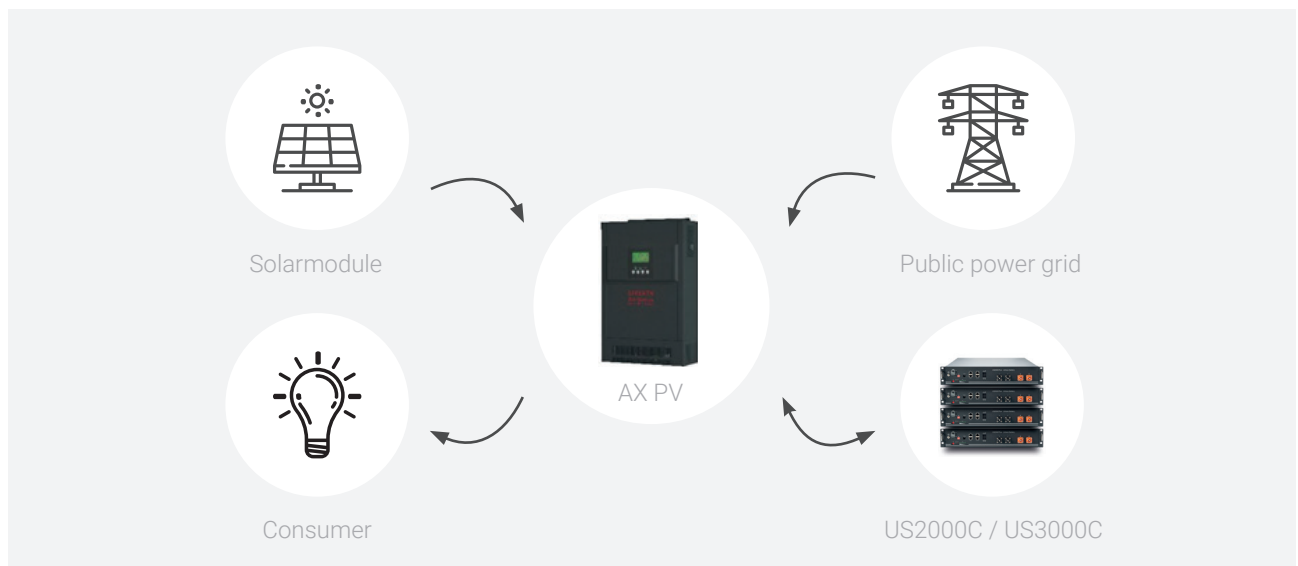
In this way, the BMS prevents the premature failure of a battery due to environmental factors.

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

Pylontech US2000C and US3000C operate as ideal energy storage in interaction with the EFFEKTA® AX PV

solar inverters. They are 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

Model	US2000C	US3000C
Technology	Lithium iron phosphate (LiFePo ₄)	Lithium iron phosphate (LiFePo ₄)
Nominal voltage	48 V	48 V
Rated capacity	50 Ah / 2.4 kWh	74 Ah / 3.55 kWh
Usable capacity (95% DoD)	47.5 Ah / 2.28 kWh	70 Ah / 3.37 kWh
Max. quantity of modules / battery string	16	16
Max. quantity of battery strings in parallel	6	6
Discharge voltage range	45.5 ... 53.2 V	45.5 ... 53.2 V
Charging voltage range	52.5 ... 53.2 V	52.5 ... 53.2 V
Recommended charge / discharge current	25 A	37 A
Maximum charge / discharge current	50 A / Peak: 90 A for 15 s.	74 A / Peak: 90 A for 15 s.
Communication	RS485, CAN	RS485, CAN
Weight	24 kg	32 kg
Dimensions	442 x 410 x 89 mm	442 x 420 x 132 mm
Temperature range at charge	+0... +50° C	+0... +50° C
Temperature range during discharge	-10... 50° C	-10... 50° C
Design life	over 15 years @ 25° C	over 15 years @ 25° C
Cycle life	> 8000 @ 25° C*	> 8000 @ 25° C*
BMS / monitoring	Integrated battery management system in each module	
Certification	TüV / CE / UN38.3	

*as of 01.02.2024