

# Batteries US2000

NEW

## Lithium solar-storage system, 48 V / 2.4 kWh

The US2000 is a latest-generation lithium storage unit: Combining maximum safety with a long service life - even when at low levels of charge on a regular basis - it meets the demanding requirements for the storage of solar power. The characteristically fast charge and discharge properties of lithium batteries enable them to store or to release a large amount of power in a short period. The US2000 is therefore predestined for use in solar storage solutions for private households.



## ■ Characteristics

- Extremely resistant to cycles – anticipated service life in excess of 10 years with more than 4500 charge/discharge cycles at 90% DoD
- Modular system for individual scaling of the storage system
- High peak charge and discharge ratings of up to 4.8 kW per module can be achieved
- 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
- Compatible with Series AX solar inverters in the EFFEKTA range
- 7 years warranty



Very easy indeed to expand

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 these also provide 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.

US2000 is the ideal energy memory in conjunction with the EFFEKTA AX PV inverters. These are superbly equipped as a storage solution for solar or standalone mode 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

US2000	
Technology	Lithium iron phosphate (LiFePo4)
Nominal voltage	48 V
Rated capacity	50 Ah / 2,4 kWh
Usable capacity (90% DoD)	45 Ah / 2,2 kWh
Discharge voltage range	45,0 ... 54,0 V
Charging voltage range	52.5 ... 54,0 V
Recommended charge / discharge current	25 A
Maximum charge / discharge current	50 A / Peak: 100 A (2C) für 15 s.
Communication	RS232, RS485, CAN
Weight	24 kg
Dimensions	440 x 410 x 89 mm
Temperature range at charge	+0... +50°C
Temperature range during discharge	-10... 50°C
Life time	over 10 years
Cycle life	over 4500 at 90% depth of discharge
BMS / monitoring	Integrated battery management system in each module
Certification	TüV / CE / UN38.8