






LITHIUM IRON PHOSPHATE  
BATTERY

## ELFP-51V280Ah

14.3 kWh • 51.2V

- 14.3** High energy capacity of 14.3 kWh with 280Ah maximum capacity for powerful energy storage.
-  Built-in advanced BMS with overcharge, over-discharge, over-current, short-circuit and temperature protection.
-  Supports parallel connection of up to 16 units for large-scale energy storage systems.
-  Excellent cycle life: ≥6000 cycles at 80% DOD and ≥8000 cycles at 70% DOD.
-  RS485 / CAN / WiFi / Bluetooth communication interfaces for smart monitoring.
-  15–20 years typical service life with high safety and thermal stability.

### Technical Data

ELFP-51V280Ah

#### ELECTRICAL PARAMETERS

Nominal Voltage	51.2V
Nominal Capacity	314Ah
Maximum Capacity	280Ah
Nominal Energy	16 kWh
Maximum Energy	14.3 kWh
Cycle Life (80% DOD)	≥ 6000 Cycles
Cycle Life (70% DOD)	≥ 8000 Cycles
Charge Voltage	55.2 ± 0.2V
Discharge Cut-off Voltage	46.4 ± 0.2V
Standard Charge Current	125A
Continuous Discharge Current	125A

#### ENVIRONMENTAL PARAMETERS

Charge Temperature	0 ~ 55°C
Discharge Temperature	-20 ~ 60°C
Storage Temperature	-10 ~ 55°C
Humidity	≤ 85% RH

#### PROTECTION & FEATURES

Battery Management System	Built-in Advanced BMS
Protections	Overcharge, Over-discharge, Over-current, Short-circuit, Temperature
Parallel Connection	Up to 16 units
Communication	RS485 / CAN / WiFi / Bluetooth
Expected Service Life	15–20 Years

#### GENERAL DATA

Battery Chemistry	LiFePO <sub>4</sub> (Lithium Iron Phosphate)
Design	Maintenance-free, High Safety

#### WARNING:

- Do not short-circuit the battery terminals.
- Do not expose to fire or high temperatures.
- Do not puncture, crush, or disassemble.
- Do not use if swollen, leaking, or damaged.
- Keep away from children.
- Charge only with compatible approved charger/inverter.