

EP-4850-15 (48V50Ah)

lithium iron phosphate (LiFePO4) battery
Your best power choice for
Solar energy storage system!

EverExceed LiFePO4 solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid technology. Here introducing renowned EP-4850-15 battery of EverExceed which is high demanding among Solar industry users for its most advanced features



Advantage summary

- 15+ years of design life, 19" rack mounting module design
- Direct Lead Acid Battery (AGM/GEL) replacement for 48V 50Ah;
- Faster charge, 1 hour of charging can provide up to 90% charge;
- High energy density and conversion efficiency;
- Excellent high and low temperature operation;
- High cycle times and longer service life of >3000 cycles @100% DOD ;
- Can support paralleling use for increased requirement;
- Safety in use: EverExceed TopSure™ BMS inside, No explosion, No fire;
- Intelligent automatic protection for overcharge, over discharge and temperature conditions.
- Ultra low self discharge rate <1.5%/month;
- No maintenance required through out the lifetime;
- Great power saver;
- Superior DOD (100%) over lead acid batteries;
- RS485 and RS232 communication output
- BMS with internal cell balancing function to ensure long service life.
- Excellent high temperature performance, ultra low life decay rate in operating when harsh environment.

Specifications

Nominal Characteristics	
Battery Model	EP-4850-15
Nominal Voltage (V)	48
Rated Capacity@5HR Rate@25°C (Ah)	50
Typical energy (Wh)	2400
Electrical Characteristics	
Recommend charging voltage (V)	54 to 54.75
Floating charging voltage (V)	51.5 to 52
Recommend charging current (A)	20
Charge limiting current in parallel operation (A)	25
Max continuous discharge current (A)	50
Discharging cut-off voltage (V)	40
Working voltage range (V)	40 to 54
Operating Conditions	
Cycle life	≥3000 cycles@100% DOD@25°C ; ≥4200 cycles@80% DOD@25°C ;
Round trip efficiency (%)	≥98%
Operating Charge temperature (°C)	0°C to +60°C
Operating Discharge temperature (°C)	-20°C to +60°C
Storage temperature (°C)	-20°C to +60°C
Mechanical Characteristics	
Length x Width x Height (mm)	483 x 480 x 133
Weight (kg)	24
Terminal	M6

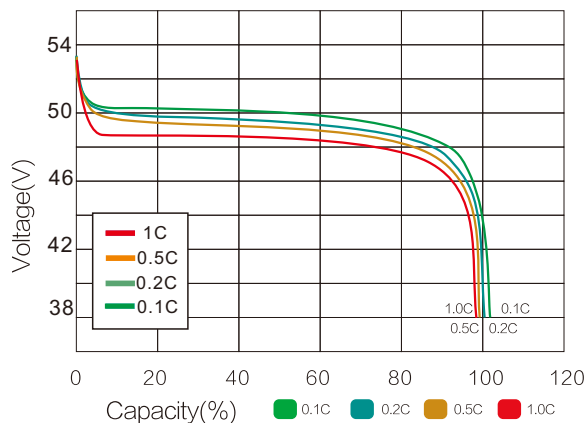
Application

- Base transceiver station
- Communication equipments
- Central office
- Telecommunication system
- Microprocessor based office machine
- UPS

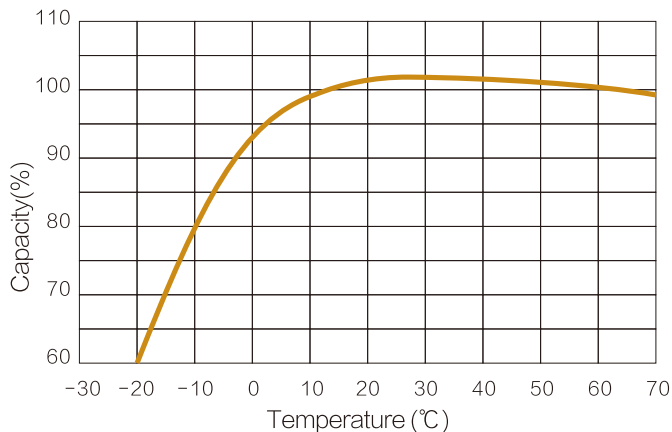


Performance Curve

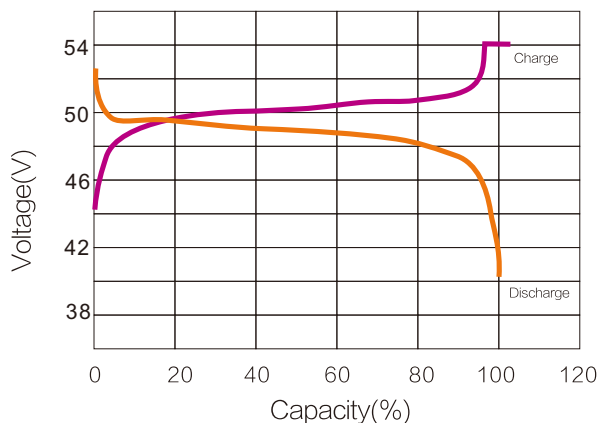
Discharge performance @25°C



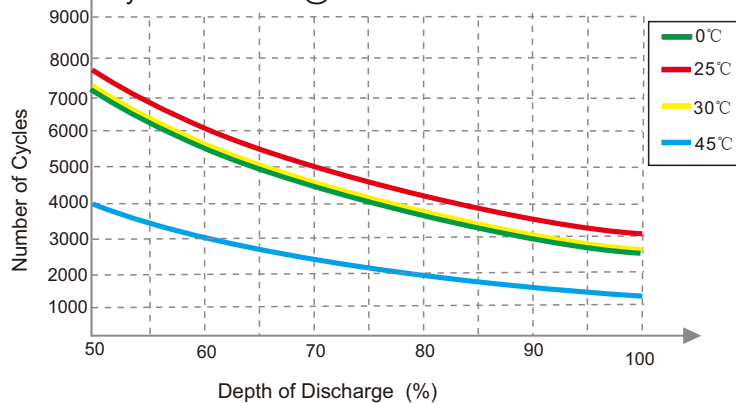
Temperature effects on capacity @ 0.2C



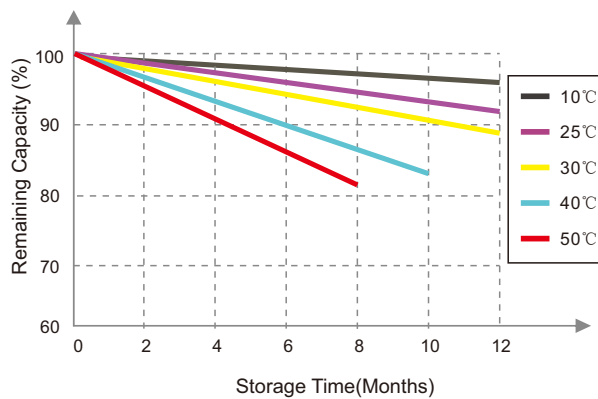
Charge and Discharge @25°C, 0.2C



Different DOD Discharge and Different Temperature Cycle Life Curve @0.2C



Different Temperature Self Discharge Curve



Battery calendar design life at different temperatures

