



# LDP 12-85 (12.8V 85Ah)

lithium iron phosphate (LiFePO4) battery

**Your best power choice  
for energy storage system!**



EverExceed LiFePO4 solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid technology.

Here introducing popular LDP 12-85 battery of EverExceed which is high demanding among different industry users for its most advanced features.

## Application

- Wheel chair, sweeper, electric vehicle, robot
- Solar/wind energy storage system
- UPS Backup power
- Telecommunication
- Medical equipment
- Solar Street light

## Advantage summary

- Direct Lead Acid Battery (AGM/GEL) replacement for 85AH;
- Faster charge, 1 hour of charging can provide up to 90% charge (Optional);
- High energy density and conversion efficiency;
- Environmental Friendly, without any heavy metals;
- High cycle times and longer service life of >3000 cycles @100% DOD;
- Great high temperature performance;
- Safety in use: Advanced intelligent BMS inside, No explosion, No fire;
- No maintenance required through out the lifetime;
- Great power saver;
- Superior DOD (100%) over lead acid batteries;
- No acid splash and carbon mono-oxide emission so no need expensive battery maintenance room;
- The integrated BMS can support Bluetooth connectivity with dedicated user friendly app to ease your operation and monitoring (optional);



### ELECTRICAL SPECIFICATIONS

|                     |                 |
|---------------------|-----------------|
| Nominal Voltage     | 12.8 V          |
| Nominal Capacity    | 84 Ah           |
| Energy              | 1075 Wh         |
| Resistance          | ≤50 mΩ          |
| Self Discharge      | <1.5% per Month |
| Series connection   | 4 Units max.    |
| Parallel connection | 4 Units max.    |

### CHARGE SPECIFICATIONS

|                            |                                     |
|----------------------------|-------------------------------------|
| Recommended Charge Current | 42 A                                |
| Maximum Charge Current     | 84 A                                |
| Recommended Charge Voltage | 14.2 V-14.6 V                       |
| BMS Charge Voltage Cut-Off | 14.6 V (3.65 ±0.5 vpc) (1.1 ±0.4 s) |
| Reconnect Voltage          | 14.4 V (3.6 ±0.05 vpc)              |
| Charging method            | CC-CV                               |

### DISCHARGE SPECIFICATIONS

|                                      |                                |
|--------------------------------------|--------------------------------|
| Maximum Continuous Discharge Current | 84 A                           |
| Peak Discharge Current               | 150 A (<2S)                    |
| Recommended Low Voltage Disconnect   | 11 V (2.75 vpc)                |
| BMS Discharge Voltage Cut-Off        | 8 V (2.0 ±0.08 vpc) (20 ±6 ms) |
| Reconnect Voltage                    | 10 V (2.5 ±0.05 vpc)           |
| Short Circuit Protection             | 200-600 μs                     |

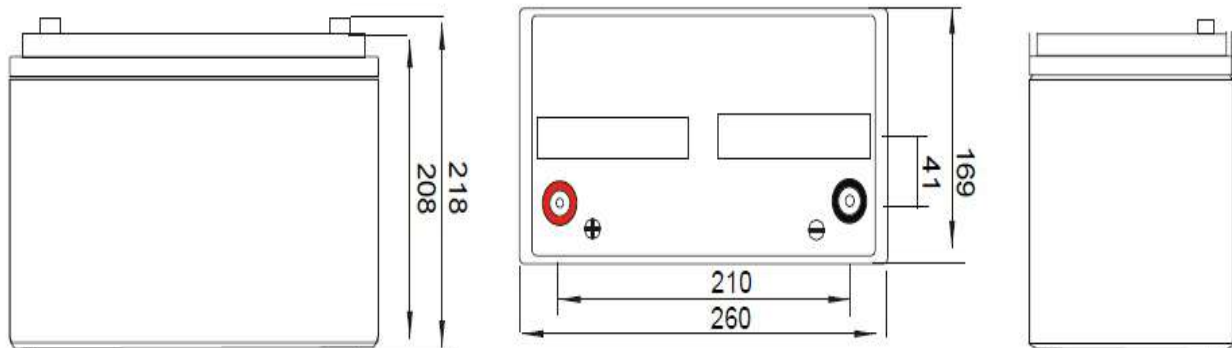
### TEMPERATURE SPECIFICATIONS

|                               |                                   |
|-------------------------------|-----------------------------------|
| Discharge Temperature         | - 4 °F to 140 °F (-20°C to 60 °C) |
| Charge Temperature            | 32 °F to 122 °F (0 °C to 50 °C)   |
| Recommend Storage Temperature | 23°F to 95 °F (-5°C to 35 °C)     |

### MECHANICAL SPECIFICATIONS

|                        |  |
|------------------------|--|
| Dimensions (L x W x H) | 10.2 x 6.7 x 8.5 "<br>260 x 169 x 215 mm |
| Weight                 | 10.2 Kg                                  |
| Terminal Type          | M8                                       |
| Case Material          | ABS                                      |
| Enclosure Protection   | IP55                                     |

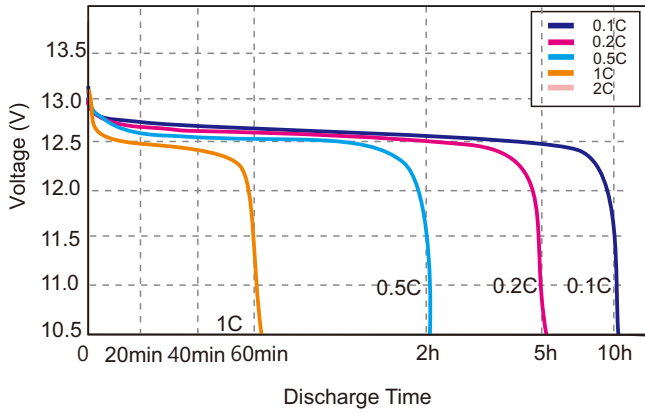
### DIMENSIONAL SPECIFICATIONS



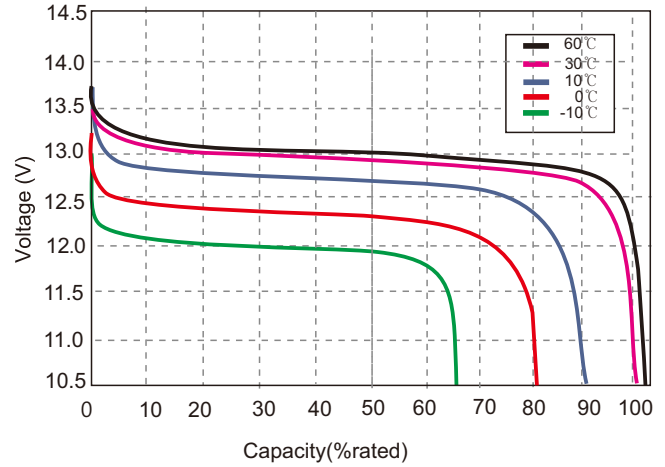


## Performance curve

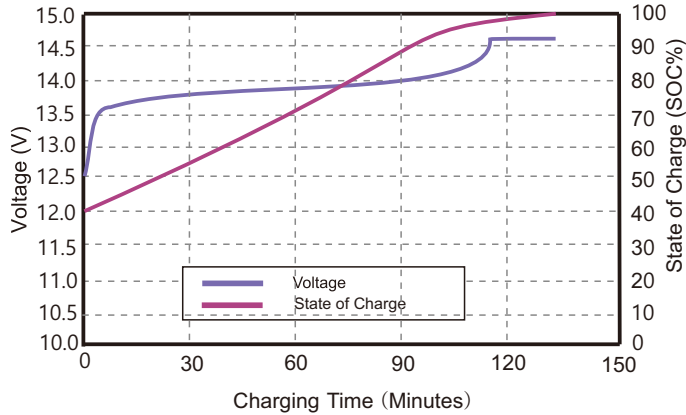
Different Rate Discharge Curve @25°C



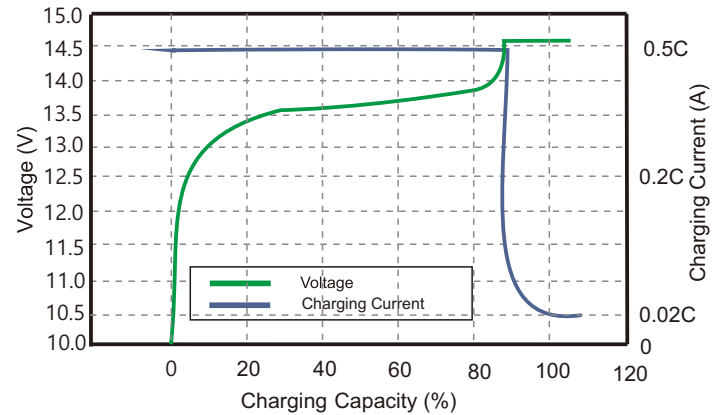
Different Temperature Discharge Curve @0.5C



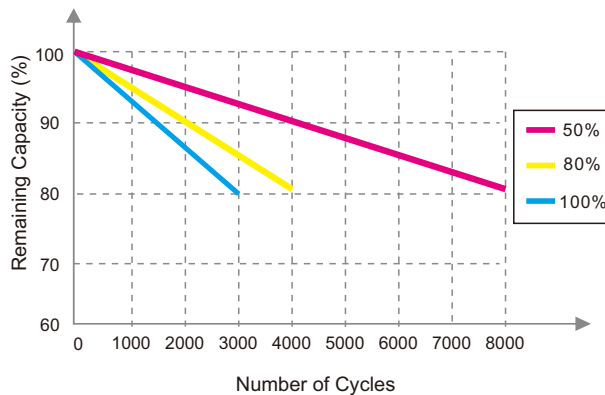
State of Charge Curve @0.5C 25°C



Charging Characteristics @0.5C 25°C



Different DOD Discharge Cycle life Curve @0.2C 25°C



Different Temperature Self Discharge Curve

