

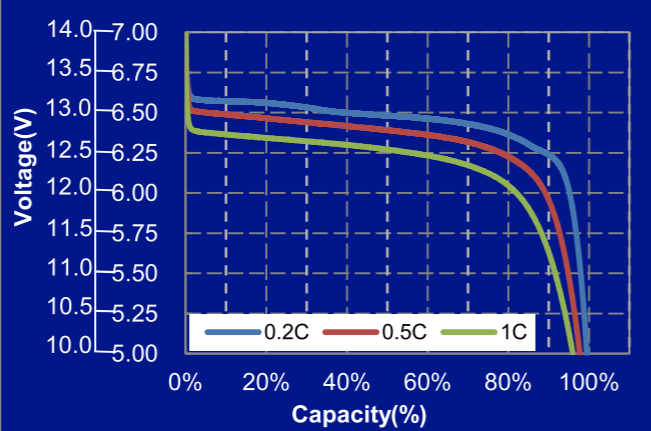
# Lithium Iron Phosphate (LiFePO4) Battery



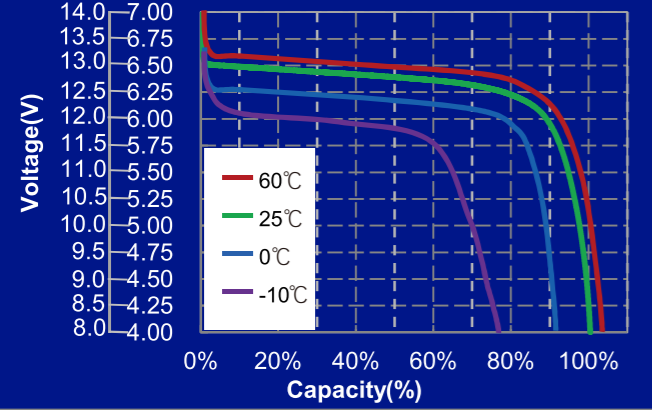
## APPLICATION

- ▶ UPS
- ▶ Solar & Wind power system
- ▶ Golf Cart
- ▶ Electric vehicle, E-bike, E-rickshaw e.g.
- ▶ Lighting

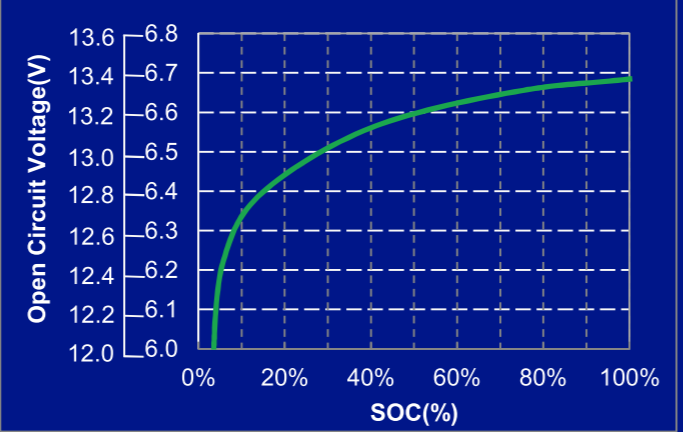
Different Rate Discharge Curve @ 25°C



Different Temperature Discharge Curve @ 0.5C, 25°C



Open circuit voltage VS SOC%



## Main Features

- Using the technology of lithium iron phosphate cell, superior safety, thousands of cycles, 100%DOD, under normal conditions
- Built-in automatic protection for over-charge, over discharge, over current and over temperature
- Maintenance free
- Internal cell balancing
- Lighter weight: About 40% ~50% of the weight of a comparable lead acid battery.
- Can be charged using most standard lead-acid charges (set)
- Wider temperature range: -20°C ~60°C
- Can connect up to 4 batteries in series to have 12V, 24V, 36V or 48V battery.

## Technical Parameter

| Model                               | LFP12-07  | LFP12-09   | LFP12-24   | LFP12-36    | LFP12-50    | LFP12-100  | LFP12-150   | LFP12-200   |
|-------------------------------------|---|------------|------------|-------------|-------------|--|-------------|-------------|
| Normal voltage                      | 12.8V   | 12.8V      | 12.8V      | 12.8V       | 12.8V       | 12.8V  | 12.8V       | 12.8V       |
| Nominal Capacity @0.2C              | 7.2Ah   | 9Ah        | 21.6Ah     | 36Ah        | 50Ah        | 100Ah  | 150Ah       | 200Ah       |
| Energy(Wh)                          | 92.1Wh  | 115.2Wh    | 276.4Wh    | 460.8Wh     | 640Wh       | 1280Wh   | 1920Wh      | 2560Wh      |
| Cycle Life                          | >3000 Cycles @.0 5C Charge/Discharge at 100%DOD, End of Life 70% Capacity   |            |            |             |             | >4000 Cycles @.0 5C Charge/ Discharge at 100%DOD, End of Life 70% Capacity |             |             |
| Months Self Discharge               | ≤3.5% per month at 25°C   |            |            |             |             |  |             |             |
| <b>Standard Charge</b>              |   |            |            |             |             |  |             |             |
| Charge Voltage                      | 14.4±0.2V   |            |            |             |             |  |             |             |
| Charge Mode (CC/CV)                 | At 0°C~50°C temperature, charged to 14.4V at a constant current of 0.5C, and then, changed continuously with constant voltage of 14.4V until the current was not more than 0.02C. |            |            |             |             |  |             |             |
| Max.continuous Charge Current       | 7.2A  | 10A        | 22A        | 36A         | 50A         | 100A   | 150A        | 150A        |
| <b>Standard Discharge</b>           |   |            |            |             |             |  |             |             |
| Max. Continuous Discharging Current | 10A   | 13A        | 32A        | 40A         | 50A         | 100A   | 150A        | 150A        |
| Max.Pulse Current                   | 20A @10S  | 20A @10S   | 60A @10S   | 80A @10S    | 100A@10S    | 200A @10S  | 300A @ 10S  | 300A @10S   |
| Discharge Cut-off Voltage           | 9.8V  |            |            |             |             |  |             |             |
| <b>Environmental</b>                |   |            |            |             |             |  |             |             |
| Charge Temperature                  | 0°C to 50°C(32°F to 113°F)@60±25% Relative Humidity   |            |            |             |             |  |             |             |
| Discharge Temperature               | -20°C to 60°C(-4°F to 140°F)@60±25% Relative Humidity   |            |            |             |             |  |             |             |
| Storage Temperature                 | 0°C to 45°C(32°F to 113°F) @60±25% Relative Humidity  |            |            |             |             |  |             |             |
| Water Dust Resistance               | IP65  | IP65       | IP65       | IP65        | IP65        | IP65   | IP65        | IP65        |
| <b>Mechanical</b>                   |   |            |            |             |             |  |             |             |
| Plastic Case                        | ABS   |            |            |             |             |  |             |             |
| Dimension(L*W*H) (mm)               | 90*70*107   | 151*65*100 | 181*77*167 | 198*166*170 | 229*138*213 | 328*172*215  | 328*172*215 | 384*250*194 |
| Approx. Weight(Kg)                  | 0.9   | 0.97       | 2.1        | 4.5         | 6.5         | 11.8   | 16.5        | 18.8        |
| Terminal                            | T2  | T2         | M5         | M8          | M6          | M8   | M8          | M8          |

Note: A battery with a capacity of 50Ah or more can have Bluetooth function added. Other specifications and models can be customized according to requirements.