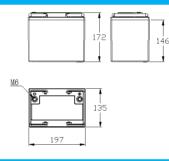


# <u>Lithium Iron Phosphate (LiFePO4) Battery</u> LFeLi-1238.4MS (12.8V38.4Ah)

#### Features of LiFePO4 Battery

- Reliable quality: We focus on the various parts of production, from selection of supplier to the production of phosphate material to lithium battery cell production to assemble of battery pack, make sure the traceability of the products.
- Long cycle time: Offers up to 10 times longer cycle life than lead acid battery. Helping to minimize replacement cost and reduce total cost of ownership.
- Higher power: Delivers twice power of lead acid battery with higher discharge rate. Also can sustain higher charge current and limit the charge time.
- Lighter weight: About 50% of the weight of a comparable lead acid battery. A drop in replacement for lead acid battery. Wider temperature range :-20°C-60°C.
- Super safety: Lithium Iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharged or short circuit situation.
- Environment friendly: Lithium battery material do not have any poisonous and harmful substances both in production and use.Now it is widely accepted by more and more countries.

#### **Physical Dimension-mm**



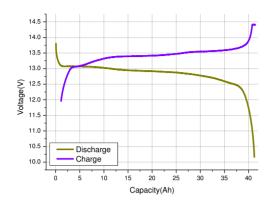


#### **Specification**

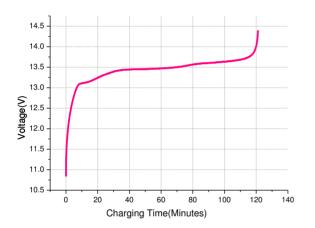
| Product Model                 | JG-4IFR12.8-38.4-Y (26650-3.2V-4S12P) |   |
|-------------------------------|---------------------------------------|---|
| Electrical<br>Characteristics | Normal Voltage                        | 12.8V   |
|                               | Rated Capacity                        | 38.4±2Ah(0.2C)  |
|                               | Energy                                | About 491.52Wh  |
|                               | Internal Resistance                   | ≤40mΩ   |
|                               | Cycle Life                            | ≥2,000@0.2C(100%DOD)  |
|                               |                                       | ≥6,000@0.2C (80%DOD)  |
|                               |                                       | ≥10,000@0.2C(50%DOD)  |
|                               | Passive Protection Function           | Over charge protection, Over discharge protection,<br>Temperature protection, Balanced function |
| Standard Charge               | Charge Voltage                        | 14.4±0.15V  |
|                               | Charge Mode                           | 0.2C to 14.4V, then 14.4V,charge current to 0.01C (CC/CV)                                       |
|                               | Charge Current                        | 8A  |
|                               | Max. Charge Current                   | 12A   |
| Standard Discharge            | Continuous Current                    | 20A   |
|                               | Max Continuous Current                | ≤40A  |
|                               | Max. Pulse Current                    | ≤120A(≤1s)  |
|                               | Discharge Cut-off Voltage             | About 10.0V   |
| Environmental                 | Charge Temperature                    | 0℃ to 45℃   |
|                               | Discharge Temperature                 | -20℃ to 60℃   |
|                               | Storage Temperature                   | 0℃ to 40℃   |
| Mechanical                    | Material System                       | LiFePO4   |
|                               | Material of Case                      | Plastic   |
|                               | Dimensions (mm)                       | (197±1)mm×(135±1)mm×(172±1)mm   |
|                               | Weight                                | 5.2±0.1Kg   |
|                               | Terminal                              | M6  |
|                               | Protocol (optional)                   | SMBus/RS485/RS232   |
|                               | SOC (optional)                        | LED/LCD   |
|                               | USB(optional)                         | 5.0V1/2A  |



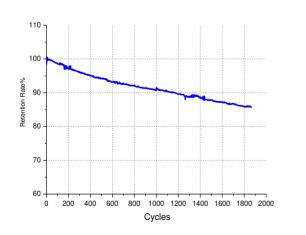
### 12.8V38.4Ah Charge-Discharge Curve 0.2C,25°C



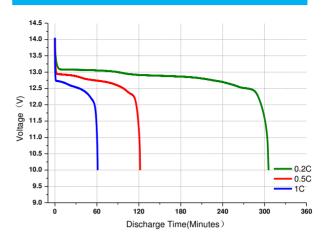
## Voltage & Charging Time Curve,0.5C,25℃



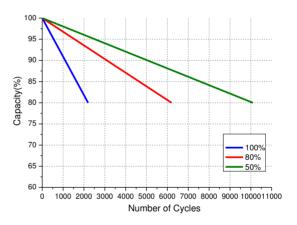
## **Cycles & Capacity Retention Rate**



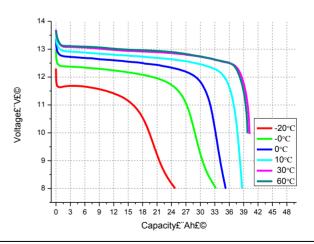
## Different Rate Discharge Curve, 25°C



## Different DOD Discharge Cycle Life Curve



#### **Discharge Curves at Different Temperature**



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