

### LITHIUM IRON PHOSPHATE BATTERY

#### ELECTRICAL SPECIFICATIONS

|                           |               |
|---------------------------|---------------|
| Nominal Voltage           | 12.8 V        |
| Nominal Capacity          | 50 Ah         |
| Capacity @ 0.2C           | >290 min      |
| Energy                    | 640 Wh        |
| Resistance                | <50 mΩ        |
| Efficiency                | 99%           |
| Self Discharge            | <3% per Month |
| Maximum Modules in Series | 4             |

#### DISCHARGE SPECIFICATIONS

|                                      |            |
|--------------------------------------|------------|
| Maximum Continuous Discharge Current | 50 A       |
| Peak Discharge Current               | 200 A (3S) |
| Recommended Low Voltage Disconnect   | 11 V       |
| PCM Discharge Voltage Cut-Off        | 10 V       |
| Reconnect Voltage                    | 12 V       |
| Short Circuit Protection             | Yes        |

#### TEMPERATURE SPECIFICATIONS

|                              |                |
|------------------------------|----------------|
| Discharge Temperature        | -20 to 60 °C   |
| Charge Temperature           | -20 to 60 °C   |
| Storage Temperature          | -20 to 60 °C   |
| PCM High Temperature Cut-Off | 176 °F (80 °C) |

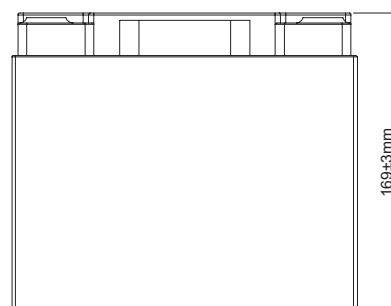
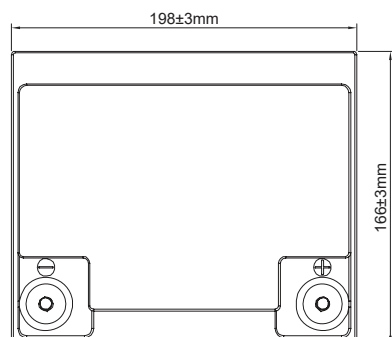
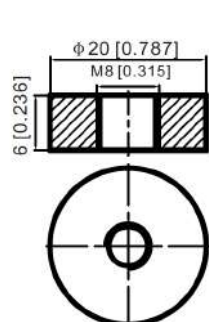
#### DIMENSIONAL SPECIFICATIONS

#### MECHANICAL SPECIFICATIONS

|                        |                     |
|------------------------|---------------------|
| Dimensions (L x W x H) | 198 x 166 x 169 mm  |
| Weight                 | 6.7 kg              |
| Terminal Type          | M8                  |
| Case Material          | ABS                 |
| Enclosure Protection   | IP65                |
| Cell Type - Chemistry  | LiFePO <sub>4</sub> |

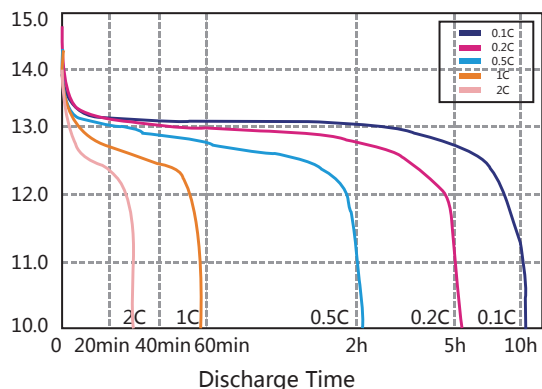
#### CHARGE SPECIFICATIONS

|                            |                 |
|----------------------------|-----------------|
| Recommended Charge Current | <25 A           |
| Maximum Charge Current     | 50 A            |
| Recommended Charge Voltage | 14.2 V - 14.6 V |
| Reconnect Voltage          | 15.2 V          |
| Balancing Voltage          | 14.4 V          |
| Active Balance Current:    | 1-3A            |

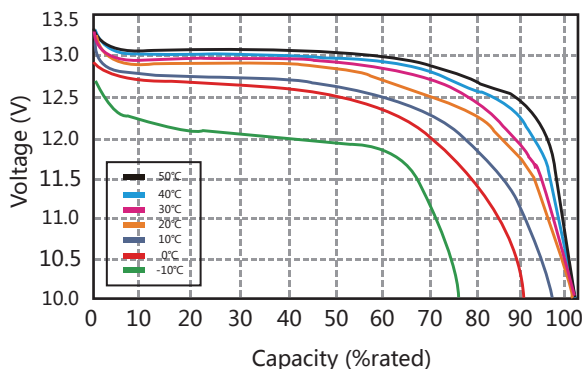


### PERFORMANCE CHARACTERISTICS

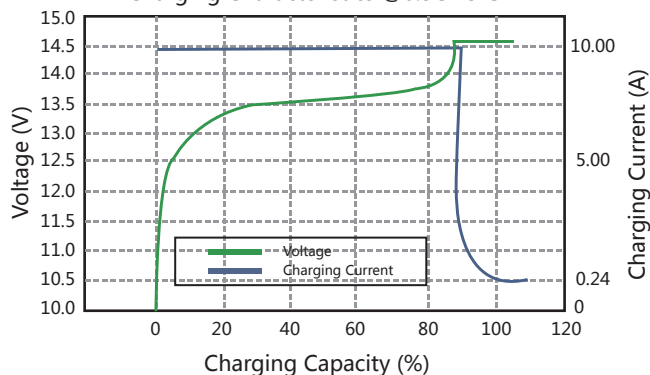
Different Rate Discharge Curve @25°C



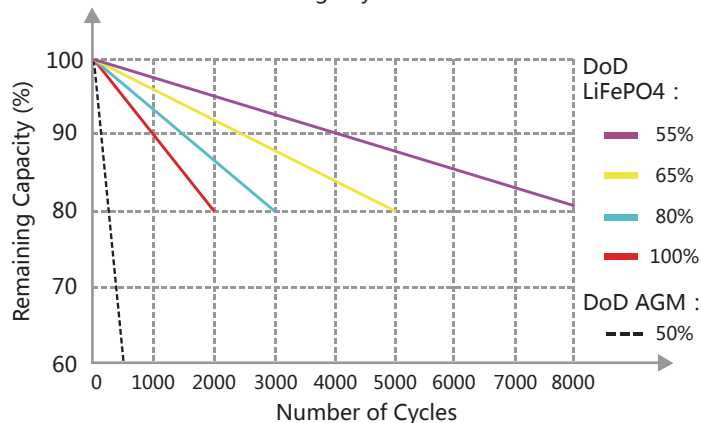
Different Temperature Discharge Curve @0.5C



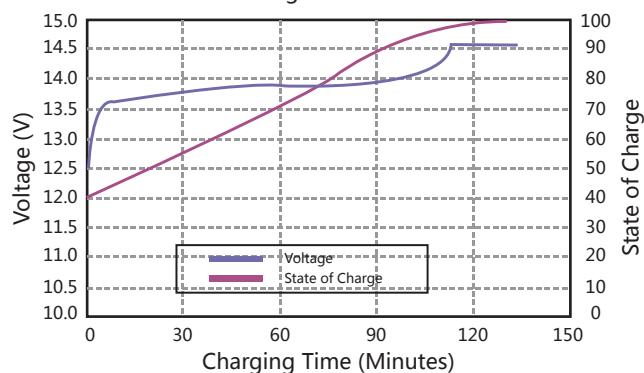
Charging Characteristics @0.5C 25°C



Different DoD Discharge Cycle Life @1C



State of Charge Curve @0.5C 25°C



Different Temperature Self Discharge Curve

