



## LITHIUM IRON PHOSPHATE BATTERY

### ELECTRICAL SPECIFICATIONS

|                           |                  |
|---------------------------|------------------|
| Nominal Voltage           | 12.8 V           |
| Nominal Capacity          | 35 Ah            |
| Capacity @ 25A            | 84 min           |
| Energy                    | 448 Wh           |
| Resistance                | ≤30 mΩ @ 50% SOC |
| Efficiency                | 99%              |
| Self Discharge            | <3% per Month    |
| Maximum Modules in Series | 1 (Single Use)   |

### DISCHARGE SPECIFICATIONS

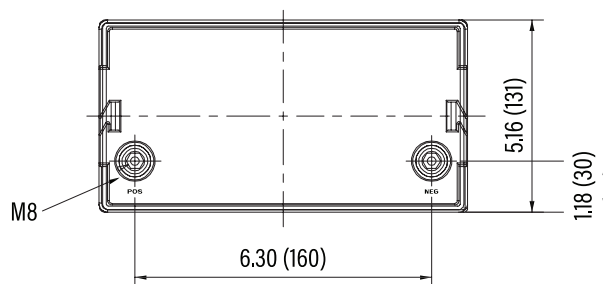
|                                      |                                |
|--------------------------------------|--------------------------------|
| Maximum Continuous Discharge Current | 35 A                           |
| Peak Discharge Current               | 70 A (7.5 s ±2.5 s)            |
| BMS Discharge Current Cut-Off        | 80 A ±8 A (32 ±8 ms)           |
| Recommended Low Voltage Disconnect   | 11 V                           |
| BMS Discharge Voltage Cut-Off        | 8 V (2.0 ±0.08 vpc) (20 ±8 ms) |
| Reconnect Voltage                    | 9.04 V (2.26 ±0.34 vpc)        |
| Short Circuit Protection             | 100-600 μs                     |

### TEMPERATURE SPECIFICATIONS

|  |                             |
|--|-----------------------------|
| Discharge Temperature                    | -4 to 140 °F (-20 to 60 °C) |
| Charge Temperature*                      | 32 to 113 °F (0 to 45 °C)   |
| Storage Temperature                      | 23 to 95 °F (-5 to 35 °C)   |
| BMS High Temperature Cut-Off - Discharge | 185 °F (85 °C)              |
| BMS High Temperature Cut-Off - Charge    | 140 °F (60 °C)              |
| Reconnect Temperature                    | 122 °F (50 °C)              |

\*Refer to charge currents below 0°C (32°F)

### DIMENSIONAL SPECIFICATIONS



### MECHANICAL SPECIFICATIONS

|                        |                                   |
|------------------------|-----------------------------------|
| Dimensions (L x W x H) | 7.7 x 5.2 x 6.7"                  |
|                        | 195 x 131 x 171 mm                |
| Weight                 | 10.8 lbs (4.9 kg)                 |
| Terminal Type          | M8                                |
| Terminal Torque        | 80 - 100 in-lbs (9 - 11 N-m)      |
| Case Material          | ABS                               |
| Enclosure Protection   | IP56                              |
| Cell Type - Chemistry  | Cylindrical - LiFePO <sub>4</sub> |

### CHARGE SPECIFICATIONS

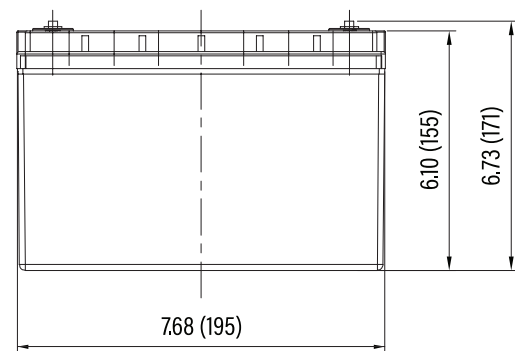
|                            |                                    |
|----------------------------|------------------------------------|
| Recommended Charge Current | 1.75 A - 17.5 A                    |
| Maximum Charge Current     | 35 A                               |
| Recommended Charge Voltage | 14.2 V - 14.6 V                    |
| BMS Charge Voltage Cut-Off | 15.6 V (3.9 ±0.025 vpc) (1 ±0.3 s) |
| Reconnect Voltage          | 14.6 V (3.8 ±0.050 vpc)            |
| Balancing Voltage          | 14.4 V (3.6 ±0.025 vpc)            |

### HEATING ELEMENT SPECIFICATIONS

|                             |                            |
|-----------------------------|----------------------------|
| Heating Temperature Range   | -4 to 50 °F (-20 to 10 °C) |
| Heating Time                | Approximately 1 hr @ 5 A   |
| BMS Heating Element Cut-Off | 158 °F (70 °C)             |

### COMPLIANCE SPECIFICATIONS

|                         |   |
|-------------------------|---|
| Certifications          | CE (battery)<br>UL1642 & IEC62133 (cells) |
| Shipping Classification | UN 3480, CLASS 9                          |





## RB35-LT

Group: U1

