



# RB80

IEEE/UL Battery  
Sizing by  
**MooreU**  
610-952-6067  
www.mooreu.com

Voltage: 12.8V | Capacity: 80 Ah | Energy: 1024 Wh | Group: 27

LITHIUM IRON PHOSPHATE BATTERY **LiFePO4**

| ELECTRICAL SPECIFICATIONS |                  |
|---------------------------|------------------|
| Nominal Voltage           | 12.8 V           |
| Nominal Capacity          | 80 Ah            |
| Capacity @ 25A            | 192 min          |
| Resistance                | ≤30 mΩ @ 50% SOC |
| Efficiency                | 99%              |
| Self Discharge            | <3% per Month    |
| Maximum Modules in Series | 4                |

| DISCHARGE SPECIFICATIONS             |                                    |
|--------------------------------------|------------------------------------|
| Maximum Continuous Discharge Current | 80 A                               |
| Peak Discharge Current               | 160 A (7.5±2.5 sec)                |
| BMS Discharge Current Cut-Off        | 280 A ±50 A (9 ±4 ms)              |
| Recommended Low Voltage Disconnect   | 11 V                               |
| BMS Discharge Voltage Cut-Off        | 8 V (2.0 ±0.08 vpc) (144 ms±30 ms) |
| Reconnect Voltage                    | 9.2 V (2.3 ±0.1 vpc)               |
| Short Circuit Protection             | 200-600 μs                         |

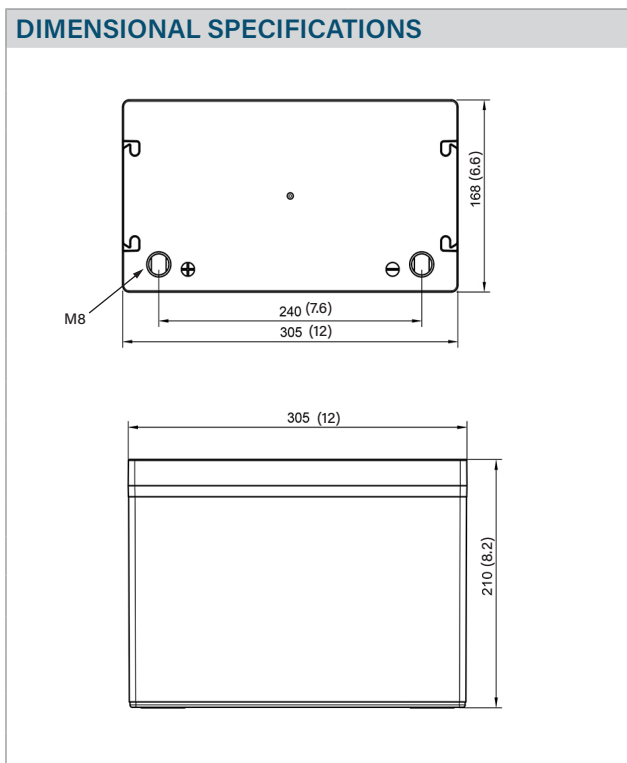
| TEMPERATURE SPECIFICATIONS   |                             |
|------------------------------|-----------------------------|
| Discharge Temperature        | -4 to 140 °F (-20 to 60 °C) |
| Charge Temperature*          | -4 to 113 °F (-20 to 45 °C) |
| Storage Temperature          | 23 to 95 °F (-5 to 35 °C)   |
| BMS High Temperature Cut-Off | 176 °F (80 °C)              |
| Reconnect Temperature        | 122 °F (50 °C)              |

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

| MECHANICAL SPECIFICATIONS |                                       |
|---------------------------|---------------------------------------|
| Dimensions (L x W x H)    | 12 x 6.6 x 8.2"<br>305 x 168 x 210 mm |
| Weight                    | 24.9 lbs (11.3 kg)                    |
| Terminal Type             | M8 x 1.25 x 12mm                      |
| Terminal Torque           | 80 - 100 in-lbs (9 - 11 N-m)          |
| Case Material             | ABS                                   |
| Enclosure Protection      | IP66                                  |
| Cell Type - Chemistry     | Cylindrical - LiFePO <sub>4</sub>     |

| CHARGE SPECIFICATIONS                      |                                      |
|--|--------------------------------------|
| Recommended Charge Current                 | 4 A - 40 A                           |
| Maximum Charge Current                     | 80 A                                 |
| Charge Current 14 to 32 °F (-10 to 0 °C)   | ≤0.1 C                               |
| Charge Current -4 to 14 °F (-20 to -10 °C) | ≤0.05 C                              |
| Recommended Charge Voltage                 | 14.2 V - 14.6 V                      |
| BMS Charge Voltage Cut-Off                 | 15.6 V (3.9 ±0.025 vpc) (1.1 ±0.4 s) |
| Reconnect Voltage                          | 15.2 V (3.8 ±0.05 vpc)               |
| Balancing Voltage                          | 14.4 V (3.6 ±0.025 vpc)              |

| COMPLIANCE SPECIFICATIONS |   |
|---------------------------|---|
| Certifications            | UN38.3 & CE (battery)<br>UL1642 (cells) (File# MH64523)<br>IEC62133 (cells) |
| Shipping Classification   | UN 3480, CLASS 9  |





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## PERFORMANCE CHARACTERISTICS

