



LiFePO<sub>4</sub> Battery Range

## FW 12-100

### Electrical Characteristics

|                         |                               |
|-------------------------|-------------------------------|
| Nominal Voltage [V]     | 12.8V                         |
| Nominal Capacity        | 100AH                         |
| Energy                  | 1280Wh                        |
| Internal Resistance     | ≤20mΩ                         |
| Cycle Life              | >2000 cycles at 0.2C 100% DOD |
| Months Self Discharge   | <3%                           |
| Efficiency of Charge    | 100% at 0.5C                  |
| Efficiency of Discharge | 96-99% at 1C                  |

### Charge

|                        |  |
|------------------------|--|
| Charge Volt            | 14V-14.6V  |
| Charge Mode            | CC at 0.2C to 14.6V, then at CV14.6V to charge current less than 0.02C |
| Charge Current         | 20 A   |
| Max. Charge Current    | 50A  |
| Charge Cut-off Voltage | 15.6V±0.2V   |

### Discharge

|                           |            |
|---------------------------|------------|
| Max. Continuous Current   | 100A       |
| Max. Pulse Current        | 200A (<3s) |
| Discharge Cut-off Voltage | 8V         |

### Environment

|                       |   |
|-----------------------|---|
| Charge Temperature    | 0°C to 45°C (32F to 113F) at 60±25% Relative Humidity   |
| Discharge Temperature | -20°C to 60°C (-4F to 140F) at 60±25% Relative Humidity |
| Storage Temperature   | 0°C to 40°C (32F to 104F) 60±25% Relative Humidity      |
| Water Dust Resistance | IP56  |

### Mechanical

|                     |                     |
|---------------------|---------------------|
| Cell Material       | LiFePO <sub>4</sub> |
| Plastic Case        | ABS                 |
| Dimensions (in./mm) | 327x172x218mm       |
| Weight (lbs./kg.)   | 13.5kg              |
| Terminal            | M6                  |

### BMS

|                     |   |
|---------------------|---|
| Protection Function | Over charge protection, Over discharge protection, Over current protection, Short current protection, Balanced function, Temperature protection |
|---------------------|---|