








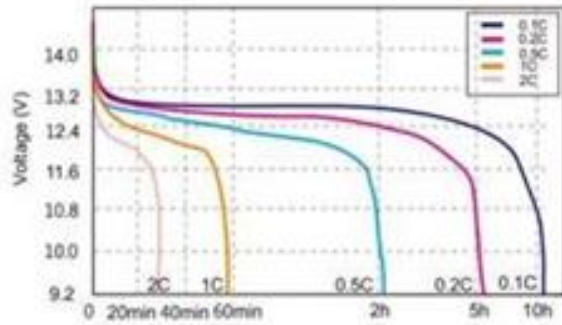
## SPECIFICATIONS & WARRANTY

|   |               |  |  |  |  |  |  |
|---|--|---|---|---|---|---|---|
| <b>Model</b>  | <b>12V200AH</b>  | <b>12V300AH</b>   | <b>12V400AH</b>   | <b>24V100AH</b>   | <b>24V200AH</b>   | <b>48V100AH</b>   | <b>48V200AH</b>   |
| <b>Nameplate Voltage</b>                                  | 12 Volt  | 12 Volt   | 12 Volt   | 24 Volt   | 24 Volt   | 48 Volt   | 48 Volt   |
| <b>Nominal Capacity</b>                                   | 200 Amp Hour   | 300 Amp Hour  | 400 Amp Hour  | 100 Amp Hour  | 200 Amp Hour  | 100 Amp Hour  | 200 Amp Hour  |
| <b>Standard Case Material</b>                             | ABS  | Steel   | Steel   | ABS   | Steel   | Steel   | Steel   |
| <b>Case Dimensions (inches)</b>                           | 20.5 x 9.5 x 8.7   | 20.5 x 9.5 x 8.7  | 19.6 x 10 x 9   | 20 x 9.5 x 8.7  | 19.6 x 10 x 9   | 19.6 x 10 x 9   | 23 x 15 x 11.5  |
| <b>Approximate Weight (lbs)<br/>(Varies with Options)</b> | 49   | 75  | 105   | 49  | 105   | 105   | 185   |
| <b>Connection Type</b>                                    | Screw In Style Terminal (Cables and Accessories Included)                                      |   |   |   |   |   |   |
| <b>Cell Type</b>  | LIFEP04 Lithium Phosphate  |   |   |   |   |   |   |
| <b>Life Cycles</b>  | >5000+   |   |   |   |   |   |   |
| <b>Nominal Voltage</b>                                    | 12.8   |   |   | 25.6  |   | 51.2  |   |
| <b>Charge Cut-Off Voltage</b>                             | 14.6V ± 0.2V   |   |   | 29.2V ± 0.4V  |   | 58V ± 1.0V  |   |
| <b>Discharge Cut-Off Voltage</b>                          | 10.0V ± 0.4V   |   |   | 21.0V ± 0.4V  |   | 42V ± 2.0V  |   |
| <b>Continuous Discharge Current</b>                       | 200A   |   |   | 150A  |   |   |   |
| <b>Maximum Input Charge Current</b>                       | 100A   |   |   |   |   |   |   |
| <b>BMS Protection</b>                                     | Over-Charging, Over-Discharging, Overload, Short-Circuit, General Overload and Temp Monitoring |   |   |   |   |   |   |
| <b>For Use In Parallel</b>                                | Yes (8 Batteries Maximum Parallel)   |   |   |   |   |   |   |
| <b>For Use In Series</b>                                  | Yes (4 Batteries Maximum Series)   |   |   |   |   |   |   |
| <b>Case Color</b>   | White or Black   |   |   |   |   |   |   |
| <b>Custom Case Available</b>                              | Custom Dimensions and Stainless Steel Optional   |   |   |   |   |   |   |
| <b>Warranty</b>   | 4 Year, No Charge for Replacement Parts including BMS  |   |   |   |   |   |   |
| <b>Operating Temperature Range</b>                        | Charging: 32° to 113°F   |   |   |   |   |   |   |
|   | Discharging: 14° to 140°F  |   |   |   |   |   |   |
| <b>Ideal Operating Temp</b>                               | 50° to 100°F   |   |   |   |   |   |   |
| <b>Recommended Storage Temp</b>                           | 60° to 77°F  |   |   |   |   |   |   |
| <b>Recommended Humidity Range</b>                         | 45% - 77% RH   |   |   |   |   |   |   |

# SPECIFICATIONS & WARRANTY

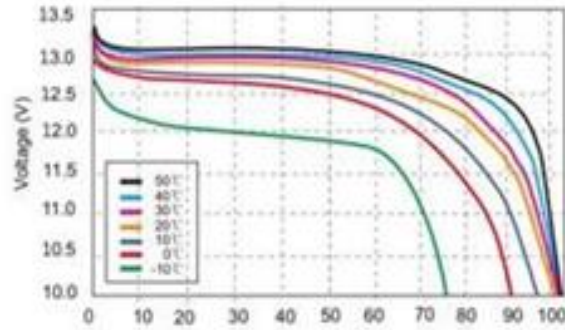
## Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



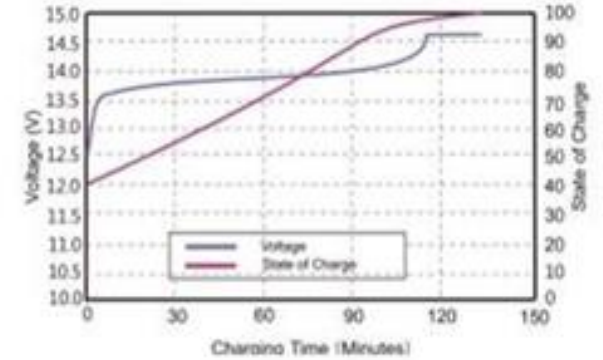
## Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



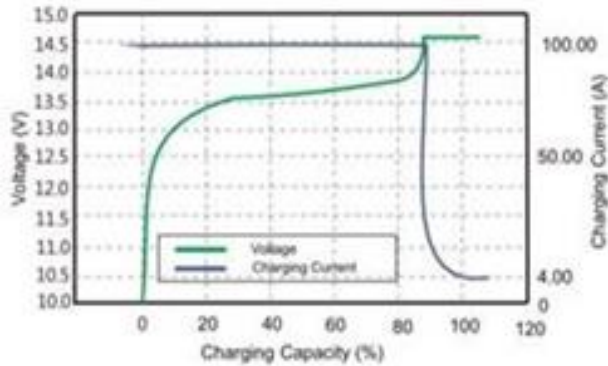
## State of Charge Curve

State of Charge Curve @0.5C 25°C



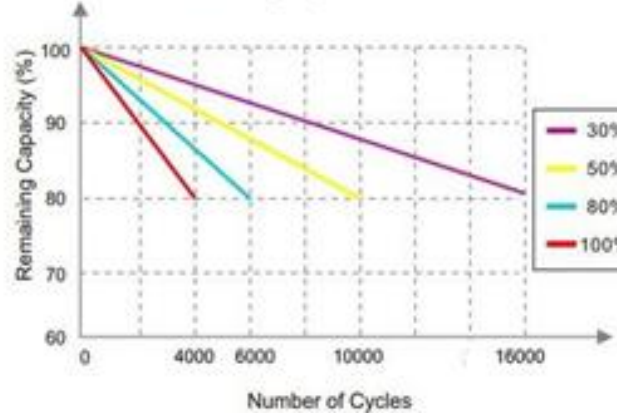
## Charging Characteristics

Charging Characteristics @0.5C 25°C



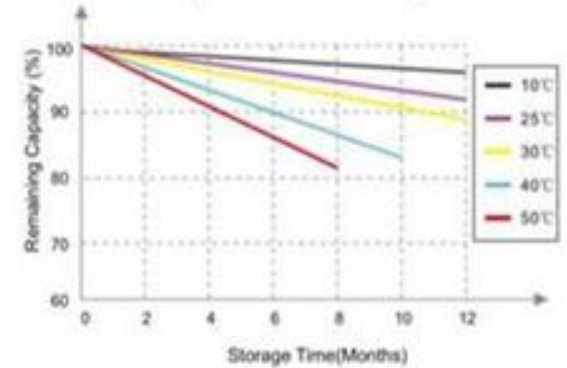
## Cycle Life Curve

Different DOD Discharge Cycle Life Curve



## Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



SPECIFICATIONS & WARRANTY

**LITHIUM BATTERY  
INTERNATIONAL WARRANTY**

The period of the warranty begins on the date of delivery to the original user and lasts for the period shown. This warranty excludes any and all damages caused during shipping. This warranty includes all international customers, including international freight.

Extended warranties are available through your reseller or dealer.

| Product      | Warranty Period | What's Covered | Freight Paid? |
|--------------|-----------------|----------------|---------------|
| LIFEPO4      | Four Years      | Parts          | If Defective  |
| Li(NiCoMn)O2 | Three Years     | Parts          | If Defective  |

MODEL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

NAME OF ORIGINAL USER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE NUMBER OR EMAIL: \_\_\_\_\_

## SPECIFICATIONS & WARRANTY

All batteries purchased are guaranteed to be free from defects in material and workmanship. Our Batteries Guarantee Period is described below:

**LIFEP04 LITHIUM = 4 Years (48 Months) Li(NiCoMn)O2**

**LITHIUM = 3 Years (36 Months)**

\* Period of Guarantee from the date of shipment.

### **PLEASE NOTE:**

1. The battery must be properly installed and maintained in accordance with the Installation and Operating procedure manual.
2. A battery will not be considered defective unless it fails to deliver 80% or less of its quoted capacity during the guarantee period.
3. Each battery must be stored, charged, discharged and stored in accordance with the printed instructions.
4. User agrees that the manufacturer or his agent shall be granted inspection access with reasonable notice.

### **DISCLAIMER: Warranty will not be provided in event of the following circumstances.**

1. Guarantee & Warranty is void if temperature exceeds the recommended operating temperature range.
2. Guarantee & Warranty is void if the battery becomes unserviceable due to fire, wreckage, freezing, neglect, abuse, or any other act of GOD, use of battery additions, parts of the battery are tampered with or modified, or the battery is serviced by persons not authorized.
3. Guarantee & Warranty is void if the batteries are used in conjunction with other brand batteries.
4. Guarantee & Warranty is void if the batteries damaged by man-made, unnormal use or move cause battery cover and internal failure
5. Guarantee & Warranty is void if the batteries flatulence and swelling by heavy over-charging.
6. Guarantee & Warranty is void if the batteries damaged by other Battery accessories. Such as battery charger.

## SPECIFICATIONS & WARRANTY

### CLAIMS PROCESS:

Please contact our warranty department and submit the information as below to us:

1. Invoice number and date
2. Your name/company name
3. Battery model, problem battery quantity
4. A brief description of the battery problem
5. A brief description of how to use the battery. (ex: Exact Application, Exact use of the battery as single cell or as battery bank, if battery bank, what's the voltage and capacity, Discharge current and working time of the battery, Working environment and temperature)
6. Picture or video of the battery
7. The picture when you test the voltage, show the value of voltage
8. The picture of manufacture code (on the top of the cover)
9. The picture of all problem quantity battery
10. Front photo of the battery

### CLAIMS:

1. Upon satisfactory proof of claim as determined by us, the part will be repaired or replaced based on the original purchase price and the portion of the warranty term remaining to be applied towards the purchase of a replacement battery (Pro Rate may apply).
2. Under no circumstances can product be returned, credited or exchanged without prior written authority.