# US 48VGC2 - Data Sheet

ESSENTIALi®

POWERED BY U.S. BATTERY MFG. CO.

ENGINEERED IN THE U.S.A.

## Lithium-Ion Battery
**51.2 V | 30AH (1.5kWh)**

CELL CHEMISTRY:
**Lithium Iron Phosphate (LFP)**

CASE:
**ABS + PC with Aluminium Heat Sink**

Dimensions:
**10.24"w x 7.09"l x 11.04"h**

BCI GROUP SIZE:
**GC2**

## FEATURES

- **IP67 rated construction** prevents damage from outside particles and moisture
- **CAN Networking** automotive grade connections allow manufacturers to integrate the battery with devices such as motor controllers and chargers to allow for communication of battery status.
- **Scalable** multiple batteries can be used in parallel for increased capacity
- **State-of-the-Art Battery Management System (BMS)** Utilizes intelligent algorithms to help ensure accurate State of Charge (SOC), delivers advanced cell balancing, and enhanced fault detection and handling for optimal performance.

## BATTERY SPECIFICATIONS

| BCI Group Size | Model | Terminal | Terminal Torque | Dimensions (mm)(±2mm) | | | Weight (kg) |
|---|---|---|---|---|---|---|---|
| | | | | Width | Length | Height | |
| GC2 | US 48VGC2 | M8 insert | 90 IN-LBS | 10.24" (260) | 7.09" (180) | 11.04" (280) | 32.2 (14.6) |

Internal Protection information: See User's Guide ***www.usbattery.com/info-center/essentialliowner***

## ELECTRICAL SPECIFICATIONS

| Voltage | Capacity | Max Continous Discharge Current | Max 20S Discharge Current | Max 10S Discharge Current |
|---|---|---|---|---|
| 51.2 V | 30 Ah | 100A | 150A | 175A |

| Max Charge Current | Self Discharge Rate | Low Voltage Cutoff | High Voltage Cutoff |
|---|---|---|---|
| 30A | 3.5%/month (In Off Mode) | 40V (Cell 2.5V) | 58.4V (Cell 3.65V) |

## OPERATIONAL SPECIFICATIONS

| Discharging | Charging | Storage |
|---|---|---|
| 14˚F~140˚F (-10˚C~60˚C) | 32˚F~131˚F (0˚C~55˚C) | 50˚F~95˚F (10˚C~35˚C) |

## SAFETY/REGULATORY INFORMATION

| Certifications | | | | |
|---|---|---|---|---|
| Transport | Shipping Classification | Cells | Pack | Case |
| UN/DoT 38.3 | UN3480, Class 9 | UL2580 | UL2271 | UL94 V-0 |

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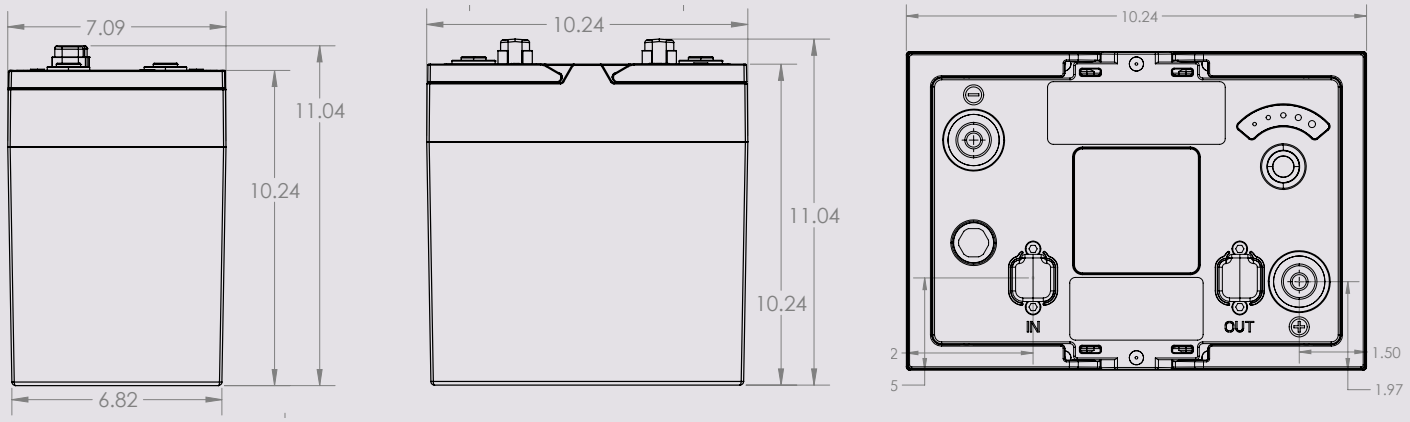


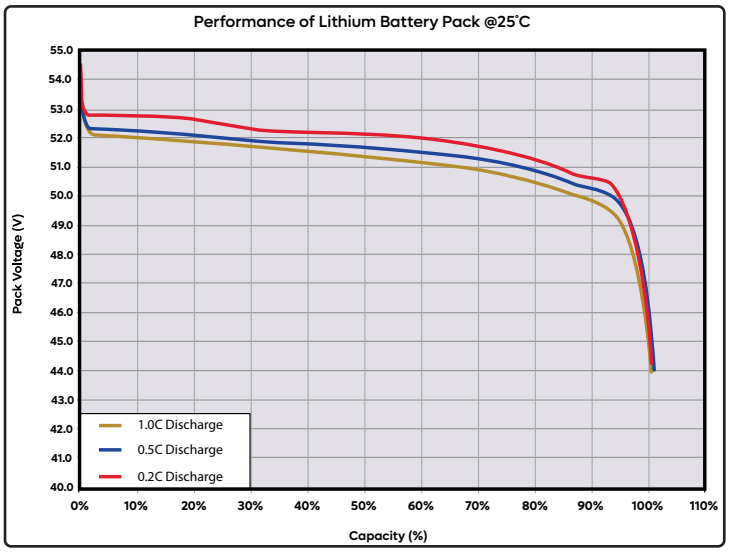


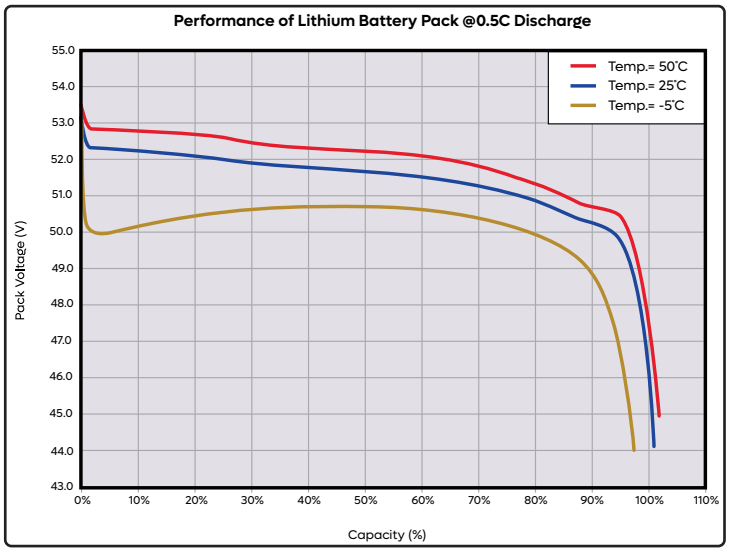


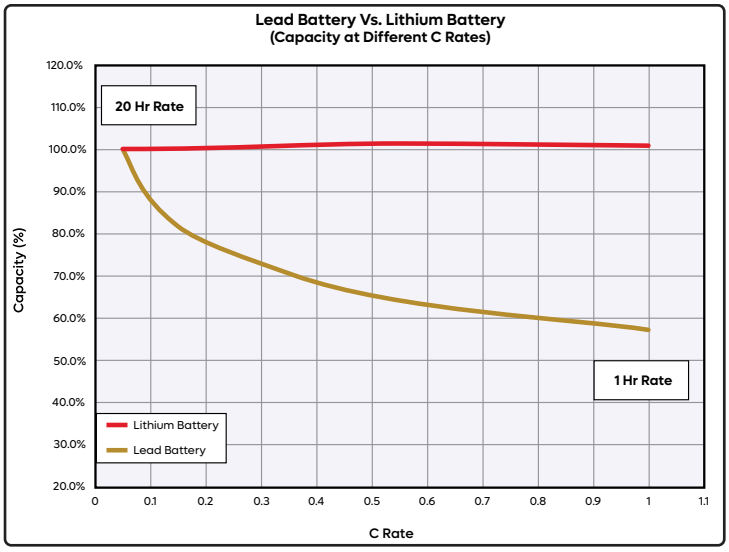


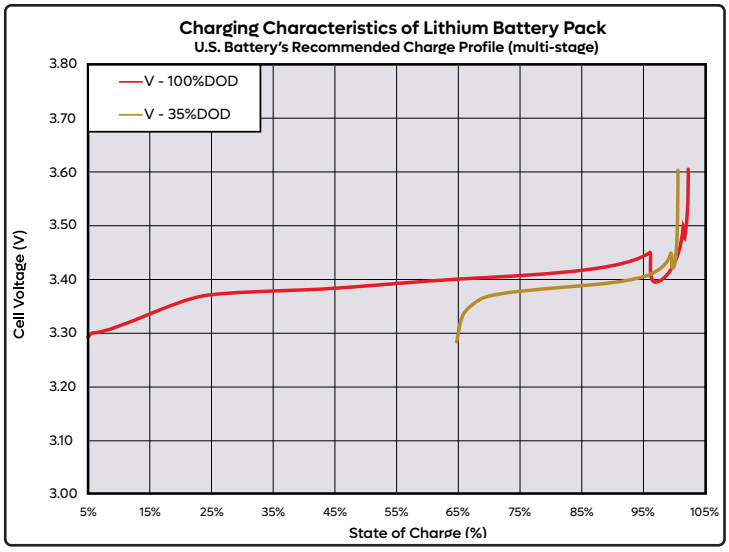


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