

# 51V 165Ah BATTERY MODULE

## GTO SERIES

CAT # GTO51V165A-F3020



### Battery Details

165Ah at 51.2V  
8,448 Watt-Hours



UL 1973 Certified for  
Motive Applications

### Key Benefits

- ✓ Safe, Non-Toxic Lithium Iron Phosphate Cells
- ✓ NeverDie® Battery Management System Maximizes Lifespan
- ✓ Fire and Crush Tested Aluminum Alloy Enclosure meeting UL 1973 Certification

### Reliable Power, Unmatched Versatility

Our battery system features easy expandability for extended run times and delivers dependable performance, even in extreme temperatures.

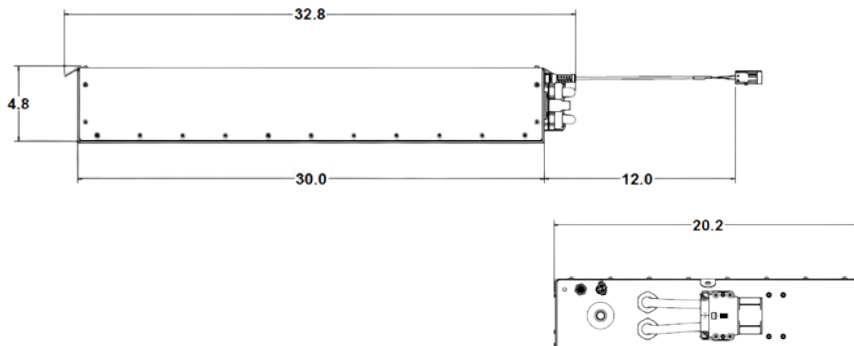
## DIMENSIONS

### Size (L x W x H):

30.0" x 20.2" x 4.8"  
(762.0mm x 513.1mm x 124.5mm)

### Weight:

150lbs  
(68kg)



# SPECIFICATIONS

## NOMINAL VOLTAGE AND CAPACITY

51.2V 165Ah 8,448Wh

## SHIPPING

UN3480, Class 9

## CERTIFICATIONS

**UNDOT:** UN38.3

**UL:** UL1973 (battery assembly)

UL 1642, UL1973 (cells)

## INTERNAL HEATER

**Power Rating:** 70W

**Nominal Input Voltage:** 12V

**Input Current:** 5.8A

**Thermostat Activation and**

**Deactivation (Internal):** <43°F

(6°C) On, >48°F (9°C) Off

## STORAGE

Refer to the Lithionics® Website for the Storage Procedure

## DISCHARGE

**Operating Voltage Range:** 46.4V to 57.6V  $\pm 0.8V$

**Operating Temperature Range:**

-4 (-20°C) to 140°F (60°C)

**Recommended Discharge**

**Current:** <82.5A

**Max Discharge Current:** <150A

**Pulse Current (1 second):**

<1,500A

**Low Voltage Cut-Off:** 46.4V

$\pm 0.8V$

## CHARGE

**Charge Voltage:** 57.6V  $\pm 0.8V$

**Operating Temperature Range:**

32°F (0°C) to 140°F (60°C)  
(Ambient -4°F (-20°C) with  
Heater Power)

**Recommended Charge Current:**

<82.5A

**Float Voltage:** 54.4V  $\pm 0.8V$  **Max**

**Charge Current:** <150A

\*Charging and discharging rates vary with temperature and usage

\*UL1973 testing: Maximum charge and discharge currents were tested at 25°C/77°F

## ELECTRICAL

**Internal Resistance:** <7mΩ

**Coulombic Efficiency:** 99%

**Self-Discharge Rate (per month):** <3%

**Cell Type:** LiFePO<sub>4</sub> Prismatic Cells

**Power Connection:** Anderson A320 Female

## MECHANICAL

**Mounting Orientation:** Upright position only (horizontal)

**Enclosure Material:**

0.09" Aluminum 5052

**Enclosure Corrosion Protection:**

Iridite Chromate Conversion Coating + Powdercoat Paint

**Ingress Protection:** IP66

**APPLICATION NOTE: EXTERNAL BMS REQUIRED. BMS SOLD SEPARATELY.**

## BMS Advanced Features

- External Battery Management System (BMS) for enhanced safety and monitoring
- Bluetooth connectivity for real-time diagnostics
- State-of-Charge (SoC) monitoring to prevent unexpected shutdowns
- High current capability up to 400A for versatile applications
- Remote monitoring app (Google Play and Apple App Store)



**CAT # NDV9**

## Powering Innovation.

Discover the right lithium replacement system for you. Reach out to Lithionics' expert support team to find your perfect power solution.