

# 51V 165Ah Battery Module

## GTO Series Batteries



CAT # GTO51V165-E2609



### KEY BENEFITS

- + **Cell-Level Safety:** Premium matched Lithium Iron Phosphate (LiFePO<sub>4</sub>) Cells optimized for safety and long cycle life
- + **NeverDie® Battery Management System:** Smart BMS technology continuously monitors and protects to maximize battery lifespan
- + **Fire & Crush Tested:** Aluminum Alloy Enclosure meets UL 1973 Certification

### Reliable Power, Unmatched Versatility

Our batteries feature easy expandability for extended run times and deliver dependable performance, even in extreme temperatures.

### Battery Details

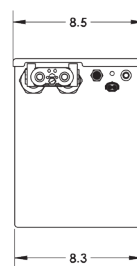
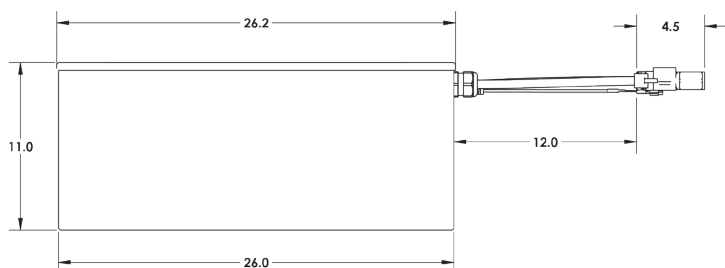
165Ah at 51.2V  
8,448 Watt-Hours



UL 1973 Certified  
for Motive Applications<sup>1</sup>

### DIMENSIONS

Size (L x W x H)	26.2" x 8.5" x 11.0"	665.5mm x 215.9mm x 279.4mm)
Weight	132.0lbs	59.9kg



## SPECIFICATIONS

### NOMINAL VOLTAGE AND CAPACITY

51.2V 165Ah 8,448Wh

### SHIPPING

UN3480, Class 9

### CERTIFICATIONS

UNDOT UN38.3

UL UL1973 (battery assembly), UL1642, UL1973 (cells)

### INTERNAL HEATER

Power Rating 70W

Nominal Input Voltage 12V

Input Current 5.8A

Thermostat On/Off (Internal) <43°F (6°C) On, >48°F (9°C) Off

### MECHANICAL

Mounting Orientation Upright position only (black lid up)

Enclosure Material 0.09"Aluminum 5052

Enclosure Corrosion Protection Iridite Chromate Conversion Coating + Powdercoat Paint

Ingress Protection IP66

### STORAGE

Refer to the Lithionics® Website for the Storage Procedure

### ELECTRICAL

Internal Resistance <6mΩ

Coulombic Efficiency 99%

Self-Discharge Rate (per month) <3%

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

Power Connection Anderson A320 Female

Series Connection Supported when paired with a compliant BMS

### CHARGE

Charge Voltage 57.6V ±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 ±0.8V

Max Charge Current<sup>2</sup> <160A

### DISCHARGE

Operating Voltage Range 46.4V to 57.6V ±0.8V

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

Recommended Discharge Current <82.5A

Max Discharge Current<sup>2</sup> <160A

Pulse Current (1 second) <1,600A

Low Voltage Cut-Off 46.4V ±0.8V

1. UL 1973 Certified: Battery is UL 1973 Certified when used with external circuit breaker and ampseal connector.

2. Maximum charging and discharging rates dependent upon the ambient temperature and usage. UL1973 testing: Maximum charge and discharge currents were tested at 25°C/77°F.

CAT # NDV9

### 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)

BMS required.  
Sold separately.



DS-015