

# 51V 165Ah Battery Module

## GTO Series Batteries



CAT # GTO51V165A-E2609

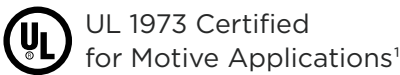


### KEY BENEFITS

- + **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

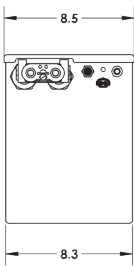
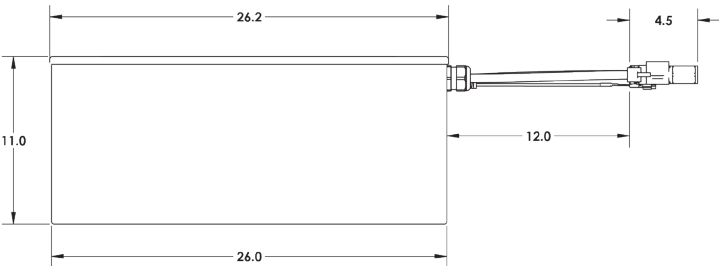
**Reliable Power, Unmatched Versatility**  
Our batteries feature easy expandability for extended run times and deliver dependable performance, even in extreme temperatures.

**Battery Details**  
165Ah at 51.2V  
8,448 Watt-Hours



### 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