

51V 165Ah Battery Module

GTO Series Batteries



CAT # GTO51V165A-E2609



Battery Details

165Ah at 51.2V
8,448 Watt-Hours



UL 1973 Certified
for Motive Applications¹

KEY BENEFITS

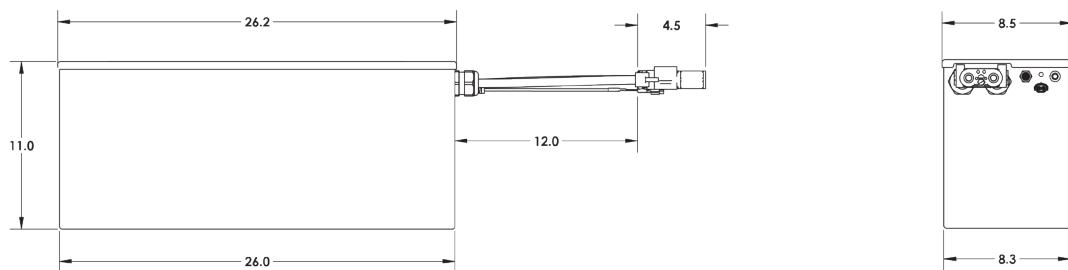
- Cell-Level Safety:** Premium matched Lithium Iron Phosphate (LiFePO₄) Cells optimized for safety and long cycle life
- NeverDie® Battery Management System:** Smart BMS technology continuously monitors and protects to maximize battery lifespan
- Fire & Crush Tested:** Aluminum Alloy Enclosure meets UL 1973 Certification

Reliable Power, Unmatched Versatility

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

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 LiFePO₄ 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 Current² <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 Current² <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.

