

# LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:  
GTO51V165A-F3020-DIN

High Energy Density Safe LFP, iONbus® Data Network,  
UL Listed Internal Heating System, Fireproof Enclosure,  
UL1973: 2023 Listed



**EXTERNAL BMS AND A160-A320 POWER  
HARNES REQUIRED**

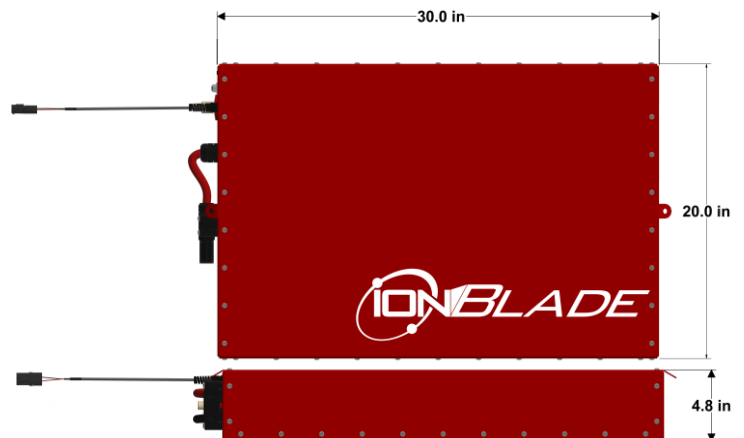
**BMS SOLD SEPARATELY. SEE BMS DATA SHEET  
PROVIDED BY LITHIONICS BATTERY®.**

Item	Description	
Model	GTO51V165A-F3020-DIN	
Nominal Voltage	51.2V	
Nominal Capacity	165Ah	
Nominal Watt Hours	8,448Wh	
Internal Resistance	<7mΩ	
DC Power Connection	Anderson A160	
<b>Charge</b>		
Charging Temperature Range (internal)	32 to 140°F (0 to 60°C), OR -4 to 140°F (-20 to 60°C) with Heater Kit	
Charge Voltage	57.6V	
Float Voltage	54.4V	
Maximum Charging Current*	150A	
<b>Discharge</b>		
Discharging Temperature Range (internal)	-22~140°F (-30~60°C)	
Operating Voltage Range	46.4~57.6V	
Maximum Discharge Current*	150A	
Discharge Cut-Off Voltage	NeverDie® Power Reserve @ 48.0V Low-Voltage Cut-Off @46.4V	
<b>Internal Heater</b>		
Power Rating	70W	
Input Voltage	12V	
Input Current	5.8A	
<b>Mechanical</b>		
Dimensions	Length 30" (33.0" overall) Width 20.2" Height 4.9"	
Weight	150lbs (68.0kg)	
Mounting Orientation	Lay Down Only, Do Not Invert	
Ingress Protection	IP66	
Enclosure Material	0.090" Aluminum 5052-H32	
Enclosure Corrosion Protection	Iridite Chromate Conversion Coating with Red Powdercoat Paint	
Anderson A160 1/4"-20 Mounting Bolt Torque	48in-lbs	
<b>Storage</b>		
Storage Temperature & Humidity Range	< 1 Month	-4~95°F (-20~35°C), 45~75%RH
	< 3 Months	14~86°F (-10~30°C), 45~75%RH
	Recommended storage	59~95°F (15~35°C), 45%RH~75%RH
Long Term Storage	If the battery needs to be stored for > 3 months the voltage should be 52.8V (50%SoC), and stored at the recommended storage specifications shown above. Additionally, the battery needs at least one charge & discharge cycle every six months.	
Self-Discharge Rate	Residual capacity	≤3% per month; ≤15% per year
	Reversible capacity	≤1.5%/per month; ≤8% per year

\* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system. UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F



## NEVERDIE®



ENERGY

165 AMP HOURS

8448 WATT-HOURS

### WARNING

SEE PAGE 2 "FRONT" VIEW FOR PERMITTED INSTALLATION ORIENTATION.

NOTE: CONTACT LITHIONICS BATTERY® FOR A USER INSTALLATION GUIDE & STORAGE PROCEDURES. FOLLOW THE GUIDE TO ENSURE FITNESS OF USE & WARRANTY.

CAUTION! READ ALL INSTRUCTIONS BEFORE INSTALLATION, OPERATION, AND MAINTENANCE OF THIS BATTERY SYSTEM.



# 51V

GTO  
SERIES

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DIMENSIONS  
& FEATURES

