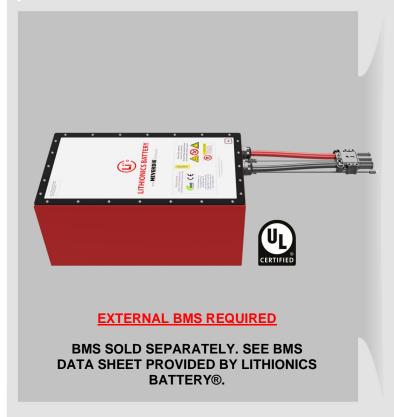
## THIONICS BATT LITHIUM ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER: GT12V450A-F24-DIN-MODULE-UL

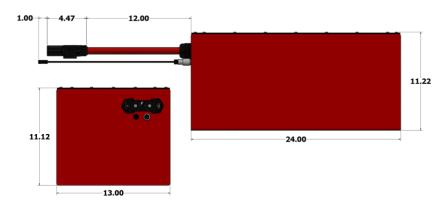
## **EXTERNAL BMS VERSION**



Item		Description
Model		GT12V450A-F24-DIN-MODULE-UL
Nominal Voltage		12.8
Nominal Capacity		450
Nominal Watt Hours		5760
Internal Resistance		<300 milliohms
Charge		
Charging temperature range		32F/0C to 113F/45C OR -4F/-20C with
		Heater Kit
Charge voltage		14.6
Recommended float charge voltage(for standby use)		13.4
Recommended max charge current*		225
Allowed max charge current*		400
Discharge		100
Discharging temperature range		-4F/-20C to 131F/55C
Operating Voltage Range		11.6 to 13.4
Recommended max discharge current*		400
Max discharge current*		400
Pulse discharge current		4500
Discharge cut-off voltage		NeverDie® Power Reserve @ 12.00
		Low-Voltage Cut-Off @11.60
Mechanical		
Dimensions		Length 24"
		Width 13"
		Height 11.22"
Weight		Approx. 130bs (58.9kg)
Storage		
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 13.2V (50%SOC), and stored at the recommended storage specification 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

UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F





**450 AMP HOURS** 

PULSE AMPS: 4500 (1SEC)

**5760 WATT-HOURS** 

## WARNING

1. LITHIUM BATTERIES ARE NOT DESIGNED FOR CHARGING IN SUB-FREEZING TEMPERATURES. CONTACT LITHIONICS BATTERY® FOR DETAILS ON OUR COLD WEATHER PACKAGE.

2. INSTALLATION: IT IS RECOMMENDED THAT MODULES BE

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