## LITHIONICS BATTERY®

LITHIUM ION IRON PHOSPHATE BATTERY SYSTEMS



### MODEL NUMBER: 12V110A-30H-CTRL200

## INTERNAL BMS VERSION



Item		Description
Model		12V110A-30H-CTRL200
Nominal Voltage		12.8
Nominal Capacity		110
Nominal Watt Hours		1408
Internal Resistance		<300 milliohms
Charge		
Charging temperature ra	nae.	32F/0C to 113F/45C
Charge voltage		14.6
Recommended float charge voltage(for standby use)		13.4
Recommended charge current*		55
Allowed max charge current*		110
Discharge		
Discharging temperature range		-4F/-20C to 131F/55C
Operating Voltage Range		11.6 to 13.4
Recommended discharge current*		110
Max discharge current*		165
Pulse discharge current		1100
Discharge cut-off voltage		NeverDie® Power Reserve @ 12.00
Mechanical		Low-Voltage Cut-Off @11.60
Dimensions		Length 14.9"
Dimensions		Width 8.0"
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		Height 13.0"
Weight		Approx. 32lbs (14.5kg)
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 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

WL1973 tests of maximum charge and discharge current were performed at 25°C/77°F

#### INTERNAL NEVERDIE® FEATURES

miniBMS® Cell/Module Sensors and Microprocessors with Automatic Cell Balancing

NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Worry-Free Power for Engine Cranking

100% Pure Copper Power Transmission (No Restrictive Nickel, Aluminum, or MOSFETS)

UL Approved Temperature Protection System

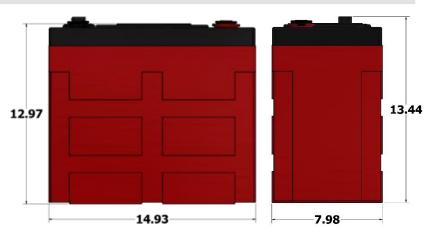
UL Approved Fully Redundant Protective Safety Circuits

Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)

Military Grade/Military Approved Hermetically-Sealed UL508 Approved Gas-Filled Pure Silver-Alloy Contactor with Aux-Contact Monitoring Circuit and Internal Arc-Suppression.

Available NeverDie® Internal Heating Kit: Permits Charging Operations at -20C/-4F Continuous (Most Models....Please Confirm with Factory)

Pushbutton Storage Operation



# NERGY

110 AMP HOURS

PULSE AMPS: 1100 (1 SEC)

1408 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 BATTERIES BE INSTALLED CABLE OR TERMINAL SIDE UP.

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

12V STANDARD SERIES