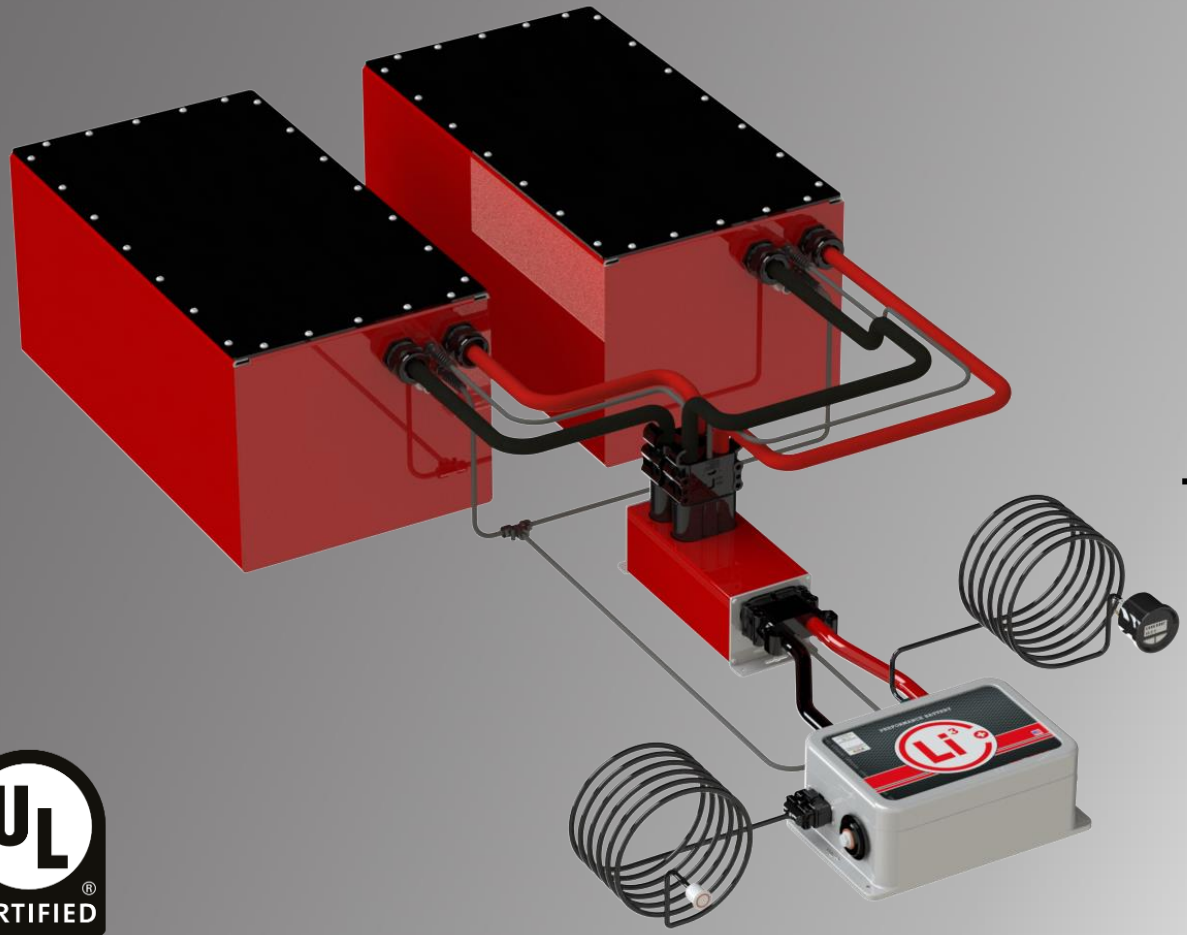
LITHIONICS BATTERY®

Lithium-ion iron phosphate battery systems



MASTER CATALOG

2019

UL CERTIFIED

MADE IN U. S. A.

The World's Widest Range of Advanced Battery Systems Using NeverDie®, miniBMS® & OptoLoop® Technology

Table of Contents

1. Applications

Note: All Photos are of Actual Lithionics Battery® Installations

RV House Power & Generator Replacement

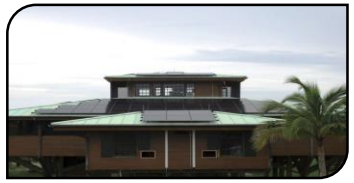
Lithionics Battery's safe Lithium-ion Iron Phosphate battery system with NeverDie® Battery Management System technology will revolutionize your dry-camping experience. Reduce or completely eliminate generator run time and minimize charging time with an advanced Lithionics Battery® solution for your RV house power needs. Be sure to pair your lithium battery with approved inverter/charger and solar charge controller equipment to maximize your charge efficiency and battery life.

Marine: House Power & Propulsion

NeverDie® lithium battery systems can be used across marine applications, offering a consistent power delivery, lower weight, and longer runtime than tradition lead acid batteries. NeverDie® technology also permits multi-use (hotel & propulsion) from the same battery system. Lithionics Battery® offers battery solutions at 12V, 24V,36V, 48V, 51V 72V, 96V, 144V along with customer specified voltages! Suitable for inverted hotel loads, trolling, electric propulsion, bow thruster and all your electric or hybrid marine needs.

Low Speed Electric Vehicles & Automatic Guided Vehicles

Lithionics Battery's Lithium-ion Iron Phosphate battery system provides a reliable and long cycle life energy storage system for your industrial vehicle needs. Our made in the USA lithium battery designs are optimized for fast re-charge rates, 24/7 use, and zero maintenance. The NeverDie® Battery Management System is also the first to offer bi-directional BMS programming, status and state-of-charge telemetry for remote monitoring and commands in Serial (RS232 or UART), CANBus, or E-TCP/IP data formats.



Commercial & Residential Energy Storage Including UL Listed Systems

Safe and reliable Lithium-ion Iron Phosphate battery systems can be used to support your off-grid or grid-tied home energy storage needs. Offering 99% recharge efficiency, our lithium battery systems capture the precious energy generated by your solar and wind charging sources to reduce recharge time and generator use. Able to be integrated with popular inverter/charger models, Lithionics Battery® offers a modular parallel system design that lets you easily install, service, or add-on additional capacity in the future.

Custom Designed Industrial Batteries

Lithionics Battery® provides experience in offering battery systems from 12V to 512V. With human safety being such an important factor, we offer recommendations for battery configurations including lock-out / tag-out battery disconnect switches, and safe plug-and-play wire harness connection methods. In addition to safety, our NeverDie® Lithium-ion Iron Phosphate battery systems offer the most reliable and consistent power delivery on the market, using the highest quality metals for discharge and recharge efficiency.

2. Safety First: Lithionics Battery® Certifications

UL Standard for Safety Testing Criteria

UL 157: Gaskets and Seals
UL 508: Industrial Control Equipment
UL 991: Tests for Safety-Related Controls Employing Solid-State Devices
UL 1642: Lithium Batteries
UL 1998: Software in Programmable Components
UL-1973: 2018 Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications

c UL® US
LISTED

UN DOT for Safety Testing Criteria

Test T.1: Altitude simulation: This test simulates air transport under low-pressure conditions.
Test T.2: Thermal test: This test assesses cell and battery seal integrity.
Test T.3: Vibration: This test simulates vibration during transport.
Test T.4: Shock: This test simulates possible impacts during transport.
Test T.5: External short circuit: This test simulates an external short circuit.
Test T.6: Impact / Crush: These tests simulate mechanical abuse from an impact..
Test T.7: Overcharge: This test evaluates the ability of a rechargeable battery to withstand an overcharge.

Testing performed in accordance with the recommendations given forth by the **UN Transportation of Dangerous Goods Manual of Test and Criteria, Sixth Revised Edition, Sections 38.3.4.1 – 38.3.4.5, 38.3.4.7** at

mga research corporation
12790 Main Road
Akron, New York 14001

3. Model Series Defined

As we take advantage of new lithium cell topologies and advances in manufacturing techniques, our battery models are differentiated by the prefix. A brief description of the differences in battery series are defined below. However, all of our battery modules utilizes high quality & safe lithium iron phosphate chemistry with ION EXT (Nano-Ceramic Kevlar Shutdown Curtain) fire prevention technology.

Standard Series (85 Watt-hours/kg)

- High Quality Lithium Iron Phosphate Chemistry
- Reliable, Cost Effective Solution
- Suitable for engine cranking & deep cycle use

GT Series (109 Watt-hours/kg)

- Increased Energy Density
- Increased Charge & Discharge Rates
- Internal Heater Kit Option Available
- Suitable for engine cranking & deep cycle use

GTR Series (100 Watt-hours/kg)

- Utilizes Robotic Manufacturing Techniques
- Allows Modules to be Installed on their Side for Low Profile Height
- Internal Heater Kit Option Available
- Suitable for engine cranking & deep cycle use

GTX Series (131 Watt-hours/kg)

- Utilizes Advanced & Precision Manufacturing Techniques
- Offers Highest Energy Density for Lithium Iron Phosphate
- Internal Heater Kit Option Available
- Suitable for engine cranking & deep cycle use

Comparison of Energy Density

Standard Series
12V 450Ah Battery, 5.76kWh

8DR Case (23 x 13 x 13.5 in)

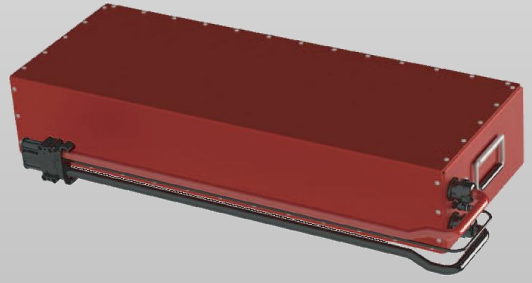
150lbs

GT Series
12V 600Ah Battery, 7.68kWh

8DR Case (23 x 13 x 13.5 in)

155lbs

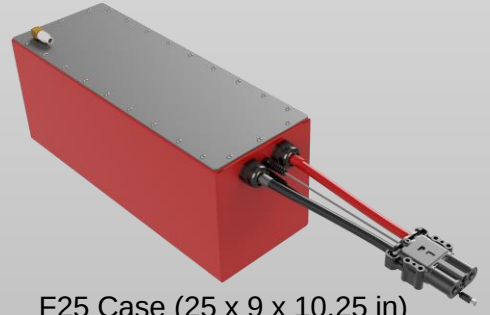
GTR Series
12V 600Ah Module, 7.68kWh



F39 Case (39 x 14.25 x 8 in)

170lbs

GTX Series
12V 555Ah Module, 7.10kWh



F25 Case (25 x 9 x 10.25 in)

120lbs

4. Case Sizes Defined (molded type)

When designing our lithium battery models, we do our best to follow the standard BCI group sizes. However, in some cases due to the differences in lithium cell form factors, our case sizes may vary slightly from standard sizes. The chart below summarizes approximate dimensions for our common case sizes. However, we recommend consulting our product data sheets for complete product details and dimensions.

Case	Length	Width	Height	Batteries (with Internal BMS)	Modules (Requires External BMS)
G15	4.53	3.53	7.33	12V20A, 24V10A	N/A
UB12500	7.72	6.52	6.83	12V50A	N/A
G34EXT	10.56	6.97	8.71	N/A	GT12V75A
G31-5C	12.50	6.50	8.46	12V125A-5C, 12V125A-5CND	N/A
G31EXT	12.94	6.80	10.36	GT12V75A	12V110A, GT12V150A,GT24V75A
30H	14.93	7.98	13.44	12V110A, 12V195A, GT12V150A, GTR12V150A, GT24V75A,	12V195A, GTR12V150A
GC2E	22.05	8.05	13.69	12V220A, GT12V225A, GT12V300A, 24V110A, GT24V150A, GT48V75A, GT51V75A	12V220A, GT12V225A, GT12V300A, 24V110A, GT24V150A, GT48V75A, GT51V75A
5D	24.04	8.02	13.39	GTR12V300A, GTR24V150A	12V400A, 24V200A, GTR12V300A, GTR24V150A
5DR	24.04	8.02	16.54	12V400A, 24V200A	N/A
8D	22.95	13.08	12.48	12V330A, GT12V375A, GT12V450A, GT24V225A, GT76V75A,	12V330A, GT12V375A, GT12V450A, 12V450A, GT12V525A, GT12V600A, 24V220A, GT24V225A, GT24V300A, 48V110A, GT48V150A, 51V110A, GT51V150A, GT76V75A, GT96V75A, GT102V75A
8DR	23.00	13.00	13.97	12V400A, 12V450A, GT12V525A, GT12V600A, 24V220A, GT24V300A, 48V110A, GT48V150A, 51V110A, GT51V150A, GT96V75A, GT102V75A	12V400A

Note: Dimensions are in Inches (approximate). See Product Data Sheet for Complete Product Details.

5. Batteries with Internal BMS

Model	Voltage	Capacity	Weight
GT12V75A-G31EXT-CTRL200	12.8 Volts	75 Amp Hours	25 lbs
12V110A-30H-CTRL200	12.8 Volts	110 Amp Hours	32 lbs
GT12V150A-30H-CTRL400	12.8 Volts	150 Amp Hours	46 lbs
GTR12V150A-30H-CTRL400	12.8 Volts	150 Amp Hours	43 lbs
12V195A-30H-CTRL400	12.8 Volts	195 Amp Hours	62 lbs
12V220A-GC2E-CTRL400	12.8 Volts	220 Amp Hours	62 lbs
GT12V225A-GC2E-CTRL400	12.8 Volts	225 Amp Hours	70 lbs
GT12V300A-GC2E-CTRL400	12.8 Volts	300 Amp Hours	92 lbs
GTR12V300A-5D-CTRL400	12.8 Volts	300 Amp Hours	87 lbs
12V330A-8D-CTRL400	12.8 Volts	330 Amp Hours	115 lbs
GT12V375A-8D-CTRL400	12.8 Volts	375 Amp Hours	110 lbs
12V400A-5DR-CTRL400	12.8 Volts	400 Amp Hours	135 lbs
12V400A-8DR-CTRL400	12.8 Volts	400 Amp Hours	135 lbs
12V450A-8DR-CTRL400	12.8 Volts	450 Amp Hours	150 lbs
GT12V450A-8D-CTRL400	12.8 Volts	450 Amp Hours	130 lbs
GT12V525A-8DR-CTRL400	12.8 Volts	525 Amp Hours	145 lbs
GT12V600A-8DR-CTRL400	12.8 Volts	600 Amp Hours	155 lbs

Model	Voltage	Capacity	Weight
GT24V75A-30H-CTRL200	25.6 Volts	75 Amp Hours	43 lbs
24V110A-GC2E-CTRL200	25.6 Volts	110 Amp Hours	74 lbs
GT24V150A-GC2E-CTRL400	25.6 Volts	150 Amp Hours	87 lbs
GTR24V150A-5D-CTRL400	25.6 Volts	150 Amp Hours	87 lbs
24V200A-5DR-CTRL400	25.6 Volts	200 Amp Hours	135 lbs
24V220A-8DR-CTRL400	25.6 Volts	220 Amp Hours	127 lbs
GT24V225A-8D-CTRL400	25.6 Volts	225 Amp Hours	130 lbs
GT24V300A-8DR-CTRL400	25.6 Volts	300 Amp Hours	150 lbs
GT48V75A-GC2E-CTRL200	48.0 Volts	75 Amp Hours	84 lbs
48V110A-8DR-CTRL200	48.0 Volts	110 Amp Hours	134 lbs
GT48V150A-8DR-CTRL400	48.0 Volts	150 Amp Hours	148 lbs
GT51V75A-GC2E-CTRL200	51.2 Volts	75 Amp Hours	87 lbs
51V110A-8DR-CTRL200	51.2 Volts	110 Amp Hours	144 lbs
GT51V150A-8DR-CTRL400	51.2 Volts	150 Amp Hours	150 lbs
GT76V75A-8D-CTRL200	76.8 Volts	75 Amp Hours	130 lbs
GT96V75A-8DR-CTRL200	96.0 Volts	75 Amp Hours	150 lbs
GT102V75A-8DR-CTRL200	102.4 Volt	75 Amp Hours	155 lbs

Note: Dimensions are in Inches (approximate). See Product Data Sheet for Complete Product Details.

6. Modules with External BMS

Model	Voltage	Capacity	Weight
GT12V75A-G34EXT-SBS75X	12.8 Volts	75 Amp Hours	21 lbs
12V110A-G31EXT-DIN	12.8 Volts	110 Amp Hours	32 lbs
GT12V150A-G31EXT-DIN	12.8 Volts	150 Amp Hours	41 lbs
GTR12V150A-30H-DIN	12.8 Volts	150 Amp Hours	43 lbs
12V195A-30H-DIN	12.8 Volts	195 Amp Hours	62 lbs
12V220A-GC2E-DIN	12.8 Volts	220 Amp Hours	62 lbs
GT12V225A-GC2E-DIN	12.8 Volts	225 Amp Hours	65 lbs
GT12V300A-GC2E-DIN	12.8 Volts	300 Amp Hours	75 lbs
GTR12V300A-5D-DIN	12.8 Volts	300 Amp Hours	82 lbs
12V330A-8D-DIN	12.8 Volts	330 Amp Hours	115 lbs
GT12V375A-8D-DIN	12.8 Volts	375 Amp Hours	95 lbs
12V400A-5D-DIN	12.8 Volts	400 Amp Hours	135 lbs
12V400A-8DR-DIN	12.8 Volts	400 Amp Hours	135 lbs
12V450A-8D-DIN	12.8 Volts	450 Amp Hours	150 lbs
GT12V450A-8D-DIN	12.8 Volts	450 Amp Hours	115 lbs
GT12V525A-8D-DIN	12.8 Volts	525 Amp Hours	133 lbs
GT12V600A-8D-DIN	12.8 Volts	600 Amp Hours	150 lbs

Model	Voltage	Capacity	Weight
GT24V75A-G31EXT-DIN	25.6 Volts	75 Amp Hours	41 lbs
24V110A-GC2E-DIN	25.6 Volts	110 Amp Hours	74 lbs
GT24V150A-GC2E-DIN	25.6 Volts	150 Amp Hours	75 lbs
GTR24V150A-5D-DIN	25.6 Volts	150 Amp Hours	82 lbs
24V200A-5D-DIN	25.6 Volts	200 Amp Hours	135 lbs
24V220A-8D-DIN	25.6 Volts	220 Amp Hours	127 lbs
GT24V225A-8D-DIN	25.6 Volts	225 Amp Hours	125 lbs
GT24V300A-8D-DIN	25.6 Volts	300 Amp Hours	145 lbs
GT48V75A-GC2E-DIN	48.0 Volts	75 Amp Hours	80 lbs
48V110A-8D-DIN	48.0 Volts	110 Amp Hours	134 lbs
GT48V150A-8D-DIN	48.0 Volts	150 Amp Hours	148 lbs
GT51V75A-GC2E-DIN	51.2 Volts	75 Amp Hours	83 lbs
51V110A-8D-DIN	51.2 Volts	110 Amp Hours	144 lbs
GT51V150A-8D-DIN	51.2 Volts	150 Amp Hours	150 lbs
GT76V75A-8D-DIN	76.8 Volts	75 Amp Hours	125 lbs
GT96V75A-8D-DIN	96.0 Volts	75 Amp Hours	145 lbs
GT102V75A-8D-DIN	102.4 Volt	75 Amp Hours	150 lbs

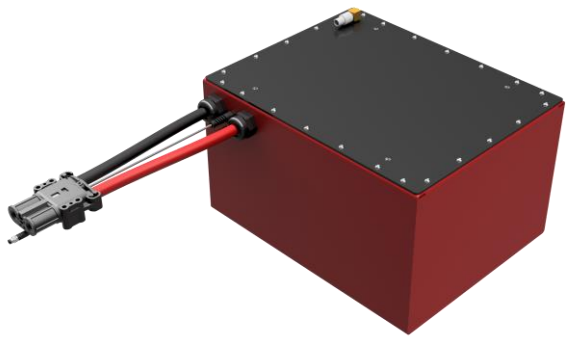
Note: Dimensions are in Inches (approximate). See Product Data Sheet for Complete Product Details.

7. F Series Batteries (aluminum alloy type)

Custom F-Series Aluminum Case Options:

Case	Length	Width	Height	Batteries (with Internal BMS)	Modules (Requires External BMS)
F1508	15.00	8.00	13.12	N/A	GT12V150A, GTX12V180A, 12V195A, GTX12V210A, GT24V75A, GTX24V90A, GTX24V105A, GTX12V275A
F1915	19.00	15.00	11.12	N/A	GT12V375A, GT12V450A, GT12V525A, GT48V150A
F2413	24.00	13.00	11.12	N/A	GT12V450A-UL, GT12V600A-UL, GT24V300A-UL, GT48V150A-UL, GT51V150A-UL
F2416	24.00	16.00	11.12	GT12V450A-UL, GT12V600A-UL, GT24V300A-UL, GT48V150A-UL, GT51V150A-UL	N/A
F2509	25.00	9.00	10.12	N/A	GTX12V555A, GTX24V275A
F2713	27.00	12.97	28.87	GT12V1200A, GT24V600A, GT51V300A	GT12V1200A, GT24V600A, GT51V300A
F3717	37.40	17.40	14.00	GT12V1200A, GT24V600A, GT51V300A	GT12V1200A, GT24V600A, GT51V300A
F3914	39.00	14.12	8.00	N/A	GTR12V450A, GTR12V600A

Note: Dimensions are in Inches (approximate). See Product Data Sheet for Complete Product Details.



F Series Features

- Custom Manufactured Sealed Aluminum Enclosures (Meets UL 157)
- Allows for Variety of Installation Locations & Options
- Includes Pressure Balancing Valve
- IP 67 Environmental Rating
- UL Compliant & Crush Test Rated (22,000lbs)

8. UL Listed Battery Systems

UL Battery Models	Voltage	Capacity	Weight
GT12V450A-F2416-CTRL300-UL	12.8 Volts	450 Amp Hours	160 lbs
GT12V600A-F2416-CTRL300-UL	12.8 Volts	600 Amp Hours	160 lbs
GT24V300A-F2416-CTRL300-UL	25.6 Volts	300 Amp Hours	160 lbs
GT48V150A-F2416-CTRL300-UL	48.0 Volts	150 Amp Hours	155 lbs
GT51V150A-F2416-CTRL300-UL	51.2 Volts	150 Amp Hours	160 lbs

UL Module Models	Voltage	Capacity	Weight
GT12V450A-F2413-DIN-UL	12.8 Volts	450 Amp Hours	145 lbs
GT12V600A-F2413-DIN-UL	12.8 Volts	600 Amp Hours	145 lbs
GT24V300A-F2413-DIN-UL	25.6 Volts	300 Amp Hours	145 lbs
GT48V150A-F2413-DIN-UL	48.0 Volts	150 Amp Hours	140 lbs
GT51V150A-F2413-DIN-UL	51.2 Volts	150 Amp Hours	145 lbs

Battery Case Dimensions	Length	Width	Height
F2416	24.00	16.00	11.12

Module Case Dimensions	Length	Width	Height
F2413	24.00	13.00	11.12

UL Listed to UL1973, 991, 1998, 157, 1642, 508

9. NeverDie® Battery Management System (BMS)

Lithionics Battery's NeverDie® Battery Management System is a proprietary design featuring UL tested protective safety features, as well as state-of-health (status & fault codes), and state-of-charge monitoring. Our patent-pending BMS utilizes custom microprocessors and in-house controlled firmware that enables the customization of the BMS to perform as a Programmable Logic Controller (PLC.) The NeverDie® Battery Management System is standard on all Lithionics Battery® systems to ensure your lithium batteries are operated within their rated specifications. This increases the lifespan of your battery system and protects your valuable investment. Unlike many competitors, Lithionics Battery® uses a military grade proprietary contactor (UL508 tested to 6,000 hot-switching cycles) for BMS on/off switching. This allows for continuous current ratings of up to 400A to match the high performance of your lithium battery module.

Internal NeverDie® BMS
200A or 400A Rating

Standard NeverDie® BMS
12V to 51V 400A Rating

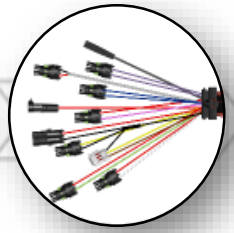
Advanced NeverDie® BMS
12V to 96V 400A Rating

High Voltage NeverDie® BMS
102V to 512V 400A Rating

Available Features:

- **Ampseal I/O Connector**
- **Round SOC Display***
- **Bluetooth® Transmitter***
- **Status & Fault Code Reader***

***Available on Advanced Series Only**



9. NeverDie® Battery Management System (BMS) cont.

NeverDie® BMS Features	Standard Series 12V to 51V	Advanced Series 12V to 96V	High Voltage Series 102V to 512V
OptoLoop Cell Monitoring	✓	✓	✓
MiniBMS Cell Balancing	✓	✓	✓
NeverDie Reserve (Reset/Power Switch)	✓	✓	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓	✓	✓
High-Voltage Cutoff Protection (Over-Charge)	✓	✓	✓
Short Circuit Protection	✓	✓	✓
UL Approved Temperature Intervention Sensor	✓	✓	✓
UL Approved Fully Redundant Protective Safety Circuits	✓	✓	✓
Military Grade Contactor with Aux Contact Monitoring	✓	✓	✓
Coulomb Counter State-of-Charge Meter		✓	✓
Current-Based Temperature Intervention Sensor		✓	✓
Programmable NeverDie Reserve & AGSR		✓	✓
Dual Channel or Redundant Contactor (Optional)		✓	✓
State-of-Charge Telemetry (CANBus & Serial)		✓	✓
State of Health Monitoring (Status & Fault Codes)		✓	✓
Ethernet TCP/IP State-of-Charge Telemetry (Optional)		✓	✓
Bluetooth State-of-Charge Telemetry (Optional)		✓	✓
Internal Pre-Charge Circuit (Programmable Latch Point)			✓
Ampseal I/O Features	**Standard (8-Pin)**	**Advanced (23-Pin)**	**Advanced (23-Pin)**
Alternator Field Control Circuit (FCC)	✓	✓	✓
CANBus (TSM Charger Control)	✓	✓	✓
Remote Reset Switch	✓	✓	✓
CANBus RV-C Data Telemetry		✓	✓
Serial UART Data Telemetry (Alternate: Serial RS232)*		✓	✓
Automatic Generator Start/Restart (AGSR)		✓	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)*		✓	✓
External Power Input (AC Sense)		✓	✓
High Voltage Charger Interlock		✓	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)*		✓	✓
Alarm Circuit		✓	✓
Battery Percent (0-5V Signal)		✓	✓

10. NeverDie® Compact Series Batteries

Compact Series using our Economy-Version 100 Amp Rated BMS

Model	Voltage	Capacity	Weight
GT12V75A-G31EXT-CS100	12.8 Volts	75 Amp Hours	23 lbs
GTX12V105A-G31EXT-CS100	12.8 Volts	105 Amp Hours	28 lbs
12V110A-G31EXT-CS100	12.8 Volts	110 Amp Hours	32 lbs
12V125A-G31-5CND	12.8 Volts	125 Amp Hours	34 lbs
GTR12V150A-30H-CS100	12.8 Volts	150 Amp Hours	45 lbs
12V195A-30H-CS100	12.8 Volts	195 Amp Hours	60 lbs
GTX12V210A-30H-CS100	12.8 Volts	210 Amp Hours	48 lbs
GTX12V315A-GC2E-CS100	12.8 Volts	315 Amp Hours	68 lbs

with NEVERDIE® Technology

Internal NeverDie® Compact Series Features

- miniBMS® Cell/Module Sensors and Microprocessors with Automatic Cell Balancing
- 100A Continuous Discharge Current Rating
- Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)
- Pushbutton Storage Operation
- NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Worry-Free Power for Engine Cranking
- Now Available Optional Bluetooth®: Monitor Battery Voltage, State-of-Charge, Temperature, Current & Status Code from your mobile device.

Lithionics Battery® Now with Bluetooth® Telemetry

Bluetooth® Telemetry Available for NeverDie® Compact Series & NeverDie® Advanced Series Battery Management Systems.

Lithionics Battery® Monitor

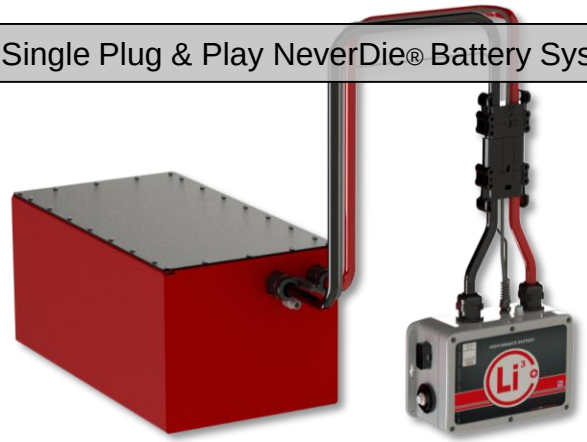
GET IT ON Google Play

Download on the App Store

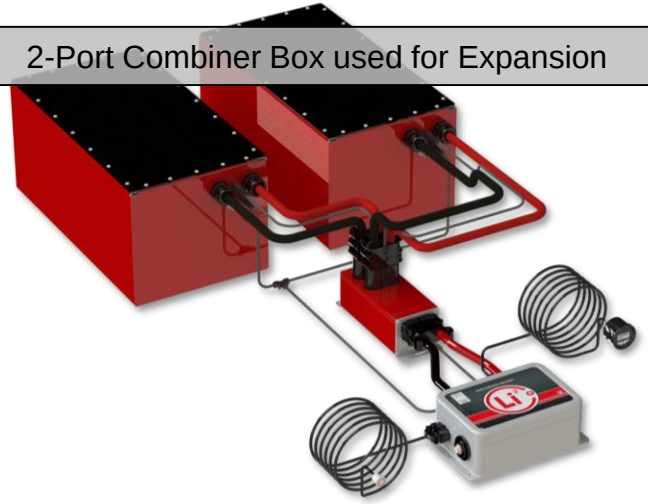
11. Lithionics Battery® Plug & Play System

Lithionics Battery® Modular Expansion via the Parallel Combiner Box

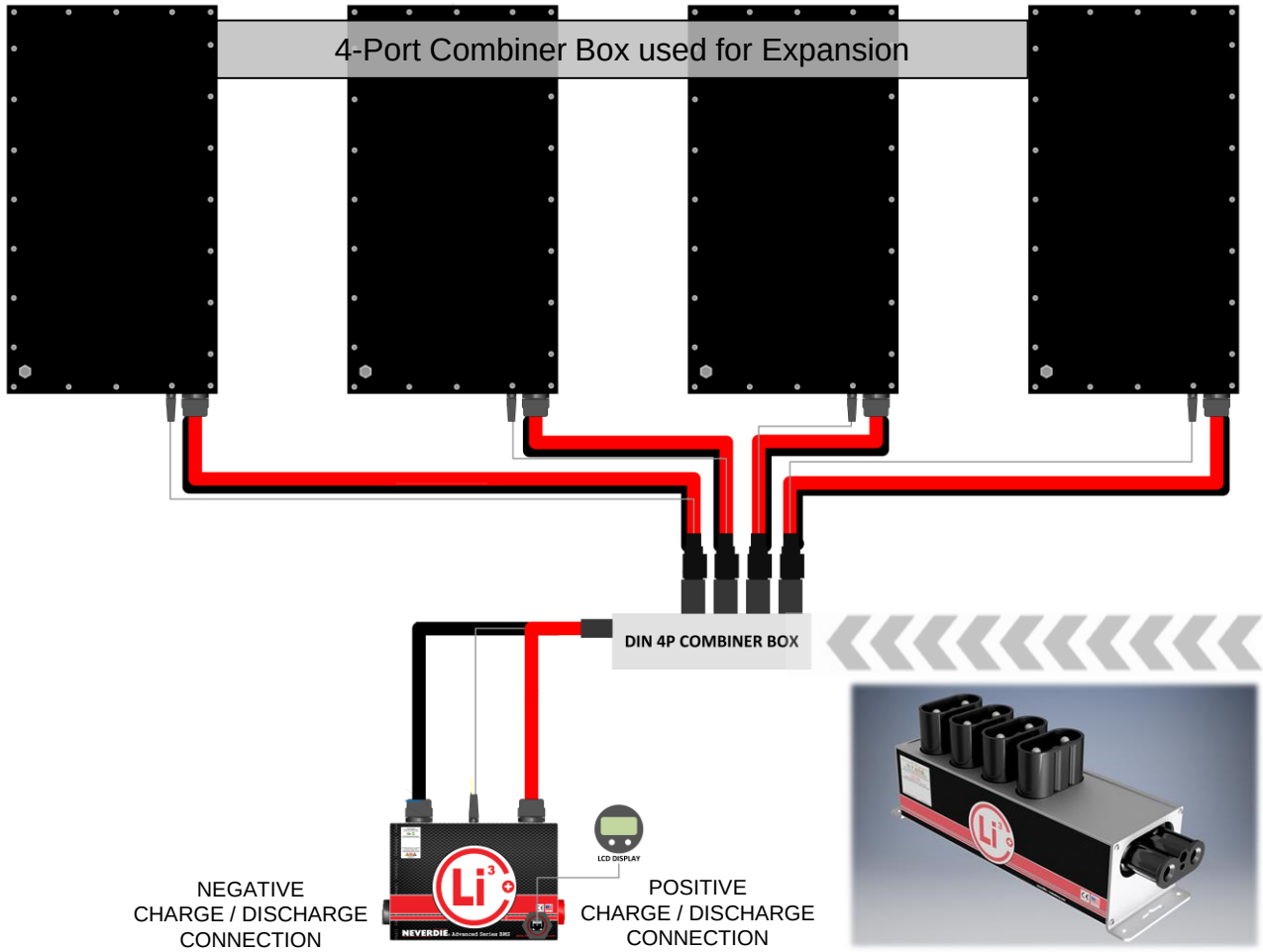
Single Plug & Play NeverDie® Battery System



2-Port Combiner Box used for Expansion



4-Port Combiner Box used for Expansion



Click here for more information on the Plug & Play Combiner Box, or visit the Products page of our website.

12. Lithionics Battery® Advantages

Lithionics Battery® Advantages:

✓ **Safety a Must:**
- High Quality & Safe Lithium Iron Phosphate Chemistry
- ION EXT (Nano-Ceramic Kevlar Shutdown Curtain) Cell Fire Prevention Technology
- 3rd Party UL & UN DOT Safety Testing

✓ **Dedicated to Quality:**
- Cell Testing & Impedance Matching
- FLIR Thermal Imaging for Quality Assurance
- Documented 100% System Load & Capacity Testing

✓ **Proprietary NeverDie® Battery Management System:**
- Pushbutton Battery Power/Storage Switch
- Protective UL Safety Features
- State-of-Charge Telemetry
- State-of-Health Monitoring (Status & Fault Codes)

✓ **American Made:**
- Designed, Manufactured and Serviced in the USA.
- On-site HazMat Pick-Up Available for Service & Repair (US 48 States)

Low Cost Alternatives:

× **Safety at a Cost:**
- Low Priced Imports Sacrifice Safety Features in Favor of Cost Reductions
- Lower Cost Inorganic Lithium Chemistries can be Volatile with Risk of Fire or Explosion

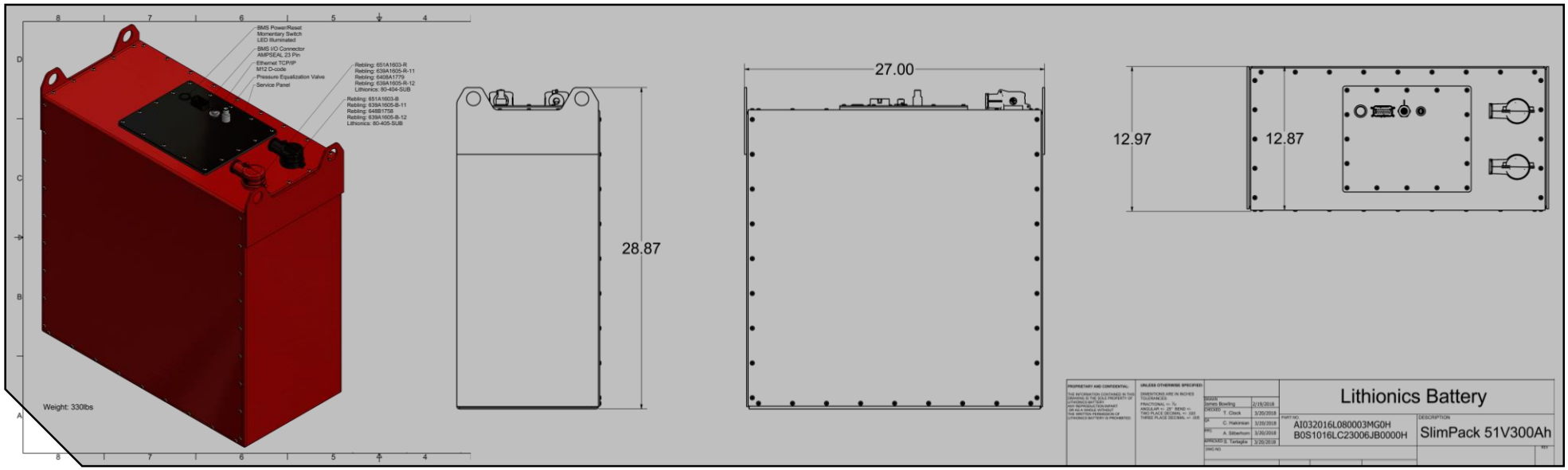
× **Lack of Verifiable Testing & Quality:**
- Re-labeled Imports not Built in the USA without Testing Capacity & Power Delivery
- No Reputable 3rd Party Safety & Quality Testing Certificates

× **No Intelligent Controls:**
- Look for Buttons: No Power Switch for Battery Control or Storage
- Unable to Monitor Battery State-of-Charge or Health

× **Disreputable Service:**
- No Programs for Returning Lithium Batteries (HazMat Packages)
- Lack of Warranty or Repair Service for Imported Lithium Batteries

13. Lithionics Battery® & Custom Built Systems

Lithionics Battery® is a USA based manufacturer and factory, staffed with actual applications and design engineers with years of industry experience. If a standard battery solution does not meet your energy or size requirements, our staff is available to assist you throughout the design and production process to offer a custom battery solution to meet your needs.



Custom Applications | Lithionics Battery® has engineering capabilities to design custom battery systems to go along with your application power requirements. Lithionics Battery® also has experience in a variety of markets and can adapt quickly to offer battery and battery connections solutions. Please contact Lithionics Battery® to discuss your battery needs.

Find your Lithium Battery Solution

Unlock the power of energy independence wherever you are, no matter what you are doing! To learn more about lithium replacement systems for your application, contact Lithionics Battery®.