Lynac Lithium Technology

DESIGNED IN NORTH AMERICA

12.8V 200Ah TRUE Series Battery

The big sibling of our most popular Smart Lithium (LFP) Battery, crammed with 12.8V 240Ah of True Power.
This beast is wired to maximize efficiency for Off-Grid and Back-Up Power systems.

Electrical Properties

12.8V 240Ah 3072Wh

Cycle Life

6000 Cycles at 0.2C to 80% DoD

Dimensions

BCI Group Fit 4D

20.55" x 9.44" x 8.58"

(522 × 240 × 218mm)

66lbs (30kg)

Discharge

Optimal Current 48A (0.2C)

Max Cont. Current 200A (0.83C)

≤5min

Max Inst. Current 400A (1.67C)

≤5s

Charge

Optimal Current 48A (0.2C)

Max Cont. Current 200A (0.83C)

≤5min

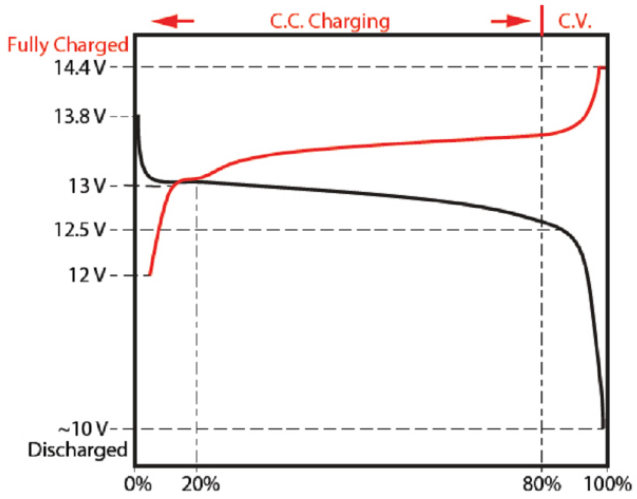
Ingress Protection

IP65

Certifications

UN 38.3, UL1642, IEC626619-3600,

3.2V26650 CB IEC62133



BMS Properties

Charge Balancing, Current, Voltage, Short Circuit, High+Low Temp Protection.

Terminal Connections

Brass M8 Screw, Torque = 28N.m = 21ft.lbs

Warranty

3 Year Manufacturer with 7 Year Prorated

Waterproof

Featherweight

Shock Resistant

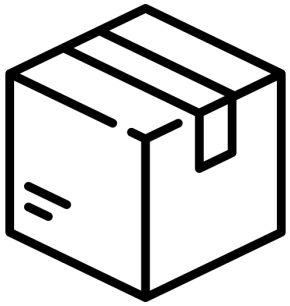
Supercharged

TRUE Series

What is TRUE Series?

Our True Series battery offers you the extra Power you deserve. We add an extra 20% capacity to every battery ensuring our ratings match the usable energy you can expect from a Lynac Lithium. 100 percent! In other words, our 12.8V 200Ah (2560Wh) battery is truly rated for 12.8V 240Ah (3072Wh). Since roughly 10% to 20% of the rated Power stored in all Lithium Iron Phosphate batteries is unusable, we strived to give you more for less - change the game.

Phone: 1 (877) 330-4519 **Email: Sales@lynac.com**



Battery Storage

70% State of Charge @13.2V - in a cool dry location.
Disconnect all loads and sources - Verify charge level after one month.
Can store in sub-zero temperatures if battery charge level is properly maintained.

Charge Settings

Absorb Voltage: 14.0Vdc - 14.4Vdc
Max Charge Voltage: 14.6Vdc
Ideal Bulk Current: 0.2C - 0.5C (20Adc - 50Adc for a 100Ah Battery)
Float Voltage: 13.2Vdc - 13.6Vdc (not required)
Tail Current: 0.02C - 0.05C (2A - 5A for a 100Ah battery)
Equalization: Off (or set to Absorb Voltage)
Temperature Compensation: Off
Peukert Exponent: 1.0
Charge Efficiency Factor: 99%
Basic Profile: Constant Current - Constant Voltage (CC-CV)

Voltage vs State of Charge

Voltage	13.9V	13.6V	13.4V	13.3V	13.2V	13.2V	13.0V	12.9V	12.8V	12.5V	12.1V	10.0V
Capacity	100%	99%	98%	90%	70%	40%	30%	20%	17%	14%	10%	0%

IMPORTANT: BATTERY INFORMATION

- LFP batteries can be operated in sub zero Temperatures but LFP cells should not be charged below freezing-low temperature charge protection and/ or battery heating can be used to prevent damage.

- LFP batteries should not be charged directly from an Alternator without proper regulation.
  Batteries should always be isolated from other battery chemistries in the system.

- Parallel connected batteries can be charged using a single bank charger without added battery balancing. Battery balancers are needed when charging series connected batteries using a single bank charger. A multi bank charger can act as a balancer but only while charging to full capacity.

- Maintenance and trickle charging is not necessary for LFP batteries and can be damaging.
  When batteries are not in use, leave resting in a partial state of charge (appox. 60% - 80%) - charge before using.

Material Saftey Data Sheet

Name of Product: 12.8V 200Ah True Series Battery

Hazard Identification	
Explosive Risk	This product doesn't not belong to explosive dangerous goods
Flammable Risk	This product doesn't not belong to flammable dangerous goods
Oxidation Risk	This product doesn't not belong to oxidation dangerous goods
Toxic Risk	This product doesn't not belong to toxic dangerous goods
Radioactive Risk	This product doesn't not belong to radioactive dangerous goods
Mordant Risk	This product doesn't not belong to mordant dangerous goods

First Aid Measures

Eye's: Flush eyes with plenty of water for at least 15 mintues, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Remove contaminated clothes and rinse skin with plenty of water for 15 minutes. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. Use oxygen if available.
Ingestion: Drink at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

Fire-fighting Measures

Flash Point: N/A
Auto-Ignition Temperature: N/A
Extinguishing Measures: Water, CO2
Special Fire-Fighting Procedures: Self-contained breathing apparatus
Unusual Fire and Explosion Hazards: Cell may vent when subjected to excessive heat-exposing battery contents.
Hazardous Combustion Products: Carbon monoxide, Carbon dioxide, Lithium oxide fumes.

Accidental Release Measures

Steps to be taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate.
Provide maximum ventilation to clear out hazardous gases.
Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can.
The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation.
Avoid skin and eye contact or inhalation of vapors.
Remove spilled liquid with absorbent and incinerate.

Waste Disposal Method

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

Handling and Storage

Discharge the battery fully to expend the metallic Lithium inside the battery. Remove internals from outside casing.
Separate battery cells from electronics. Recycle or reuse battery components.
Bury the discharged battery cells in soil if unable to recycle.
The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release the ingredients that they contain in the hermetically sealed container into the environment .
Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire.
Do not crush or puncture the battery, or immerse in liquids.
The battery should not be opened, destroyed or incinerated.
Do not short circuit terminals, or over charge, force over-discharge.
Do not crush, puncture or immerse the battery in liquid.

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area,
which is subject to little temperature change. Storage at high temperatures should be avoided.
Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

Other Precautions

The battery may explode or cause burns, if disassembled, crushed, or exposed to fire or high temperatures.
Do not short or install with incorrect polarity.

Exposure Controls/Personal Protection

Respiratory Protection

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores.
Respiratory Protection is not necessary under conditions of normal use.

Ventilation

Not necessary under conditions of normal use.

Protective Gloves

Not Necessary under conditions of normal use.

Other Protective Clothing or Equipment

Not Necessary under conditions of normal use.

Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

Physical and Chemical Properties

Appearance: Rectangle.

Odour: If leaking, smells of medical ether.

pH: Not applicable as supplied.

Flash Point: Not applicable unless individual components exposed.

Flammability: Not applicable unless individual components exposed.

Relative Density: Not applicable unless individual components exposed.

Solubility (water): Not applicable unless individual components exposed.

Solubility (other): Not applicable unless individual components exposed.

Physical and Chemical Properties

Stability: Product is stable under conditions described in Section 4

Conditions to Avoid: Heat above 70 C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short Circuit. Expose over a long period to humid conditions.

Materials to Avoid: Oxidising agents, alkalis, water.

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

Hazardous Polymerization: N/A

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

Toxicological Information

Signs & Symptoms: None, unless battery ruptures.
In the event of exposure to interal contents, vapour fumes may be very irritating to the eyes and skin.

Inhalation: Lung irritant.

Skin contact: Skin irritant.

Eye contact: Eye irritant.

Ingestion: Poisoning if swallowed.

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to sever irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

Ecological Information

Mammalian effects: None known at present.

Eco-toxicity: None known at present.

Bioaccumulation potential: Slowly Bio-degradable.

Environmental fate: None known environmental hazards at present.

Disposal Consideration

Do not incinerate, or subject cells to temperature in excess of 70 C,
Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

Transport Information

Label for conveyance: Lithium Battery Label

UN 3480

Packaging Group: N/A

EMS F-A S-I

Marine Pollutant: NO

Proper Shipping Name: Lithium ion Batteries (Including lithium ion polymer batteries)

Hazard Classification: The goods are complied with the requirements of section II of
Packing Instruction 965 of 63th DGR Manual of IATA(2022 Edition)
Packing Instruction 188 of IMDG CODE (Amdt. 40-20) 2020 Edition, including the passing of the UN38.3 test.