



## 12.8V 100Ah TRUE Series Battery

Our most popular Smart Lithium (LFP) Battery, crafted with the perfect combination of size, weight, and power. A lighter, simpler version of our 12.8V 100Ah battery with all the power benefits. Take reliable, deep cycle energy further and optimize your Renewable Energy, Off-Grid, and Electric Vehicle system now.

### Electrical Properties

12.8V 120Ah 1536Wh

### Cycle Life

6000 Cycles at 0.2C to 80% DoD

### Dimensions

BCI Group Fit 24

259 × 167 × 212mm

10.197" × 6.575" × 8.35"

13.2kg (29lbs)

### Discharge

Optimal Current 24A (0.2C)

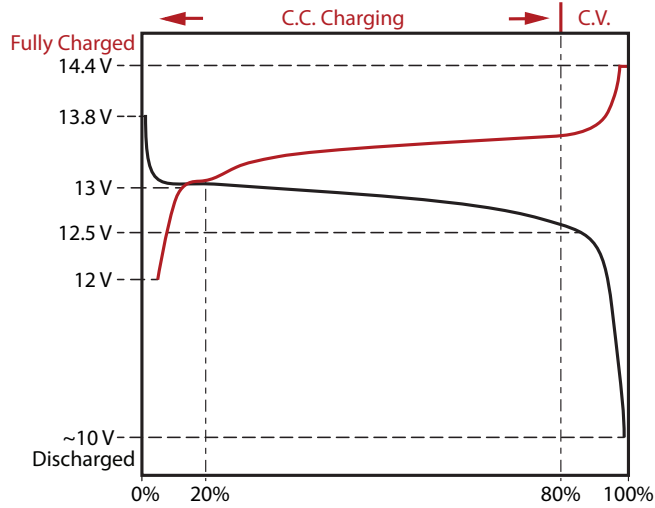
Max Cont. Current 120A (1C) ≤5min

Max Inst. Current 300A (2.5C) ≤5s

### Charge

Optimal Current 24A (0.2C)

Max Cont. Current 120A (1C) ≤5min



### BMS Properties

Charge balancing. Protection for excess current, voltage, short circuits.

### Terminal Connections

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



Featherweight



Rugged Case



Waterproof



TRUE SERIES

### What is TRUE Series?

True usable power rating system. Unique to Lynac Lithium, True Series describes the amount of Real Usable Energy you can expect from our batteries based on 80% Depth of Discharge. If it says 100Ah on the case, you get 100Ah!





## 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 (20A dc - 50A dc for a 100Ah battery)**

**Max Bulk Current: 1C\* (100A dc 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	Capacity
13.9V	100%
13.6V	99%
13.4V	98%
13.3V	90%
13.2V	70%
13.1V	40%
13.0V	30%
12.9V	20%
12.8V	17%
12.5V	14%
12.1V	10%
10.0V	0%

## The Need To Know

**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.**

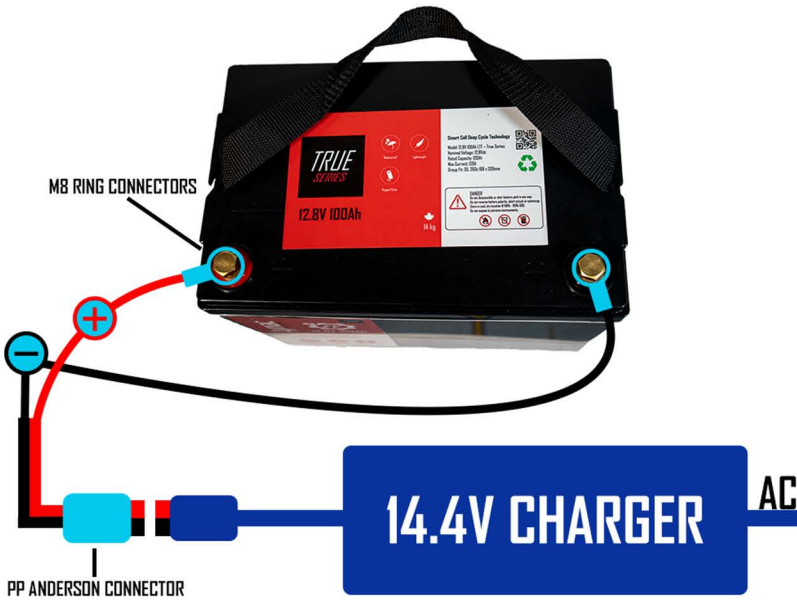
**LFP batteries should not be charged directly from an Alternator without proper regulation. Batteries should always be isolated from other battery chemistries in the system.**

**Parallel connected batteries can be charged using a single bank charger without added battery balancing.**

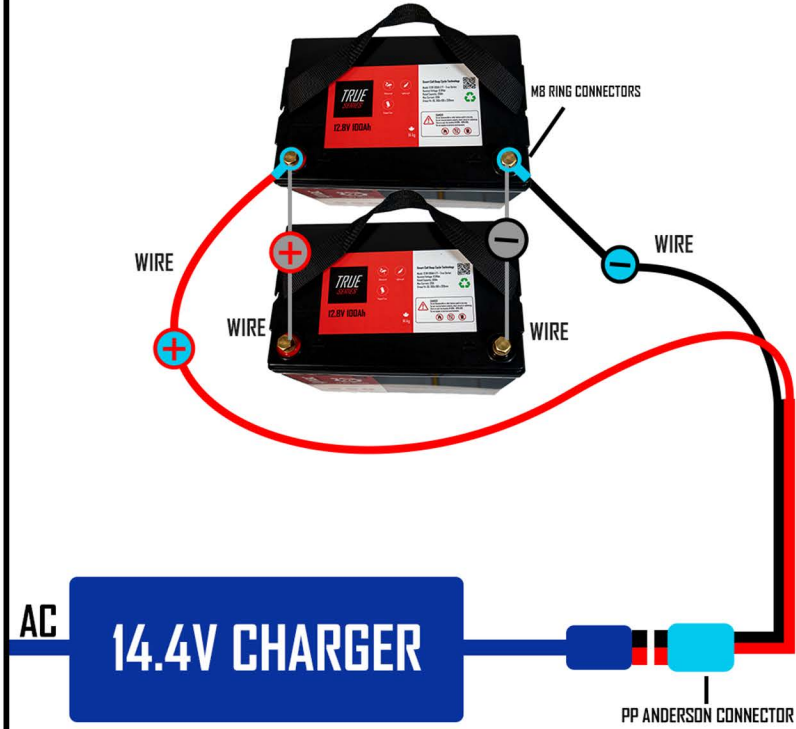
**Battery balancers are needed when charging series connected batteries using a single bank charger. A multi bank charger can act as a balancer but only while charging to full capacity.**

**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 (approx. 40% - 80%) - charge before using.**

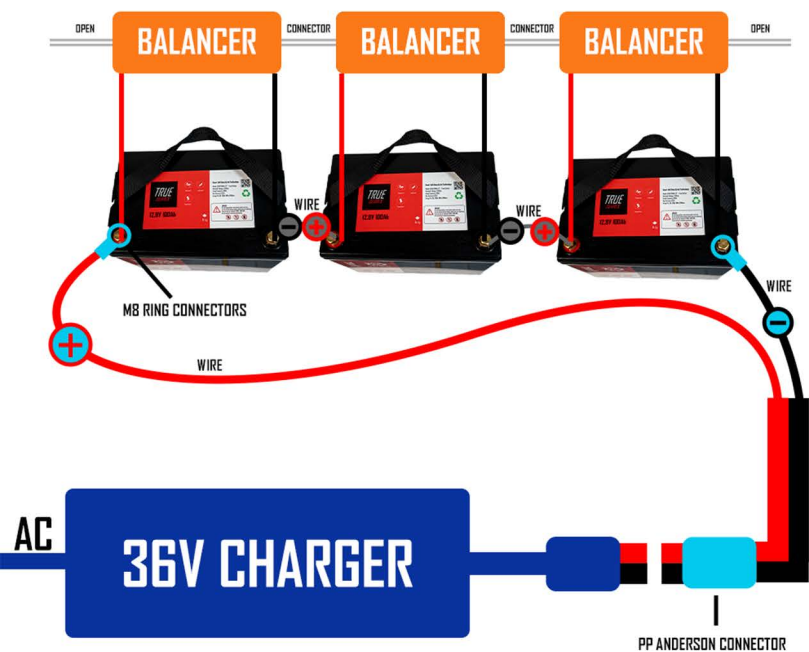
## CHARGING A SINGLE 12.8V 100AH BATTERY



## CHARGING A 200AH PARALLEL BATTERY SYSTEM



## CHARGING A 36V SYSTEM WITH BALANCERS



## CHARGING A 48V SYSTEM WITH BALANCERS

