

# TN Power (LiFePO4) Data Sheet

TN-LFP12.8V110AH Models

## GENERAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS	
<b>Nominal Voltage</b>	12.8V
<b>Nominal Capacity</b>	110Ah@0.2C
<b>Energy</b>	1208Wh
<b>Internal Resistance</b>	30≤mΩ
<b>Cycle Life</b>	>2000 Cycles @ 0.2C Charging/Discharging at 100%DOD, Until 70% Capacity.
<b>Self Discharge</b> ≤3.5% per month at 25°C	≤3.5% per month at 25°C
DISCHARGE SPECIFICATIONS	
<b>Discharging Current</b>	21.6A
<b>Max. Continuous Current</b>	100A
<b>Max Pulse Current</b>	200A (<3S)
<b>Discharging Cut-off Voltage</b>	10.0V
MECHANICAL SPECIFICATIONS	
<b>Cell &amp; Format</b>	IFR32700 N60,4S18P
<b>Casing</b>	Plastic
<b>Dimension(L*W*H*TH)</b>	355*176*189*189mm
<b>Weight</b>	13.7Kg (Approx)
<b>Terminal</b>	SAE
CHARGE SPECIFICATIONS	
<b>Charging Voltage</b>	14.0~14.6V
<b>Charging Mode</b>	At 0°C~45°C temperature, charged to 14.6V at a constant current of 0.2C5A, and then, charged continuously with constant voltage of 14.6V until the current is no more than 0.02C5A.
<b>Charging Current</b>	21.6A
<b>Max Charging Current</b>	54A
TEMPERATURE SPECIFICATIONS	
<b>Charge Temperature</b>	0°C to 45°C (32°F to 113°F) @60±25% Relative Humidity
<b>Discharge Temperature</b>	-20°C to 60°C (-4°F to 140°F) @60±25% Relative Humidity
<b>Storage Temperature</b>	0°C to 45°C (32°F to 113°F) @60±25% Relative Humidity
<b>Water Dust Resistance</b>	IP55



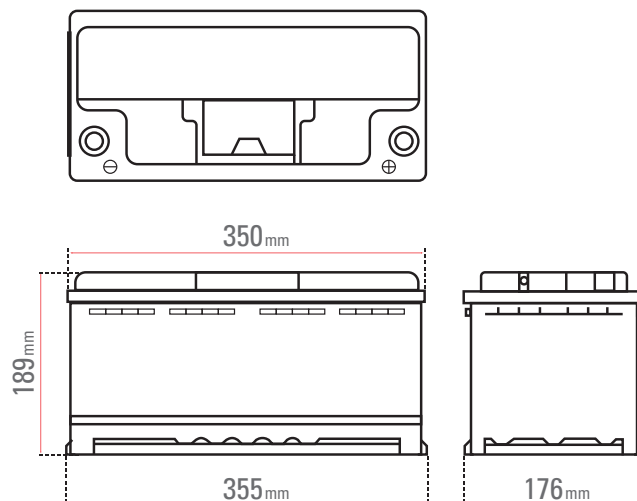
## FEATURES

- Using the technology of lithium iron phosphate cell, superior safety, thousands of cycles, 100%DOD, under normal conditions.
- Built-in automatic protection for over-charge, over discharge, over current and over temperature.
- Maintenance Free
- Internal cell balancing
- About 40% ~50% of the weight of a comparable lead acid battery.
- Can be charged using most standard lead-acid charges (set).
- Wider temperature range: -20°C ~60°C.
- Support for Series application expansion (up to 51.2V) and two in parallel.

## APPLICATION

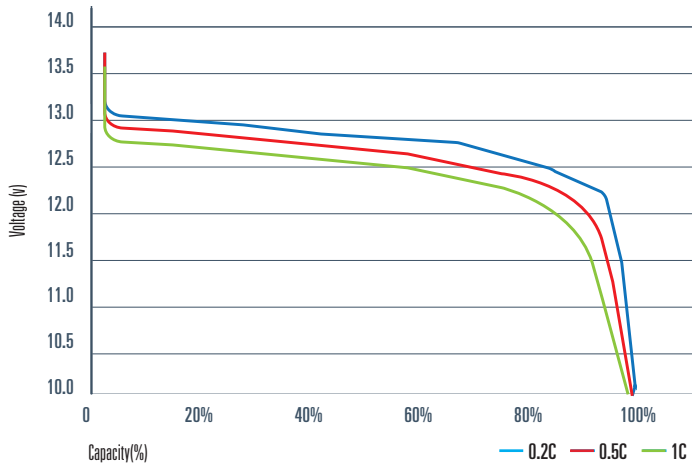
- Recreational Vehicles
- Marine
- Renewable Energy
- Medical / Mobility
- Electric Vehicles
- Golf Cart

## DIMENSIONAL SPECIFICATIONS

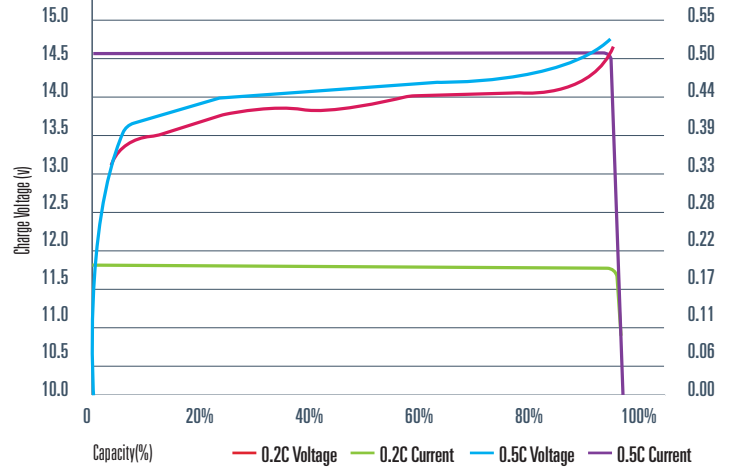


# Lithium Iron Phosphate (LiFePO4) Battery | MODEL: TN-LFP12.8V110AH

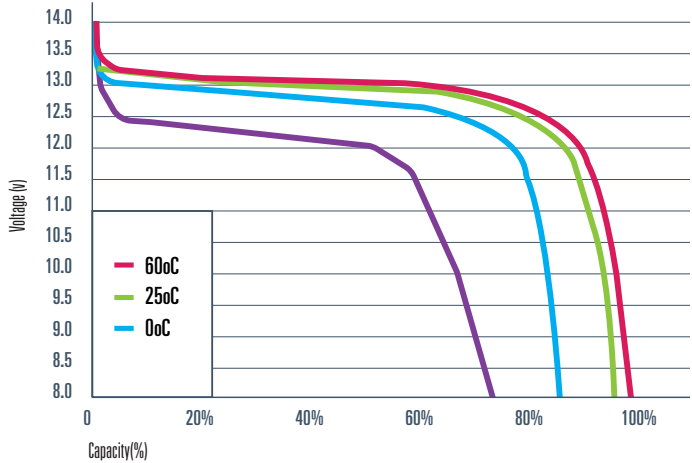
Different Rate Discharge Curve @ 25°C



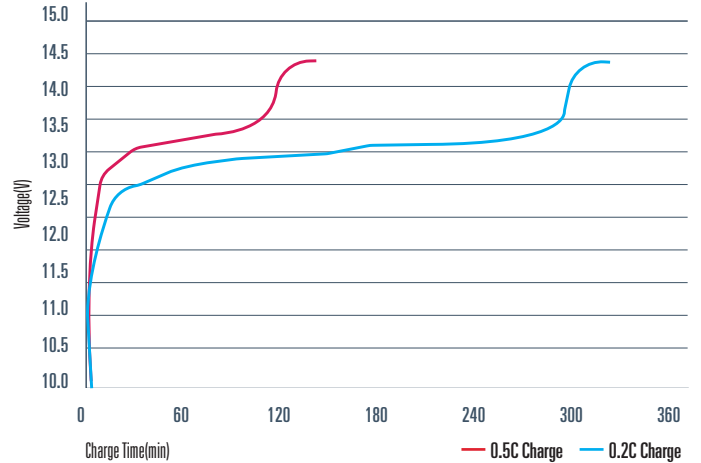
Charge Characteristics @0.2C&0.5C, 25°C



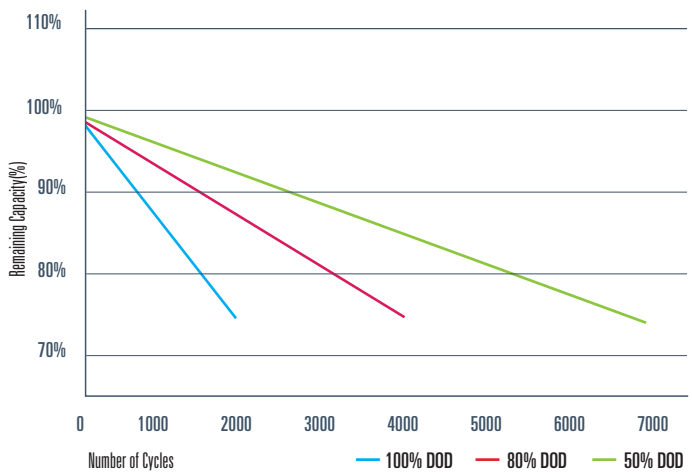
Different Temperature Discharge Curve @0.5C, 25°C



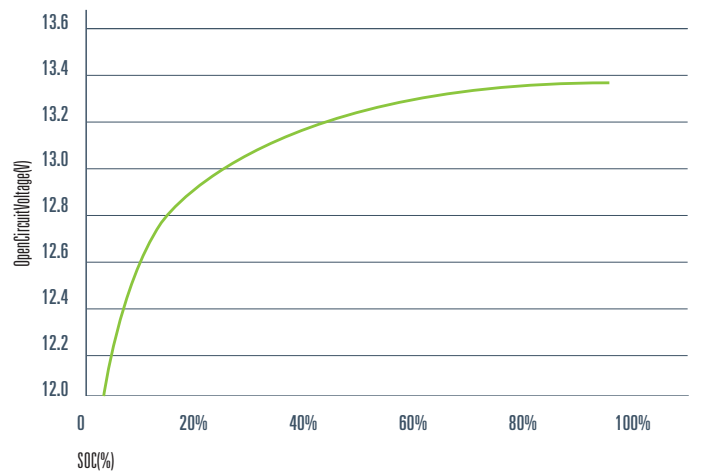
Charge Characteristics @0.2C&0.5C, 25°C



Different DOD Discharge Cycle Life Curve @0.5C, 25°C



Open circuit voltage VS SOC%



TN POWER Lithium is UN38.3 certified

