

# Lithium Iron Phosphate (LiFePO<sub>4</sub>) Battery

MODEL: TN-LFP12.8V12AH

## GENERAL SPECIFICATIONS

ELECTRICAL CHARACTERISTICS	
<b>Nominal Voltage</b>	12.8V
<b>Nominal Capacity</b>	12Ah@0.2C
<b>Energy 1075.2Wh</b>	153.6Wh
<b>Internal Resistance</b>	70≤mΩ
<b>Cycle Life</b>	>2000 Cycles @ 0.2C Charge/Discharge at 100%DOD, End of Life 70% Capacity.
<b>Self Discharge ≤3.5% per month at 25°C</b>	≤3.5% per month at 25°C

STANDARD DISCHARGING	
<b>Discharging Current</b>	2.4A
<b>Max. Continuous Current</b>	12A
<b>Max Pulse Current</b>	30A(<3S)
<b>Discharging Cut-off Voltage</b>	10.0V

STANDARD CHARGING	
<b>Charging Voltage</b>	14.6±0.2V
<b>Charging Mode (CC/CV)</b>	At 0°C~45°C temperature, charged to 14.6V at a constant current of 0.2C5A, and then, changed continuously with constant voltage of 14.6V until the current was not more than 0.02C5A
<b>Charging Current</b>	2.4A
<b>Max Charging</b>	6A

MECHANICAL	
<b>Cell &amp; Format</b>	IFR32700 N60,4S2P
<b>Casing</b>	ABS
<b>Dimension(L*W*H*TH)</b>	151*98*95*101mm
<b>Weight Approx.</b>	1.55Kg
<b>Terminal</b>	F2

ELECTRICAL CHARACTERISTICS	
<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



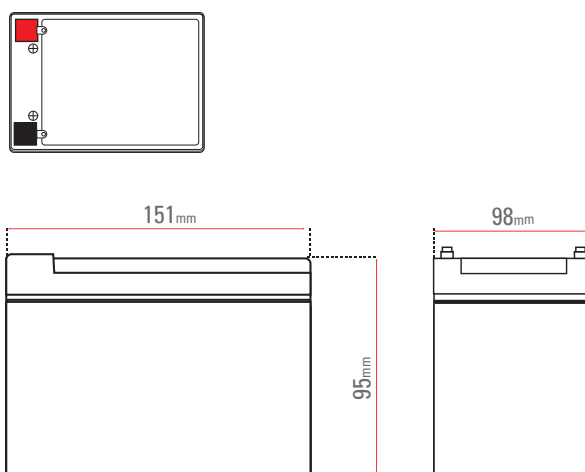
## FEATURES

- Using lithium iron phosphate technology, 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
- Lighter weight: 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

## APPLICATION

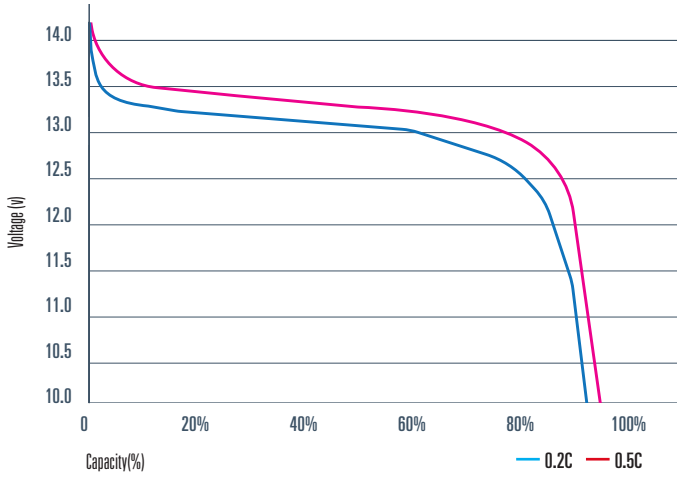
- Recreational Vehicles
- Marine
- Renewable Energy
- Medical / Mobility
- Electric Vehicles
- Golf Cart

## DIMENSIONAL SPECIFICATIONS

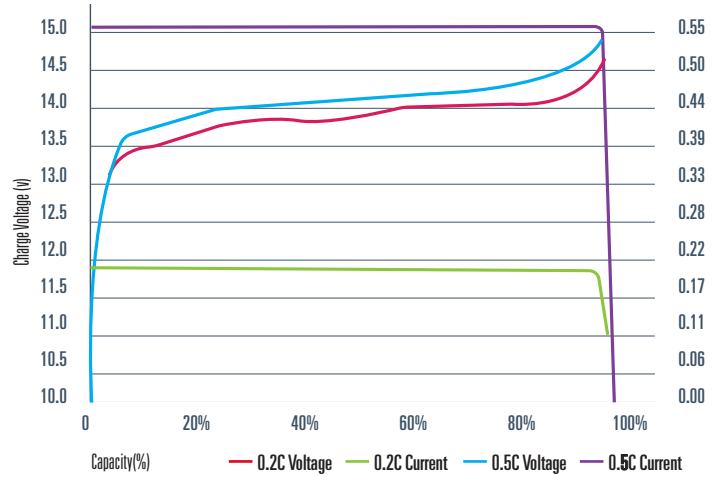


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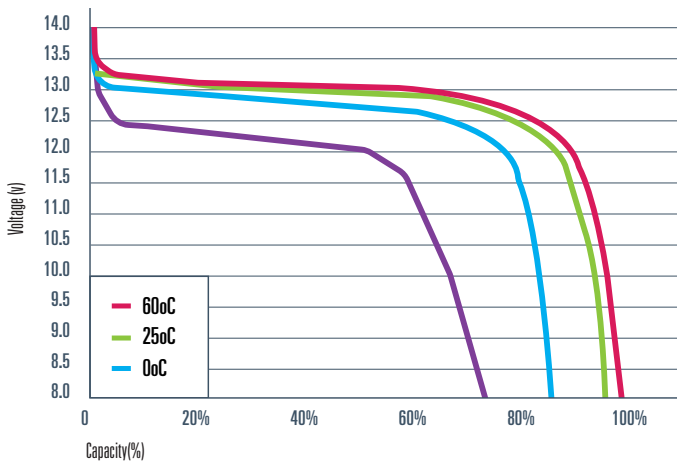
Different Rate Discharge Curve @ 25°C



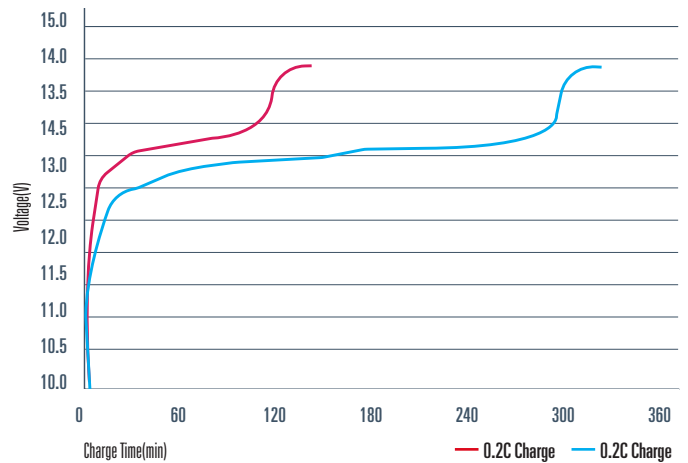
Charge Characteristics @0.2C&0.5C, 25°C



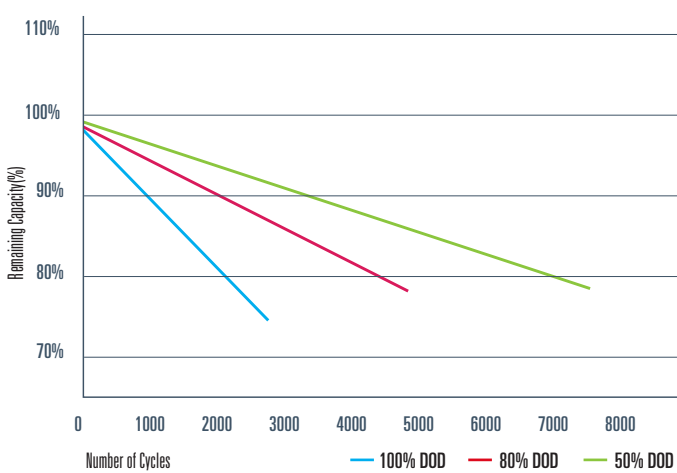
Different Temperature Discharge Curve @0.5C, 25°C



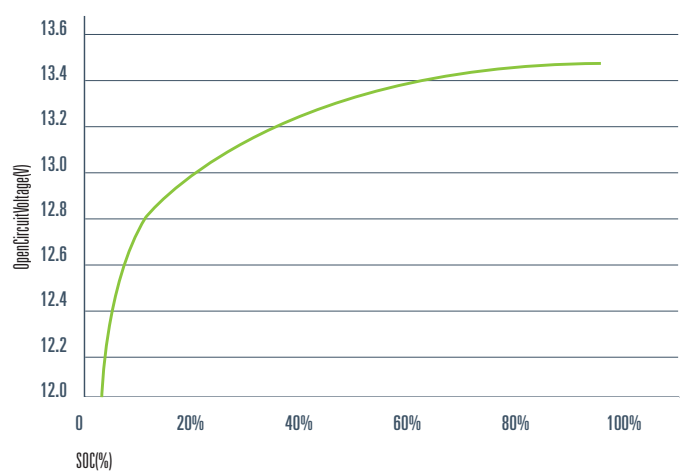
Charge Characteristics @0.2C&0.5C, 25°C



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



Open circuit voltage VS SOC%



TN POWER Lithium is UN38.3 certified

