# NITRO

# LITHIUM IRON PHOSPHATE BATTERY

# **NLI-1272I**

#### **SPECIFICATIONS**

Nominal Voltage	12.8V
Rated Capacity	72Ah @1C
Circuit Protection	Over charge, Over discharge, Over current, Over temp. Short, Balance
Cycle Life	3000 times cycles @100%DOD and 6000 times @80% DOD
Monthly Self Discharge	<3%
Efficiency of Charge	100% @0.2C
Efficiency of Discharge	96~100% @1C
Charge Voltage	14.6±0.2V
Standard Charge Current	12A
Max Charge Current	50A
Standard Discharge Current	12A
Max. Continuous Current	60A
Discharge Cut-off Voltage	10V
Charge Temperature	0°C to 55°C (32°F to 131°F) @60±25% Relative Humidity
Discharge Temperature	-20°C to 60°C (-4°F to 140°F) @60±25% Relative Humidity
Storage Temperature	-20°C to 45°C (-4°F to 113°F) @60±25% Relative Humidity
Case / IP class	Plastic case / IP65
Dimensions	230 mm X 138 mm X 208 mm
Approx Weight	8.2Kg
Terminal	M8
Extended functions (optional)	Power Switch, SOC indicator, USB, Communications (CANBUS, Bluetooth, SMBUS, RS485, RS232, UART, I <sup>2</sup> C)



#### **FEATURES**

#### • LONGER CYCLE LIFE:

Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

#### • LIGHTER WEIGHT:

About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.

#### • HIGHER POWER:

Delivers twice power of lead acid battery, evenhigh discharge rate, while maintaining high energy capacity.

# • WIDER TEMPERATURE RANGE: -20°C~60°C.

#### • SUPERIOR SAFETY:

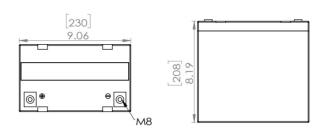
Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

## • INCREASED FLEXIBILITY:

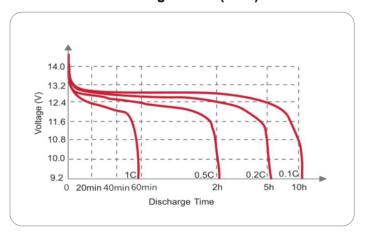
Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.

### **DIMENSIONS**

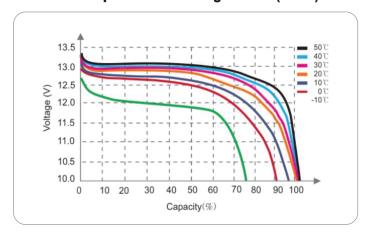




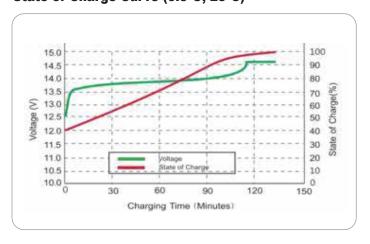
#### **Different Rate Discharge Curve (25°C)**



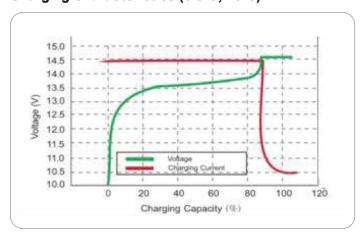
#### **Different Temperature Discharge Curve (0.5°C)**



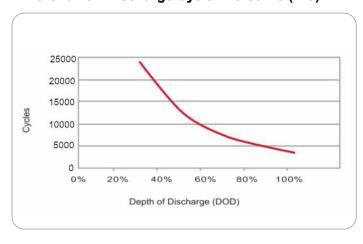
## State of Charge Curve (0.5°C, 25°C)



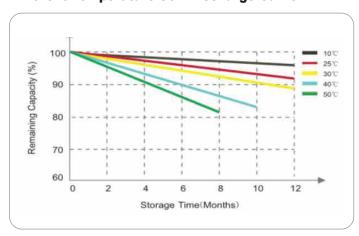
Charging Characteristics (0.5°C, 25°C)



#### **Different DOD Discharge Cycle Life Curve (1°C)**



#### **Different Temperature Self Discharge Curve**





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