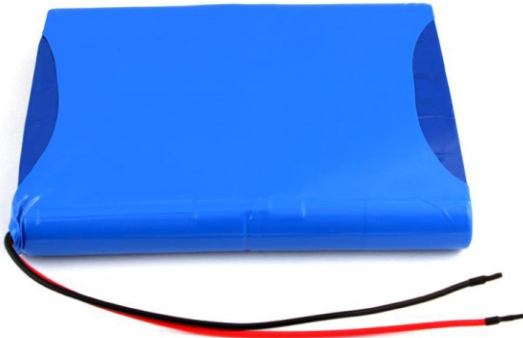




## LNP xx-12 (12V 10Ah~100Ah) Lithium ion - Li(NiCoMn)O2 Battery



### Physical Dimension

Customized

### Features of Li ( NiCoMn ) O2 Battery

- Longer Cycle Life: 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, even high discharge rate, while maintaining high energy capacity.
- Wider Temperature Range: -20°C~60°C.
- Superior Safety: Li ( NiCoMn ) O2 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.

### Application

- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

### Specification

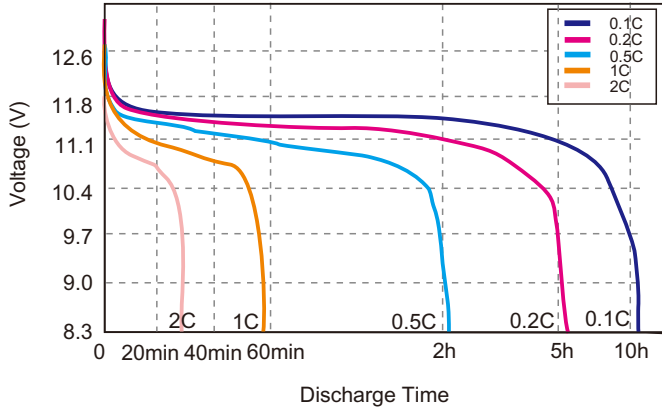
Electrical Characteristics	Nominal Voltage	11.1V
	Nominal Capacity	10Ah~100Ah
	Energy	111Wh~1110Wh
	Internal Resistance	/
	Cycle Life	>600 cycles @1C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	12.6±0.2V
	Charge Mode	0.2C to 12.6V, then 12.6V, charge current to 0.02C (CC/CV)
	Charger Current	10A, 15A, 20A
	Max. Charge Current	10A, 15A, 20A
	Charge Cut-off Voltage	12.9V±0.2V
Standard Discharge	Continuous Current	10A, 15A, 20A
	Max. Pulse Current	Customizable
	Discharge Cut-off Voltage	9V
Environmental	Charge Temperature	0 °C to 45 °C (32°F to 113°F) @60±25% Relative Humidity
	Discharge Temperature	-10 °C to 65 °C (14°F to 149°F) @60±25% Relative Humidity
	Storage Temperature	0 °C to 40 °C (32°F to 104°F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & Method	Different capacities, different combinations
	Plastic Case	PVC
	Dimensions (in./mm.)	Customized
	Weight (lbs./kg.)	/
	Terminal	/
	Protocol (optional)	/
	SOC (optional)	/



## LNP xx-12 (12V 10Ah~100Ah) Lithium ion - Li(NiCoMn)O2 Battery

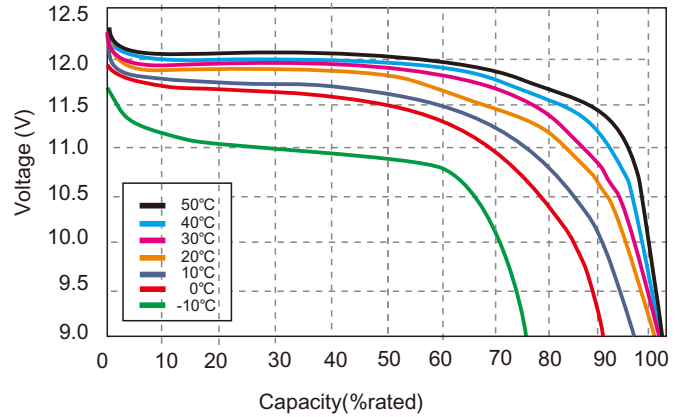
### Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



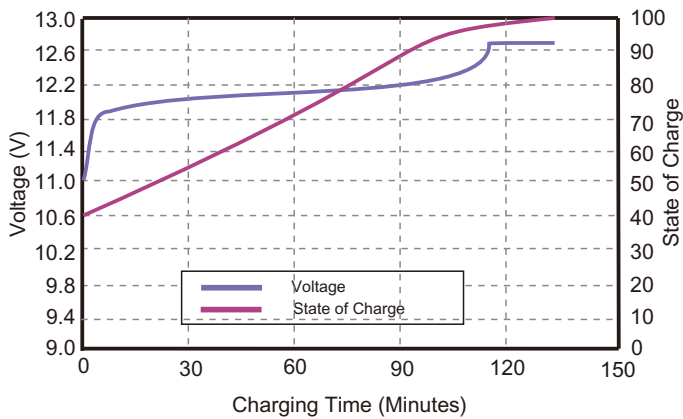
### Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



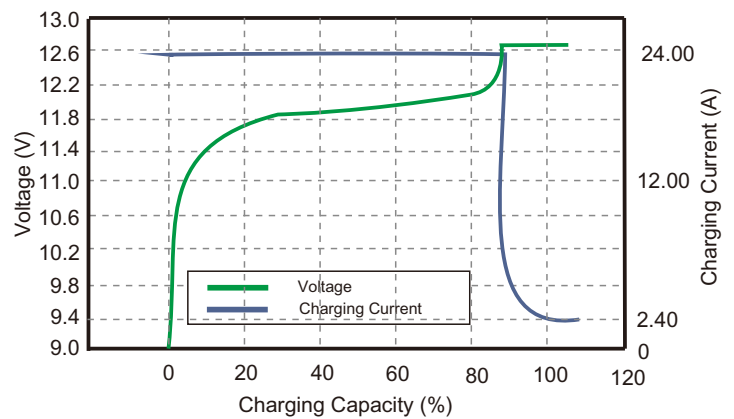
### State of Charge Curve

State of Charge Curve @0.5C 25°C



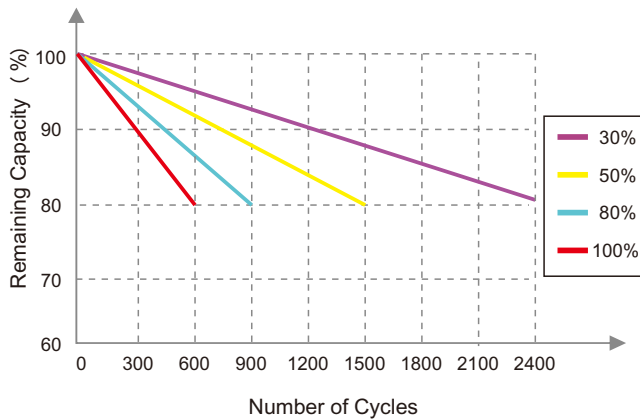
### Charging Characteristics

Charging Characteristics @0.5C 25°C



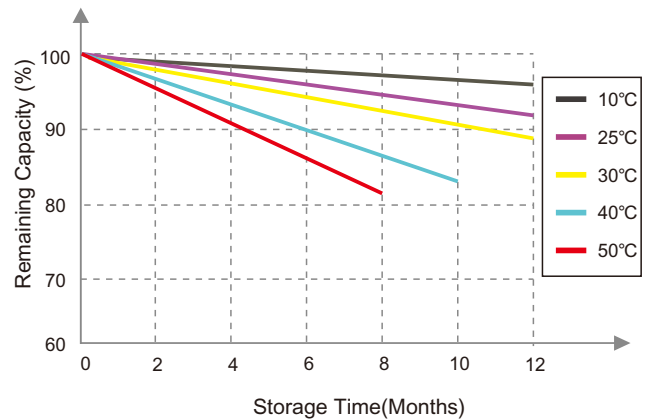
### Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



### Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



#### JYC LNP BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/ specification are subject to modification without notice. Contact JYC for the latest information.