

LTO cylindrical battery

HIGH SAFETY
FAST CHARGE/DISCHARGE
WIDE TEMPERATURE RANGE
LONG SERVICE LIFE



Environmental Protection



High Energy Density

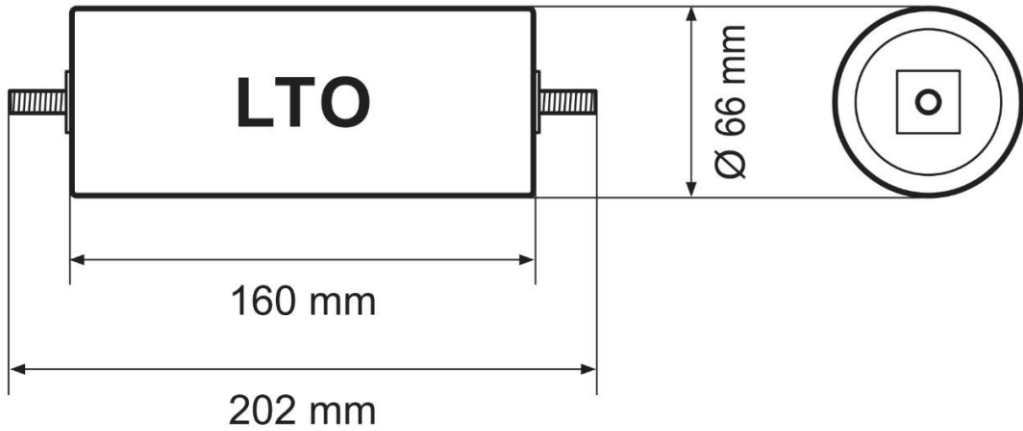


Safe And Stable



Super Shockproof

Engineering Drawing(mm)



Model No.	NX-LTO-45Ah
Battery Type	Lithium Titanate Battery (LTO)
Electrical Data	
Nominal Capacity	45 Ah
Nominal Voltage	2.3 V
Internal Resistance	≤ 1mΩ
Max. Charging Current	10 C (450 A)
Charging Upper Limit Voltage	2.8 V
Max. Discharge Current	10 C (450 A)
Discharge Cut-off Voltage	1.5 V
Cycle Lifetime	30,000
Operational Requirements	
Operating Ambient Temperature	-50°C ~ 65°C (Charging) -50°C ~ 65°C (Discharging)
Storage Ambient Temperature	-20°C ~ 45°C Short-term (within 1 month) -20°C ~ 20°C Long-term (within 1 year)
Storage Humidity	<70%
Mechanical Data	
Weight	1.25 kg
Cell Construction Type	Cylindrical
Cell Diameter	66 mm
Cell Height (excluding terminals)	160 mm
Cell Height (including terminals)	202 mm
Shell Material	Aluminum



1



Positive Electrode

2



Negative Electrode



1.Safe and reliable

Extremely high number of charge/discharge cycles **>6000** without worrying about the depth of discharge.



2.Battery Protection

Reasonable battery protection can fully extend the battery life.



3.Temperature Control

The battery can be used under -20° to 60° and the battery safety is guaranteed.



4.Real Performance

Free from fear of cold, be stored in low temperature environment



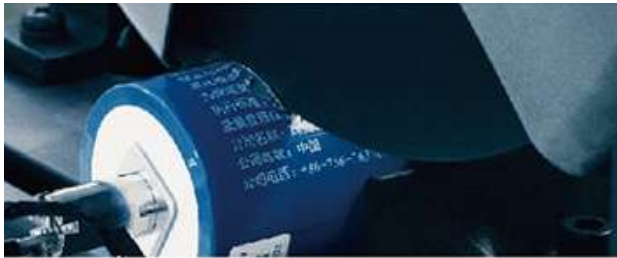
Penetration test in the water

Single cell with charge (follow the remark's method), under the condition of $20^{\circ}\text{C}\pm 5^{\circ}\text{C}$, lay it aside for 1 hour, then use cutting machine to cut the cell vertically, the result shows no leakage, fire or explosion etc.



Drilling test

Single cell with charge (follow the remark's method), under the condition of $20^{\circ}\text{C}\pm 5^{\circ}\text{C}$, lay it aside for 1 hour, then use electric drill vertically penetrates into the cell, the pin stays in the cell for 1 min, the result shows no leakage, fire or explosion etc.



Cutting test

Single cell with charge (follow the remark's method), under the condition of $20^{\circ}\text{C}\pm 5^{\circ}\text{C}$, lay it aside for 1 hour, then use cutting machine to cut the cell vertically, the result shows no leakage, fire or explosion etc.



Burning test

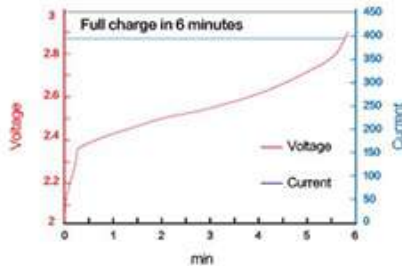
Single cell with charge (follow the remark's method), under the condition of $20^{\circ}\text{C}\pm 5^{\circ}\text{C}$, lay it aside for 1 hour, then put the cell into the raging fire, the cell doesn't indicate any inflammation nor explosion within 40mins.

Results show that: Yinlong titanium batteries don't occur fire or explosion after penetration, electric di,cutting and other tests.

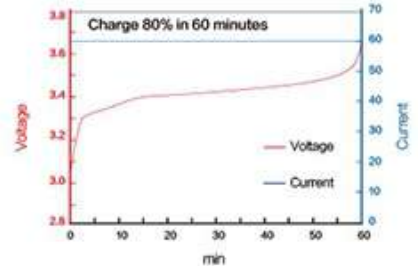


Fast charge /discharge

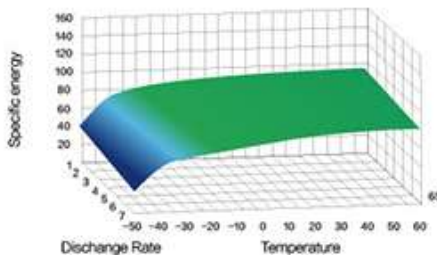
Nano LTO Batteng Fast Changing Curve



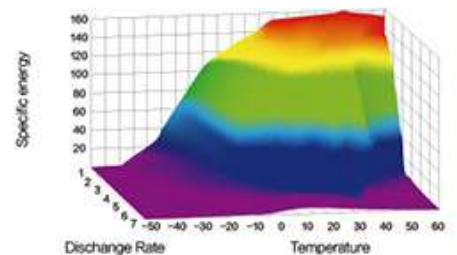
Other Lithium-ion Batteng Changing Curve



Performance of Nano LTO battery



Performance of Graphite Lithium battery



Wide temperature range