

# Prism Mark

# Product Manual

Hefei Lengqi Fanglue International Trade Co., Ltd.

High-Performance Rechargeable Lithium Battery Solutions

# Company Profile

Located in the High-tech Zone of Hefei City, **Hefei Lengqi Fanglue International Trade Co., Ltd.** is a pioneer in the energy sector.

- ✔ **20 Years Experience:** Specialized in the production of new energy lithium batteries.
- ✔ **Proprietary IP:** Full range of cylindrical rechargeable lithium batteries with independent intellectual property patents.
- ✔ **Global Reach:** Products have successfully entered the global market, partnering with over 80 e-commerce platforms and 10+ international agents (EZGO, Chaowei, etc.).
- ✔ **Scale:** Phase 1 production has reached a batch scale of 300,000 units per month, ready to meet the growing demand for "smart" lithium batteries.



# Core Technical Advantages



## Electrolyte Tech

Mastery of core electrolyte material technology ensures significant competitive advantages in battery performance and safety.



## Smart Solutions

Developing intelligent battery solutions alongside traditional cells to meet the rising demand for smart devices.



## Automated Lines

Self-developed, highly automated production lines guarantee a 95%+ first-pass yield, enhancing efficiency and quality.



## Complete Chain

A comprehensive industry chain extending from fundamental electrolyte materials down to final battery packing.

# Product Focus: Stacked Cell

## Core Advantages

Our stacked cells are designed for maximum efficiency and durability, serving as the foundation for our high-capacity solutions.

- 🛡️ **Safe, stable and reliable** operation under various conditions.
- ⚡ **High voltage platform** delivering superior power.
- 🌡️ **Anti-high temperature capabilities** for extreme environments.
- 🔋 **Heavy load discharge support** for demanding applications.
- 🔄 **Good cycle life** ensuring long-term usability.
- 🌿 **Low power consumption & Light weight** design.



# General Specifications

Parameter	Unit	Value	Parameter	Unit	Value
Nominal capacity	mAh	30000	Discharge current	mA	6000-15000
Charge cut-off voltage	V	4.3±0.5	Dimensions (L x W x H)	mm	6 x 156 x 240 (±0.5)
Nominal voltage	V	3.9±0.5	Weight	g	473±0.5
Discharge cut-off voltage	V	2.7±0.5	Operating temperature	°C	-130
Internal resistance	mΩ	≤11	Cycle Life (1C)	Times	≥1000 (Capacity ≥80%)
Charging current	mA	6000-15000	Application	Energy storage systems	

# Material Specs: Ternary Lithium (三元锂)

Model	Nominal Capacity (mAh)	Nominal Voltage (V)	Internal Res. (mΩ)	Charge Current	Discharge Current
ZTH09270-180	180	3.9±0.05	≤100	0.2-0.5C	0.2-0.5C
ZTH09270-210	210	3.9±0.05	≤110	0.2-0.5C	0.2-0.5C
ZTH13300-300	300	3.9±0.05	≤80	0.2-0.5C	0.2-0.5C
ZTH13400-600	600	3.9±0.05	≤50	0.2-0.5C	0.2-0.5C
ZTH13400-670	670	3.9±0.05	≤50	0.2-0.5C	0.2-0.5C
ZTH18650-2000-3C	2000	3.9±0.05	≤30	0.2-0.5C	3C
ZTH18650-2000-5C	2000	3.9±0.05	≤30	0.2-0.5C	5C
ZTH18650-2200-3C	2200	3.9±0.05	≤30	0.2-0.5C	3C

# Material Specs: LCO & Manganese

## Lithium Cobalt Oxide

Model	Capacity (mAh)	Int. Res. (mΩ)	Charge	Discharge
ZTH13300-400-3A	400	≤80	0.5C-1C	3A
ZTH13400-550-3A	550	≤50	0.5C-1C	3A
ZTH16300-550-3A	550	≤60	0.5C-1C	3A

## Manganese Series & Liquid High Capacity

Material	Model	Capacity (mAh)	Charge	Discharge
Manganese	ZTH18650-1500	1500	0.2-0.5C	0.2-1C
Manganese	ZTH18650-2000	2000	0.2-0.5C	0.2-1C
Liq. High Cap	ZTH18650-3800	3800	0.5C Std	0.2C Std

# Applications



Electric Two-wheeler



Electric Tricycle



Micro EV



Electric  
Special-purpose Vehicle



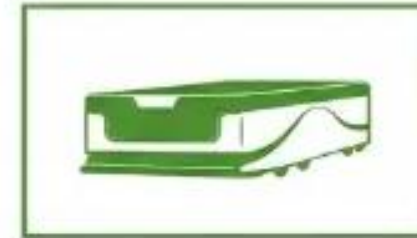
Start-stop Battery



Garden Tools



Service Robot



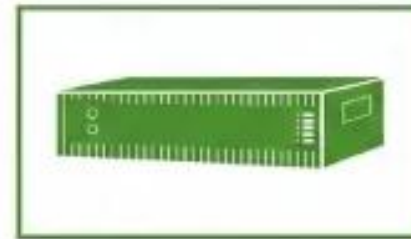
AGV/AMR



Residential Energy  
Storage



Portable Power Station

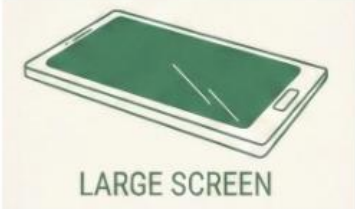






Telecom Base  
Station Storage



UPS (Uninterruptible  
Power Supply)

# Applications

Application	Phone	Tablet	Laptop	Watch/Bracelet	Wireless Earbuds
Terminal Devices	 <p>LARGE SCREEN</p>	 <p>TABLET</p>	 <p>LAPTOP</p>	 <p>SMARTWATCH</p>	 <p>EARBUDS</p>
Cell Type	Pouch	Pouch	Pouch	Small Pouch	Button
Voltage (V)	4.2-4.4	4.2-4.4	4.2-4.4	4.2-4.4	4.2-4.4
Maximum Energy Density (Wh/L)	>200	>200	>200	>200	>200
Maximum Cycle Life Retention $\geq 80\%$	1C $\geq 1000$	1C $\geq 1000$	1C $\geq 1000$	1C $\geq 1000$	1C $\geq 1000$
Operating temperature (°C)	-130	-130	-130	-130	-130

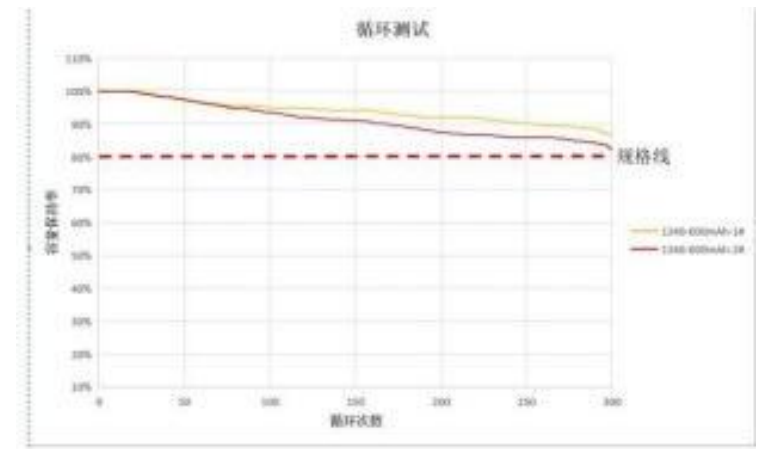
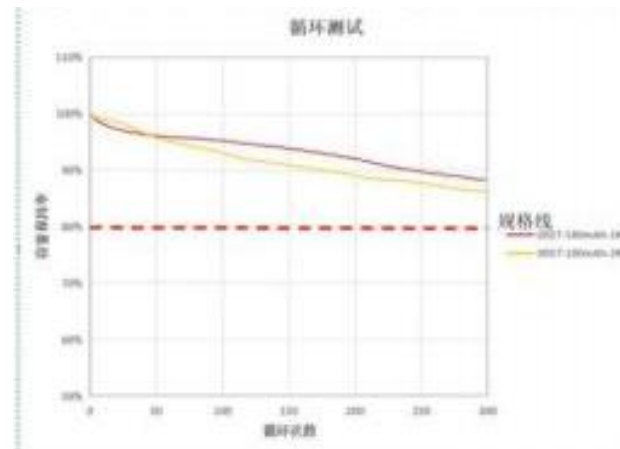
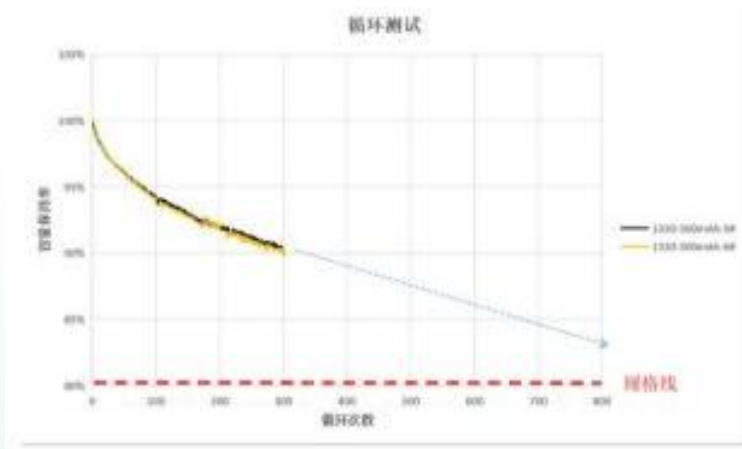
# Rigorous Testing & Cycle Life

## Exceptional Longevity

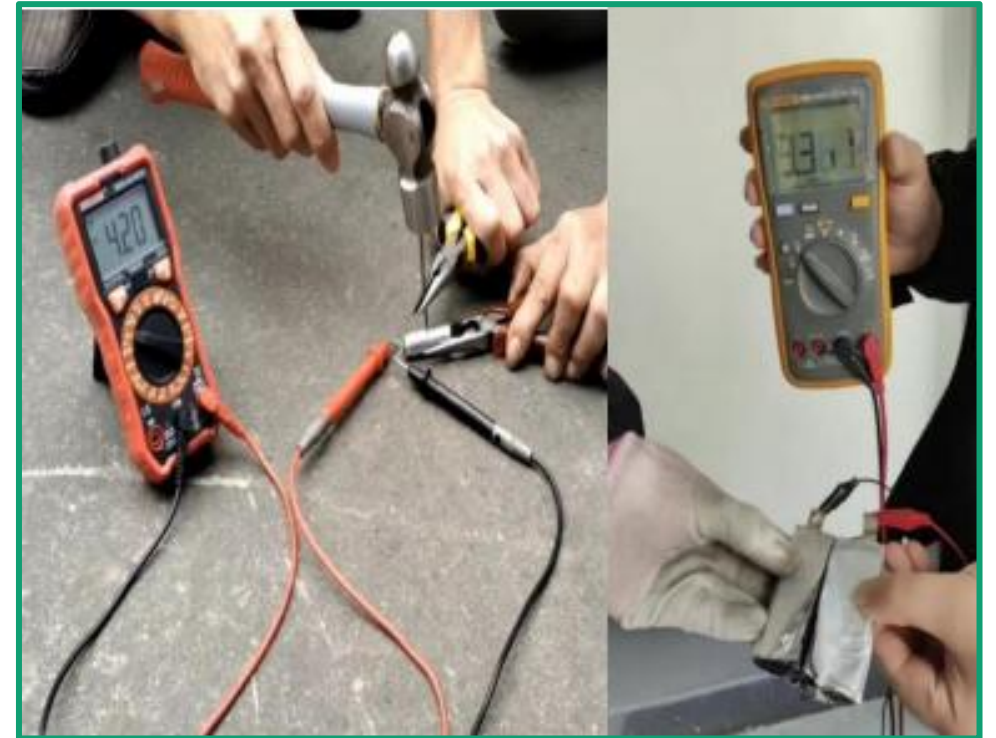
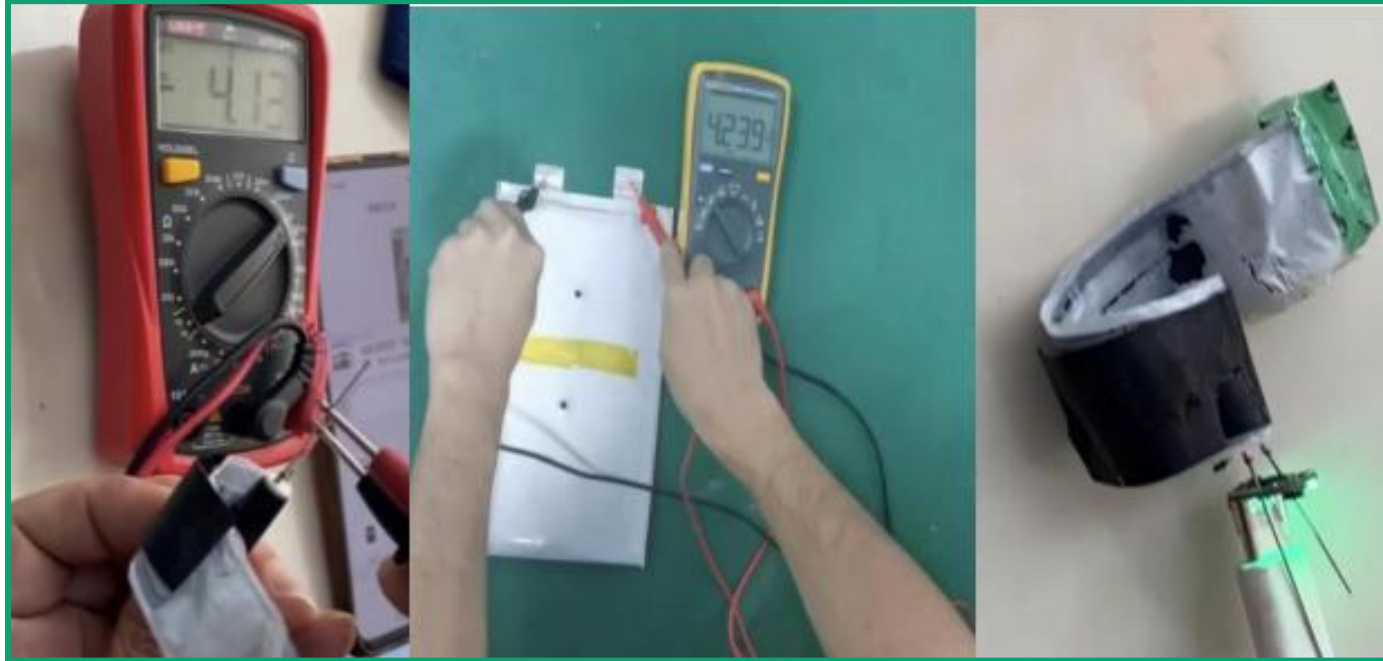
Our batteries undergo strict cycle testing to guarantee long-term stability and minimal capacity degradation.

- ✔ **Test Method:** 23°C, 0.5C constant current/voltage charge to 4.2V (cutoff 0.05C), 0.5C discharge to 2.7V.
- ✔ **Models Tested:** 09270-180, 13300-300, 13400-600.

- 🎯 **Initial Results:** 88% - 89% capacity retention after 300 cycles.
- 🎯 **Projection:** Attenuation slows down significantly; projected to easily meet **80% capacity at 800 cycles.**



# Product Test

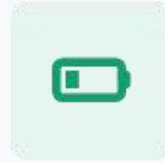


# Manufacturing Process



## 1. Pole Piece Making

Batching → Coating → Rolling →  
Slitting



## 2. Cell Making

Winding/Shelling → Baking →  
Assembly/Injection → Sealing →  
Cleaning → Sleaving



## 3. Post-Processing

Formation → Aging → Capacity Grading  
→ Testing → Packaging

# Advanced Production Equipment


We rely on top-tier, precision machinery to ensure the consistency and quality of our lithium battery production.

- ⚙️ **Die-Cutting:** Blade die-cutting, intermittent, and high-speed hardware die-cutting machines.



# Advanced Production Equipment

We rely on top-tier, precision machinery to ensure the consistency and quality of our lithium battery production.

 **Stacking:** Lithium metal specialized stackers, type 300 dual-station automatic, high-speed dual-station, and integrated cut-stack machines.



# Advanced Production Equipment

We rely on top-tier, precision machinery to ensure the consistency and quality of our lithium battery production.



**Welding & Packaging:** Fully automated welding and sealing lines.



# Advanced Production Equipment

We rely on top-tier, precision machinery to ensure the consistency and quality of our lithium battery production.

 **Welding & Packaging:** Fully automated welding and sealing lines.



# Advanced Production Equipment

We rely on top-tier, precision machinery to ensure the consistency and quality of our lithium battery production.

↻ **Winding:** Precision automatic winding machines.

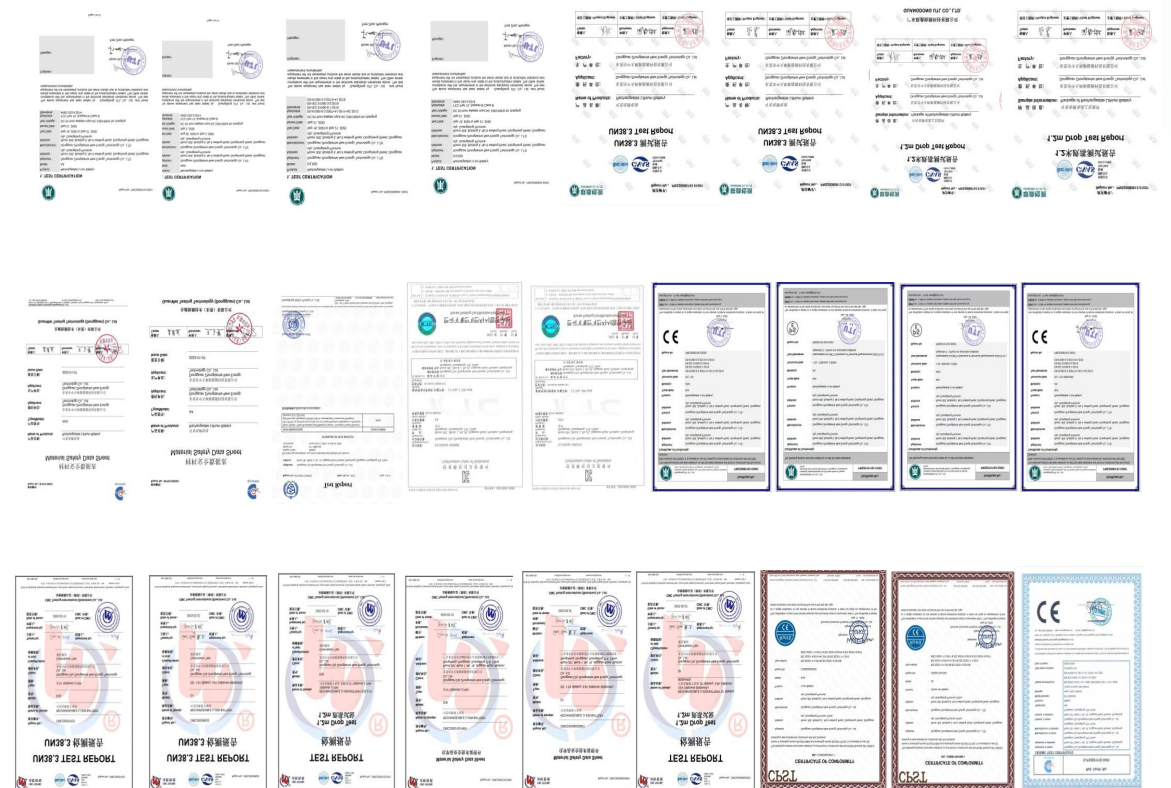


# Global Certifications

## Committed to Safety & Compliance

Our full range of products meets the strict transport and safety standards required for international distribution. We prioritize quality assurance at every step.

FCC USA	UKCA UK	CE EU	ROHS Global
PSE Japan		UN38.3 Transport	



# Prism Mark

Powering the future with smart, reliable energy solutions.



Hefei Lengqi Fanglue International Trade Co., Ltd.



F4 Bldg, Phase II Innovation Ind. Park, High-tech Zone, Hefei