



# BATTERY TESTING SERVICE

## 电池测试服务



“S”标准·新生活  
Standard for Life

[www.waltek.com.cn](http://www.waltek.com.cn)



## 电池产品检测认证服务/Testing And Certification Services For Battery

随着电子、信息及通讯等产品均朝向无线化、可携带化方向发展，对于产品的各项高性能组件也往“轻、薄、短、小”的目标迈进，电池做为最佳的电源供应得到了广泛的运用，但近年来全球性电池召回事件引发了国际市场对电池产品安全性的担忧；同时，各国的市场监督机构加大了对电池产品的监管力度，使国内电池生产商面临提升产品品质的挑战。

近年来沃特检测逐渐加强了对电池测试方面的投入，完善了各种电池测试仪器，为客户提供全面电池测试和认证服务，确保电池的品质能满足国际标准要求。

Waltek将会成为电池生产商和企业解决认证问题的合作伙伴，Waltek能进行符合各国认证要求的电池测试，用专业的技术和快捷有效的服务，为您打开国际电池的市场之门。



### 关于Waltek

沃特测试是具有多年产品检测经验的专业第三方检测机构，实验室严格按ISO/IEC17025的要求建立，并取得中国合格评定国家认可委员会(CNAS)认可资质、质量技术监督局实验室资质认定(CMA)的资质、国际电工委员会(IECEE)的CB测试实验室资质(CBTL)以及国家质检总局进出口商品检验鉴定业务(AQSIQ)许可资质。同时，公司还是香港机电工程署EMSD认可核证团体、美国国家实验室自愿认可程序NVLAP的认可实验室，美国联邦通讯委员会FCC认可实验室、美国消费品安全委员会CPSC认可实验室、美国能源之星Energy Star认可实验室、美国加州能效CEC注册认可实验室，加拿大工业部IC认可实验室，ELI全球高效照明产品认证认可实验室，是UL、Intertek(ETL-SEMKO)、CSA、TÜV Rheinland、TÜV SÜD等国际权威认证机构的战略合作伙伴和数据认可实验室。

Along with the wireless and portable development for electronic, information and communication products etc., the battery as the best power supply has been widely used as per the high-performance components of products are striding forward towards the goal of light, thin, short, small".But in recent years, the global battery recall triggered the international markets' concerns about the safety of battery products. Meanwhile, national market supervision bodies have increased the regulation of the battery products, so the domestic battery manufacturer has to face the challenge of improving the product quality.

In recent years, Waltek services has gradually strengthened the investment for battery test service and improved the battery test equipment. And provide customers with comprehensive service of battery testing and approval to ensure that the quality of battery complies with the international testing standards.

Waltek service will become a battery manufacturer and business partners to resolve the approval problems. Waltek will be able to conduct the battery testing which meets national approval requirements. With professional technology, fast and efficient service, Waltek can help you to open the door of battery international market.

### About Waltek

Waltek Services Test Group Ltd. is a professional third-party testing and certification organization with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by CNAS (China National Accreditation Service for Conformity Assessment) AQSIQ, CMA and IECEE for CBTL. Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, NVLAP(National Voluntary Laboratory Accreditation Program), FCC(The Federal Communications Commission), CPSC(Consumer Product Safety Commission), CEC(California energy efficiency), IC(Industry Canada) and ELI(Efficient Lighting Initiative). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as UL, Intertek(ETL-SEMKO), CSA, TÜV Rheinland, TÜV SÜD, etc.



公司设有多个具有国际先进设备和测试功能齐全的实验室，可提供销往世界各国的产品的测试及认证服务，确保产品在安全、电磁兼容、无毒性、能效及可靠性等方面均达到国际标准要求。为使客户能直接方便地

得到本地化服务，实现我们提供高素质服务的承诺，公司在华南及华东(深圳、东莞、佛山、苏州、宁波)均设立产品测试实验室，真诚为广泛客户提供精准的测试及技术支持服务，积极跟随客户需求，充分展现沃特“一站式”的服务理念。

公司拥有经验丰富的业界资深工程师及客户服务代表，满足客户的多项测试需求，并提供精湛的技术指导、整改对策服务；同时可透过公司的全球合作伙伴提供全球认证服务，协助客户的产品顺利推广应用至全球市场。

## Waltek企业荣誉

- 国家高新技术企业
- 美国UL 第三方测试数据认可实验室
- 中国合格评定国家认可委员会CNAS认可
- 美国INTERTEK ETL SEMKO RTL level 3认可实验室
- 广东省质量技术监督局资质认定计量认证证书 (CMA)
- 德国TUV 莱茵数据认可检测实验室
- 国家质量监督检验检疫总局进出口商品检验鉴定机构资格证书
- 加拿大标准协会CSA认可测试实验室
- 香港机电工程署认可核证团体
- 顺德职业技术学院校外实训基地
- 香港机电工程署认可核证团体
- 佛山职业教育校企合作联盟常务理事单位
- 美国环境保护署EPA 认可能源之星检测实验室
- 佛山市服务外包行业协会理事单位
- 美国消费品安全委员会CPSC 认可检测实验室
- 佛山市顺德区家电商会会员单位
- 全球高效照明产品ELI认证认可检测实验室
- 光亚·法兰克福阿拉丁网站，新世纪LED网官方合作检测机构
- 美国加利福尼亚州能效认证认可检测实验室



There are several laboratories in our company which are equipped with advanced equipments for fully testing. It can provide testing and certification services for products exported around the world, also it can ensure that the products reach international standards in aspects of safety, electromagnetic compatibility, virulence, energy efficiency, reliability and so on. To enable our customers can get local services more directly and conveniently, and to realize our promise to provide more high quality services. Our company has set up product testing labs in South China and East China (Shenzhen, Dongguan, Foshan, Suzhou and Ningbo). We can provide our clients with accurate test and technical support services in good faith, and actively follow customer demand. These can fully demonstrate Waltek Services concept -- "One-stop Services" .

Our company has many experienced engineers and customer service representatives to meet our customer's demand for a number of tests and provide superb technical guidance and modification service; At the same time we can provide global certification services by our global partners to help our customer's products to successfully extend to the global market.

## Waltek Enterprise Honor

1. National high-tech enterprises
2. Authorized third-party Lab by American UL
3. Authorized by CNAS
4. Authorized Lab by INTERTEK ETL SEMKO RTL level3
5. Authorized by CMA
6. Authorized testing Lab by TUV Rheinland
7. Licensed of Import and export commodity inspection appraisal organization by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China.
8. Authorized testing Lab by CSA
9. Recognized certification body by EMSD.
10. Off-campus practice base of Shunde Polytechnic.
11. Standing director member of Foshan vocational education university-enterprise cooperation alliance.
12. Authorized energy star testing lab by United States Enviromental Protection Agency.
13. Standing director member of Foshan Service Outsourcing Industry Association.
14. Authorized testing Lab by United States Consumer Product Safety Commission.
15. Member of Shunde Home Appliacne Chamber of Commerce.
16. Certification and accreditation testing Lab by ELI.
17. Official Cooperation testing institutions of Guang ya Frankfurt Aladdin Webside and new century LED Website.
18. Certification and accreditation testing Lab by CPUC.

## 电池产品测试认证服务/Testing And Certification Services For Battery

电池产品的测试范围:

可充电电池

-镍镉电池

-镍氢电池

-锂离子电池

-铅酸蓄电池

动力电池

储能电池

燃料电池

原电池

Scope of battery product:

Rechargeable Battery

-Nickel-cadmium battery

-Nickel-metal hydride battery

-Lithium ion battery

-Lead-acid battery

Power Battery

Storage Battery

Fuel Battery

Primary Battery

### ★ 电池主要测试项目

环境测试：高空低压模拟、温度循环、热滥用、温度储存、盐雾、燃烧喷射、洗涤

机械测试：振动、机械冲击、跌落、挤压、重物撞击、针刺

安全可靠性测试：高温/常温外部短路、过充电、强制放电、强制内部短路

电气测试：额定容量、多倍率放电、荷电保持能力、循环寿命、内阻、过压充电、过流充电、欠压放电、恒功率放电、静电放电测试、反向充电

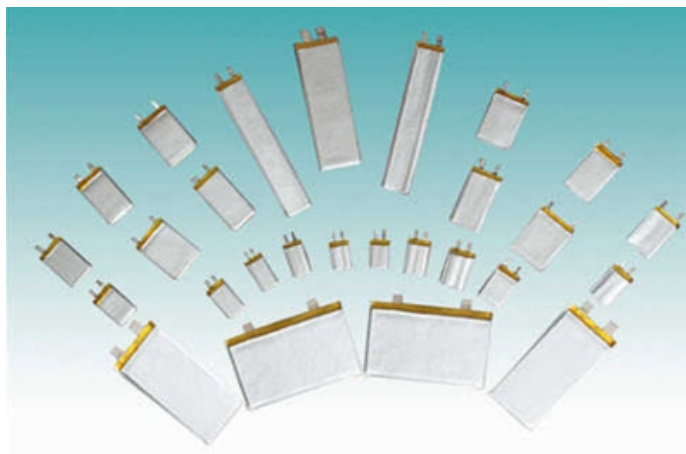
### ★ The main Testing Items of Battery

Environmental testing: Low pressure / Temperature cycling/ Thermal abuse/ Temperature Storage/ Salty Fog /Projectile /Launder ometer

Mechanical testing: Vibration/Mechanical shock/Drop test/Crush / Impact/ Nail Penetrate

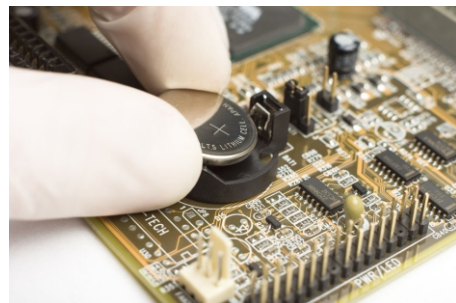
Safety reliability testing: High or normal temperature external short-circuit/ Over Charge/Forced Discharge/Forced Internal Short-Circuit

Electric testing: Rated capacity/Different rate discharge Performance/Charge retention/Cycling life/ Internal resistance/ Overvoltage charge/Overcurrent charge/Undervoltage discharge/ Constant power discharge/ESD/Reverse charge



## ★一般电池电芯检测标准 Battery pack and cell testing standard

认证项目Item	检测标准Test Standard	适用产品Applicable Products
CB	IEC 62133	二次电池、电芯 Secondary battery pack and cell
Transportation	UN 38.3	锂离子电池Lithium-ion batteries and cells
CQC	GB 31241	锂离子电池Lithium-ion batteries and cells
GS Mark/CE	EN 62133	电池、电芯 Battery pack and Cell
CTIA	IEEE 1725, IEEE1625	通信设备电池、电芯 Rechargeable Batteries for Cellular Telephones
KC	K 62133	电池、电芯 Battery pack and Cell
PSE	JIS C 8712, JIS C 8714 Appendix9	锂离子电池Lithium-ion batteries and cells
UL	UL1642	锂离子电池Lithium-ion batteries and cells
UL	UL 2054	家用与商用电池 Household and Commercial batteries
GOST/EAC	IEC 62133	二次电池、电芯 Secondary battery pack and cell
BSMI	CNS 15364, IEC 62133	电池、电芯 Battery pack and Cell



## 镍电测试标准 / Nickel Battery Testing Standard:

IEC 61951 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Portable sealed rechargeable single cells Part 1: Nickel-cadmium; Part 2:Nickel-metal hydride

含碱性或非酸性电解液的二次电池和电芯-便携式密封可再充电电芯 第1部分：镍镉电池；第2部分：镍氢电池

## 铅酸蓄电池测试标准 / Lead-acid Battery Testing Standard:

IEC60896 Stationary lead-acid batteries 固定型铅酸蓄电池

IEC 60095 Lead-acid starter batteries 启动用铅酸蓄电池

IEC 61056 General purpose lead-acid batteries (valve-regulated types) 通用的铅酸蓄电池

## 其他 / Others:

IEC 61960 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Secondary lithium cells and batteries for portable applications 含碱性或非酸性电解液的二次电池和电芯-便携设备用的二次电池和电芯

IEC 60086 Primary batteries 原电池

精密的仪器/Precision Instruments



充放电系统  
CC/CV 恒流恒压充电  
精密度0.0001  
Battery Charge-discharge Tester  
Constant Current and constant Voltage  
Accuracy 0.0001



冲击台  
多个冲击圈  
峰值加速度125g至175g  
Shock Tester  
More chosen shock ring  
Peak acceleration 125g~175g



快速升降温试验箱  
30min内高低温转换  
Rapidly rising-descending  
temperature test chamber  
Change from 72°C to -40°C in 30 min



挤压试验机  
精度0.001  
压力、位移、电压可同时监测  
Crust testing machine  
Accuracy:0.001  
Force/displacement/  
voltage Monitored at same time



外部短路试验箱  
内阻:80±20ohm  
温度可控  
External short-circuit testing machine  
Internal resistance: 80±20 ohm  
Temperature controlled



撞击试验机  
高度可调  
重锤9.1kg/10.0kg  
Impact tester  
Height adjustable  
Heavy punch: 9.1kg/10.0kg



振动系统  
正弦扫频、随机扫频  
频率、加速度、位移可调  
Eletromagnetic Vibration Tester  
Sine frequency sweep/  
Random frequency sweep  
Frequency/Acceleration/  
displacement adjustable



模拟高空低压试验箱  
保压≥98%  
自动补压  
Simulated altitude low pressure  
test chamber  
Pressure maintaining≥98%  
Automatic pressure



跌落试验机  
1.2m高度  
6个方向跌落物品  
Drop test machine  
1.2m height  
Free fall from six orientation





热冲击试验箱  
速率：5±2°C/min  
温度、时间可实时监控  
Thermal shock test chamber  
Rate:5±2°C/min  
Temperature &Time real time monitor



强制内部短路试验机&手套箱  
电压实时监控≥100次/s  
压力可控可调  
Forced internal short circuit test  
machine &Golve box  
Real-time monitoring voltage  
≥100 times per second  
Voltage can controlled and adjusted



实验室  
Testing Lab

## 沃特服务/Our Services

### 技术支持:

资深工程师配以精良的设备，实验室在参加国内、国际实验室的比对工作以及实验室内部盲样考核、平行样考核中均取得满意的好成绩。我们与全球众多国家的认证机构皆保持良好的合作关系，随时做技术上的研讨及沟通。

### 价格支持:

精良的实验设备、资深的行业人才和“关注客户、致力服务”的服务理念，成就了品牌的专业形象，得到了国内外客户和同行的认可，获得了良好的信誉和稳定的市场。有实力为您的产品获得各国认证提供全方位一站式的服务，助您的产品放心的行销全球。在价格上比同行更有优势。

### 时间支持:

公司一直致力于提供快捷、专业、精确的检测服务，为客户提高市场竞争力，持续创造最大价值。简化客户的送样到报告流程，省去许多评估、等待、转述的时间，在最短的时间里完成相关测试项目，为客户提供最快捷的服务。

### 服务支持:

一切从客户利益角度出发，耐心地为每一位客户解答各类疑问，同时解决好检测过程中的各种问题，并且严格遵守商业保密承诺！

希望我们精湛的技术、丰富的经验、高效的速度、实惠的价格以及优质的服务，为您打开国际电池市场之门！

### Technical Support:

Senior engineers with excellent equipment, the laboratory has achieved satisfactory results in the compare testing, blind sample test and parallel sample test during the domestic and international laboratories. We maintain a good working relationship with the certificate bodies of various countries around the world. We keep ready to have technical discussion and communication any time.

### Price Support:

Excellent test equipment, Senior professional talents and service concept of "Focus on customer, Commit to service" have led professional Waltek brand. And it has recognized at home and abroad customers, also peers. Waltek gained good reputation and stable market. Waltek has the strength to provide one-stop service to obtain national approvals for your products and assists your products enter into global marketing smoothly. Good offer in peer.

### Lead time Support:

The company has been committed to quick, professional and accurate services, provides customers with competitiveness of market, continues to create maximum value for customers. To simplify the procedure from sending samples to report issued. To save a lot time in evaluation, waiting, and reporting. We complete the testing soonest and provide efficient service.

### Service Support:

All is from the customer's interest. We reply all the queries from each client patiently and resolve all the problems during testing. In addition, we stick observe the business secrecy commitment.

Hope our excellent technology, high efficient speed, affordable prices and quality service can assist you to open the door of international battery market.





## 沃特检验集团

Waltek Testing Group Co.,Ltd.

### 沃特深圳 / Waltek Shenzhen

广东省深圳市宝安区新安街道兴东社区留仙三路6号鸿威工业区厂房B栋、C栋B101

B101,Hongwei Industrial Park,No. 6,Liuxian 3rd Road,  
Xin'an Street,Bao'an District,Shenzhen 518105,  
Guangdong,China.

Tel: +86-755-8355 1033 Fax: +86-755-8355 2400

### 沃特东莞 / Waltek Dongguan

广东省东莞市厚街镇莞太路厚街段77号

No. 77, Houjie Section, Guantai Road, Houjie Town,  
Dongguan 523000, Guangdong,China.

Tel: +86-769-2267 6998 Fax: +86-769-2267 6828

### 沃特佛山 / Waltek Foshan

广东省佛山市顺德区陈村镇顺联国际机械城2座二楼

2/F,2nd Building,Sunlink International Machinery City,Chencun  
Town,Shunde District,Foshan 528313,Guangdong,China.

Tel: +86-757-2381 1398 Fax: +86-757-2381 1381

### 沃特中山 / Waltek Zhongshan

广东省中山市小榄镇民安北路40号六楼

6F, No. 40 Minan North Road, Xiaolan Town,Zhongshan City,  
Guangdong,China.

Tel: +86-760-2258 6999 Fax: +86-760-2258 9668

### 虹彩检测 / HCT-Test

广东省深圳市龙岗区龙岗街道新生社区莱茵路30-9号1-3层  
(天基工业园B栋厂房)

Building B, Tianji Industrial Park, Floor 1-3 No.30-9 Laiyin Road,  
Xinsheng Community, Longgang Street, Longgang District, Shenzhen,  
Guangdong,China.

Tel: +86-755-8461 6666 Fax: +86-755-8959 4308

### 沃特苏州 / Waltek Suzhou

江苏省苏州市吴中区吴中大道4499号

No. 4499 Wuzhong Avenue, Wuzhong District,  
Suzhou 215000, Jiangsu China.

Tel: +86-512-6655 2666 Fax: +86-512-6603 2668

### 沃特宁波 / Waltek Ningbo

浙江省宁波市高新区凌云路1177号011幢6号1层3区、007幢1号楼5层1区

Zone 3, 1/F, No.6, Building 011; Zone 1, 5/F, No.1, Building 007,  
No.1177 Lingyun Road, Ningbo National Hi-Tech Zone,

Ningbo 315040, Zhejiang,China.

Tel:+86-0574-2791 7833 Fax:+86-0574-8386 8018

### 沃特检验 / Waltek Testing

广东省深圳市宝安区70区留仙二路鸿威工业园A栋一楼

1/F,Unit A,Hongwei Industrial Park,Liuxian 2nd Road,  
Baoan,ShenZhen 518105,Guangdong,China.

Tel: +86-755-3366 3308 Fax: +86-755-3366 3309

全国办事处：广州 上海 重庆 成都 厦门 武汉 长沙

微信公众号：



全国免费客服热线：

**400-840-2288**

info@waltek.com.cn

www.waltek.com.cn

出版日期：2022年11月