

# Product Specification

Number: L-KLS5-04-CR14505S-1800mAh

Name: Primary Lithium Battery

Date: 2026-03-02



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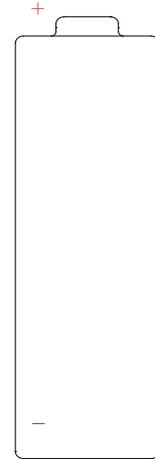
ADD : NO. 8-1, RONGXIA RD. XIAPU SHANQIAN  
INDUSTRIAL ZONE BEILUN NINGBO ZHEJIANG.

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Part name	Primary Lithium Battery	Date	2026-03-02
Part number	L-KLS5-04-CR14505S-1800mAh	Edition	V1
Department		Page	3 / 6

# Primary Lithium Battery CR14505S

3.0V [Li-MnO<sub>2</sub>]  
AA-size bobbin cell



## BENEFITS

- High Voltage Response, Stable During Most of the Lifetime of the Application
- Energy Density up to 830Wh/L
- Wide Operating Temperature Range (-40 °C ~ +85 °C)
- Low Self-discharge Rate (less than 1% per year after 1 year of storage at +25 °C)

## KEY FEATURES

- Optimized Battery Structure, Full Discharge Capacity
- Long Endurance
- No Passivation
- GB 8897.4-2008、IEC 60086.4:2014 and RoHS

## MAIN APPLICATIONS

- Security System
- Smart Metering
- RFID and Tracking System
- Wireless Transmitting
- Smart Home Devices
- Military Devices

## References Data

### Electrical characteristics

Open circuit voltage (at 23±2°C) ≥3.10V

Nominal capacity 1800mAh  
(At +25°C, battery discharged at continuous current 1mA until voltage reaches cut-off voltage 2.0V. The capacity can vary at different temperature, discharge current or cut-off voltage.)

Maximum continuous current 10mA  
(At +25°C, 2.0V cut-off, battery discharged for minimum 50% of rated capacity.)

Maximum pulse discharge current 100mA  
(At +25°C, 2.0V cut-off, battery discharged for minimum 50% of rated capacity with max pulse for 3 seconds after 27 seconds break. The discharged capacity may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions, consult KLS.)

Storage (recommended) ≤+30°C  
(For more severe conditions, consult KLS.) ≤75%RH

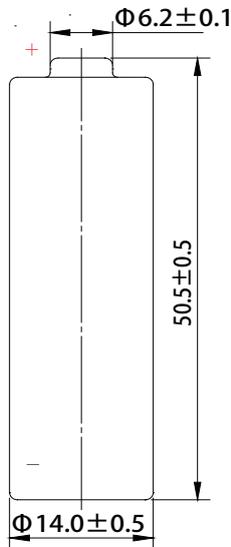
Operating temperature range -40°C~+85°C  
(Operation above ambient temperature may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult KLS.)

Part name	Primary Lithium Battery	Date	2026-03-02
Part number	L-KLS5-04-CR14505S-1800mAh	Edition	V1
Department		Page	4 / 6

### Physical characteristics

Diameter	14.0±0.5mm
Height	50.5±0.5mm
Typical weight	22.0g
Li metal content	0.70g

MSDS as per request  
 Diode (1N4007, 1N5819)  
 PTC (SRS175...)  
 Tag, wire, connector, etc. available



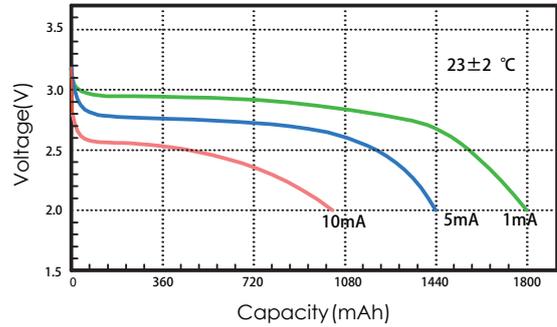
Dimensions in mm (GB1804-m)

### WARNING:

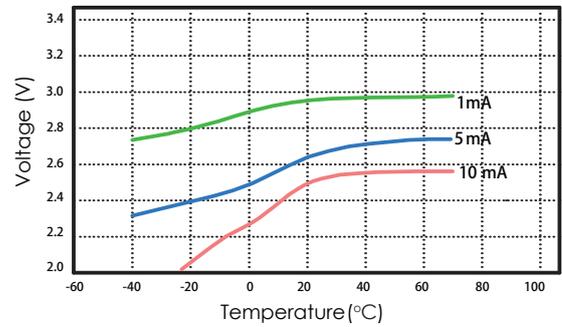
- Do Not Short Circuit
- Do Not Recharge
- Do Not Puncture
- Do Not Crush
- Do Not Dismantle
- Do Not Incinerate
- Do Not Mix New and Used Batteries
- Do Not Heat Above 100°C

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/specifications are subject to modification without notice. Contact KLS for the latest information

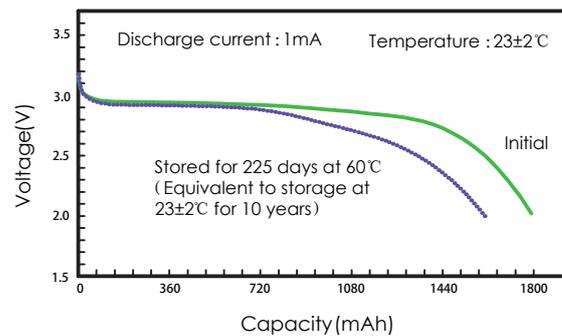
1. Typical discharge profiles at 23±2°C (at mid-discharge)



2. Voltage plateau versus Current and Temperature (at discharge stable phase)



3. Storage characteristics



Part name	Primary Lithium Battery	Date	2026-03-02
Part number	L-KLS5-04-CR14505S-1800mAh	Edition	V1
Department		Page	5 / 6

### **Matters Needing Attention 注意事项**

Strictly observe the following matters needing attention. KLS will not be responsible for any accident occurred by handling outside of the precautions in this specification.

您必须严格遵守下述电池使用注意事项。对于没有按照以下注意事项所造成的任何意外事故，KLS 不承担任何责任。

### **! Caution 注意**

- ✓ Use Nickel-plated iron or Nickel-plated stainless steel for the terminals that contact the battery.
- ✓ 使用镀镍铁或镀镍不锈钢的端子与电池接触。
- ✓ Make sure that terminal contact pressure is 50g minimum, for a stable contact.
- ✓ 确保电池端接触压力最小为 50g，以保证稳定接触。
- ✓ Keep the battery and contact terminal surfaces clean and free from moisture and foreign matter.
- ✓ 保持电池和接触端表面清洁、无水分或异物。
- ✓ Before inserting the battery, check the battery contact terminals to make sure they are normal, not bent or damaged. (Bent terminals may not make good contact with the battery or may cause short circuit.)
- ✓ 在安装前，检查电池端子，确保其正常、无弯折或损坏。（弯的端子可能造成接触不良或短路）
- ✓ When the batteries are piled up in a disorderly way, their positive and negative terminals may short-circuit, consuming some batteries while charging others, causing explosion.
- ✓ 当电池无序堆放时，正负极端子可能会发生短路、电池间的充放电、甚至造成爆炸。
- ✓ Lithium batteries that are almost exhausted can output a voltage that is almost the same as that of a new battery: Please does not judge a battery only with a Voltmeter. Do not mix batteries of different types and brands, or new and used batteries. We are well informed that battery pack should be assembled with single batteries of similar voltage, capacity and inner resistance.
- ✓ 电量即将用尽的锂电池释放出的电压几乎与新电池一样：请不要仅依据电压示数判断电池的新旧程度。请勿将不同类型或品牌的电池混合使用。
- ✓ Lithium batteries need a period of time to recover their normal voltage after even a slight short circuit. Therefore, if the battery is short-circuited, wait an adequate long time for batteries to recover before measuring their electrical characteristics.
- ✓ 锂电池在发生轻微短路后，需要一段时间才能恢复正常电压。因此，如果电池被短路，请先等待电池恢复原电压，再对其参数进行测量。
- ✓ Use a high impedance (1M or higher) voltmeter to measure battery voltage.
- ✓ 请使用高电阻(1M 或以上)测量电池电压。
- ✓ Add fuse between negative and connector. Once short circuit, it will cut immediately and permanently.
- ✓ 请在负极和插头之间加入熔丝。一旦发生短路，熔丝会立即、永久切断电路。
- ✓ Do not contact terminals with conductive i.e. metal, goods. Keep batteries in non-conductive, i.e. plastic, trays.
- ✓ 请不要用金属等导电物体接触电池正负极。将电池置于塑料等不导电的物体周围。
- ✓ Reduce impact to insulation layer from vibration, but the dimension will enlarge.
- ✓ 减少震动对电池绝缘层的冲击，否则电池尺寸将会扩大。
- ✓ Battery characteristics vary with type and grade, even when batteries are the same size and shape. When replacing batteries with new ones, be sure to carefully check the symbols and numbers on them.
- ✓ 电池性能随类型和等级的变化而有所不同，甚至同一尺寸和形状的电池，性能也不相同。当用新电池替换旧电池时，请认真核对电池上的标志和参数。

Part name	Primary Lithium Battery	Date	2026-03-02
Part number	L-KLS5-04-CR14505S-1800mAh	Edition	V1
Department		Page	6 / 6

### **! Danger 危險**

- ✓ DO NOT recharge, short-circuit, disassemble, deform, heat or place the battery near a direct flame. This battery contains flammable materials such as lithium and organic solvent and performing any of the above actions could cause it to ignite explode or become damaged.
- ✓ 请勿对电池进行充电、短路、拆解、或使电池变形；请勿加热或置于明火附近。电池内含有锂、有机溶剂等易燃材料，上述任何操作都可能导致电池损坏甚至发生爆炸。
- ✓ DO NOT over-discharge the battery. In case the battery is over-discharged when connected with exterior power source or connected with other batteries in series, explosion may occur.
- ✓ 请勿对电池进行过放电。电池与外部电源链接或与其他电池串联可能会引起爆炸。
- ✓ Keep this battery out of the reach of children. If it is swallowed, contact a physician immediately.
- ✓ 请将电池远离儿童。若发生吞咽，请立即就医。
- ✓ When storing a battery or throwing it away, be sure to cover it with tape. If the battery is contacted with other metal objects, it could cause fire or become damaged.
- ✓ 当贮存或丢弃电池时，请务必对电池进行包裹处理。若电池与其他金属物品接触可能造成电池损坏或引发火灾。

### **! Warning 警告**

- ✓ Thoroughly read the user's manual before use, inaccurate handling may cause leakage, heat, smoke, explosion, or fire, causing device trouble or injury.
- ✓ 在使用之前请详细阅读操作说明书，不适当的操作可能引起电池变热、着火、爆炸、毁坏或电池容量的衰减。
- ✓ Insert the battery with the "+" and "-" ends correctly oriented.
- ✓ 在装入设备时注意电池的正负极不要反装。
- ✓ If the battery is used together with new batteries, do not use it with a different type battery.
- ✓ 禁止把电池同干电池或其它原电池或者新旧电池一起使用，也不要同不同包装、不同型号或不同品牌的电池一起使用。
- ✓ Do not solder the battery directly. Protect the welding point and connector.
- ✓ 禁止直接对电池进行焊接。对焊点和插头做好保护措施。
- ✓ The battery should be preferably stored in dry and cool conditions. Avoid storing the battery in direct sunlight, or in excessively hot and humid place. Storage at high temperature must be avoided to preserve the battery life time.
- ✓ 电池应贮存在通风干燥处。请勿将点出贮存在阳光直射下或高温高湿环境中。为保持电池使用寿命，请避免在高温中贮存电池。

KLS reserves the final explanation. Please use battery strictly according to specification. KLS will not be responsible for any inappropriate operation. KLS keeps the right to change product specifications without previous notice. If any question, please consult with the manufacturer.

KLS 保留最终解释权。请严格按照规范使用电池。KLS 对任何不当操作将不负责。KLS 保留修改产品规格书不另行通知的权利。如有任何问题,请咨询制造商。