

T14500 Datasheet

1、SCOPE

Specifications for Tenergy Li-ion 14500

- 1.1 This Specification applies to the Li-ion rechargeable Battery HCT14500.
- 1.2 This Specification shall be applied to single cell.

2、TYPE AND MODEL

2.1 TYPE

Li-ion Rechargeable Battery

2.2 MODEL

T14500(insulation tube is available upon request)

3、SPECIFICATION

Item	Specification	
	Standard	Test condition
3.1 Nominal capacity	800 mah	Discharge current 0.2CA, cut-off voltage 2.75V
3.2 Nominal voltage	3.7 V	
3.3 Charge cut-off voltage	4.2 V	
3.4 Discharge cut-off voltage	2.75 V	
3.5 Max current of constant charge	2C ₅ A	
3.6 Max current of constant discharge	2C ₅ A	
3.7 Standard weight	20.0±0.5 g	Cell only
3.8 Operating temperature range	Charge	0 °C ~+45 °C
	Discharge	-20 °C ~+60 °C

4、DIMENSION& APPEARANCE

4.1 DIMENSION

Diameter : 14.1±0.2 mm

Length : 48.7±0.5 mm

4.2 APPEARANCE

There shall be no defects such as remarkable scratches, leakage or deformation.

5、PERFORMANCE

5.1 STANDARD TEST CONDITION

Test shall be carried out at 23±2 °C temperature with 25% to 85% relative humidity, unless

Otherwise specified.

Humidity can be discharged unless it affects test result.

5.2 STANDARD CHARGE

Charge the cell with the constant current of 0.2C₅A to 4.2 V, then charge with 4.2 V until the current approaching 0.01C₅A.

5.3 STANDARD DISCHARGE

Discharge the cell with the constant current of 0.2C₅A to the end-voltage 2.75V.

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8、 HANDLING INSTRUCTIONS

8.1 TEMPERATURE RANGE

*charging : 0 °C ~45 °C

*discharge : -20 °C ~60 °C

*storage : -20 °C ~45 °C

8.2 CHARGING

*The lithium-ion rechargeable battery must be charged with a maximum limit of voltage and current limit.

* Maximum limit voltage : 4.25V

*Maximum charging current : 2C₅A

8.3 DISCHARGING TURN ON ELECTRICITY THE ANNOUNCEMENTS

* Maximum charging current : 2C₅A

* Avoid discharging below 2.75 V

8.4 OPERATION

*The battery must not be connected with the charger not exclusively designed for this battery

*The battery must not be applied for other equipment.

8.5 PROTECT CIRCUITS

The battery must possess three types of protective circuits follows.

8.5.1 Over-charging protective circuit

The over-charging protective circuit shall operate at 4.25 to 4.35 volts, lower voltage is desirable;

8.5.2 Over-discharging protective circuit

The over-discharging protective circuit shall operate at 2.3 to 2.75 volts, then discharge current must decrease to less than 10 micro amperes.

8.5.3 Excessive-current protective circuit

The protective circuit must operate at charging or discharging at over 3C current

9、 WARNING FOR USING THE LI-ION RECHARGEABLE BATTERY

9.1 Observe the following in using the battery

*Do not beat or throw into the fire.

* Do not disassemble

* Do not set up or leave in high temperature (80°C or more) in device

* Do not short positive (+) and negative(-) terminal with a metal

* Do not wet in the water

* Do not give a hard shock or drop

* Do not solder lead lines to the battery in direct

9.2 CHARGING

*Charge within the limits of 0°C to +45°C temperature

* Do not charge reversibly

* Charge only with charge exclusively designed for this battery

9.3 DISCHARGING

*Discharge with the limits of -20°C to +60°C temperature

*Avoid discharging below 2.75V , do not over-discharge below 1.0V

*Discharge within a designated current

*Use only as a power source for a designated device

9.4 STORAGE

*Discharge completely for the long-term storage

*Store dry and low temperature area , do not store in a high temperature area.