

Product : Battery Charger
Model No. : LBC-318
Brand : Camelion
Version No. : V1.0
Issue Date : 2018-12-10
Prepared : Jeff Liu
Reviewed : Dobby Wang
Approved : Rex Liu

Revision History

Revision	Date	by	Description of change
V1.0	2018.12.10	Jeff Liu	First issue

Schematic



General Description

This intelligent USB Charger is designed for recharging cylindrical 1.2V Ni-MH/Ni-Cd and 3.6/3.7V Li-ion batteries (10440--32650 etc) . It has four independent charging channels so that you can charge 1-4pcs batteries simultaneously. Automatically select the charging current and multiple charging protections ensure fast and safety charging. It's a wonderful, universal smart battery charger for different types and sizes cylindrical batteries which used in toys, shavers, flashlights, electronic cigarettes and so on.

1 Product Features

- 1.1 MCU controls four independent charging channels and automatically identifies battery types and selects the appropriate charging mode.
- 1.2 LCD screen displays the charging channel information, include charging status, battery types (Ni-MH or Li-ion), charging current, the present voltage of battery and recharged capacity.
- 1.3 Automatic selects charging currents 500mA/1000mA (1000mA charging current base on charging 1-2 Li-ion batteries and fixed on outer channels).
- 1.4 Over-charging, short circuit ,reverse polarity and over charging time protections.
- 1.5 The charger can activate 0V rechargeable batteries.

2 Electrical Performance and Tests

- 2.1 Input: DC 5V/2A
- 2.2 Charging Voltage: 1.48V, 4.2V
- 2.3 Charging Current :1000mA /500mA
- 2.4 Cut-off current (at CV mode) : less than 100mA
- 2.5 Standby current: less than 25mA

3 Mechanical Tests and Requirements

3.1 Drop test

Drop from a height of 3 feet onto a concrete floor covered with 1/8 inch vinyl tile. Drop 3 times total, each time on a different product surface. After that, test again the appearance, the insulation function, indicator function and electrical performance.

3.2 Surface

Smooth surface, no scratch, flashes, blot and crack. Hardware gets no rust, flashes and scratch.

3.3 Vibration Test

The frequency sweep for each item on different surface is 10 times under the condition of the frequency 10~55HZ and the amplitude 0.35mm. After that, test again the appearance, the insulation function, indicator function and electrical performance.

3.4 Salt Spray Test

Put the unit under temperature 35°C with 5% Na-Cl salt spray for 8 hours. Then take out to dry for 16 hours. After that, test again the appearance, the insulation function, indicator function and electrical performance.

4 Environmental Conditions

4.1 Operating Temperature

0°C to 40°C

4.2 Storage Temperature

-20°C to 65°C

4.3 Package Packing

Color box

4.4 Housing Texture

ABS

4.5 Net weight

172 ± 5g

4.6 Transportation

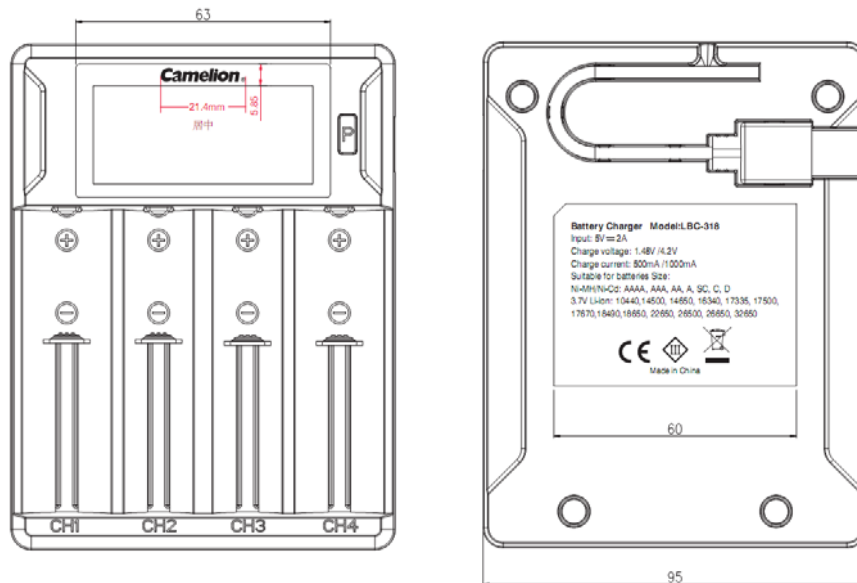
The unit should be protected against raining, watering and strong vibration

5 Safety Standards

EN60335-1

EN 60335-2-29

6 Drawings



Cautions

- This charge is only for charging cylindrical batteries, including 1.2V Ni-MH/ Ni-Cd and 3.6V/3.7V Li-ion batteries. Do not charge non-rechargeable batteries (e.g. zinc-carbon, alkaline, lithium).
- When charge with 5V USB AC adapter, 2A-current AC adapter is recommended.
- The charger may get hot during working a long time, handle with care.
- Please cut off the electricity and remove the battery from the charger when charging complete.
- This product is for indoor use only, the maximum operating temperature is 40°C.
- Do not expose the product to fire. Keep this product at a dry place and avoid exposure to moisture and sunlight.
- Do not disassemble or reassemble this product.
- This appliance is not intended for use by any person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.