EEMB LP603449-PCM

EEMB LP603449 3.7V 1100mAh Lithium Polymer Battery Instruction Manual

1. Product Overview

The EEMB LP603449 is a 3.7V 1100mAh Lithium Polymer (LiPo) rechargeable battery designed for various electronic devices. It features a JST 2.0mm connector and includes a Protection Circuit Module (PCM) for enhanced safety and reliability.

Image 1.1: EEMB LP603449 Lithium Polymer Battery with JST 2.0mm connector.

Key Features:

- **Voltage:** 3.7V (Nominal)
- **Capacity:** 1100mAh (Typical), 1000mAh (Minimum)
- **Connector:** JST-PHR-02 (2.0mm pitch)
- **Protection:** Integrated PCM for overcharge, over-discharge, overcurrent, and short-circuit protection.
- **Certifications:** UN 38.3 compliant.

2. Important Safety Information

Read and understand all safety instructions before using this battery. Failure to follow these instructions may result in fire, electric shock, explosion, or other hazards.

- Do not short-circuit, disassemble, deform, heat, or place the battery near direct flame.
- Strictly prohibit piercing the cell with sharp objects such as a needle.
- Do not charge or use the battery if it is punctured, damaged, bloated, expanded, swelling, or otherwise deformed. Stop using the battery if abnormal heat, odor, deformation, or abnormal condition is detected.
- Do not charge batteries unattended. Monitor the charging process.
- Keep away from flammable materials.
- Do not charge batteries with a higher voltage or current than specified.

- Avoid direct sunlight, high temperature, and high humidity.
- Do not keep batteries in heated temperatures above 60°C (140°F).
- Keep out of reach of children.

Image 2.1: Safety warnings and disposal information on product packaging.

3. Product Specifications

Detailed technical specifications for the EEMB LP603449 battery.

Specification	Value
Model Number	LP603449-PCM
Nominal Voltage	3.7V
Typical Capacity	1100mAh
Minimum Capacity	1000mAh
Weight	Approximate 22g (1.06 ounces)
Dimensions (W x L x H)	34.5 x 51 x 6.3mm (1.36 x 2.01 x 0.25 inches)
Connector Model	JST-PHR-02
Connector Pin Pitch	2.0mm
BMS Overcharge Voltage	4.28 ± 0.05 V

Specification	Value
BMS Overdischarge Voltage	2.4 ± 0.1 V
Max Charge Current	1100mA
Max Loading Current (peak value)	2A
Max Loading Current (constant)	1A
Charge Temperature	0 ~ 45°C
Discharge Temperature	-20 ~ 60°C
Battery Cell Composition	Lithium Polymer

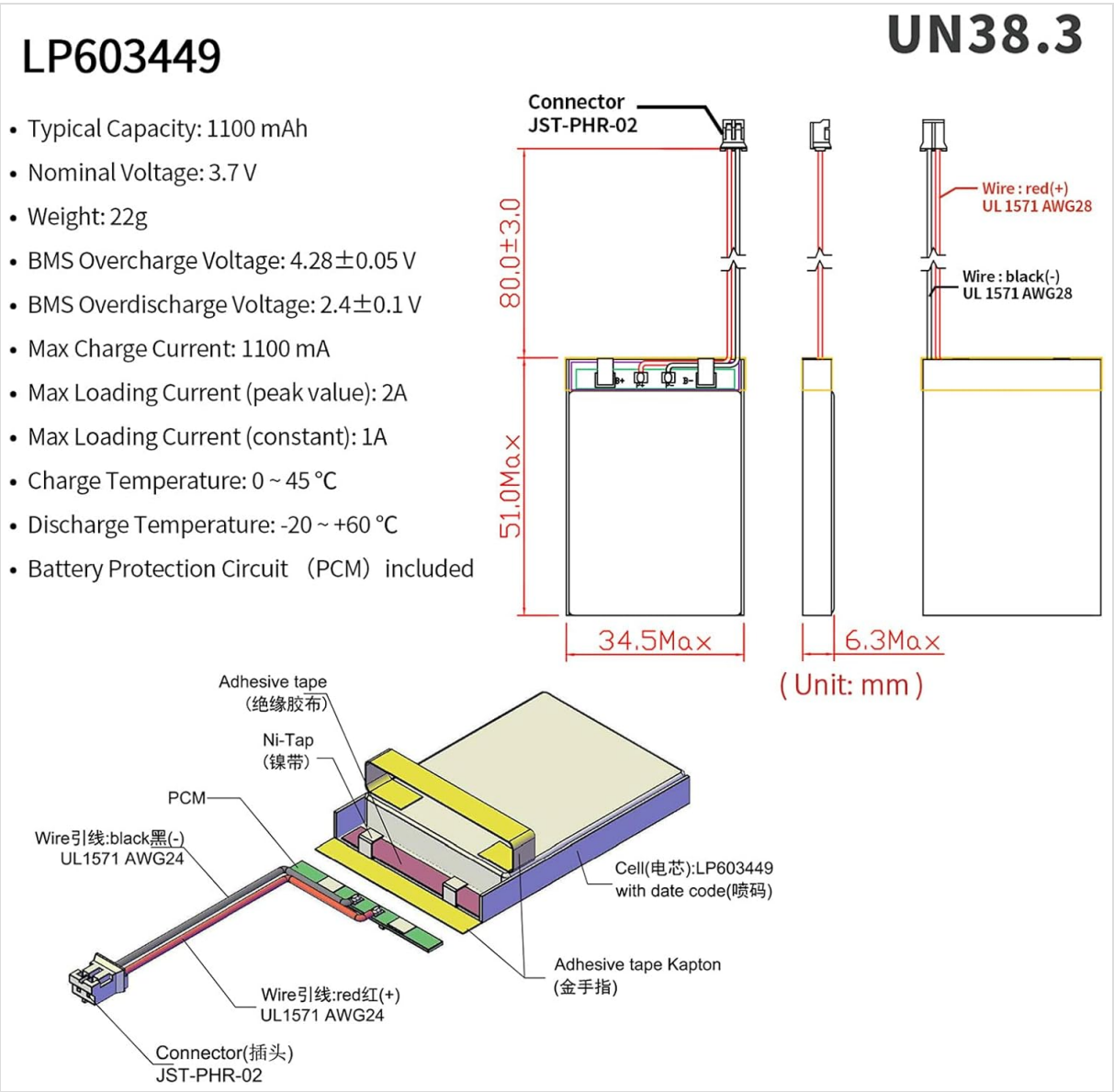

Image 3.1: Technical specifications and dimensional drawing of the LP603449 battery.

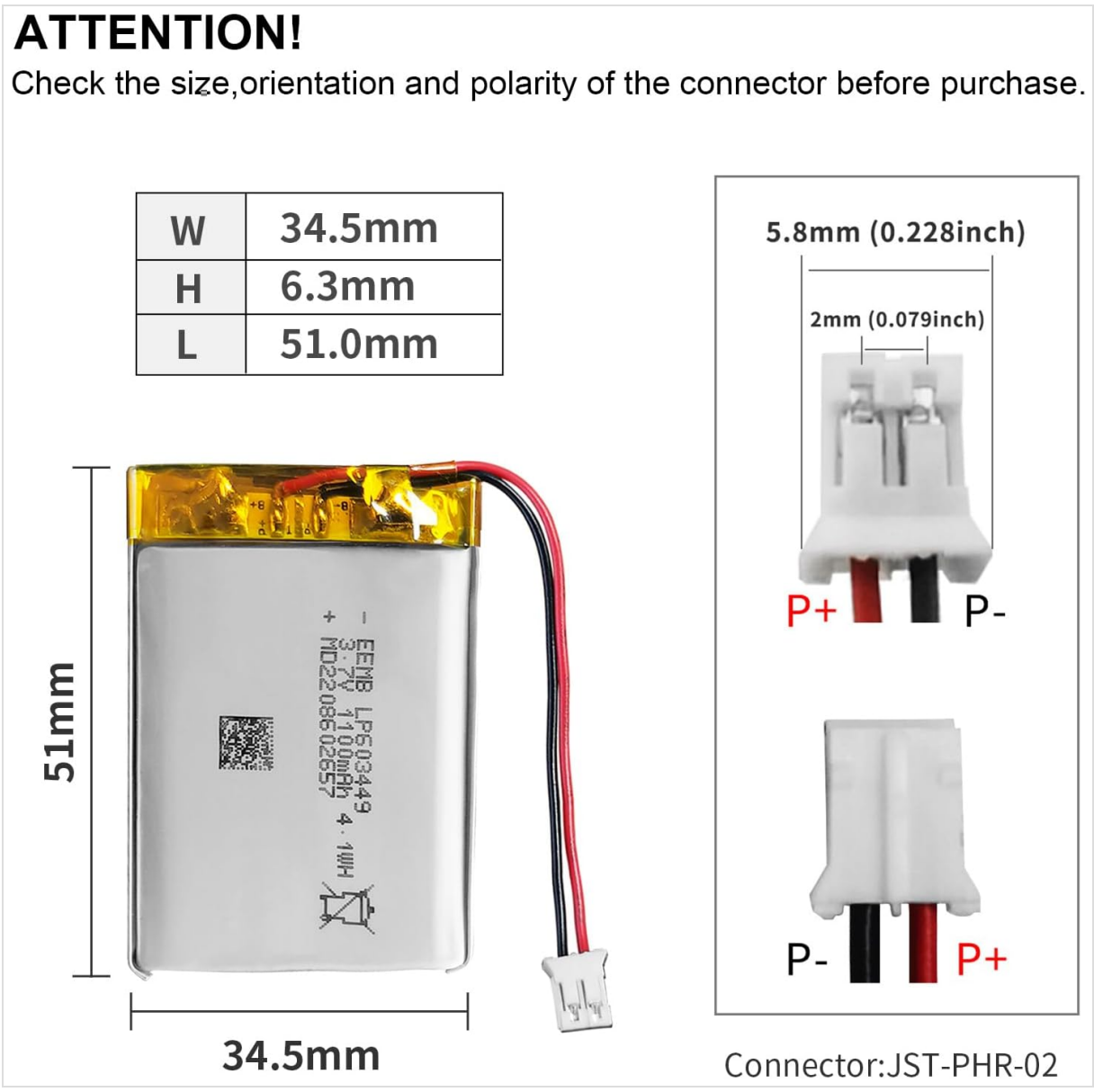

Image 3.2: Visual representation of battery and connector dimensions.

4. Installation and Connection

Before connecting the battery, it is crucial to confirm the size, orientation, and polarity of the connector to ensure compatibility with your device. Incorrect connection can cause product failure or damage.

4.1. Polarity Confirmation

- The battery's red wire is the positive electrode ("+").
- The battery's black wire is the negative electrode ("-").
- Ensure your device's positive electrode connects to the battery's positive electrode.
- Ensure your device's negative electrode connects to the battery's negative electrode.

READ BEFORE CONNECTION

⚠ WARNING

- Connector's orientation may not 100% match what is on your device. Confirm polarity of the connector and your device before connection!
- Connector's RED wire is positive electrode “+”. BLACK wire is negative electrode “- “.
- Device's positive electrode “+” shall connect to connector's positive electrode “+”; Device's negative electrode “-” shall connect to connector's negative electrode “-”.
- WRONG CONNECTION MAY CAUSE PRODUCT FAILURE.

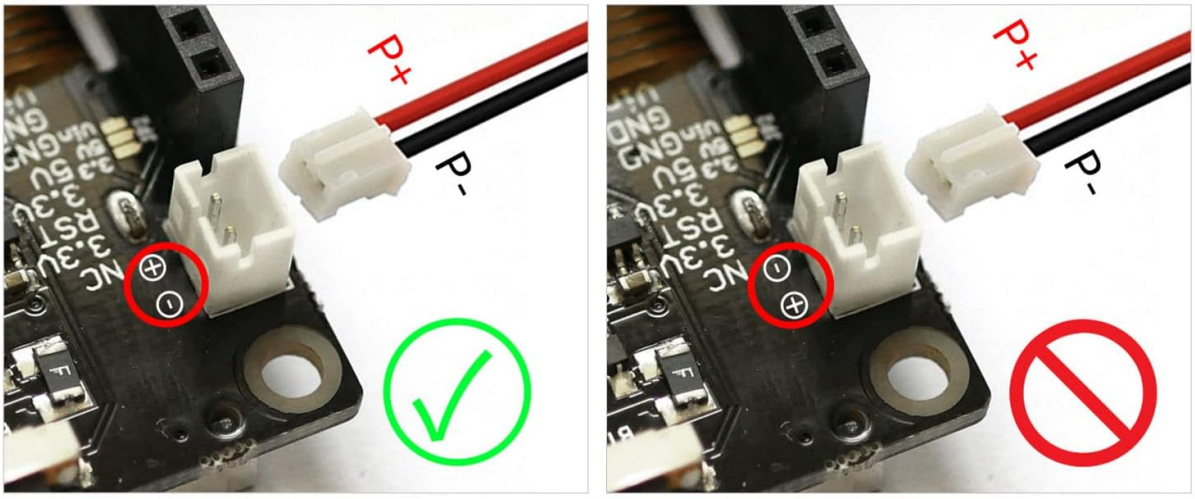

Image 4.1: Correct (left) and incorrect (right) polarity connections. Always match positive to positive and negative to negative.

Warning: Connector orientation may not 100% match what is on your device. Always confirm polarity before connection. Wrong connection may cause product failure.

5. Operation

5.1. Charging

Charge the battery using a compatible Lithium Polymer battery charger. Do not exceed the maximum charge voltage of 4.28V or the maximum charge current of 1100mA. Always monitor the battery during charging.

5.2. Protection Features

This battery includes a Protection Circuit Module (PCM) that provides:

- Overcharge Protection
- Over-discharge Protection
- Short Circuit Protection
- Overvoltage Protection
- Overcurrent Protection

Image 5.1: Visual representation of the battery's multiple protection features.

6. Storage and Maintenance

- Keep the cells in a 40%-60% charged state during long-period storage.
- It is recommended to charge the battery every 3 months after receipt and maintain the voltage between 3.7V and 4.0V.
- Store the battery in a cool and dry place, away from direct sunlight and extreme temperatures.
- Avoid storing the battery in temperatures above 60°C (140°F).

7. Recommended Applications

This EEMB Lithium Polymer battery is suitable for a wide range of devices, including but not limited to:

- Bluetooth speakers
- Dash cams
- Keyboards and mice

- Wi-Fi smart home systems
- PDAs and digital cameras
- GPS devices
- Monitoring units
- E-books
- Tracking devices
- Blood oxygen tracking equipment
- Pulse monitors
- Wireless IoT devices
- Arduino boards
- LED lights
- Radios
- Remote controllers
- Wireless headphones
- Micro controllers

Image 7.1: Examples of devices compatible with the EEMB LP603449 battery.

8. Certifications

The EEMB LP603449 battery is UN 38.3 compliant, ensuring it meets international safety standards for the transport of lithium metal and lithium-ion batteries.

Image 8.1: UN 38.3 certification mark on the product packaging.

9. Troubleshooting

If you encounter issues with your EEMB LP603449 battery, consider the following:

- **Battery Not Charging:** Ensure the charger is compatible and functioning correctly. Verify the battery connector is securely and correctly plugged in with matching polarity. Check for any visible damage to the battery or charging cable.
- **Battery Not Holding Charge:** This could indicate the battery has reached the end of its life cycle or has been stored improperly. Ensure you are following the recommended storage guidelines (Section 6).
- **Device Not Powering On:** Confirm the battery is fully charged and correctly connected. Check the device itself for any internal issues.
- **Overheating:** Immediately disconnect the battery if it becomes excessively hot during charging or use. Refer to the safety information (Section 2) and discontinue use if overheating persists.

10. Support

For any questions or concerns regarding your EEMB LP603449 battery, please contact EEMB customer service via Amazon message. We aim to respond within 24 hours.

Manufacturer: EEMB Co.,Ltd