

## MULS PA5278U-1BRS

# MULS PA5278U-1BRS Laptop Battery User Manual

Model: PA5278U-1BRS | Brand: MULS

## 1. INTRODUCTION

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This user manual provides essential information for the safe and effective use of your MULS PA5278U-1BRS laptop battery. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of the battery.




Image: The MULS PA5278U-1BRS laptop battery, shown with two small screwdrivers, indicating tools that may be needed for installation.

## 2. PRODUCT SPECIFICATIONS

| Specification   | Value                        |
|-----------------|------------------------------|
| Model Number    | PA5278U-1BRS                 |
| Battery Type    | Lithium Ion                  |
| Voltage         | 11.4V                        |
| Capacity        | 4080mAh                      |
| Watt-Hours (Wh) | 48Wh                         |
| Item Weight     | 13.6 ounces (approx. 385.6g) |

| Specification      | Value                  |
|--------------------|------------------------|
| Package Dimensions | 13.5 x 5.75 x 1 inches |



Rechargeable Li-ion Battery Pack  
Bloc Batteries Li-ion / 锂离子电池组  
Model NO. PA5278U-1BRS / 型号

DC 11.4V / 11.4V 48Wh / 4080mAh

Must be recycled or disposed of properly.  
Doit être recyclée ou s'en débarrasser correctement.  
Muss recyclet oder umweltverträglich entsorgt werden.


為避免起火爆炸之危險，請勿自行拆卸、更換或短路電池；  
請勿在置於火爐或水裡。請依照說明書指示進行充電。  
請參考使用說明或依相關法規規定處理廢電池。  
電池請存放於攝氏0-50度環境中。產地：中國  
注意 電池警告事項，請參閱說明書


⚠️ 危険 バッテリパックを分解、改造、火中に投入、ショート、  
あるいは浸漬された充電方法以外では充電しないでください。  
守らないと、火災、破裂、発熱の原因となります。  
禁止拆解、修改、擠壓或投入火中。  
若出現嚴重故障，請勿繼續使用。  
請勿置於高溫環境中，電池浸水后禁止使用。

廢電池請回收  
Li-ion 90

## PA5278U-1BRS MULS

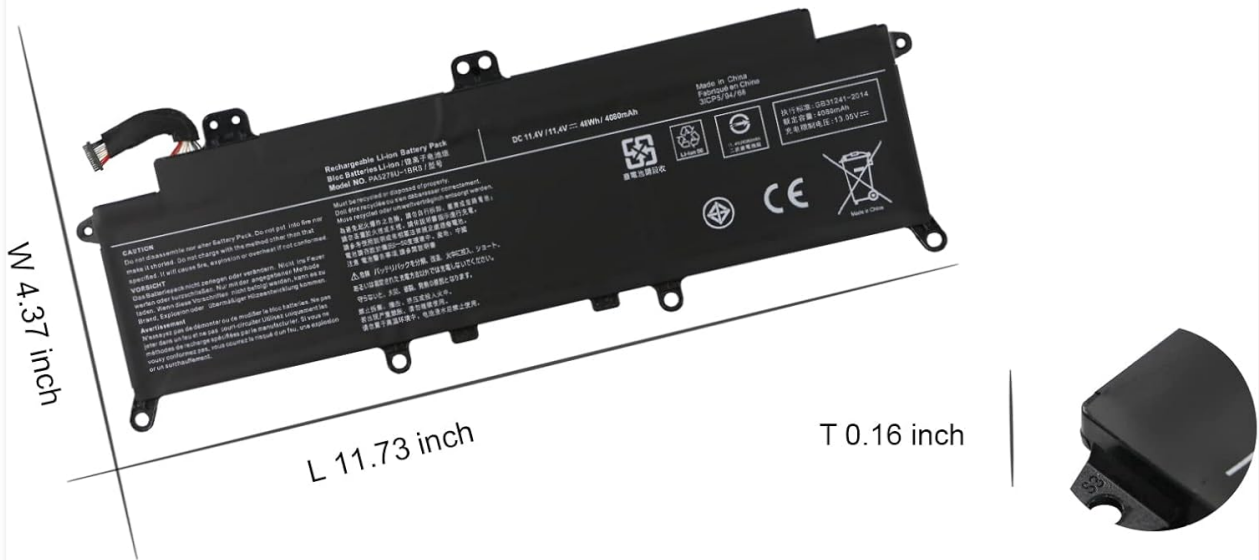
|               |         |
|---------------|---------|
| Voltage:      | 11.1V   |
| Capacity:     | 4080mAh |
| Wattage:      | 48Wh    |
| Battery Type: | Li-ion  |





**Recyclable Battery**

Image: A visual representation of the battery's key electrical specifications: Voltage (11.1V), Capacity (4080mAh), Wattage (48Wh), and Battery Type (Li-ion).



**Notice:**

1. Use the battery to 5% and charge to 95%, repeat for 3-4 times to activate the maximum capacity.
2. Do not disassemble, crush or stab the battery, and keep it away from water and fire.
3. Charge to 80% at least once per month if the battery is not used for a long time.
4. Please try to avoid using the tablet for a long time while charging, it might cause damage of the battery and reduce capacity.

Image: A technical drawing illustrating the physical dimensions of the battery, including its length, width, and thickness.

### 3. COMPATIBILITY

The MULS PA5278U-1BRS battery is designed as a replacement for specific laptop models. Please verify your laptop's model number against the list below to ensure compatibility.

**Compatible Part Numbers:**

- PA5278U-1BRS
- PT28U-0LN03X

**Compatible Laptop Models:**

- **For TOSHIBA Portege X30 Series:**
  - Portege X30-D, X30-D-10L, X30-D-10M, X30-D-10V, X30-D-119, X30-D-11U, X30-D-121, X30-D-123, X30-D-13Z, X30-D-143, X30-D-162, X30-D-16P, X30-D-19E
  - Portege X30-E, X30-E-10G, X30-E-10U, X30-E-11D, X30-E-11T, X30-E-11U, X30-E-12H, X30-E-19Z, X30-E-BTO

- Portege X30-F-15U, X30-F1352

- **For TOSHIBA Tecra X40 Series:**

- Tecra X40-D, X40-D-10E, X40-D-10F, X40-D-10G, X40-D-10H, X40-D-10J, X40-D-10M, X40-D-10Q, X40-D-10R, X40-D-10T, X40-D-10U, X40-D-10V, X40-D-10W, X40-D-10Z, X40-D-110, X40-D-11F
- Tecra X40-E-013, X40-E-108
- Tecra X40-F, X40-F-10D

- **For DYNABOOK Portege X30-F Series:**

- Portege X30-F-10L, X30-F-10N



## Fit For

TOSHIBA Portege X30 Series  
TOSHIBA Tecra X40 Series  
DYNABOOK Portege X30-F Series

Image: A laptop from the compatible series, demonstrating the intended use environment for the battery.

#### 4. SAFETY INFORMATION AND PRECAUTIONS

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Your safety is paramount. This battery is manufactured with multiple protection features. Adhere to the following guidelines to prevent potential hazards and ensure safe operation.

##### **Built-in Safety Features:**

- **Short-Circuit Protection:** Prevents damage from electrical shorts.
- **Over-heat Protection:** Monitors and regulates battery temperature.
- **Overload Protection:** Safeguards against excessive current draw.
- **Overcharge Protection:** Prevents battery from being charged beyond its capacity.
- **Overcurrent Protection:** Protects against current surges.

PA5278U-1BRS  MULS



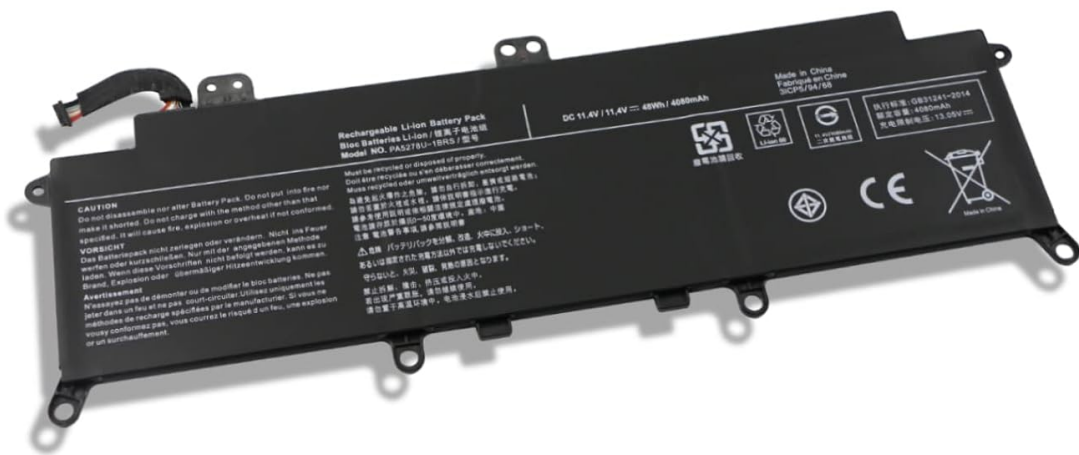
**"A" Grade Cells**

High quality battery cells ensure longer life, quicker charging, improved safety and higher durability



**Up to 500+ Cycles**

High quality battery cells provide high capacity and longer service life, up to 500+ charge-discharge cycles



**Short-Circuit Protection**



**Over-heat Protection**



**Overload Protection**

Image: The battery displaying its CE, FCC, and RoHS compliance marks, alongside visual indicators for short-circuit, over-heat, and overload protection.

# WHY CHOOSE OUR PRODUCTS



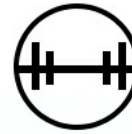
Over charge  
Protection



Over current  
Protection



Overheat  
Protection



Short circuit  
Protection

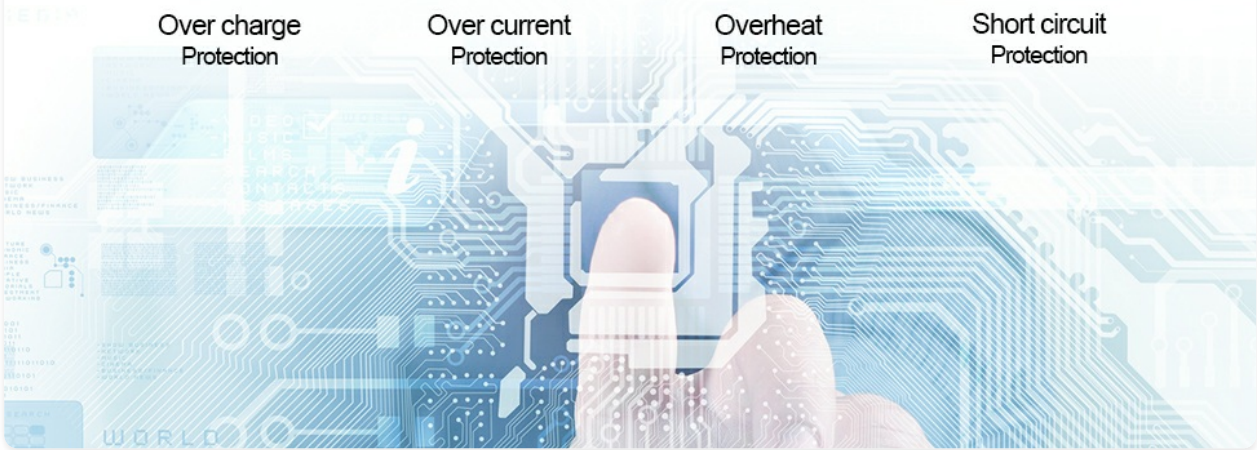


Image: An illustration highlighting the comprehensive protection mechanisms integrated into the battery design, including safeguards against overcharge, overcurrent, overheat, and short circuits.

## General Safety Warnings:

- Do not disassemble, crush, or stab the battery.
- Keep the battery away from water and fire.
- Avoid exposing the battery to extreme temperatures.
- Dispose of used batteries according to local regulations. Do not dispose of in household waste.

## 5. INSTALLATION

Replacing a laptop battery typically involves opening the laptop casing. If you are not comfortable performing this procedure, it is recommended to seek assistance from a qualified technician.

### General Installation Steps (May vary by laptop model):

1. **Power Off and Disconnect:** Ensure your laptop is completely powered off and unplugged from any power source.
2. **Remove External Battery (if applicable):** If your laptop has an external, removable battery, remove it first.
3. **Access Internal Battery:** Carefully open the laptop's back panel or keyboard area to access the internal battery compartment. Refer to your laptop's specific service manual for precise instructions.
4. **Disconnect Old Battery:** Gently disconnect the old battery's cable from the motherboard.
5. **Remove Old Battery:** Unscrew any retaining screws and carefully remove the old battery.
6. **Install New Battery:** Place the new MULS battery into the compartment, ensuring it aligns correctly. Secure it with screws if necessary.
7. **Connect New Battery:** Connect the new battery's cable to the motherboard, ensuring a firm connection.

8. **Reassemble Laptop:** Carefully reassemble the laptop, ensuring all screws and panels are properly secured.

**Caution: Static electricity can damage electronic components. Take appropriate anti-static precautions during installation.**

## 6. FIRST USE AND CHARGING

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To activate the battery's maximum capacity and ensure optimal performance, follow these initial charging instructions:

- **Initial Activation:** Use the battery until its charge level drops to approximately 5%, then fully charge it to 95%. Repeat this charge and discharge cycle 3-4 times. This process helps calibrate the battery and activate its full capacity.
- **First Charge:** For the very first use, it is recommended to fully charge the battery before using the laptop on battery power.

## 7. MAINTENANCE AND STORAGE

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Proper maintenance and storage can significantly extend the lifespan of your laptop battery.

- **Regular Use:** For best results, use your laptop on battery power regularly rather than keeping it constantly plugged in.
- **Long-Term Storage:** If the battery will not be used for an extended period (e.g., more than one month), charge it to approximately 80% before storing. Store it in a cool, dry place away from direct sunlight.
- **Avoid Constant Charging:** While charging, avoid using the laptop for prolonged periods, as this might cause damage to the battery and reduce its capacity over time.
- **Temperature:** Operate and store the battery within recommended temperature ranges (typically 0°C to 35°C or 32°F to 95°F).

## 8. TROUBLESHOOTING

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If you encounter issues with your MULS PA5278U-1BRS battery, consider the following common troubleshooting steps:

- **Battery Not Detected:**
  - Ensure the battery is correctly installed and its connector is firmly seated.
  - Restart your laptop.
  - Update your laptop's BIOS and battery drivers.
- **Battery Not Charging:**
  - Verify that the AC adapter is functioning correctly and is the original or a compatible replacement.
  - Check the charging port for any debris or damage.

- Try a different power outlet.

- **Short Battery Life:**

- Ensure background applications are not excessively draining power.
- Adjust power settings in your operating system to optimize battery usage.
- Perform the initial activation cycle (5% to 95% charge) a few times to recalibrate the battery.

If problems persist after attempting these steps, please contact MULS customer support for further assistance.

## 9. WARRANTY AND SUPPORT

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MULS is committed to providing high-quality products and excellent customer service.

### Warranty Information:

- **30-Day Money-Back Guarantee:** Enjoy a 30-day no-questions-asked full money-back period from the date of receipt.
- **12-Month Exchange Warranty:** The battery is covered by a 12-month exchange warranty for manufacturing defects.

*Note: The return window may close a month after product receipt. Please contact us directly for warranty claims beyond this period.*

### Customer Support:

For any questions, concerns, or support needs, MULS provides 24/7 email service. Please refer to your purchase documentation for specific contact details or visit the official MULS website.

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This manual is for informational purposes only. Specifications are subject to change without notice.