

DALY 200A+BT

DALY BMS 24V 8S 200A LiFePO4 Smart Bluetooth Battery Protection Board User Manual

Model: 200A+BT

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your DALY BMS 24V 8S 200A LiFePO4 Smart Bluetooth Battery Protection Board. This device is designed to offer comprehensive protection for 24 Volt Lithium Battery Packs, ensuring optimal performance and extended battery life in various applications such as clean machines, RVs, and energy storage systems.





Image: DALY BMS 24V 8S 200A LiFePO4 Smart Bluetooth Battery Protection Board with an attached Bluetooth module.

2. KEY FEATURES

- **Comprehensive Battery Protection:** Includes low voltage cutoff, high voltage cutoff, short circuit protection, and temperature protection to safeguard your 8S 24V 200A battery systems.
- **Smart Bluetooth Connectivity:** Features a Bluetooth module for quick setup, real-time monitoring, configuration, and optimization of lithium battery systems. Monitor State of Charge (SOC), voltage, current, and receive critical notifications.
- **Parallel System Support:** The built-in parallel circuit supports 8+ battery packs, allowing for scalable capacity expansion.
- **Multiple Interface Functions:** Supports dual UART communication, BT module, and touch display (if applicable to your variant). Includes a Bluetooth activation-free function for easy connection via the app.
- **Extended Warranty:** Comes with a 5-year warranty.

DALY BMS, Your Trusted Choice for Lithium Battery Pack

Other BMS	DALY BMS
Doesn't support parallel capacity expansion ❌	✔ Built-in current limiting module, Support multiple parallel systems
Exposed components (Short lifespan) ❌	✔ Waterproof, dustproof, shockproof
No LED status indicators ❌	✔ Real-time BMS working status LED display
Large size, space-limited ❌	✔ Small size, installation flexibility
Built-in Bluetooth, weak signal ❌	✔ Bluetooth module, stable connection
Single UART port, limited accessories ❌	✔ Dual UART ports for multi-accessory connection
High price, Limited warranty ❌	✔ Factory-direct pricing, professional technical support, 5 years extended warranty

Image: A comparison chart illustrating the advantages of DALY BMS, such as parallel capacity expansion, waterproof design, real-time status display, compact size, stable Bluetooth connection, dual UART ports, and a 5-year warranty.

3. PACKAGE CONTENTS

Upon opening your DALY BMS package, please verify that all the following items are included:

- 8S 24V 200 Amps Smart BMS unit (x1)
- B-P-Output line (x1)
- Bluetooth dongle (x1)
- Sampling cable (x1)
- NTC temperature sensor (x1)
- Instruction Manual (x1)

Packing List

*Take "K" series BMS as an example for reference only.



- | | | | |
|----------------------|------------------|-------------------|--------------------------|
| 1 Packaging Box | 2 Sampling Cable | 3 SMART BMS | 4 B-P-Output cable(Gift) |
| 5 Instruction Manual | 6 Screws | 7 Bluetooth(Gift) | 8 NTC |

Note:The packing list take the K series 8S as an example, same for M/S series

Image: A visual representation of the DALY BMS package contents, including the BMS unit, cables, Bluetooth dongle, NTC sensor, and manual.

4. SETUP AND INSTALLATION

Proper installation is crucial for the safe and effective operation of your DALY BMS. Please follow these general guidelines and refer to the included manual for detailed, model-specific wiring diagrams and instructions.

- 1. Preparation:** Ensure your battery pack is disconnected from any power sources. Gather necessary tools and safety equipment.
- 2. Mounting:** Securely mount the BMS unit in a location that allows for adequate ventilation and protects it from physical damage or moisture.
- 3. Wiring:** Connect the sampling cable to the battery cells in the correct sequence as specified in the detailed manual. Incorrect wiring can cause damage. Connect the B-P-Output line and NTC temperature sensor.
- 4. Bluetooth Module:** Plug in the Bluetooth dongle to enable smart monitoring features.
- 5. Initial Power-Up:** Carefully connect the main battery terminals to the BMS. Observe for any unusual

behavior.

For detailed wiring diagrams and specific connection points, consult the physical instruction manual provided in your package.



Image: A DALY BMS unit integrated into a battery enclosure on a workbench, demonstrating a typical installation scenario.

5. OPERATING THE SMART BMS (BLUETOOTH APP)

The DALY Smart BMS features a Bluetooth module for convenient monitoring and configuration via a dedicated mobile application. This allows for real-time data access and system adjustments.

1. **App Download:** Download the official DALY BMS application from your device's app store.
2. **Connection:** Ensure Bluetooth is enabled on your mobile device. Open the DALY BMS app; the Bluetooth activation-free function allows the app to wake up the BMS for easy connection. Select your BMS from the list of available devices.
3. **Monitoring:** The app provides a comprehensive status display, showing battery voltage, current, individual cell voltages, temperature, and State of Charge (SOC).
4. **Configuration:** Access protection parameters and system settings to customize your BMS operation.

This may include adjusting voltage thresholds, current limits, and other operational parameters.

5. **Data Logging:** The app may offer data logging features to track battery performance over time.

Smart Bluetooth All in the "Handy"

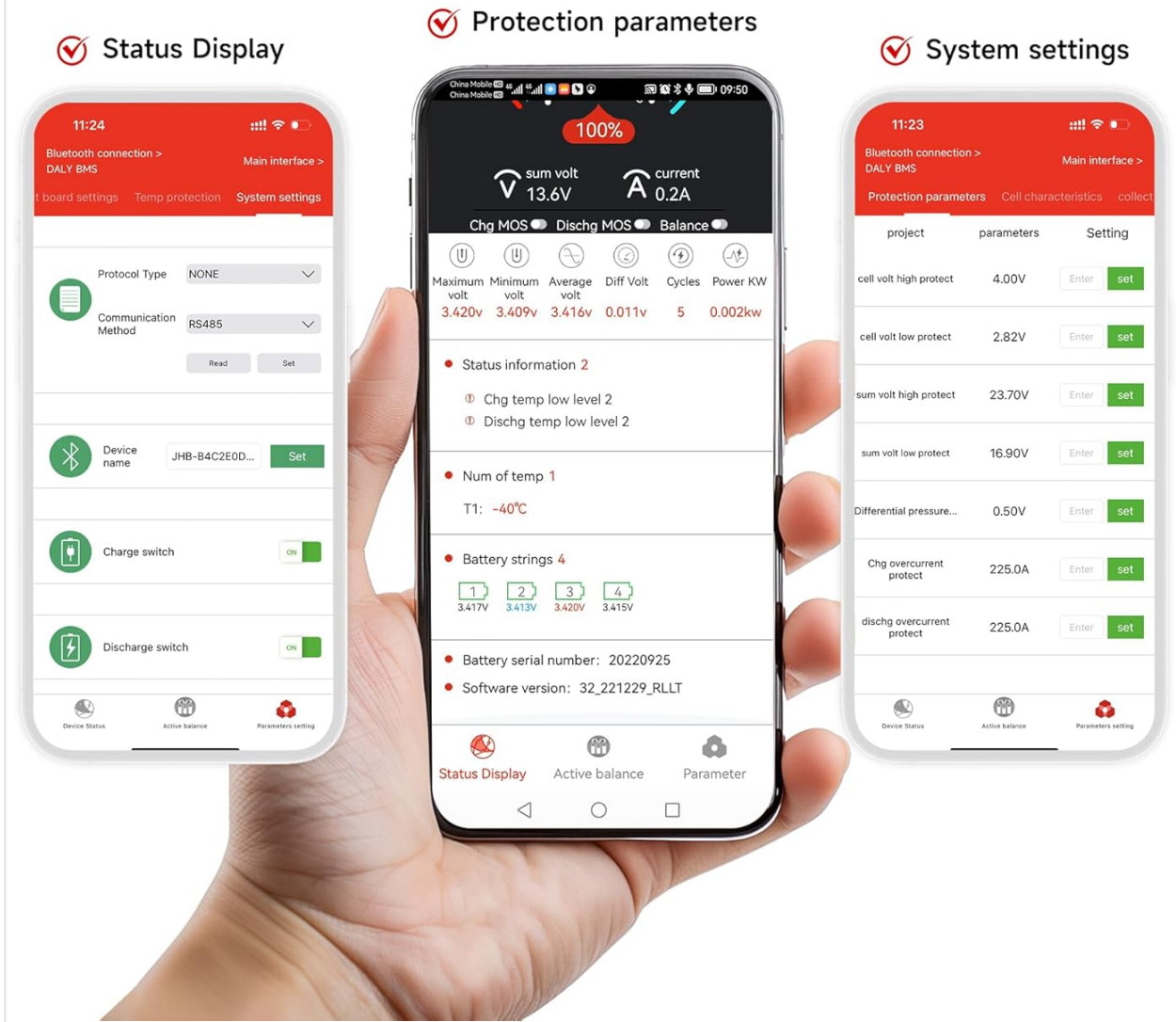


Image: Screenshots of the DALY Smart Bluetooth application interface, displaying battery status, protection parameters, and system settings.

6. SAFETY PROTECTIONS

The DALY BMS is engineered with multiple safety features to protect your battery pack and connected equipment:

- **Overcharging Protection:** Prevents cells from being charged beyond their safe voltage limit.
- **Overdischarging Protection:** Stops discharge when cells reach their minimum safe voltage, preventing damage.
- **Overcurrent Protection:** Limits current during charge and discharge to prevent excessive loads.
- **Short Circuit Protection:** Automatically disconnects the battery in case of a short circuit.

- **Extreme Temperature Protection:** Monitors battery temperature and initiates protective measures if temperatures exceed safe operating ranges.

**DALY
BMS**

5 SAFETY PROTECTIONS

*Note: The shows the 16S 500A S series BMS as an example.

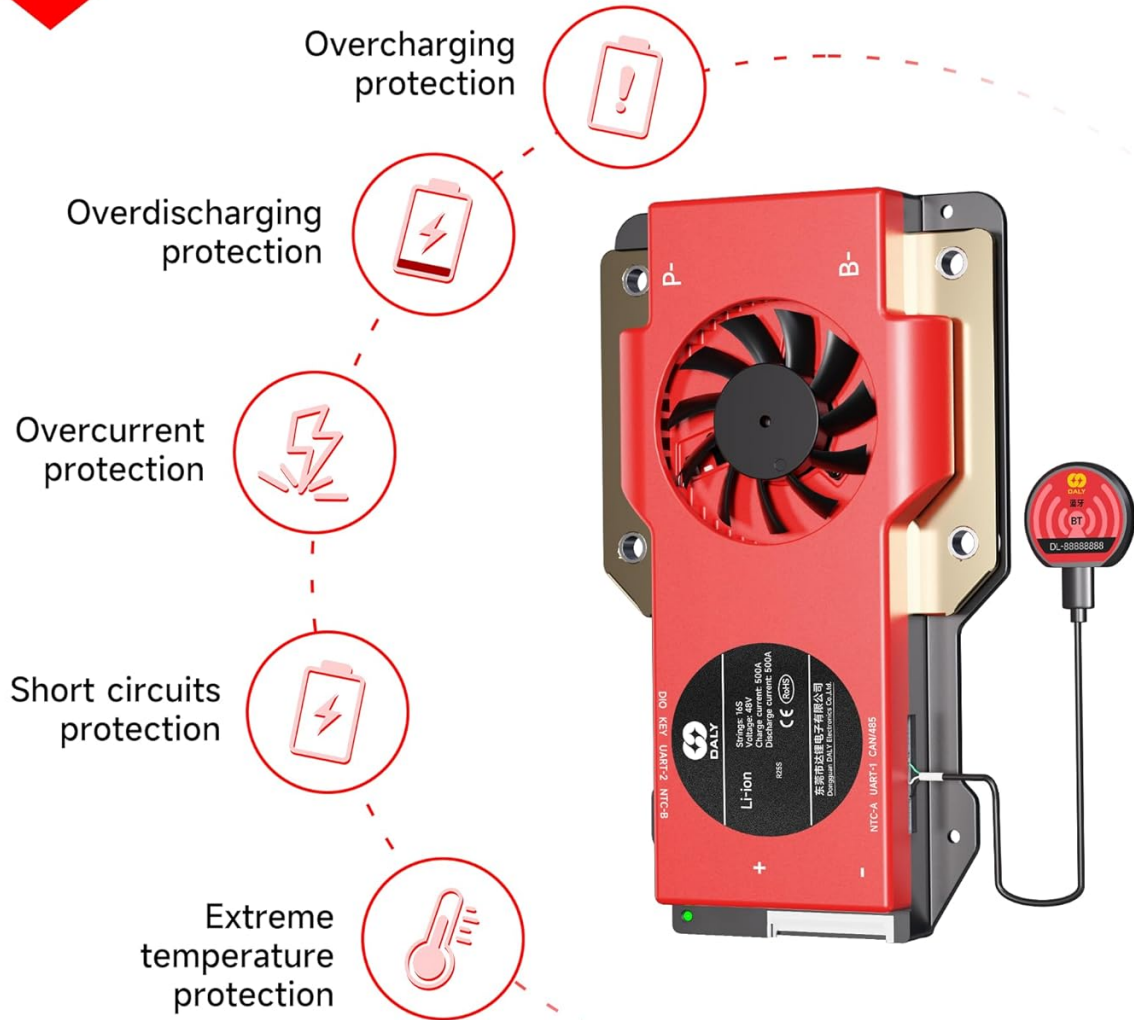


Image: A diagram visually representing the five core safety protections integrated into the DALY BMS: overcharging, overdischarging, overcurrent, short circuits, and extreme temperature protection.

7. PARALLEL SYSTEM SUPPORT

The DALY BMS is designed to support multiple battery packs in parallel configurations. This feature allows you to increase the overall capacity of your battery system by simply adding more batteries, providing greater power and extended runtime for your applications.

Built-in current limiting module,
Support multiple parallel systems
to increase the battery pack capacity

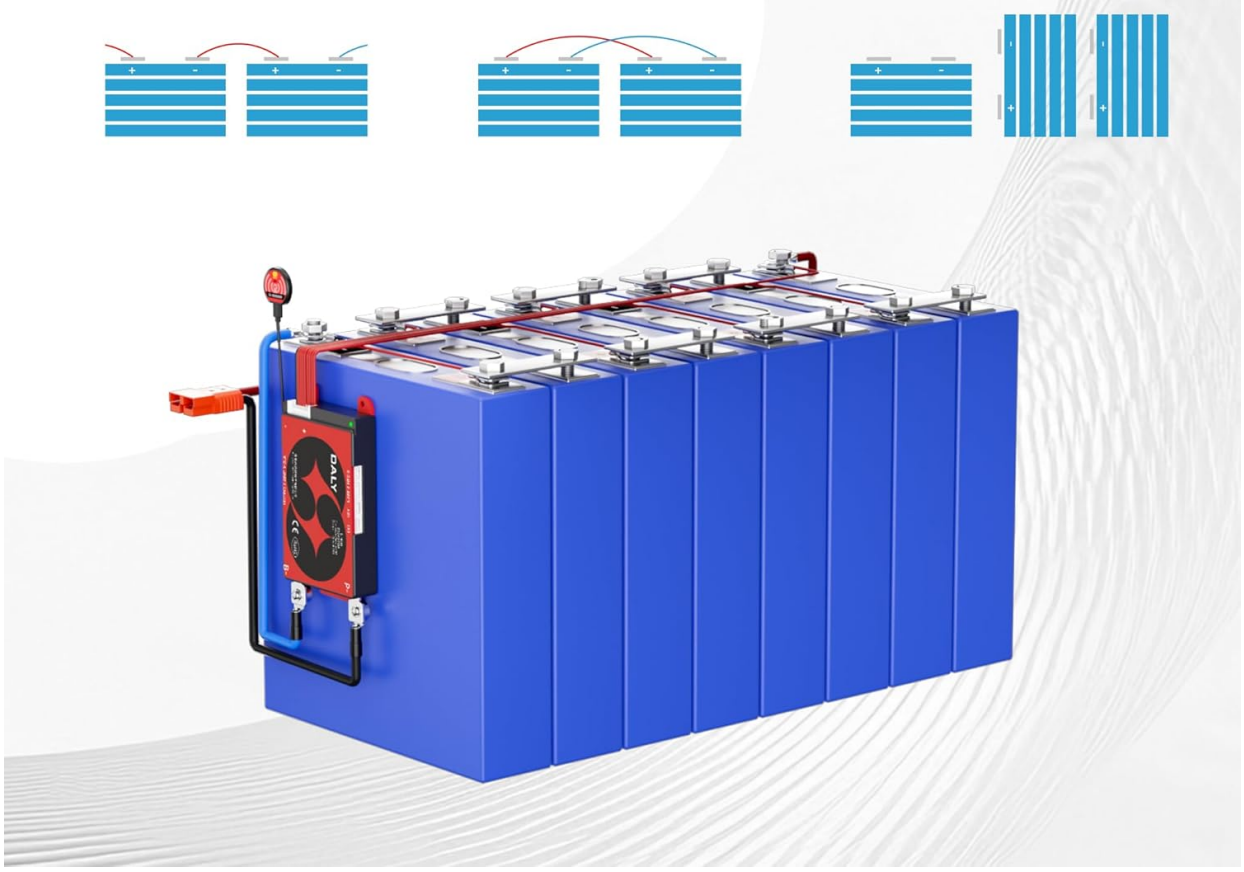


Image: An illustration showing a DALY BMS connected to a large battery bank, demonstrating its capability to support multiple parallel battery systems for increased capacity.

8. SPECIFICATIONS

Specification	Value
Brand	DALY
Model	200A+BT
Input Voltage	24 Volts
Output Voltage	24 Volts
Item Weight	1.39 pounds
Package Dimensions	10.43 x 8.11 x 1.93 inches
Manufacturer	Dongguan Daly Electronics Co., Ltd



Image: A detailed table outlining various technical specifications of the DALY BMS, including protection values, current ratings, and equalization functions.

9. TROUBLESHOOTING

If you encounter issues with your DALY BMS, consider the following common troubleshooting steps:

- **Connection Issues:** Ensure all wiring is correct and secure. Verify the Bluetooth dongle is properly inserted and your mobile device's Bluetooth is active.
- **App Not Connecting:** Close and reopen the app. Restart your mobile device. Ensure the BMS is powered on.
- **Battery Imbalance:** If individual cell voltages are significantly different, the BMS's balancing function may be working. For persistent imbalance, consult the manual or DALY support.
- **Protection Triggered:** If the BMS enters a protection state (e.g., overvoltage, undervoltage, overcurrent), identify and resolve the underlying cause. The app may provide diagnostic information.
- **General Performance:** Ensure the BMS is adequately ventilated and operating within its specified temperature range.

For complex technical questions or issues not resolved by basic troubleshooting, it is recommended to contact DALY customer service for professional technical support.



Image: A Q&A guide addressing common questions about BMS selection and battery compatibility, including considerations for battery type, ampere rating, and monitoring needs.

10. WARRANTY AND SUPPORT

The DALY BMS 24V 8S 200A LiFePO4 Smart Bluetooth Battery Protection Board comes with a **5-year warranty**, reflecting the manufacturer's commitment to quality and reliability. For warranty claims, technical assistance, or any product-related inquiries, please contact DALY customer support. Refer to the contact information provided in your product packaging or on the official DALY website.



Image: A DALY BMS unit displayed alongside a shield graphic indicating a 5-year extended warranty.

11. APPLICATIONS

The DALY BMS is suitable for a wide range of applications requiring reliable battery management for LiFePO4 battery packs:

- Recreational Vehicles (RVs)
- Marine Vessels
- Off-Grid Energy Storage Systems
- Portable Power Banks
- Electric Vehicles (e.g., Vans, ATVs)
- Industrial Clean Machines

Charging voltage (V)	User: 14.6V (Battery string 12V) / 14.8V (Battery string 15V)				
Discharge current (A)	40	60	100	200	500
Discharge overcurrent protection value (A)	60	90	150	300	450
Charging current (A)	40	60	100	200	500
Charge overcurrent protection value (A)	60	90	150	300	450
Main circuit on-resistance (mΩ)	120				
Passive equalization function (100±30mA)					
Equalization turn-on voltage (V)	User A1: 14.6V (A1: Can be set up)				
Equalization timing differential pressure (mV)	30 (Can be set up)				
Recovery current (mA)	User 100mA / 14.6V (A1: Can be set up)				
Single Cell over-charge protection					
Protection voltage (V)	User A1: 14.6V (A1: Can be set up)				
Protection delay (s)	100				
Recovery voltage (V)	User 14.6V (A1: Can be set up)				
Charge/discharge over-current protection					
Protection delay (s)	100				
Release condition	Recovery (Recovery: 100%)				
Current consumption	Working current (mA) < 20				
The above data is the temperature test results of DALY (secondary) for reference only.					

Short circuit protection		External test short circuit
Short circuit protection condition	The actual test is subject to the User's test	
Short circuit protection delay (s)	10-300	10-300 (10-300ms)
Short circuit protection released	Recovery test release	
Single Cell over-discharge protection		
Protection voltage (V)	User 14.6V (A1: Can be set up)	
Protection delay (s)	100	
Recovery voltage (V)	User 2.00V (A1: Can be set up)	
Temperature protection (°C)		
Operating temperature (°C)	charging 10-75 discharge 10-75 (Can be set up)	
Storage temperature (°C)	-40-85	
Recovery temperature (°C)	< 60	Stop (can't)

RV Application

What BMS is suitable for my battery?

Q1: Could you please check What kind of battery will best connect with DALY BMS and how many cells are connected in series through?

A: To ensure proper compatibility and protection, the BMS will connect directly to the positive and negative terminals in maximum operating voltage. For example: 24V operating voltage at 48V, choose BMS must be 48V or higher. If you purchase the wrong your controller's maximum voltage, current or other will be damaged. Please use well.

Q2: How many ampere need?

A: To ensure proper compatibility and protection, the BMS will connect directly to the positive and negative terminals in maximum operating voltage. For example: 24V operating voltage at 48V, choose BMS must be 48V or higher. If you purchase the wrong your controller's maximum voltage, current or other will be damaged. Please use well.

Q3: Do you need Monitor or Customized settings at important data?

A: You can monitor the battery status via Bluetooth module or RS485 module. DALY BMS can also be connected to the CAN bus or other interface to monitor the battery status.

Q4: Do you have a basic BMS solution available, for example, 12V or 24V?

A: Yes, we have a basic BMS solution available, for example, 12V or 24V. You can choose the BMS according to your battery pack configuration.

Q5: Would you like to know more?

A: You can contact our sales team or visit our website for more information. We will provide you with the best solution for your battery pack.

Q6: How many ampere need?

A: To ensure proper compatibility and protection, the BMS will connect directly to the positive and negative terminals in maximum operating voltage. For example: 24V operating voltage at 48V, choose BMS must be 48V or higher. If you purchase the wrong your controller's maximum voltage, current or other will be damaged. Please use well.

Q7: Do you need Monitor or Customized settings at important data?

A: You can monitor the battery status via Bluetooth module or RS485 module. DALY BMS can also be connected to the CAN bus or other interface to monitor the battery status.

Q8: Do you have a basic BMS solution available, for example, 12V or 24V?

A: Yes, we have a basic BMS solution available, for example, 12V or 24V. You can choose the BMS according to your battery pack configuration.

Q9: Would you like to know more?

A: You can contact our sales team or visit our website for more information. We will provide you with the best solution for your battery pack.


Marine Application

Support multiple parallel systems to increase the battery pack capacity

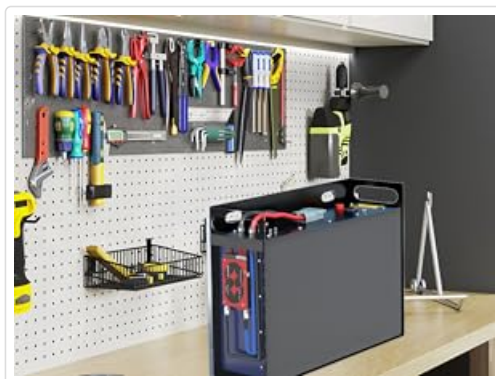



Off-Grid Energy Storage

All in the "Handy"



Portable Power Bank



Electric Vehicle (Van)



ATV and Other Recreational Vehicles

12. OFFICIAL PRODUCT VIDEO

Your browser does not support the video tag.

Video: An official DALY promotional video showcasing the design, manufacturing process, and applications of DALY BMS products.