

JKBMS RS485 Converter

JKBMS RS485 Converter Module Instruction Manual

Model: RS485 Converter

1. INTRODUCTION

This instruction manual provides essential information for the proper installation, operation, and maintenance of your JKBMS RS485 Converter Module. Please read this manual thoroughly before using the product to ensure optimal performance and safety.

The JKBMS RS485 Converter Module is designed to facilitate communication between a JKBMS system and compatible accessories, such as LCD displays or monitoring systems. It ensures efficient data conversion for seamless integration within your battery management setup.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Efficient Data Conversion:** Specifically designed for JKBMS Active Balancer Smart BMS, ensuring efficient data conversion for seamless system communication.
- **Wide Compatibility:** Compatible with various JKBMS Active Balancer Smart BMS models, offering flexibility for different battery management system needs.
- **Easy Integration:** Simple installation steps allow for straightforward integration into your battery management system without complex operations.
- **Stable and Reliable:** Engineered for stable performance and reliable data transmission, providing long-term operational assurance.

2.2 Compatibility Notice

Important:

This converter module is exclusively compatible with JKBMS products. It does not support other BMS brands. Verify compatibility before purchase.

JKBMS models are typically configured with RS485 and LCD ports by default (with the exception of JK-BD4A17S4P). When using the LCD Pro, the RS485 interface cannot be used simultaneously.

3. PACKAGE CONTENTS

The package includes the following items:

- 1 × JKBMS RS485 Converter Module



Image 1: JKBMS RS485 Converter Module. This image shows the compact black converter module with its integrated cables.

4. SETUP AND INSTALLATION

Follow these steps to properly install your JKBMS RS485 Converter Module:

1. **Identify Ports:** Locate the RS485 communication port on your JKBMS unit. Refer to your specific JKBMS manual for port identification.
2. **Connect Converter:** Connect the JKBMS RS485 Converter Module to the designated RS485 port on your JKBMS. Ensure the connection is secure. The module typically has labeled wires (e.g., Yellow: A, White: B, Black: GND) that correspond to the BMS connection points.
3. **Connect to Accessory:** Connect the other end of the RS485 Converter Module to your desired accessory (e.g., LCD display, PC via USB-to-RS485 adapter).
4. **Power On:** Once all connections are secure, power on your JKBMS system.
5. **Initial Activation (if needed):** To activate the BMS manually, it is recommended to use the power board settings as per your JKBMS manual.



Image 2: JKBMS RS485 Converter Module with its wiring harness. This image illustrates the module connected to a multi-pin connector, ready for integration.

JKBMS | Accessories

Smarter and more intuitive



Image 3: Overview of JKBMS accessories, including the RS485 converter, display screens, and adapter board. This image shows how the converter fits into a larger ecosystem of JKBMS components.

5. OPERATING INSTRUCTIONS

Once the JKBMS RS485 Converter Module is installed, it facilitates communication between your JKBMS and connected devices.

- **Data Monitoring:** Use compatible software on a connected computer or an LCD display to monitor battery parameters and system status provided by the JKBMS.
- **Configuration:** The RS485 interface allows for configuration and parameter adjustments of the JKBMS through appropriate software.
- **Simultaneous Use:** Note that if an LCD Pro display is connected and actively using the communication port, the RS485 interface may not be available for simultaneous use. Prioritize the required communication method.

JKBMS | Bluetooth Communication

4S-24S | 40A-300A | LiFePO4 / Li-ion / LTO



View battery information



Support Android/iOS



Record charge/discharge data



Control MOS for charge and discharge



Image 4: Illustration of JKBMS Bluetooth communication with a smartphone app, showing battery information and control options. While this image shows Bluetooth, it represents the type of monitoring and control facilitated by communication modules like the RS485 converter.

6. TROUBLESHOOTING

If you encounter issues with your JKBMS RS485 Converter Module, consider the following:

• No Communication:

- Verify all cable connections are secure and correctly oriented.
- Ensure the JKBMS is powered on.
- Confirm that the RS485 port on the JKBMS is active and not in use by another device (e.g., LCD Pro).
- Check the settings of your connected monitoring software or device for correct baud rates and communication protocols.

• Incorrect Readings:

- Ensure the JKBMS firmware is up to date.
- Recalibrate your monitoring system if applicable.

• Compatibility Issues:

- Reconfirm that your BMS is a JKBMS product, as this converter is not compatible with other brands.

7. SPECIFICATIONS

Feature	Specification
Product Dimensions	1.85 x 0.95 x 0.59 inches
Item Weight	6.1 ounces (0.38 Pounds)

Model Number	RS485 Converter
Brand	JKBMS
Input Voltage	12 Volts
Output Voltage	12 Volts (DC)

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official JKBMS website or contact your authorized dealer. Keep your purchase receipt for warranty claims.

JKBMS offers comprehensive after-sales support to ensure timely resolution and assistance for any issues encountered during use.

9. APPLICATION SCENARIOS

The JKBMS RS485 Converter Module, as part of the JKBMS ecosystem, supports various applications where reliable battery management is crucial. These include:

- E-bikes and Electric Tricycles
- Low Speed Quads and Scooters
- Forklifts and Industrial Drones
- Cleaning Cars and Tourist Cars
- RV Energy Storage and Energy Storage Cabinets
- Power Banks and Power Tools

JK | Smart BMS

Application Scenario



E-bike



Electric Tricycle



Low Speed Quad



Forklift



Cleaning Car



Tourist Car



Industrial Drone



Scooter



RV Energy Storage



Energy Storage Cabinet



Power Bank



Power Tools



Image 5: Visual representation of various application scenarios for JKBMS Smart BMS, including electric vehicles, energy storage, and industrial equipment. The RS485 converter facilitates communication in these systems.