MikroTik R11E-LTE6

MikroTik R11e-LTE6 miniPCI-e Card User Manual

MODEL: R11E-LTE6

Brand: MikroTik

INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of the MikroTik R11e-LTE6 miniPCI-e Card. The R11e-LTE6 is a Category 6 (CAT6) LTE modem designed for integration into compatible devices, offering high-speed mobile broadband connectivity.

It supports 2G, 3G, and 4G/LTE networks, delivering downlink speeds up to 300 Mbps and uplink speeds up to 50 Mbps. Key features include carrier aggregation, allowing the use of multiple frequency bands simultaneously for enhanced performance.

SETUP

The R11e-LTE6 is a miniPCIe form factor modem. It is designed for installation into MikroTik products equipped with a miniPCIe slot. Please note that this card is not compatible with RB800 and RB4011 models.

Installation Steps:

1. Ensure the host device is powered off and disconnected from all power sources.

2. Locate the miniPCIe slot on your MikroTik device. Refer to your device's specific manual for slot location.

3. Carefully insert the R11e-LTE6 card into the miniPCIe slot, ensuring it is fully seated.

4. Secure the card with the appropriate screws, if required by your device.

5. Connect external antennas to the 'MAIN' and 'AUX' antenna connectors on the card. Ensure a secure connection for optimal signal reception.

6. Power on your host device. The operating system should detect the new LTE modem.

Image 1: Front view of the MikroTik R11e-LTE6 miniPCI-e Card. This image displays the top side of the card, highlighting the R11e-LTE6 model designation, regulatory markings (FCC ID, CE), and the two gold-plated antenna connectors labeled 'MAIN' and 'AUX' at the top edge. The miniPCIe connector pins are visible at the bottom.

OPERATING

Once installed and detected by the host device's operating system (e.g., RouterOS), the R11e-LTE6 functions as a cellular modem.

Key Operational Features:

- **Network Compatibility:** Supports 2G, 3G, and 4G/LTE networks across various international bands (1/2/3/5/7/8/12/17/20/25/26/38/39/40/41n).

- **Data Rates:** Achieves up to 300 Mbps downlink and 50 Mbps uplink speeds.

- **Carrier Aggregation:** Utilizes carrier aggregation technology to combine multiple frequency bands, enhancing data throughput and network efficiency.

- **Configuration:** Configuration of the LTE modem, including APN settings, network selection, and connection management, is performed through the host device's operating system interface. Refer to your host device's manual for detailed software configuration instructions.
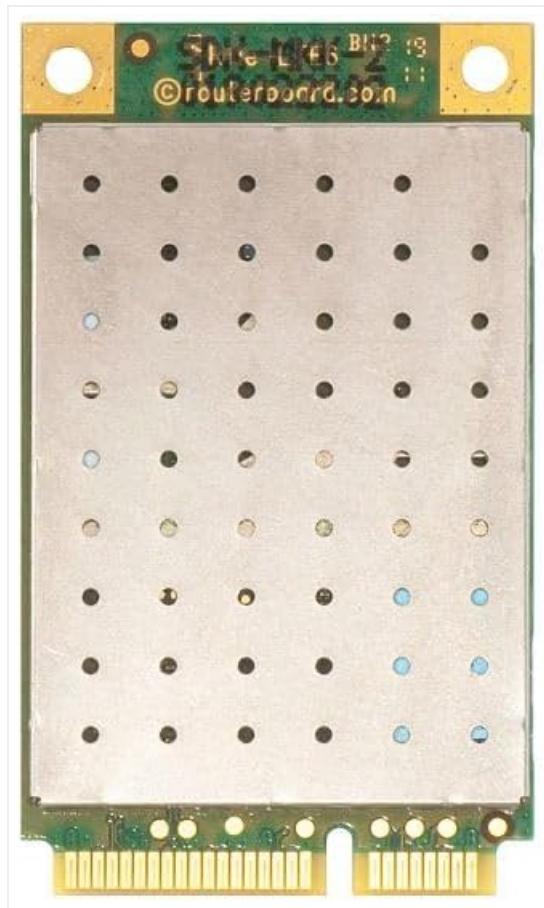

Image 2: Back view of the MikroTik R11e-LTE6 miniPCI-e Card. This image shows the reverse side of the card, primarily featuring a metal shield covering the components, with small ventilation holes. The text 'R11e-LTE6' and 'routerboard.com' are visible at the top edge.

MAINTENANCE

The MikroTik R11e-LTE6 card is a robust electronic component designed for reliable operation with minimal maintenance.

- **Environmental Conditions:** Operate the card within the specified temperature and humidity ranges of your host device.

- **Cleaning:** If necessary, gently clean the card's surface with a dry, soft cloth. Avoid using liquids or abrasive cleaners.

- **Handling:** Always handle the card by its edges to prevent damage to components or connectors. Avoid touching the gold-plated contacts.

- **Firmware Updates:** Ensure your host device's operating system and the modem's firmware are kept up-to-date. Refer to MikroTik's official website for the latest updates and instructions.

TROUBLESHOOTING

If you encounter issues with your R11e-LTE6 card, consider the following troubleshooting steps:

- **Card Seating:** Ensure the miniPCIe card is correctly and securely seated in its slot.
- **Antenna Connections:** Verify that the external antennas are properly connected to the 'MAIN' and 'AUX' ports.
- **Driver/Firmware:** Confirm that your host device has the necessary drivers and the latest firmware for the LTE modem.
- **SIM Card:** If applicable, ensure a valid and active SIM card is correctly inserted into the host device's SIM slot.
- **Network Configuration:** Double-check the APN settings and network selection within your host device's operating system.
- **Host Device Compatibility:** Confirm that your host device model is compatible with the R11e-LTE6 card and has a functional miniPCIe slot.
- **MikroTik Resources:** For advanced diagnostics and support, consult the official MikroTik documentation and support forums.

SPECIFICATIONS

General

- **Model:** R11E-LTE6
- **Brand:** MikroTik
- **Hardware Interface:** Mini PCI Express
- **Product Dimensions:** 0.2 x 1.18 x 2.01 inches
- **Item Weight:** 0.528 ounces
- **Date First Available:** January 20, 2020

Cellular Connectivity

- **Network Technologies:** 2G, 3G, 4G/LTE
- **LTE Category:** CAT6
- **Data Transfer Rate (Max):** 300 Megabits Per Second (Downlink), 50 Megabits Per Second (Uplink)
- **Supported Bands:** 1, 2, 3, 5, 7, 8, 12, 17, 20, 25, 26, 38, 39, 40, 41n
- **Features:** Carrier Aggregation

WARRANTY INFORMATION
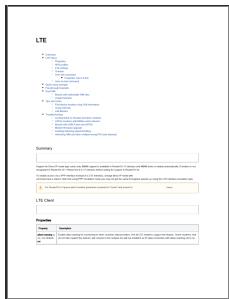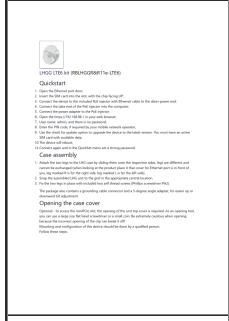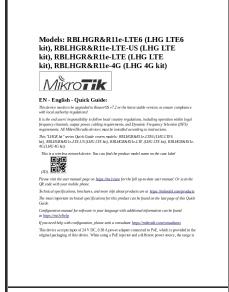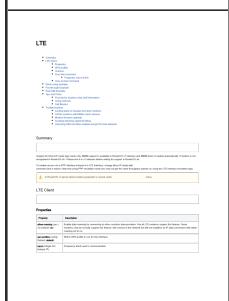
Warranty terms for the MikroTik R11e-LTE6 miniPCI-e Card are provided by MikroTik or the authorized reseller at the time of purchase. Please retain your proof of purchase. For detailed warranty information, refer to the documentation included with your product or visit the official MikroTik website.

TECHNICAL SUPPORT

For technical assistance, advanced troubleshooting, or inquiries regarding the MikroTik R11e-LTE6, please contact MikroTik's official support channels or the authorized reseller from whom the product was purchased. Ensure you have your product model and any relevant purchase details available.

Related Documents - R11E-LTE6

[MikroTik LTE Configuration Guide](#)

A comprehensive guide to configuring and managing LTE connections on MikroTik devices, covering setup, troubleshooting, advanced features like passthrough and dual SIM, and modem management.

[MikroTik LHGG LTE6 Kit Quickstart and Installation Guide](#)

A comprehensive guide to setting up and installing the MikroTik LHGG LTE6 Kit, including quickstart instructions, case assembly, miniPCIe slot usage, powering, mounting, and configuration details.

[MikroTik LHG LTE Series Quick Start Guide](#)

Quick start guide for MikroTik LHG LTE series devices (RBLHGR&R11e-LTE6, LTE-US, LTE, 4G). Covers setup, installation, compliance, and safety for outdoor wireless network devices.

[MikroTik hAP ac³ LTE6 Quick Guide](#)

This quick guide provides essential information for setting up and using the MikroTik hAP ac³ LTE6 wireless router, including model details, first steps, safety precautions, and technical specifications.

[MikroTik LTE Guide: Configuration and Troubleshooting](#)

Comprehensive guide to configuring and troubleshooting MikroTik LTE devices, covering APN profiles, network modes, cell monitoring, and advanced features like passthrough and cell locking.

[MikroTik Chateau LTE6 ax Home Router: Setup, Specifications, and Safety Guide](#)

Comprehensive guide for the MikroTik Chateau LTE6 ax home router (S53UG+5HaxD2HaxD-TC&FG621-EA). Includes safety warnings, quick start instructions, mobile app connection, detailed specifications, powering, configuration, button functions, LED status, SIM slot usage, reset procedures, accessories, LTE antenna usage, operating system support, and CE Declaration of Conformity.