MikroTik RB4011iGS+5HacQ2HnD-IN

MikroTik RB4011iGS+5HacQ2HnD-IN-US Router Instruction Manual

Model: RB4011iGS+5HacQ2HnD-IN-US | Brand: MikroTik

1. INTRODUCTION

This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your MikroTik RB4011iGS+5HacQ2HnD-IN-US router. This device is a powerful networking solution designed for various applications, offering high-speed connectivity and advanced features.

Key Features:

- Quad-core Cortex A15 CPU for high performance.
- 1GB RAM for efficient operation.
- Ten Gigabit Ethernet ports for extensive wired connectivity.
- SFP+ 10Gbps interface for high-speed fiber connections.
- IPsec hardware acceleration for secure and fast VPN connections.
- Dual-band (2GHz and 5GHz) wireless capabilities with four chains in 5GHz (up to 1733 Mbps) and dual-chain in 2GHz.
- PoE output on port #10 for powering compatible devices.
- Compact and professional solid metal enclosure in matte black.

2. HARDWARE OVERVIEW

Familiarize yourself with the physical components and ports of your RB4011iGS+5HacQ2HnD-IN-US router.

Front and Top View:

Figure 2.1: Front and top view of the MikroTik RB4011iGS+5HacQ2HnD-IN-US router, highlighting its compact design and external antennas for wireless connectivity.

Rear View:

Figure 2.2: Rear panel of the router, showing the array of Gigabit Ethernet ports, the SFP+ cage for 10Gbps connectivity, the power input, and a USB port for additional peripherals.
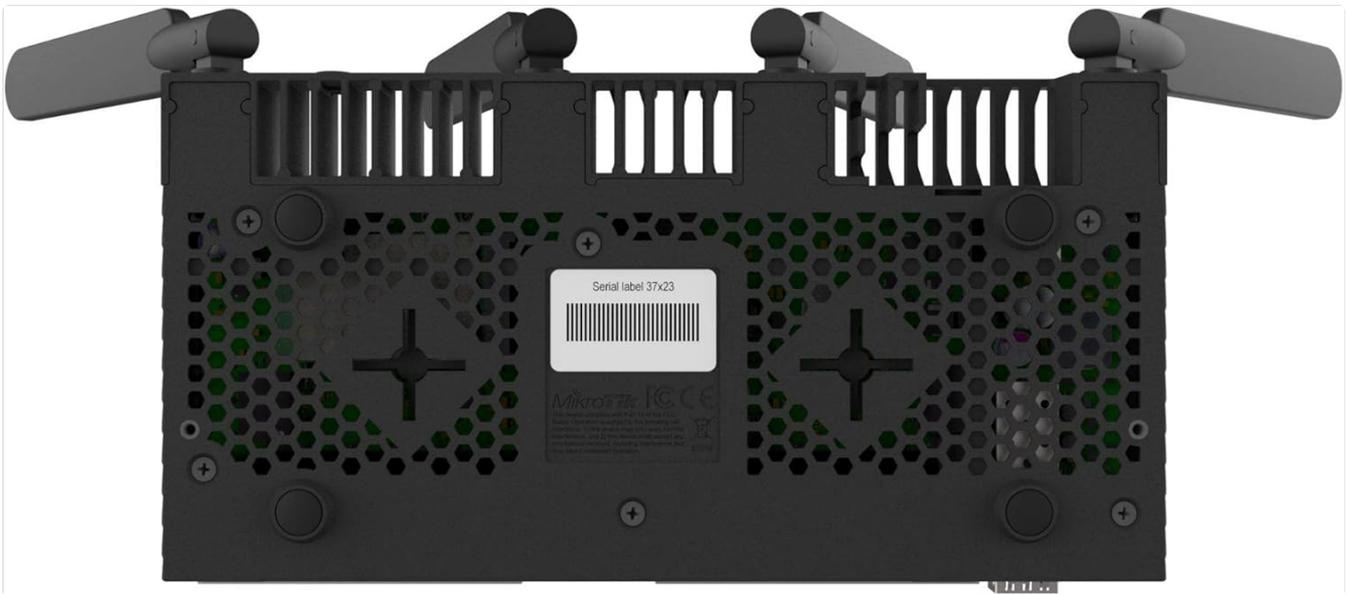
Bottom View:

Figure 2.3: The underside of the router, featuring ventilation for passive cooling and the serial label with product identification details.

3. SETUP INSTRUCTIONS

Follow these steps to set up your MikroTik RB4011iGS+5HacQ2HnD-IN-US router.

1. **Power Connection:** Connect the provided power adapter to the DC jack on the router and plug it into a power outlet. The power LED should illuminate.

2. **Internet Connection:** Connect your internet service provider's (ISP) modem or main network cable to the first Ethernet port (often labeled 'Internet' or 'WAN') on the router.

3. **Local Network Connection:** Connect your computer or other network devices to any of the remaining Ethernet ports (LAN ports) using standard Ethernet cables.

4. **Wireless Connection:** For wireless devices, search for the default MikroTik Wi-Fi network (SSID) broadcast by the router. The default SSID and password can usually be found on a sticker on the device or in the quick start guide.

5. **Initial Configuration:** Open a web browser on a connected computer and navigate to the router's default IP address (commonly http://192.168.88.1). Log in using the default username (usually 'admin') and an empty password (or the password provided on the sticker). Follow the on-screen instructions for initial setup, including changing the default password and configuring your network settings.

4. OPERATING INSTRUCTIONS

The MikroTik RB4011iGS+5HacQ2HnD-IN-US operates on RouterOS, a highly versatile and powerful operating system. Advanced configurations are performed via the web interface (WinBox) or command-line interface (CLI).

Basic Operation:

- **LED Indicators:** Observe the LED indicators on the front panel for status information regarding power, network activity, and wireless status.

- **Wireless Configuration:** Access the RouterOS web interface to configure Wi-Fi networks, security settings, and guest networks. The router supports dual-band operation (2.4GHz and 5GHz).
- **Port Configuration:** Individual Ethernet ports can be configured for various roles, including LAN, WAN, or bridging. Port 10 supports PoE output.
- **SFP+ Port:** The SFP+ port allows for high-speed fiber or copper connections using compatible SFP+ modules (e.g., MikroTik S+RJ10 for 10Gbps Ethernet).

Advanced Features:

- **Firewall:** Configure robust firewall rules for network security.
- **QoS (Quality of Service):** Prioritize network traffic for critical applications.
- **VPN:** Utilize IPsec hardware acceleration for high-performance VPN tunnels.
- **Routing Protocols:** Support for various routing protocols for complex network topologies.

Related Video: MikroTik S+RJ10 6-Speed RJ-45 Module

This video demonstrates the MikroTik S+RJ10 6-speed RJ-45 module, which can be used with the RB4011iGS+5HacQ2HnD-IN-US router's SFP+ port to achieve 10 Gigabit Ethernet speeds over copper cables.

Related Video: MikroTik Router Overview

This video provides a general overview of a MikroTik wireless dual-band router. While it features a different model (hAP AC3), it illustrates common MikroTik router functionalities and features relevant to the RB4011 series.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your router.

- **Firmware Updates:** Regularly check for and install the latest RouterOS firmware updates from the official MikroTik website to ensure security and access to new features.
- **Cleaning:** Keep the router clean and free from dust. Use a soft, dry cloth for cleaning. Ensure ventilation openings are not obstructed.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges to prevent damage.
- **Backup Configuration:** Periodically back up your router's configuration to prevent data loss in case of unexpected issues.

6. TROUBLESHOOTING

Here are solutions to common issues you might encounter.

- **No Power:** Ensure the power adapter is securely connected to both the router and a working power outlet. Check the power LED.
- **No Internet Access:** Verify that your ISP modem is working correctly. Check cable connections to the router's WAN port. Ensure correct WAN configuration in RouterOS.

- **No Wi-Fi Signal:** Confirm that wireless interfaces are enabled in RouterOS. Check Wi-Fi settings (SSID, password, channel).
- **Slow Performance:** Check for network congestion. Ensure firmware is up-to-date. Review RouterOS configurations for any misconfigurations that might impact performance.
- **Forgot Password:** If you cannot access the router, a hard reset might be necessary. Refer to the MikroTik documentation for your specific model for reset procedures, as this will revert all settings to factory defaults.

7. SPECIFICATIONS

Feature	Detail
Model Name	RB4011iGS+5HacQ2HnD-IN
CPU	Quad-core Cortex A15
RAM	1GB
Ethernet Ports	10 x Gigabit Ethernet (Port 10 with PoE output)
SFP+ Ports	1 x 10Gbps SFP+
Wireless Standard	802.11ac (Dual-Band)
Wireless Bands	2GHz (dual-chain), 5GHz (four-chain, up to 1733 Mbps)
Hardware Acceleration	IPsec
Dimensions	11.02 x 10.59 x 2.87 inches
Weight	2.98 pounds
Color	Black
Manufacturer	MikroTik

8. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your product or visit the official MikroTik website. Technical support is available through MikroTik's support channels, including their online forums and knowledge base. Always ensure you have your product's serial number and purchase details ready when contacting support.