

MikroTik CubeG-5ac60ay-US

MikroTik Cube 60Pro ac User Manual

Model: CubeG-5ac60ay-US

1. INTRODUCTION

The MikroTik Cube 60Pro ac is a high-performance wireless device designed for establishing stable and high-speed 60 GHz links. It features an automatic 5 GHz failover mechanism to ensure continuous connectivity during adverse weather conditions. This manual provides essential information for the proper installation, operation, and maintenance of your device.

The Cube 60Pro ac is ideal for various applications requiring reliable, high-throughput wireless connectivity, such as point-to-point or point-to-multipoint setups over distances up to 600 meters (or 800 meters with compatible devices like MikroTik nRAY).



Figure 1: General view of the MikroTik Cube 60Pro ac device. This image provides an overall look at the product design and branding.

2. SAFETY INFORMATION

- Always follow local electrical codes and regulations during installation.
- Ensure the device is powered off before performing any installation or maintenance.
- Mount the device securely to prevent accidental falls.
- Do not open the device enclosure unless instructed by qualified personnel.
- Avoid exposing the device to extreme temperatures, humidity, or direct water contact.
- Use only the power adapter and cables supplied or recommended by MikroTik.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- MikroTik Cube 60Pro ac device
- Mounting bracket and hardware
- Power adapter
- PoE injector (if included)
- Quick Start Guide

4. SETUP AND INSTALLATION

4.1. Mounting the Device

The Cube 60Pro ac is designed for outdoor pole or wall mounting. The device features a strong metal base for secure attachment and improved cooling.

1. Attach the mounting bracket to the desired pole or wall using the provided hardware. Ensure the mounting surface is stable and can support the device's weight.
2. Secure the Cube 60Pro ac device to the mounting bracket. Adjust the angle for optimal signal alignment.



Figure 2: Front view of the MikroTik Cube 60Pro ac device mounted on a pole. This image shows the device's main body and the MikroTik logo, indicating its orientation when installed.



Figure 3: Side view of the MikroTik Cube 60Pro ac mounted on a pole, illustrating the cable connection point. This view highlights the robust mounting mechanism and the weather-sealed Ethernet port.

4.2. Connecting Power and Network

1. Connect an Ethernet cable from your network infrastructure to the PoE injector.
2. Connect another Ethernet cable from the PoE injector's "PoE Out" port to the Ethernet port on the Cube 60Pro ac

device. Ensure the connection is secure and the weather-sealed cap is properly tightened.

3. Connect the power adapter to the PoE injector and then plug it into a power outlet.
4. Observe the LED indicators on the device for power and link status.

4.3. Initial Configuration (RouterOS)

The Cube 60Pro ac runs on MikroTik's RouterOS L4. Initial configuration typically involves accessing the device via a web browser (WebFig) or WinBox utility.

- **Default IP Address:** Refer to the Quick Start Guide for the default IP address and login credentials.
- **Accessing RouterOS:** Open a web browser and navigate to the device's IP address, or use the WinBox utility to discover and connect to the device.
- **Basic Setup:** Configure the 60 GHz wireless interface for your desired link (e.g., point-to-point or point-to-multipoint). Set up the 5 GHz interface as a failover.
- **Security:** Change default passwords immediately and configure appropriate wireless security settings.

5. OPERATING THE DEVICE

5.1. 60 GHz Link Operation

The primary function of the Cube 60Pro ac is to establish a high-speed 60 GHz wireless link. Ensure clear line-of-sight between devices for optimal performance.

- Monitor the link status and signal strength through the RouterOS interface.
- Adjust antenna alignment if necessary to maximize signal quality.

5.2. 5 GHz Automatic Failover

The device is equipped with an automatic 5 GHz failover. In conditions where the 60 GHz link degrades (e.g., heavy rain or snow), the device will automatically switch to the 5 GHz backup link to maintain connectivity.

- The transition between 60 GHz and 5 GHz is designed to be seamless.
- You can monitor the active frequency band via the RouterOS interface.

6. MAINTENANCE

6.1. Cleaning

Periodically inspect the device for dirt, dust, or debris accumulation, especially on the antenna surface. Use a soft, dry cloth to gently clean the exterior. Do not use liquid cleaners or solvents.

6.2. Firmware Updates

Regularly check the MikroTik website for the latest RouterOS firmware updates. Keeping your device's firmware up-to-date ensures optimal performance, security, and access to new features.

- Download firmware updates from the official MikroTik website: mikrotik.com/download
- Follow the instructions provided by MikroTik for the update process.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No power/Device not turning on	Power adapter or cable issue, faulty PoE injector, power outlet problem.	Check power connections, test power outlet, verify PoE injector functionality.
60 GHz link not establishing or unstable	No clear line-of-sight, misaligned antennas, interference, incorrect configuration.	Ensure clear line-of-sight, re-align antennas, check for obstructions, verify RouterOS configuration.
5 GHz failover not working	5 GHz interface not configured, incorrect failover settings, 5 GHz interference.	Verify 5 GHz interface configuration in RouterOS, check failover rules, scan for 5 GHz interference.
Cannot access RouterOS interface	Incorrect IP address, network connectivity issue, firewall blocking access.	Verify device IP address, check network cable, temporarily disable local firewall, try WinBox.

8. SPECIFICATIONS

Feature	Detail
Model Number	CubeG-5ac60ay-US
Brand	MikroTik
Frequency Bands	60 GHz (primary), 5 GHz (automatic failover)
Wireless Standard	802.11ay (for 60 GHz)
RouterOS License Level	L4
Maximum Range	Up to 600 meters (point-to-multipoint), up to 800 meters (with nRAY)
Antenna Type	High-frequency, directional
Mounting	Pole/Wall mount with metal base
Item Weight	2 pounds
Package Dimensions	7 x 7 x 4 inches

9. WARRANTY AND SUPPORT

9.1. Warranty Information



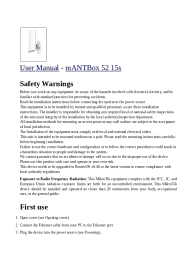
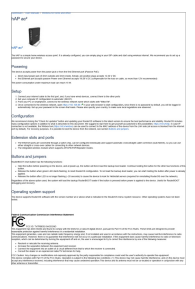

MikroTik products are covered by a limited manufacturer's warranty. For detailed warranty terms and conditions, please refer to the official MikroTik website or the warranty card included with your product. Keep your proof of purchase for warranty claims.

9.2. Technical Support

For technical assistance, troubleshooting, or further inquiries, please visit the official MikroTik support resources:

- **MikroTik Wiki:** wiki.mikrotik.com
- **MikroTik Forum:** forum.mikrotik.com
- **Contact Support:** Refer to the MikroTik website for direct support contact options.

Related Documents - CubeG-5ac60ay-US

	<p>MikroTik Wireless Wire Cube Pro (CubeG-5ac60ay) User Manual and Specifications</p> <p>Comprehensive user manual and technical specifications for the MikroTik Wireless Wire Cube Pro (CubeG-5ac60ay) and Cube 60Pro ac, covering installation, configuration, safety, RF exposure, regulatory compliance, and detailed performance data.</p>
	<p>MikroTik hAP lite TC Wireless Access Point User Manual</p> <p>Comprehensive user manual for the MikroTik hAP lite TC, a simple home wireless access point. Covers quick start, configuration, powering, mounting, specifications, and regulatory compliance.</p>
	<p>MikroTik mANTBox 52 15s User Manual and Technical Specifications</p> <p>Comprehensive user manual for the MikroTik mANTBox 52 15s outdoor wireless access point, detailing safety warnings, installation, powering, configuration, grounding, ports, accessories, and regulatory compliance information for FCC, IC, CE, and other international standards.</p>
	<p>MikroTik hAP ac² User Manual and Configuration Guide</p> <p>A comprehensive guide to setting up and configuring the MikroTik hAP ac² wireless access point, covering powering, initial setup, configuration options, and regulatory compliance.</p>
	<p>MikroTik hAP ac3 User Manual and Quick Start Guide</p> <p>This document provides a comprehensive guide to the MikroTik hAP ac3 wireless router, covering safety warnings, quick start setup, mobile app configuration, mounting instructions, port details, and regulatory compliance information.</p>



[MikroTik CONR-514 hAP ac2 Router Board User Manual](#)

User manual for the MikroTik CONR-514 hAP ac2 Router Board, covering powering, setup, configuration, extension slots, buttons, operating system support, and compliance information.