MIKROTIK CRS504-4XQ-IN Wireless Routers User Manual

User Manual – CRS504-4XQ-IN

Contents

Safety Warnings

Before you work on any equipment, be aware of the hazards involved with electrical circuitry, and be familiar with standard practices for preventing accidents. Ultimate disposal of this product should be handled according to all national laws and regulations. The Installation of the equipment must comply with local and national electrical codes. This unit is intended to be installed in the rackmount. Please read the mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation for people and damage to the system. This product is intended to be installed indoors. Keep this product away from water, fire, humidity, or hot environments. Use only the power supply and accessories approved by the manufacturer, which can be found in the original packaging of this product. Read the installation instructions before connecting the system to the power source. We cannot guarantee that no accidents or damage will occur due to the improper use of the device. Please use this product with care and operate at your own risk! In the case of device failure, please disconnect it from power. The fastest way to do so is by unplugging the power plug from the power outlet. It is the customer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and Dynamic Frequency Selection (DFS) requirements. All Mikrotik devices must be professionally installed.
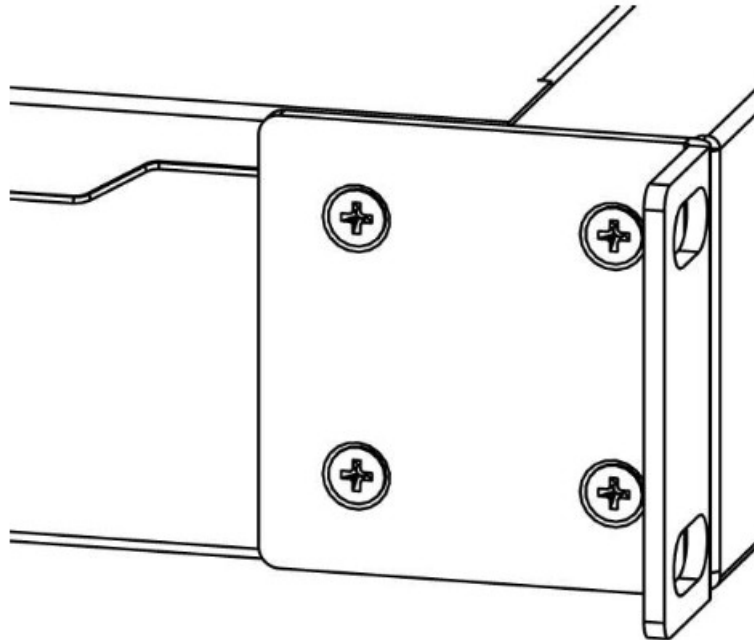
Quick start

- Connect an ethernet cable to the device;
- Download the configuration tool **https://mt.lv/winbox**;
- Open the Neighbors tab and connect to the device using the MAC address;
- The user name: is admin, by default, there is no password (or, for some models, check user and wireless passwords on the sticker);
- To update the device to the latest software version download the latest RouterOS software from **https://mikrotik.com/download**;
- Choose MIPSBE packages, and save them to your computer;
- Return to the WinBox and upload downloaded packages;
- Restart the device.

Mounting

The device is designed to use indoors and it can be mounted in a rackmount enclosure using provided rack mounts, or it can be placed on the desktop. Please attach rubber pegs on the bottom of the router if the desired

placement is on the flat surface or use a Phillips screwdriver to attach rackmount ears on both sides of the device if the designated use is for rackmount enclosure:

1. Attach rack ears to both sides of the device and tighten four screws to secure them in place, as shown in the picture.
2. Place the device in a rackmount enclosure and align it with the holes so that the device fits conveniently.

3. Tighten screws to secure it in place.

   The IP rating scale for this device is IPX0. The device has no protection from water contamination, please ensure the placement of the device in a dry and ventilated environment. We recommend shielded Cat5/6 cables for our devices. The mounting and configuration of this device should be done by a qualified person.

Configuration

RouterOS includes many configuration options in addition to what is described in this document. We suggest starting here to get yourself accustomed to the possibilities: **https://mt.lv/help**. In case the IP connection is not available, the Winbox tool (**https://mt.lv/winbox**) can be used to connect to the MAC address of the device. For recovery purposes, it is possible to boot the device from the network, see the Reset button section.

Powering

The device accepts power from two alternative current inputs at the range AC 100-240 V. Dual power supplies for redundancy with IEC power connectors. DC jack input Voltage 36-57 V DC. 2-pin terminal input Voltage 36-57 V DC. PoE in input 43-57 V DC. The power consumption under maximum load can reach 41 W.

Expansion slots and ports

- Product code CRS504-4XQ-IN
- CPU QCA9531 650 MHz
- CPU architecture MIPSBE
- CPU core count 1
- Size of RAM 64 MB
- Storage 16 MB, Flash
- Number of 100Mbit Ethernet ports 1

- Number of 100G QSFP28 ports 4
- Switch chip model 98DX4310
- Dimensions 320 x 185 x 44 mm
- Operating system RouterOS v7, License level 5
- Operating temperature -40°C to +70°C

    * 100G QSFP28 supported speeds: 1x 100G; 1x 40G; 4x 25G; 4x 10G; 4x 1G. Not supported: 2x 50G; 1x 50G, 2x 40G

Reset button

The RouterBOOT reset button has the following functions. Press the button and apply the power, then:

- Release the button when the green LED starts flashing, to reset the RouterOS configuration to defaults.
- Release the button when the LED turns solid green to clear all configurations and defaults.
- Release the button after the LED is no longer lit (~20 seconds) to cause a device to look for Netinstall servers (required for reinstalling RouterOS over the network).

Regardless of the above option used, the system will load the backup RouterBOOT loader if the button is pressed before power is applied to the device. Useful for RouterBOOT debugging and recovery.

Operating system support

The device supports RouterOS v7.2 The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.

Accessories

The package includes the following accessories that come with the device:

2 Power cords

Fastening set

Please visit the wiki pages for the MikroTik SFP module compatibility table:
https://wiki.mikrotik.com/wiki/MikroTik_SFP_module_compatibility_table

⚠️ Safety Notice

Electric shock hazard. This equipment is to be serviced by trained personnel only.

Federal Communication Commission Interference Statement

FC This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy

and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

Innovation, Science, and Economic Development Canada

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

UKCA marking

UK
CA

Technical Specifications

Product Power Input Options	Degrees of protection	Operating Temperature
2 AC inputs = 100 – 240 V DC Jack (36 – 57 V) PoE in Ethernet Port (42.5 – 57 V) 2 – PIN Terminal (36 – 57 V)	IP20	-0°..+70°C

Documents / Resources

MIKROTIK CRS504-4XQ-IN Wireless Routers [pdf] User Manual
CRS504-4XQ-IN Wireless Routers, CRS504-4XQ-IN, Wireless Routers, Routers

References

- 🔧 **MikroTik Routers and Wireless - Software**
- 🌐 **MikroTik SFP module compatibility table - MikroTik Wiki**

- **User Manual**