# RB5009UG+S+IN

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## 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.

## Setup

- Make sure your ISP is allowing hardware change and will automatically issue an IP address.
- Connect your ISP cable to the first Ethernet port.
- Connect your PC to any of the Ethernet ports.
- Connect the device to the power source.
- Use a Web browser or WinBox to connect to the default IP address of 192.168.88.1 from any port, with the username *admin* and no password (or, for some models, check user and wireless passwords on the sticker).
- If IP is not available, download WinBox from our webpage and use it to connect through MAC address.
- Update RouterOS software to the latest version, and make sure that the device has an internet connection.
- If the device does not have an internet connection update software by downloading the latest version from our webpage https://mikrotik.com/download
- Find the latest software and choose your packages.
- To get the architecture type of your device model, open WinBox, WebFig go to (System/Resources).
- Download packages to the PC and upload them to the WinBox, WebFig, (Files) menu, and reboot the device.
- Set up your password to secure the device.

## Powering

The power consumption under maximum load can reach 20 W. The device accepts power from the power jack or from the first Ethernet port:

- Direct-input power jack (5.5 mm outside and 2 mm inside, female, pin positive plug) accepts 24-57 V DC.
- The First Ethernet port accepts Power over Ethernet 24-57 V DC.
- The 2-pin terminal on the side accepts 24-57 V DC.

Connecting to a POE Adapter:

1. Connect the Ethernet cable from the device to the POE port of the POE adapter.
2. Connect an Ethernet cable from your LAN to the LAN port of the POE adapter, please mind arrows for data and power flow.
3. Connect the power cord to the adapter, and then plug the power cord into a power outlet.

# Configuration

Once logged in, we recommend clicking the "Check for updates" button in the QuickSet menu, as updating your RouterOS software to the latest version ensures the best performance and stability. For wireless models, please make sure you have selected the country where the device will be used, to conform to local regulations.
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 an IP connection is not available, the Winbox tool (https://mt.lv/winbox) can be used to connect to the MAC address of the device from the LAN side (all access is blocked from the Internet port by default).
For recovery purposes, it is possible to boot the device for reinstallation, see section Buttons and jumpers.

# Mounting

The device is designed to use indoors and it can be mounted on the wall, or it can be placed on the desktop.



1. Find the designed mounting holes on both sides of the device, as shown in the picture;
2. Use provided screws to secure the device to the wall;
3. Based on the wall material you can use a drill bit and provided dowels.

The device has no protection from water contamination, please ensure the placement of the device in a dry and ventilated environment.
We recommend Cat6 cables for our devices.
*The mounting and configuration of this device should be done by a qualified person.*

# Rackmount

If desired placement is rackmount, additional brackets can be purchased separately:

### RB5009 rackmount kit K-79





## Extension slots and ports

- Product code RB5009UG+S+IN
- CPU 88F7040 1.4 GHz
- CPU architecture ARM 64bit
- CPU core count 4
- Size of RAM 1 GB
- RAM type DDR4
- Storage 1 GB, NAND
- Number of 1G Ethernet ports 7
- Number of 2.5G Ethernet ports 1
- Number of 10G SFP+ ports 1
- USB port 1 (3.0 type A)
- Operating system RouterOS (License level 5)
- Switch chip model 88E6393
- Dimensions 220 x 125 x 22 mm
- Operating temperature -40°C to +60°C

## Buttons and jumpers

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 after 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.

## LED

- Hidden Green LED behind the Reset button is a USER LED
- Blue LED 1 is the DC1 Power LED
- Blue LED 2 is the DC2 Power LED
- Green SFP+ LED is an SFP+ port link and activity LED
- Ethernet RJ45 Green LEDs are Ethernet port link and activity LEDs
- Ethernet RJ45 Port 1 Orange LED is PoE-in status LED
- Ethernet RJ45 Port 2-8 Orange LEDs are unused on this model

## Accessories

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

- ADAPT1_EU/US Switching Power Supply 24V 1.5A 36W
- SET1_ K-55 fastening set
- PAD1_ 4 pcs Pad D=7; H=1.5 mm, black, one side adhesive 3M988T

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

## Operating system support

The device supports RouterOS software version 7.0.5. The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.

⚠ To avoid pollution of the environment, please separate the device from household waste and dispose of it in a safe manner, such as at designated waste disposal sites. Familiarize yourself with the procedures for the proper transportation of the equipment to the designated disposal sites in your area.

## Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 complies with Industry Canada's license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

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

## UKCA marking

UK
CA

# Eurasian Conformity Mark

Информация о дате изготовления устройства указана в конце серийного номера на его наклейке через дробь. Первая цифра означает номер года (последняя цифра года), две последующие означают номер недели.

Изготовитель: Mikrotikls SIA, Aizkraukles iela 23, Riga, LV-1006, Латвия, support@mikrotik.com. Сделано в Китае, Латвии или Литве. См. на упаковке.

Для получения подробных сведений о гарантийном обслуживании обратитесь к продавцу. Информация об импортерах продукции MikroTik в Российскую Федерацию: https://mikrotik.com/buy/europe/russia

Продукты MikroTik, которые поставляются в Евразийский таможенный союз, оцениваются с учетом соответствующих требований и помечены знаком EAC, как показано ниже:

# Norma Oficial Mexicana

EFICIENCIA ENERGETICA CUMPLE CON LA NOM-029-ENER-2017.

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

- Es posible que este equipo o dispositivo no cause interferencia perjudicial y.
- Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

Fabricante: Mikrotikls SIA, Brivibas gatve 214i, Riga, LV-1039, Latvia.

País De Origen: Letonia; Lituania; China (Republica Popular); Estados Unidos De America; Mexico.

Por favor contacte a su distribuidor local para preguntas regionales específicas. La lista de importadores se puede encontrar en nuestra página de inicio – https://mikrotik.com/buy/latinamerica/mexico.

# CE Declaration of Conformity

Manufacturer: Mikrotikls SIA, Brivibas gatve 214i Riga, Latvia, LV1039.

The full text of the EU Declaration of Conformity is available at the following internet address: https://mikrotik.com/products

*Information contained here is subject to change. Please visit the product page on www.mikrotik.com for the most up-to-date version of this document.*