MikroTik LTE18 hAP Hap Simple Home Wireless User Guide

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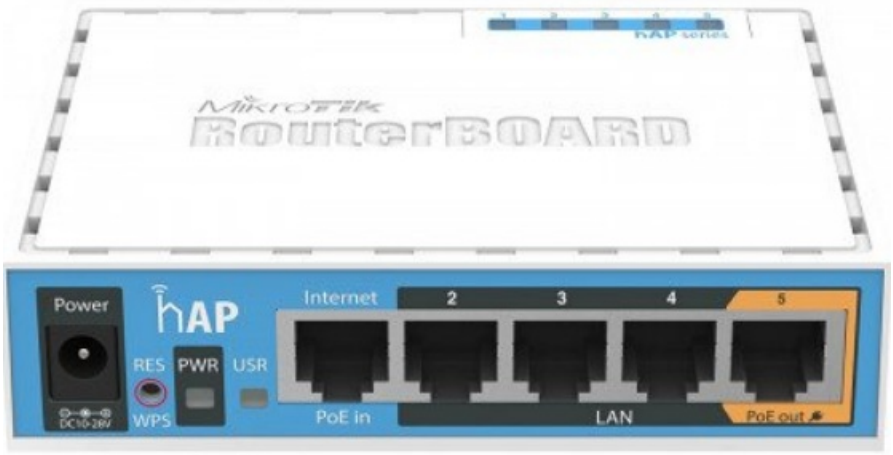

Specifications

- Five 10/100 Ethernet ports
- Integrated Wireless 2.4 GHz 802.11b/g/n with 2×2 MIMO
- Two onboard PIF antennas with max gain of 1.5 dBi
- One USB type-A slot
- Support for Cat5 shielded cable

Product Usage Instructions

Safety Warnings:

Make sure to follow these safety precautions when setting up your hAP:

- Connect the Internet cable to port 1 and local network PCs to ports 2-5.
- Set your computer IP configuration to automatic (DHCP).
- Connect to the wireless network name starting with MikroTik.

Configuration:

To configure your hAP:

1. Open your web browser and go to the default IP address.
2. Check for updates and update RouterOS software.
3. Personalize your wireless network by changing the SSID, country, WiFi password, and router password.
4. Apply the configuration to save changes.

Powering:

To power your hAP:

- Use the power jack or the first Ethernet port (Passive PoE).
- The power jack accepts 10-28 V DC.
- The first Ethernet port accepts passive Power over Ethernet 10-28 V DC.

Connecting with a mobile app:

To connect using a mobile app:

1. Insert the SIM card and power on the device.
2. Scan the QR code with your smartphone and connect to the wireless network.
3. Open the application and click Connect to establish a connection.

Mounting:

Place the device on a desktop indoors using Cat5 shielded cable. Maintain a safe distance between the radiator and your body.

Extension Slots and Ports:

The hAP features:

- Five individual Ethernet ports supporting Auto MDI/X.
- Integrated Wireless 2.4 GHz with MIMO technology.
- One USB type-A slot.

FAQ

- **Q: How do I change the wireless network name (SSID)?**
  - A: You can change the SSID in the Network Name field during configuration.
- **Q: What is the recommended power input for the hAP?**
  - A: The power jack accepts 10-28 V DC, and the first Ethernet port accepts passive Power over Ethernet 10-28 V DC.
- **Q: How can I update the RouterOS software?**
  - A: Click on the Check for updates button on the right side of the configuration page to update to the latest version.

The hAP is a simple home wireless access point. It is configured out of the box, you can simply plug in your internet cable and start using wireless internet.

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 to 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, and 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 radio devices must be professionally installed. Exposure to Radio Frequency Radiation: This MikroTik equipment complies with the FCC, IC, and European Union radiation exposure limits set forth for an uncontrolled environment. This MikroTik device should be installed and operated no closer than 20 centimeters from your body, occupational user, or the general public

Connecting

- Connect your Internet cable to port 1, and local network PCs to ports 2-5.
- Set your computer IP configuration to automatic (DHCP).
- Wireless "access point" mode is enabled by default, you can connect to the wireless network name which starts with "MikroTik".
- Once connected to the wireless network, open **https://192.168.88.1** in your web browser to start configuration,

since there is no password by default, you will be logged in automatically (or, for some models, check user and wireless passwords on the sticker).

- We recommend clicking the “Check for updates” button on the right side and updating your RouterOS software to the latest version to ensure the best performance and stability.
- To personalize your wireless network, SSID can be changed in the fields “Network Name”.
- Choose your country on the left side of the screen in the field “Country”, to apply country regulation settings.
- Set up your wireless network password in the field “WiFi Password” the password must be at least eight symbols.
- Set up your router password in the bottom field “Password” to the right and repeat it in the field “Confirm Password”, it will be used to login next time.
- Click on the “Apply Configuration” to save changes.

Powering

The board accepts power from the power jack or the first Ethernet port (Passive PoE):

- Direct-input power jack (5.5mm outside and 2mm inside, female, pin positive plug) accepts 10-28 V DC;
- The First Ethernet port accepts passive Power over Ethernet 10-28 V DC. The power consumption under maximum load can reach 5 W.

Connecting with a mobile app

Use your smartphone to access your router through WiFi.

- Insert the SIM card and power on the device.
- Scan QR code with your smartphone and choose your preferred OS.
- Connect to the wireless network. SSID starts with MikroTik and has the last digits of the device’s MAC address.
- Open application.
- By default, the IP address and user name will be already entered.
- Click Connect to establish a connection to your device through a wireless network.
- Choose Quick setup and the application will guide you through all basic configuration settings in a couple of easy steps.
- An advanced menu is available to fully configure all necessary settings

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 from the network, see a section Reset button.

Mounting

The device is designed to be used indoors, by placing it on the desktop. We recommend using Cat5 shielded cable. When using and installing this device please pay attention to the Maximum Permissible Exposure (MPE) safety distance with a minimum of 20 cm between the radiator and your body.

Extension Slots and Ports

- Five individual 10/100 Ethernet ports, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices
- One Integrated Wireless 2.4 GHz 802.11b/g/n, 2×2 MIMO with two onboard PIF antennas, max gain 1.5 dBi
- One USB type-A slot
- The Ether5 port supports PoE output for powering other RouterBOARD devices. The port has an autodetection feature, so you can connect Laptops and other non-PoE devices without damaging them. The PoE on Ether5 outputs approximately 2 V below input voltage and supports up to 0.58 A (So provided 24 V PSU will provide 22 V/0.58 A output to the Ether5 PoE port).

Reset button

The reset button has three functions:

- Hold this button during boot time until the LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds).
- Keep holding for 5 more seconds, LED turns solid, release now to turn on CAP mode. The device will now look for a CAPsMAN server (total 10 seconds).
- Or Keep holding the button for 5 more seconds until LED turns off, then release it to make the RouterBOARD look for Netinstall servers (total 15 seconds).

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 software version 6. The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.

Notice

- The Frequency band 5.470-5.725 GHz isn’t allowed for commercial use.
- In case WLAN devices work with different ranges than the above regulations, then a customized firmware version from the manufacturer/supplier is required to be applied to the end-user equipment and also prevent

the end-user from reconfiguration.
- For Outdoor Usage: End-user requires approval/license from the NTRA.
- Datasheet for any device is available on the official manufacturer website.
- Products with the letters “EG” at the end of their serial number have their wireless frequency range limited to 2.400 – 2.4835 GHz, the TX power is limited to 20dBm (EIRP).
- Products with the letters “EG” at the end of their serial number have their wireless frequency range limited to 5.150 – 5.250 GHz, the TX power is limited to 23dBm (EIRP).
- Products with the letters “EG” at the end of their serial number have their wireless frequency range limited to 5.250 – 5.350 GHz, the TX power is limited to 20dBm (EIRP).

Please make sure the device has a lock package (firmware version from the manufacturer) which is required to be applied to the end-user equipment to prevent the end-user from reconfiguration. The product will be marked with country code “-EG”. This device needs to be upgraded to the latest version to ensure compliance with local authority regulations! It is the end users’ responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and Dynamic Frequency Selection (DFS) requirements. All MikroTik radio devices must be professionally installed. To avoid pollution of the environment, please separate the device from household waste and dispose of it in a safe manner, such as in 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

- FCC ID:TV7RB951Ui-2ND

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 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. This device and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

IMPORTANT: Exposure to Radio Frequency Radiation. This equipment complies with the FCC RF radiation

exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and any part of your body.

Innovation, Science and Economic Development Canada

- **IC:** 7442A-9512ND

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.

IMPORTANT: Exposure to Radio Frequency Radiation.

This equipment complies with the IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and any part of your body.

UKCA marking

CE Declaration of Conformity

Manufacturer: Mikrotikls SIA, Brivibas gatve 214i Riga, Latvia, LV1039. Hereby, Mikrotīkls SIA declares that the radio equipment type RB951Ui-2nD is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

- **https://mikrotik.com/products**

Frequency bands terms of use

Frequency range (for applicable models)	**Channels used**	**Maximum Output Power (EIRP)**	**Restriction**
2400-2483.5 MHz	1 – 13	20 dBm	Without any restriction to use in all EU Member States

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 radio devices must be professionally installed! This MikroTik device meets Maximum WLAN transmit power limits per ETSI regulations. For more detailed information see Declaration of Conformity above

Note. The 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.

Documents / Resources

	MikroTik LTE18 hAP Hap Simple Home Wireless [pdf] User Guide LTE18 hAP Hap Simple Home Wireless, LTE18 hAP, Hap Simple Home Wireless, Simple Home Wireless, Home Wireless, Wireless

References

- MikroTik Routers and Wireless
- MikroTik Routers and Wireless - Buy
- MikroTik Routers and Wireless - Buy
- MikroTik Routers and Wireless - Products
- User Manual