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ATLGM&RG520F-EU

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ATL 5G R16 (ATLGM&RG520F-EU)

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.

All installation methods for mounting an access point on any wall surface are subject to the acceptance of local jurisdiction.

The Installation of the equipment must comply with local and national electrical codes.

This product is intended to be mounted outdoors on a pole. Please read the mounting instructions carefully before beginning installation. Failure to use the correct hardware and configuration or to follow the correct procedures could result in a hazardous situation for people and damage to the system.

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 and cabling requirements. All MikroTik radio devices must be professionally installed.

This is a class A device. In a domestic environment, this product might cause radio interference in which case the user might be required to take adequate measures.

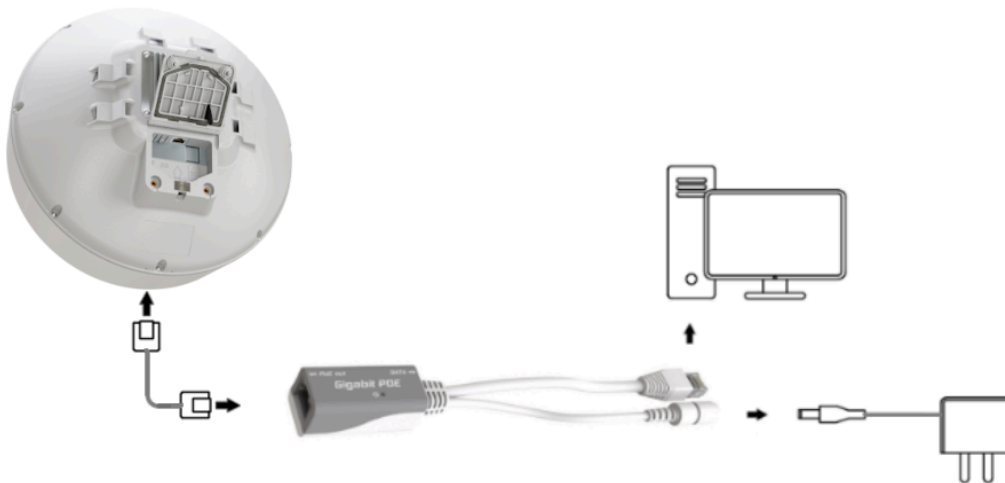
To avoid pollution of the environment, please separate the device from household waste and dispose of it in a safe manner, such as at designated waste disposal sites. Familiarize yourself with the procedures for the proper transportation of the equipment to the designated disposal sites in your area.

Exposure to Radio Frequency Radiation: This MikroTik equipment complies with the European Union radiation exposure limits set forth for an uncontrolled environment. This MikroTik device should be installed and operated no closer than 30 centimeters from your body, occupational user, or the general public.

Quickstart

1. Open the Ethernet port door;

2. Insert the Micro SIM card into the slot with the chip facing up; if you want to use eSIM, read the [eSIM](#) section;
3. Connect the device to the included PoE injector with an Ethernet cable to the data+power end;
4. Connect the data end of the PoE injector to the computer;
5. Connect the power adapter to the PoE injector;
6. Configure your device using a web browser through WebFig or the WinBox tool at <https://mt.lv/WinBox>; **multiple configuration methods are available to ensure accessibility**;
7. Access WebFig by opening <http://192.168.188.1>, and for WinBox, download the tool, navigate to the Neighbors tab, and click on the MAC address. The username is "admin" with no password (or, for some models, check user and wireless passwords on the sticker);
8. Click the "Check for updates" button and update RouterOS to the latest version. A valid SIM card must be inserted or an [eSIM](#) must be set up, and an active Internet connection is required.
9. For a manual update of the device, visit the products page at <https://mikrotik.com/products> to find your product. The required packages are accessible under the "Support&Downloads" menu;
10. Upload downloaded packages to the WebFig or WinBox "Files" menu and reboot the device;
11. By upgrading your RouterOS software to the latest version, you can ensure optimal performance, stability, and security updates;
12. Set up your router password.



Powering

- Number of DC inputs: 1 (PoE-IN).
- PoE in: 802.3 af/at.
- PoE in input Voltage: 12-56 V.
- Power adapter rated current: 0.8 A.
- Maximum power consumption without accessories: 10 W.
- Maximum power consumption: 10 W.

Mounting

1. Slide the included metallic mounting rings into the two slots on the back of the antenna dish.
2. Attach the unit to a pole, with the Ethernet port pointing downward.
3. Use a PH2 screwdriver to tighten the rings.
4. Fix the Ethernet cable to the pole using zip ties, less than one meter from the unit, to avoid the cable being pulled out of the port.

⚠ To use a patched Ethernet cable, the rubber seal must first be cut. Alternatively, insert the cable through the rubber seal before attaching the RJ45 connector.

Do not use a cable without the rubber seal, as this will compromise the IP66 rating.

5. Check mounting angle and positioning.

When mounting outdoors, please ensure that any cable openings are directed downwards. Use a POE injector and proper grounding, this device has a specially-designed grounding connector under the port cover. Recommended using shielded Cat5/6 cable. The IP rating scale for this device is IP66.

Configuration

Configuration can be done using a web browser via WebFig, the WinBox tool <https://mt.lv/WinBox>. Multiple methods are available to ensure accessibility.

- To access WebFig, open <http://192.168.188.1> in your browser.
- For WinBox, download the tool, go to the Neighbors tab, and click on the MAC address.
The default username is "admin", **please find the password on the device sticker**.

We recommend checking for updates frequently to ensure your RouterOS software remains up to date for the best performance and stability. Click the "Check for updates" button in WinBox or WebFig to update to the latest version.

 A valid SIM card must be inserted or an eSIM set up, along with an active Internet connection, for updates to work.

RouterOS provides a wide range of configuration options beyond what's described in this document. We suggest visiting <https://mt.lv/help> to explore these features.

For recovery purposes, it is possible to boot the device for reinstallation, see section [Reset button](#).

Accessories

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



Expansion slots and ports

- Product code: **ATLGM&RG520F-EU**.
- CPU Dual-core: 88F3720 800 MHz
- CPU architecture: ARM 64bit
- Size of RAM: 512 MB
- RAM type: DDR3L
- Storage: 32 MB, Flash
- Number of 1G Ethernet ports: 1
- LTE Category: 20 (2.0 Gbps Downlink, 200 Mbps Uplink)
- LTE modem: RG520F-EU
- TAC: 86945405
- 5G SA Category: 4.2 Gbps Downlink, 900 Mbps Uplink.
- 5G NSA Category: 5.0 Gbps Downlink, 650 Mbps Uplink.
- 3G Category: R8 (42.2Mbps Downlink, 5.76Mbps Uplink).
- MIMO DL: 4x4.
- 5G SA FDD bands: 1 (2100 MHz) / 3 (1800 MHz) / 5 (850 MHz) / 7 (2600 MHz) / 8 (900 MHz) / 20 (800 MHz) / 28 (700 MHz).

- 5G SA TDD bands: 38 (2600 MHz) / 40 (2300 MHz) / 41 (2500 MHz) / 75 (1500 MHz) / 76 (1500 MHz) / 77 (3700 MHz) / 78 (3500 MHz).
- 5G NSA FDD bands: 1 (2100 MHz) / 3 (1800 MHz) / 5 (850 MHz) / 7 (2600 MHz) / 8 (900 MHz) / 20 (800 MHz) / 28 (700 MHz).
- 5G NSA TDD bands: 40 (2300 MHz) / 41 (2500 MHz) / 77 (3700 MHz) / 78 (3500 MHz) / 76 (1500 MHz) / 38 (2600 MHz) / 75 (1500 MHz).
- LTE FDD bands: 20 (800MHz) / 28 (700MHz) / 3 (1800MHz) / 5 (850MHz) / 7 (2600MHz) / 8 (900 MHz) / 1 (2100MHz) / 32 (1500 MHz).
- LTE TDD bands: 40 (2300MHz) / 38 (2600MHz) / 41 (2500MHz) / 42 (3500MHz).
- 3G bands: 1 (2100MHz) / 5 (850MHz) / 8 (900MHz).
- Dimensions: 311 x 311 x 179 mm.
- Operating system: RouterOS version 7, License level 3
- Operating temperature -40°C to +70°C

SIM slot usage



SIM card slot is designed to be used with Micro SIM cards.

Nano SIM cards have different thicknesses and usage with an adapter is not recommended.

eSIM settings

By default the device is configured to use the SIM slot. To use the on-board eSIM, switch the slot by using the following command: `/interface/lte/settings/set sim-slot=esim`

- A single eSIM chip can store multiple eSIM profiles, the maximum profile count depends on the eSIM chip used.

<https://help.mikrotik.com/docs/spaces/ROS/pages/30146563/LTE#LTE-LTEeSIM>

Reset button

The reset button has three functions:

- Hold this button during boot time until the green 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 of 10 seconds).
- Reinstall RouterOS using [Netinstall](#). To reinstall RouterOS using the Netinstall utility, enter the device into BOOTP mode. There are two types of booters available: the regular booter and the backup booter.
 - Regular booter - Power on the device, wait 1-2 seconds, then press and hold the Reset button. Wait until the "USR" LED is blinking, then turns solid "On". When the "USR" LED turns "Off", release the Reset button - the device will enter BOOTP mode.
 - Backup booter - Power off the device, press and hold the Reset button, then power it on. Wait until the "USR" LED is blinking, then turns solid "On". When the "USR" LED turns "Off", release the Reset button - the device will enter BOOTP mode using the backup booter.

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.

i Netinstall

When performing [Netinstall](#), make sure to use the latest v7 version of both ROS files and the Netinstall software.

Operating system support

The device supports RouterOS software version 7 and higher. The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.

- i** For important safety instructions and regulatory certifications, please refer to the Safety and Regulatory Information document available on <https://mikrotik.com/products>.

Navigate to: Support & Downloads → Safety and Regulatory Information

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