

# MIKroTik SXT Kit Series Models User Manual

Home » Mikrotik » MIKroTik SXT Kit Series Models User Manual



#### **Contents**

- 1 MIKroTik SXT Kit Series Models
- 2 SXT LTE kit
- 3 First use
- 4 Mounting
- 5 Grounding
- 6 Powering
- 7 Configuration
- 8 Extension slots and ports
- 9 Reset button
- 10 Mode button
- 11 Accessories
- 12 Operating system support
- 13 Federal Communication Commission Interference

#### **Statement**

- 14 Innovation, Science and Economic Development Canada
- 15 CE Declaration of Conformity
- 16 MPE statement
- 17 Documents / Resources
- **18 Related Posts**

# MikroTik

**MIKroTik SXT Kit Series Models** 



#### **SXT LTE kit**

The SXT kit comes as a complete set and includes a built-in modem, connected to a built-in antenna. It has two 10/100 Ethernet connectors that support MDI-X auto-detection. There are two micro SIM card slots available, to switch between cell providers.

#### First use

- The default configuration is CPE RouterMode:
- \*LTE interface connected to providers network (WAN port);
- \*WAN port is protected by a firewall and enabled DHCP client.
- LAN Configuration:
- IP Address 192.168.88.1/24 is set on the bridge (LAN port)
- DHCP Server enabled;
- DNS: enabled.
- WAN (gateway) Configuration:
- gateway: Ite1;
- ip4 firewall: enabled;
- NAT: enabled.
  - 1. Open the bottom lid.
  - 2. Insert the SIM cards into the micro-SIM slots (SIM A slot is a default).
  - 3. If using another slot, the configuration can be changed in RouterOS with CLI command: system routerboard modem set sim-slot=down
  - 4. After changing SIM slots, LTE modem will be restarted. It can take some time (depending on modem and board around 30 seconds) to fully initialize it, so make sure you test your modem.

#### https://wiki.mikrotik.com/wiki/Dual\_SIM\_Application

- 5. Connect the device to the power source (see "SXT kit-series#Powering").
- 6. Once the device is powered on and PC connected to the device, open https://192.168.88.1 in your web browser or Winbox to start the configuration.
- 7. User name: admin and there is no password by default you will be logged in automatically to the Quick Set screen.
- 8. 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. Must have an internet connection and a valid SIM card.
- 9. To manually update the device, please go to our web page and download the latest (MIPSBE) software

- packages to your PC.
- 10. Open Web browser or Winbox and upload packages to the Files menu and reboot the device.
- 11. 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.
- 12. Click on the "Apply Configuration" to save changes.

#### **Mounting**

SXT designed to be mounted on the pole, the package includes a mounting bracket and steel clamp.

- 1. With the clip pointed forward, slide the mounting bracket into the rail on the bottom of the case, until the clip clicks into place.
- 2. Guide the clamp through the opening in the bracket.



- 3. Attach the unit to a pole, with the Ethernet port pointing downward.
- 4. Use a PH2 screwdriver to tighten the rings when alignment is complete.
- 5. 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.
- 6. Check mounting angle and positioning.

When using both Ethernet ports, make sure to cut a wider cable opening in the plastic door. You can use pliers to tear out the plastic piece that is protecting the cable opening. When closing the plastic door, make sure to apply pressure, until it "clicks" into place. Mounting and configuration of this device should be done by a qualified person. When mounting on the wall, please ensure that cable feed is pointing downwards. The IPX rating scale of this device is IP54. We recommend using Cat6 shielded cables. Warning! This equipment should be installed and operated with a minimum distance of 20 cm between the device and your body.

# Grounding

The installation infrastructure (towers and masts), as well as the router itself, must be properly grounded. The device includes a grounding wire attachment screw behind the case door. Attach your grounding wire to the grounding screw, then attach the other end of the grounding wire to the grounded mast. This is to substantially reduce the risk of ESD and lightning damage.

#### **Powering**

The device accepts power from the Ethernet port: 12 – 57 V DC passive and 802.3af/at PoE to the port ETH1. The power consumption under maximum load can reach 5 W, with attachments 22 W.

## Connecting to a PoE Adapter:

- 1. Connect the Ethernet cable from the device to the PoE+DATA port of the PoE adapter;
- 2. Connect an Ethernet cable from your local network (LAN) to the PoE adapter;
- 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 with 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: <a href="https://mt.lv/help">https://mt.lv/help</a>. In case IP connection is not available, the Winbox tool (<a href="https://mt.lv/winbox">https://mt.lv/winbox</a>) 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 a section SXT kit-series#Reset button.

### **Extension slots and ports**

- Two Ethernet ports that support automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices.
- The ETH2 port is capable of powering another RouterBOARD device with passive PoE (up to 57 V). The
  maximum output current is 600 mA when using less than 30 V to power this device and 400 mA when using
  more than 30 V.
- · MiniPSIe slot.
- · Two micro SIM slots.
- Integrated LTE module, supported bands depend on a region (check brochure).

#### **Reset button**

### The reset button has three functions:

- Hold this button during boot time until 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.

#### Mode button

The action of the mode buttons can be configured from RouterOS software to execute any user-supplied RouterOS script. You can also disable this button. The mode button can be configured in RouterOS menu /system routerboard mode-button

#### **Accessories**

Package includes the following accessories that come with the device:

- ADAPT1\_EU/US Switching Power Supply 24 V, 0.8 A, 19.2 W, 85.3%, VI, cable:150 cm Hor CMC;
- CLAMP1\_Hose Clapmp SUS304 (Philips type; clamping diameter range 35-70 mm);
- POE1 POE Injector with shielded connector;
- BRAC1 SXT5D mounting;

# **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.

#### **Federal Communication Commission Interference Statement**

FCC ID: TV7R11ELTE6, TV7R11ELTE, TV7R11E4G 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. For use of CBRS bands, the CBSD Category of the final Host equipment will be dependent on the power settings and antenna gain used.

#### 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.

**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.

## **CE Declaration of Conformity**

#### Manufacturer:

 Hereby, Mikrotīkls SIA declares that the radio equipment type RouterBOARD is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity isavailable at the following internet address: https://mikrotik.com/products

#### **MPE** statement

This equipment complies with EU 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 your body, unless specifically stated otherwise in page 1 of this document. In RouterOS you must specify your country, to make sure local wireless regulations are observed. This device meets Maximum 2G/3G/4G LTE per ETSI regulations.

#### Frequency bands terms of use

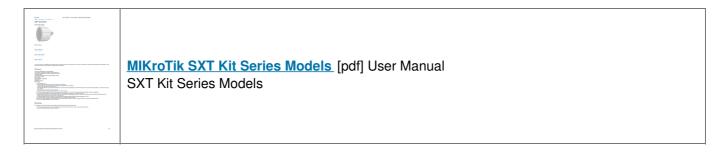
Frequency range (for applicable models)	Channels used	Maximum Output Powe r (EIRP)	Restriction
<u>2412-2472</u> MHz	1 – 13	20 dBm	Without any restriction to use in all EU Member States
<u>5150-5250</u> MHz	26 – 48	23 dBm	Restricted to indoor use only*

<u>5250-5350</u> MHz	52 – 64	20 dBm	Restricted to indoor use only*
<u>5470-5725</u> MHz	100 – 140	27 dBm	Without any restriction to use in all EU Member States

Instruction manual: Connect the power adapter to turn on the device. Open 192.168.88.1 in your web browser,

to configure it. More information on {+}https://mt.lv/help+

# **Documents / Resources**



Manuals+,