

# User Manual

## SXTsq series



The SXTsq is an outdoor wireless router with a built-in directional antenna. It can be used as a CPE or for point to point links (use RouterOS wireless mode "bridge" to work as a single-client AP for point to point scenarios). List of products in series:

**SXTsq Lite2**

**SXTsq Lite5**

**SXTsq 5 ac**

**SXTsq 5 High Power**

## **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 is 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, 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.

## Quickstart

- Open the Ethernet door.
- Connect an Ethernet cable to the Ethernet port. The maximum diameter of Ethernet cable is 6mm.
- Connect the other end of the Ethernet cable to the included PoE injector.
- Plug the PoE injector into your network switch or computer.
- Plug the included power supply into the PoE injector to start up the device.
- Set LAN computer IP configuration to *automatic* (DHCP).
- The default IP address of the unit is *192.168.88.1*, open this address in your web browser to start the configuration. The username is admin and there is no password (or, for some models, check user and wireless passwords on the sticker).
- We recommend clicking the "Check for updates" button and updating your RouterOS software to the latest version to ensure the best performance and stability.
- Choose your country, to apply country regulation settings and set up your password on the screen that loads.

## MikroTik mobile app

Use the MikroTik smartphone app to configure your router in the field, or to apply the most basic initial settings for your MikroTik home access point.



1. Scan QR code and choose your preferred OS.
2. Install and open application.
3. By default, the IP address and user name will be already entered.

4. Click Connect to establish a connection to your device through a wireless network.
5. Choose Quick setup and application will guide you through all basic configuration settings in a couple of easy steps.
6. An advanced menu is available to fully configure all necessary settings.

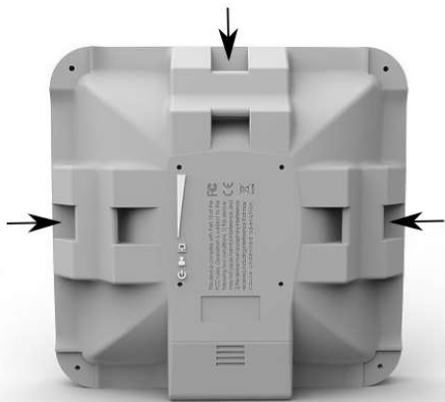
## Configuration

The device is preconfigured as a wireless client (CPE), and all you need to do is select the AP to connect to and set a device password. You can do this in the quickSET tab that is loaded by default. In case IP connection is not available, Winbox can be used to connect to the MAC address of the device. In case you wish to boot the device from the network, for example, to use MikroTik Netinstall, hold the RESET button of the device when starting it, until the LED light turns off, then the device will start to look for Netinstall servers.

More information about using RouterOS and connecting to this device in our documentation: <https://mt.lv/help>.

## Mounting

The IP rating scale for this device is IP54. When mounting outdoors, please ensure that any cable openings are directed downwards. We recommend using POE injector and proper grounding. When using and installing this device please pay attention to Maximum Permissible Exposure (MPE) safety distance with a minimum of 20 cm between the radiator and your body.



The device comes bundled with a metal mounting ring, which can be used on one of the three mounting slots on the backside of the device.

- Use a Phillips screwdriver to loosen the metal ring.

- Slide one end of it through the most convenient of the three mounting slots.
- Position the device on the pole where it will be mounted.
- Slide the loose end of the mounting ring back to its closing latch and use the screwdriver to tighten it.
- The included ring mount allows for mounting on 3-7 cm diameter poles.

It's recommended to secure Ethernet cable to the pole using zip ties. With the distance from the device approximately 30 cm.

As an additional option, you can use "quickMOUNT-X" – mounting bracket for easy adjustment that can be obtained separately. Product web page: [https://mikrotik.com/product/qm\\_x](https://mikrotik.com/product/qm_x)



Specially designed for the SQ series enables vertical and horizontal adjustment on the pole.

## Powering

The SQ series only accepts DC = power from Passive PoE injectors (one power supply and PoE injector are included)

**SXTsq Lite2** accepts 10-30 V DC = consuming at maximum load 5 W.

**SXTsq Lite5** accepts 10-30 V DC = consuming at maximum load 6 W.

**SXTsq 5 ac** accepts 10-28 V DC = consuming at maximum load 7 W.

**SXTsq 5 High Power** accepts 10-28 V DC = consuming at maximum load 7 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.

# Extension Slots and Ports

●One Ethernet 10/100 Mbit (SXTsq 5 ac – Gigabit Ethernet), 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:

●SXTsq Lite22.4 GHz, 802.11b/g/n, antenna gain 10 dBi.

●SXTsq Lite55 GHz, 802.11a/n, antenna gain 16 dBi.

●SXTsq 5 ac5 GHz, 802.11a/n/ac, antenna gain 16 dBi.

●SXTsq 5 High Power5 GHz, 802.11a/n, antenna gain 16 dBi.

# Buttons and Jumpers

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

●Release the button when green LED starts flashing, to reset RouterOS configuration to defaults.

●Release the button when the LED turns solid green to clear all configuration and defaults.

●Release the button after LED is no longer lit (~20 seconds) to cause the 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.

# Grounding

The device includes a grounding connection (marked  $\equiv$ ) which you should connect to the grounding installation of the tower or building where the device will be used. This is to substantially reduce the risk of ESD and lightning damage.

# Accessories

Package includes the following accessories that come with the device:

●EU/US Switching Power Supply 24V DC  $\equiv$ , 0.38 A, 9 W, Level VI, cable:1.5 m.

●Hose Clamp SUS304 (Phillips type; clamping diameter range 30-70 mm).

●POE Injector with shielded connector/Gigabit POE injector.

# Specifications

For more information about SQ series products, specifications, pictures, downloads, and test results please visit our web pages:

**SXTsq Lite2** [https://mikrotik.com/product/sxtsq\\_lite2](https://mikrotik.com/product/sxtsq_lite2)

**SXTsq Lite5** <https://mikrotik.com/product/RBSXTsq5nD>

**SXTsq 5 ac** [https://mikrotik.com/product/sxtsq\\_5\\_ac](https://mikrotik.com/product/sxtsq_5_ac)

**SXTsq 5 High Power** [https://mikrotik.com/product/sxtsq\\_5\\_high\\_power](https://mikrotik.com/product/sxtsq_5_high_power)

## Operating system support

The device supports RouterOS software version 6.44.5. 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 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

Model	FCC ID
SXTsq Lite5	TV7LHG5ND M
SXTsq 5	TV7LHG5HPN D
SXTsq 5 ac	TV7LHG5ACD
SXTsq Lite2	TV7SXTSQ- 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

Model	IC
SXTsq Lite5	7442A- LHG5NDM
SXTsq 5	7442A- LHG5HPND
SXTsq 5 ac	7442A- LHG5ACD
SXTsq Lite2	7442A- SXTSQ2ND

This device complies with Industry Canada licence-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.

**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.

Cet équipement est conforme aux limites d'exposition au rayonnement IC définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et toute partie de votre corps.

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



## Eurasian Conformity Mark

Частотный диапазон	Мощность передатчика
2400-2483.5 МГц, 5150-5350 МГц, 5650-5850 МГц	≤100 мВт

\*Доступные частотные каналы могут различаться в зависимости от модели продукта и сертификации.

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: Mikrotiks SIA, Aizkraukles iela 23, Riga, LV-1006, Латвия, [support@mikrotik.com](mailto: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 ЕАС, как показано ниже:



## Norma Oficial Mexicana

Rango de frecuencia (potencia de salida máxima): 2400-2483.5 MHz (20 dBm), 5725-5850 MHz (30 dBm). Los canales de frecuencia disponibles pueden variar según el modelo y la certificación del producto.

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>.

## The National Commission for the State Regulation of Communications and Informatization by Ukraine

Виробник: Mikrotikls SIA, Brivibas gatve 214i Рига, Латвія, LV1039.

Робоча частота (Максимальна вихідна потужність): 2400-2485.3 МГц (20 дБм), 5150-5250 МГц (23 дБм), 5250-5350 МГц (20 дБм), 5470-5725 МГц (27 дБм).

Справжнім Mikrotikls SIA заявляє, що маршрутизатор відповідає основним вимогам та іншим відповідним положенням директиви 2014/53/ЕС, а також суттєвим вимогам Технічного

регламенту радіообладнання, затвердженого постановою Кабінету Міністрів України від 24 травня 2017 року № 355.

Для експлуатації в Україні необхідно отримати дозвіл на експлуатацію у порядку, затвердженому рішенням НКРЗІ від 01.11.2012 № 559, зареєстрованому в Міністерстві юстиції України 03.01.2013 за № 57/22589.

## CE Declaration of Conformity

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

Hereby, Mikrotiks 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 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
2412-2472 MHz	1 - 13	20 dBm	Without any restriction to use in all EU Member States
5150-5250 MHz	26 - 48	23 dBm	Restricted to indoor use only*
5250-5350 MHz	52 - 64	20 dBm	Restricted to indoor use only*
5470-5725 MHz	100 - 140	27 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 / Dieses MikroTik-Gerät erfüllt die maximalen WLAN- Sendeleistung Grenzwerte gemäß ETSI-Bestimmungen. Weitere Informationen finden Sie oben unter Konformitätserklärung / Cet appareil MikroTik respecte les limites maximales de puissance de transmission WLAN conformément aux réglementations ETSI. Pour plus d'informations, voir la déclaration de conformité ci-dessus / Questo dispositivo MikroTik è conforme ai limiti massimi di potenza di trasmissione WLAN in conformità con le normative ETSI. Per ulteriori informazioni, consultare la dichiarazione di conformità sopra / Este dispositivo MikroTik cumple con los límites

máximos de potencia de transmisión WLAN de acuerdo con las regulaciones ETSI. Para obtener más información, consulte la declaración de conformidad anterior / Это устройство MikroTik соответствует максимальным пределам мощности передачи WLAN в соответствии с правилами ETSI. Для получения дополнительной информации см. Декларацию соответствия выше.

*Note. Information contained here is subject to change. Please visit the product page on [www.mikrotik.com](http://www.mikrotik.com) for the most up to date version of this document.*