# User Manual SXTSA-series

# SXT series: SXT SA5, SXT SA5 ac

SXT is an outdoor wireless router that can be used as a CPE in a PtM setup, or for point to point links. Please ensure the device is correctly mounted, with the cable pointing straight down.

## 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.
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.

## Assembly and mounting

With the clip pointed forward, slide the mounting bracket into the rail on the bottom of the case, until the clip clicks into place. The SXT comes bundled with a hose clamp, guide the clamp through the opening in the bracket and around the pole where it will be mounted. Tighten the hose clamp screw when alignment is complete. Two screw holes are provided as additional security against accidental bracket movement.

The SXT device has a sliding door, behind which the Ethernet port and the reset jumpers are located. This door can be also secured shut with a screw in the provided screw hole.

# Connecting

- Open the ethernet door to connect an ethernet cable to the ethernet port, 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).

- Please select your country in the screen that loads, to ensure your device meets local regulations. Set a wireless password, a management password, and upgrade the device to the latest software with the "check for updates" button.
  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.
  We recommend clicking the "Check for updates" button and updating your RouterOS software to the latest version to ensure the best performance and stability. More information about using RouterOS and connecting to this device
  in our documentation: *+https://mt.lv/help+*↗

# Powering

The device only accepts 8-32 V power from Passive PoE injectors (one power supply and PoE injector are included).

# Extension Slots and Ports

- One Ethernet (10/100 Mbit or Gigabit, depends on model), 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 with a built-in directional antenna, max 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 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.
  The device includes a grounding connection behind the ethernet port door (a screw or a metal loop, depending on the model), 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.

# Operating System Support

The device only supports RouterOS software with the version number at or above what 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 | IC |
|---|---|
| RBSXTG-5HPnD-SAr2 | TV7SXTG-5HPND |
| RBSXTG-5HPacD-SAr2 | TV7SXTG-5HACD |

_**Model RBSXTG-5HPnD-SAr2 (SXT SA5):**_

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.
**IMPORTANT: Exposure to Radio Frequency Radiation.** 75 cm minimum distance has to be maintained between the antenna and user. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

### *Model RBSXTG-5HPacD-SAr2 (SXT SA5 ac):*

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

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**IMPORTANT: Exposure to Radio Frequency Radiation.** 20 cm minimum distance has to be maintained between the antenna and user. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

**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.

**Antenna Installation. WARNING:** It is installer's responsibility to ensure that when using the authorized antennas in the United States (or where FCC rules apply); only those antennas certified with

the product are used. The use of any antenna other than those certified with the product is expressly forbidden in accordance to FCC rules CFR47 part 15.204. The installer should configure the output power level of antennas, according to country regulations and per antenna type. Professional installation is required of equipment with connectors to ensure compliance with health and safety issues.

# Innovation, Science and Economic Development Canada

| Model | IC |
|-------|-----|
| RBSXTG-5HPnD-SAr2 | 7442A-SXTG5HPND |
| RBSXTG-5HPacD-SAr2 | 7442A-SXTG5HACD |

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.

*Model RBSXTG-5HPnD-SAr2 (SXT SA5):*

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)

**IMPORTANT: Exposure to Radio Frequency Radiation**. 33 cm minimum distance has to be maintained between the antenna and user. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

*Model RBSXTG-5HPacD-SAr2 (SXT SA5 ac):*

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

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

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

**IMPORTANT: Exposure to Radio Frequency Radiation.** 22 cm minimum distance has to be maintained between the antenna and user. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

# UKCA marking

UK
CA

# Eurasian Conformity Mark

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

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:

ЕAC

# Norma Oficial Mexicana

Rango de frecuencia (potencia de salida máxima): 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](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): 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: Mikrotikls SIA, Brivibas gatve 214i Riga, Latvia, LV1039.

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 is available at the following internet address: [https://mikrotik.com/products](https://mikrotik.com/products)

## Frequency bands terms of use

| Frequency range (for applicable models) | Channels used | Maximum Output Power (EIRP) | Restriction |
| --- | --- | --- | --- |
| | | | |

| 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](www.mikrotik.com) for the most up to date version of this document.*