CRS518-16XS-2XQ-RM

CRS518-16XS-2XQ

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 for 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, 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 devices must be professionally installed.

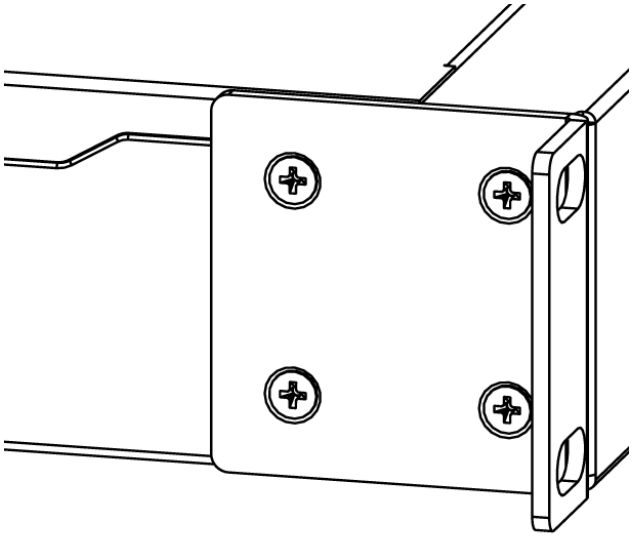
Quick start

- Connect with your computer to the device;
- Download the configuration tool https://mt.lv/winbox;
- Open the *Neighbors* tab and connect to the device using the MAC address;
- The user name: *admin*, by default there is no password (or, for some models, check user and wireless passwords on the sticker);
- To update the device to the latest software version download the latest RouterOS software from https://mikrotik.com/download;
- Choose MIPSBE packages, and save them to your computer;
- Return to the WinBox and upload downloaded packages;
- Restart the device.

Mounting

The device is designed to use indoors and it can be mounted in a rackmount enclosure using provided rack mounts, or it can be placed on the desktop. Please attach rubber pegs on the bottom of the router if the desired placement is on the flat surface or use a Phillips screwdriver to attach rackmount ears on both sides of the device if the designated use is for rackmount enclosure:

1. Attach rack ears to both sides of the device and tighten four screws to secure them in place, as shown in the picture.
2. Place the device in a rackmount enclosure and align with the holes so that the device fits conveniently.



3. Tighten screws to secure it in place.

The IP rating scale for this device is IPX0. The device has no protection from water contamination, please ensure the placement of the device in a dry and ventilated environment. We recommend shielded Cat5/6 cables for our devices. The mounting *and configuration of this device should be done by a qualified person.*

Configuration

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 the IP connection is not available, the Winbox tool (https://mt.lv/winbox) can be used to connect to the MAC address of the device.
For recovery purposes, it is possible to boot the device from the network, see the Reset button section.

Powering

- A number of AC inputs 2.
- Nominal voltage 12 V.
- Nominal current 12.5 A.
- AC input range 100-240 V.
- Max power consumption (without attachments) 45 W.
- Max power consumption 77 W.

Expansion slots and ports

- Product code CRS518-16XS-2XQ-RM.
- Switch chip model 98DX8525.
- CPU QCA9531 650 MHz.
- CPU architecture MIPSBE.
- CPU core count 1.
- Size of RAM 64 MB.
- RAM type DDR2.
- Storage 16 MB, Flash.

- A number of 100M Ethernet ports 1.
- A number of 25G SFP28 ports 16.
- A number of 100G QSFP28 ports 2.
- USB port 1 (type A).
- Operating system Only v7 RouterOS.
- Dimensions 443 x 265 x 44.5 mm.
- Operating temperature -40°C to +70°C.

* 100G QSFP28 supported speeds: 1x 100G; 2x 50G; 1x 50G; 1x 40G; 4x 25G; 4x 10G; 4x 1G. Not supported: 2x 40G
* 25G SFP28 supported speeds: 1x 25G; 1x 10G; 1x 2.5G; 1x 1G. Not supported: 1x 5G

Reset button

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).

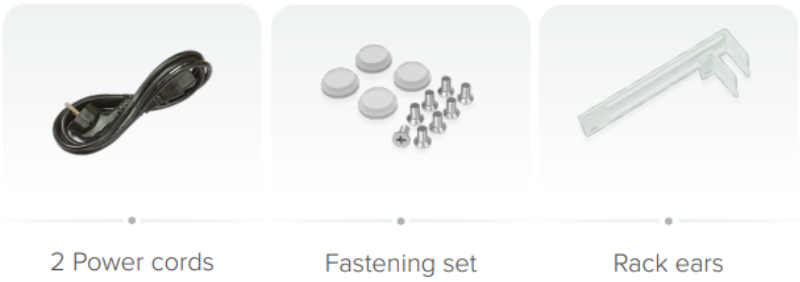
Regardless of the above option used, the system will load the backup RouterBOOT loader if the button is pressed before power is applied to the device. Useful for RouterBOOT debugging and recovery.

Operating system support

The device supports RouterOS v7.4.1 The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.

Accessories

Package includes the following accessories that come with the device:



Please visit the wiki pages for the MikroTik SFP module compatibility table: https://wiki.mikrotik.com/wiki/MikroTik_SFP_module_compatibility_table

Safety Notice

Electric shock hazard. This equipment is to be serviced by trained personnel only.

Federal Communication Commission Interference Statement

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 or more 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.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

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.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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; 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

UK CA

(EN) Technical Specifications / (DE) Technische Spezifikationen / (FR) Spécifications techniques /(IT) Specifiche tecniche / (ES) Especificaciones técnicas / (RU) Технические характеристики:

(EN) Product Power Input Options **(DE) Produkt Stromquellen Optionen** **(FR) Options d'entrée d'alimentation du produit** **(IT) Opzioni di ingresso alimentazione del prodotto** **(ES) Opciones de entrada de energía del producto** **(RU) Варианты входной мощности продукта**	**(EN) IP class of the enclosure** **(DE) IP-Klasse des Gehäuses** **(FR) Classe IP du boîtier** **(IT) Classe IP della custodia** **(ES) Clase de IP del recinto** **(RU) Класс защиты корпуса IP**	**(EN) Operating Temperature** **(DE)Betriebstemperatur** **(FR) température de fonctionnement** **(IT) temperatura di esercizio** **(ES) Temperatura de funcionamiento** **(RU) Рабочая Температура**
2 AC inputs (100-240 V AC)	IP20	-0°..+70°C

#61928