

# PRODUCT CATALOG 2023



www.triotronik.com

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# Why MikroTik?

MikroTik provides routing, switching and wireless equipment for all possible uses - from the customer location, up to high end data centres.

We have an extensive network of trained consultants, training centres and distributors in almost every country of the world.

Established in Europe in 1996, we have 27 years of experience in networking and wireless installations.

Our in-house developed RouterOS software supports most common and many special features and we are constantly adding new customer requested features.

Whether you are building wireless links across the seas, internet exchanges between countries or secure tunnels between banks- MikroTik can do it all.

- Best price/performance
- Millions of RouterOS powered devices are currently routing the world
- 27 years of developing networking software and hardware
- Over 240'000 RouterOS trained and certified network engineers
- Several thousand training sessions conducted each year
- World wide network of certified consultants
- Offering products that support simple CPEs to complex enterprise networks
- Thousands of pages of documentation, examples, application notes, and guides



# MikroTik

We are a security and innovation focused European router software and hardware manufacturer, that offers the most flexible and user friendly, up to carrier-class routing and network management solutions. Our products are used by ISPs, individual users and companies for building data network infrastructures all around the world – even in space research, ocean research and on Mount Everest.

There are millions of installations worldwide going back as far as 1996!

Our mission is to make existing Internet technologies faster, more powerful, adaptable and affordable to wider range of users. That is why we offer enterprise-level solutions with consumer-grade pricing.



# RouterOS

MikroTik RouterOS is the operating system of MikroTik RouterBOARD hardware.

It has all the necessary features for an ISP- routing, firewall, bandwidth management, wireless access point, backhaul link, hotspot gateway, VPN server and more.

RouterOS is a stand-alone operating system based on the Linux kernel, and our goal here at MikroTik is to provide all these features with a quick and simple installation and an easy to use interface.

- Powerful QoS control
- RIP, OSPF, BGP, MPLS routing
- Bonding of interfaces
- Stateful firewall, tunnels
- (R)STP bridging with filtering
- High speed 802.11a/b/g/n/ac/ax
- 60 GHz wireless
- Wireless TDMA (Nv2)
- WDS and Virtual AP
- HotSpot Plug-and-Play access
- WinBox GUI and Web admin
- Telnet/MAC-Telnet/SSH/Console
- Real-time configuration and monitoring
- IPsec hardware acceleration
- 2G, 3G, 4G (LTE) and 5G support





# Academy

Colleges, universities, and schools around the world are starting MikroTik

Academy programs to offer students Internet networking courses using

MikroTik RouterOS as a learning tool. We are actively enrolling new locations weekly and looking for new applicants.

The are no charges from MikroTik for material, online testing, and online certificates associated with this program. MikroTik Academy program offers schools an excellent networking education program and program materials for little or no cost.

The program courses offer:

- a proven network education program
- official MikroTik RouterOS certification exams
- discounted (and free) hardware and free RouterOS licenses for training classes

If there is an educational institution near you that could be interested in the MikroTik Academy program, please contact us or forward this information to them.

Please contact us at training@mikrotik.com.

Official MikroTik Academy Web Page: mikrotikacademy.com















# MikroTik Youtube channel: join our growing community!

Product reviews, tips & tricks (or as we call them — MikroTips), deep dives, tutorials, project references, even user submissions — our channel has something for everyone! Join thousands of MikroTik enthusiasts, share your knowledge in the comments, and enjoy your daily dose of selected MikroTik content directly from the source!



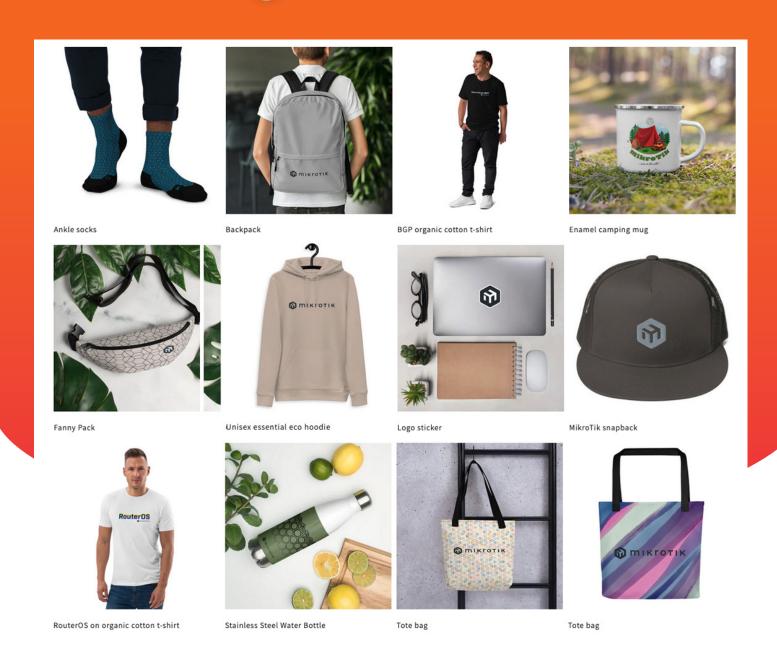
youtube.com/mikrotik/

# Custom MikroTik merch available

The virtual doors of our online merch store are officially open! Fanny packs, mugs, socks, seasonal gifts, laptop sleeves, mouse pads, and so much more! We're not adding any markup — you'll be paying only for the product, printing, delivery, etc. If you order anything- it will be manufactured specifically for you and sent directly from our dropshipping partner.



#### merch.mikrotik.com



# RB5009UPr+S+IN

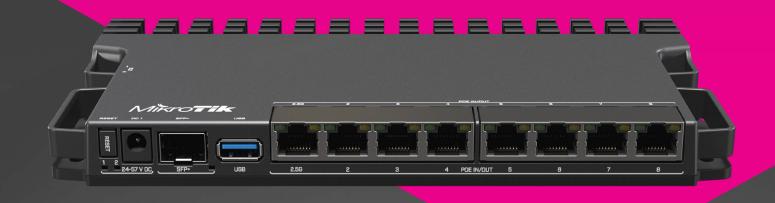
mt.lv/p/580



A new version of our popular heavy-duty RB5009 router with PoE-in and PoE-out on all ports. Perfect for small and medium ISPs. 2.5 Gigabit Ethernet & 10 Gigabit SFP+, numerous powering options.

- 7x Gigabit Ethernet ports
- 1x 2.5 Gigabit Ethernet port
- Powerful quad-core CPU
- 10 Powering options
- Durable

- Metallic case
- RouterOs v7 only
  - 10G SFP+
  - 1 GB DDR4 RAM
  - 1 GB NAND





# RB5009UPr+S+OUT

An outdoor version of our best-selling heavy-duty PoE router. Extensive power redundancy for the best price! 7x Gigabit Ethernet ports, 1x 2.5 Gigabit Ethernet, 10G SFP+, 1GB of RAM, 1GB NAND, modern quad-core CPU, 9 (!) powering options, durable IP66 waterproof enclosure.

• 7x Gigabit Ethernet ports



• Powerful quad-core CPU

 9 Powering options (Including a 2-pin terminal!)

- 10G SFP+
- 1 GB DDR RAM
- 1 GB NAND
- RouterOS v7





**Switches** 

## **CRS518-16XS-2XQ-RM**

mt.lv/p/582



A 100 Gigabit switch for enterprise networks and data centers. Hotswappable parts and insane port density with 1.2 Tbps switching capacity!

- 2x 100G QSFP28 ports
- 16x 25G SFP28 ports
- Hot-swap power supplies
- Hot-swap cooling
- Ultra fast Marvell Prestera Aldrin2 switch-chip

#### FiberBox Plus







Ultimate value pick for 10 Gigabit outdoor networking. High masts, poles, or towers – your connection will be safe! A powerful budget version of the netFiber 9.

- 4x10 gigabit SFP+ ports
- Gigabit Ethernet port
- Weatherproof IP66 outdoor case
- Direct upgrade for existing FiberBox setups
- RouterOs v7 / SwitchOs
- Multiple powering options: PoE-In, DC jack, 2-pin terminal



#### CRS504-4XQ-OUT

mt.lv/p/594



Affordable, compact, energy-efficient 100 Gbps networking anytime, ANYWHERE! The next step in upgrading existing 10 or 25 Gigabit outdoor networks.

- 4x 100 Gigabit QSFP28 ports
- Backward compatible with 40G, 25G, 10G, and 1G connections
- Weatherproof IP66 enclosure
- Multiple powering options: PoE-in, DC jack, 2-pin terminal
- Management & console ports

#### CRS510-8XS-2XQ-IN

mt.lv/p/593





A versatile 100 Gigabit switch that offers speed, value, and diverse connectivity options. It's time to upgrade your 10 or 25 Gigabit network!

- 2x 100 Gigabit QSFP28 ports
- 8x 25 Gigabit SFP28 ports
- Multiple powering options: PoE-in, DC jack, 2-pin terminal, AC
- Dual hot-swap power supplies
- Backward compatible with 40G, 25G, 10G, and 1G connections
- Compact & energy efficient!
- 16X 25 Gigabit Marvell Prestera switch chip



#### CSS610-8P-2S+IN

mt.lv/p/581



Your compact, affordable PoE powerhouse with 8x Gigabit PoE-out ports and 2x 10 Gigabit SFP+ ports.

- 56 Gigabit switching capacity
- 2x 10 Gigabit SFP+ ports
- 8x Gigabit PoE-Out Ethernet ports
- Can be configured from your web browser
- Port-to-port forwarding
- MAC filtering & vlans
- Traffic mirroring





#### **SXT LTE6 kit-US**

mt.lv/p/583



Affordable connectivity in remote areas. Even if your phone has no reception at all, SXT LTE6 kit can deliver due to its advanced LTE chip design and high-gain antenna. US carrier-certified! (AT&T, T-Mobile)

- Category 6 LTE modem
- Connect even where your phone fails!
- Carrier aggregation for a better signal
- Two Ethernet ports
- PoE-In & Poe-Out
- Two Micro-SIM slots



#### **ATL LTE18 kit**

mt.lv/p/589



An advanced technology level (ATL) LTE solution with wide range MIMO 4x4 antennas for fast and stable connectivity in rural and urban areas. Make the most of your mobile coverage!

- High-speed internet even when your phone has no signal!
- Blazing fast CAT18 Ite modem
- Gigabit Ethernet with PoE-In
- Powerful 64-bit dual-core ARM CPU
- Large high-gain antenna
- Snow-resistant design
- Extra small form-factor easy shippingand handling
- 4x4 MIMO support
- LTE band 28, 700 MHz 1 GHz support



#### Chateau LTE18 ax

mt.lv/p/586



The best home AP just got even better. Generation 6 version of the Chateau LTE18. Much faster wireless, improved CPU, and now – with 2.5 Gigabit Ethernet!

- Now with 2.5 Gigabit Ethernet!
- Powerful 1.8 GHz quad-core CPU
- 802.11ax + Wave2
- Strong dual-band, dual-chain wireless (3-6 dBi)
- 4x Gigabit Ethernet ports
- The fastest CAT18 LTE modem
- WPA3



#### Chateau 5G ax

mt.lv/p/587



Mobile internet has never been faster! Generation 6 version of Chateau 5G. Much faster wireless, improved CPU, and now – with 2.5 Gigabit Ethernet!

- Now with 2.5 Gigabit Ethernet!
- Powerful 1.8 GHz guad-core CPU
- 802.11ax + Wave2
- Strong dual-band, dual-chain wireless (3-6 dBi)
- 4x Gigabit Ethernet ports
- The fastest LTE/5G modem
- WPA3

# hAP ax<sup>2</sup>

mt.lv/p/585 (##)



A Generation 6 version of the legendary hAP ac2. With PoE-In and PoE-Out, much faster wireless, more RAM, and a modern CPU. The smallest fullyfledged AX router on the market!

- Powerful quad-core ARM CPU
- 802.11ax + Wave2
- Strong dual-band, dual-chain Wireless (4-4.5 dBi)
- 5x Gigabit Ethernet ports
- PoE-Out
- Different mounting options
- WPA3



# cAP ax

mt.lv/p/596 (IIII)



The best-selling ceiling access point is back – stronger than ever! A new generation of wireless greatness for your office, hotel, mall, or any other setups in crowded areas. Modern quadcore CPU, 1GB of RAM, 2x Gigabit Ethernet ports, PoE, Gen 6 802.11ax wireless, PSU - included!

- Fast and reliable 802.11ax Wireless
- Modern quad-core 1.8 GHz CPU
- 2x Gigabit Ethernet ports
- 1 GB of RAM
- RouterOs v7
- Multiple powering options
- Remains hidden in plain sight
- Poe-In & Poe-Out to power other devices (Like CCTV cameras!)
- Manage hundreds of devices easily with CAPsMAN management system!



# hAP ax<sup>3</sup>



Our top-of-the-line AX home access point. With all the processing power and speed your household might ever need. Gen 6 wireless, 2.5 Gigabit Ethernet, PoE, WPA3, and more!





#### hAP ax lite

mt.lv/p/592



Gen6 wireless on a budget - tiny, fast, and strong enough to harvest the power of RouterOS v7!

- 4x Gigabit Ethernet ports
- NAND storage
- 2.4 GHz Gen6 Wireless
- 256 MB RAM

- Powerful 4.3 dBi antenna
- RouterOs v7
- Modern ARM CPU

Accessories for fiber



#### XQ+31LC10D

mt.lv/p/591



A 100 Gigabit QSFP28 module for impressive distances up to 10 km!



#### **XQ+85MP01D**

mt.lv/p/584



The MikroTik 40/100 Gigabit product line keeps growing: QSFP28 module for distances up to 100m

#### **LHG LTE18 kit**

mt.lv/p/569





Great distances, even greater speed – with the power of the ultra fast LTE Category 18 modem. Last-mile-internet solution for the most remote areas.

- High-speed Internet even when your phone has no signal!
- Blazing fast CAT18 LTE modem
- Gigabit Ethernet with PoE-in
- Powerful 64-bit dual-core ARM CPU
- Large high-gain antenna
- Grid antenna design perfect for harsh, windy weather

#### Chateau LTE6-US

mt.lv/p/579





US carrier-certified home access point with LTE6 support for speeds up to 300 Mbps. With 5x Gigabit Ethernet ports, a powerful quad-core CPU, and a refreshingly tasteful design, this device is the right choice for most homes.

- 5 Gigabit Ethernet ports
- Brand new LTE Category 6 modem
- LTE connections up to 300 Mbps
- Strong dual-band, dual-chain radio for maximum coverage
- Powerful quad-core ARM CPU

#### **LHGG LTE6 kit**

mt.lv/p/526





Great solution for great distances. With Gigabit Ethernet, an upgraded dual-core CPU, powerful 17 dBi antenna and a massive heat sink, you can trust the LHGG LTE6 kit to handle any challenge!

- High-speed Internet even when your phone has no signal!
- 300 Mbps CAT6 LTE modem
- Large high-gain antenna
- Gigabit Ethernet with PoE-in
- Powerful dual-core CPU and 256MB RAM
- Grid antenna design perfect for harsh, windy weather

#### Intercell 10 B38+B39

mt.lv/p/506





The Intercell 10 B38+B39 is an outdoor TDD-LTE dual carriers base station with 2\*(2\*10W) output power (each carrier supports 2x2 MIMO with 10W output each RF channel ). The unit is compact, light weight, and easy to deploy. The Intercell 10 B38+B39 offers excellent performance, helping operators provide better coverage and higher capacity with minimal effort.

- Maximum 2 \* 192 RRC connected users and 2 \* 96 active users
- 5/10/15/20 MHz operation bandwidth
- All IP based backhaul, many IP backhaul methods can be used, including RJ45 Ethernet, SFP

20



#### Chateau 5G

mt.lv/p/537

One router to delight them all – introducing the ultimate home AP with ultra-fast LTE/5G support.

- A high-speed, dual-band home access point with LTE/5G support for really fast Internet anywhere, anytime
- 5 x Gigabit Ethernet ports
- Full-sized USB
- Comes with powerful external LTE/5G antennas for even stronger signal
- LTE Category- 20 (2.0 Gbps Downlink, 200 Mbps Uplink)
- 5G support- NSA (5.0 Gbps downlink, 650 Mbps uplink)SA (4.2 Gbps downlink, 900 Mbps uplink)
- Powerful quad-core CPU, 256 MB RAM

#### hAP ac3 LTE6 kit







hAP ac<sup>3</sup> LTE6 kit features our newest CAT6 LTE modem. It enables carrier aggregation, allowing you to use the LTE connection with speed up to 300 Mbps. It works by using multiple LTE bands at the same time. A huge advantage when there are a lot of LTE users in the area. Depending on the service provider, we have seen Internet speed doubling after switching to CAT6. The new enclosure allows mounting the device vertically or horizontally. A wall mount set is also included.

- 5 Gigabit Ethernet ports
- Strong dual-band 2.4GHz / 5 GHz wireless
- 256 MB of RAM
- Powerful quad-core CPU
- Category 6 LTE modem (300 Mbps Downlink, 50 Mbps Uplink)
- Carrier aggregation
- USB

#### LDF LTE6 kit

mt.lv/p/515





This outdoor wireless system with a built-in antenna can provide a connection even in the most remote locations. Tiny, powerful, can be used with any satellite TV dish with an offset mount. Since the LDF is a tiny little package, it makes shipping and deployment fast, simple and low cost.

- Attach it to any satellite TV dish, and the dish will act as a reflector, greatly amplifying the signal
- With a solid IP68 rating LDF LTE6 kit can withstand dust, dirt and sand, as well as temporary immersion in water
- Category 6 LTE modem (300 Mbps Downlink, 50 Mbps Uplink)
- Carrier aggregation
- Passive PoE input 802.3 af/at, 12-57 V
- 10/100 Mbps Ethernet, MiniPCI-e



MikroTik GPEN concept can replace any existing or future GPON solution. It provides all the benefits of GPON, but utilizes well-proven, simple and inexpensive Ethernet solutions.

GPEN doesn't require expensive GPON OLT equipment in your server rooms, just a regular switch port!

Similar to GPON, GPEN solution will require clients to provide power, but instead of powering GPON's ONT device, power will be used for extending the Ethernet cable (with our GPeR devices) and powering the netPower device. That is the GPEN analogue of GPON Passive optical splitters – netPower provides additional functionality and possibilities. And the best part of this technology – it give you all the flexibility for a fraction of the price. You can connect netPower to your server room by Ethernet, Active optical line or use it to power one end of point-to point backbone wireless link. GPEN – the evolution of GPON done right!





**GPeR** 

mt.lv/p/455



Extend Ethernet cable by additional hop with the Gigabit Passive Ethernet Repeater

- 100 150 m to regular network devices, and up to 210 m to another GPeR unit
- Up to 1,500 m total
- Two Gigabit Ethernet ports
- PoE-in- 802.3af/at or Passive PoE (24- 57 V)
- PoE-out-jumper selectable passive PoE Passthrough



#### **GPeR IP67 case**

mt.lv/p/428



A sturdy and affordable outdoor enclosure for GPeR units. It can be easily mounted on walls and poles. Despite the name, meticulous testing revealed that in real life the enclosure has an IP68 rating with protection from immersion in water, as well as protection from dust.



#### **GPENII**

mt.lv/p/450



A power injector that can be mounted on a wall, and will power your uplink devices with PoE.

- 2 Gigabit Ethernet ports
- Passive PoE-out
- Can be used to power the ISP equipment, using power from the user premises.
- Has a designated space for an ISP sticker on the front. Sticker size: 6,6 x 2,54 cm.

#### **GPEN21**

http://mt.lv/GPENpdf





A smart power injector that serves as an advanced software controlled repeater that can power your uplink devices with PoE.

- 2 Gigabit Ethernet ports
- SFP port for fiber to copper functionality Interface management and monitoring
- VLAN support
- SNMP reporting
- Traffic control and shaping
- Has a designated space for an ISP sticker on the front. Sticker size: 6,6 x 2,54 cm.
- Passive PoE-out
- 802.3af/at PoE-in

#### netPower 15FR

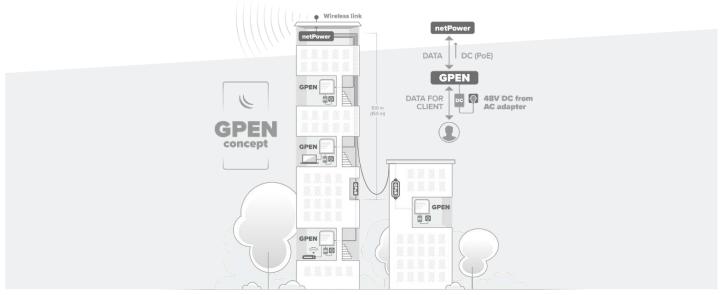






A 18 port reverse PoE switch in outdoor enclosure. Part of our GPEN concept - aimed to bring the speed and versatility of fiber networking while using the advantages of Ethernet. It is an easy to deploy, low-cost way for any ISP to deliver the Internet to individual apartments.

- 15 reverse PoE-in ports
- Extra PoE-out port- you can use it to power an aggregate link
- Two SFP ports
- Can draw the necessary power even from a single client
- Dual boot feature that allows to choose RouterOS or SwOS



#### IoT products

New MikroTik IoT products – Internet of things has never been so affordable. MikroTik is bringing you new, powerful IoT products for the fraction of the cost you would expect.



#### wAP LR2 kit

mt.lv/p/559



Our newest out-of-the-box solution for LoRa® technology. Like the previous wAP LR kits, it contains a pre-installed UDP packet forwarder to any public or private LoRa® servers and an outdoor weatherproof wireless access point with 2.4 GHz WLAN interface and Ethernet port with PoE-in that could be used as a backend.



#### R11e-LR2

mt.lv/p/561



A new Concentrator Gateway card for LoRa® technology in mini PCIe form – so you can create or customize your own 2.4 GHz IoT projects. It enables 2.4 GHz LoRa® connectivity for any MikroTik product that has a mini PCIe slot with connected USB lines. It supports 4 different RX channels and 1 TX channel.



#### TOF-2400-8V-4

mt.lv/p/560 (##)



For extra network coverage (up to 3-4km in the line of sight), we suggest adding an external 8dBi Omni antenna- the TOF-2400-8V-4.If necessary, this antenna can be used for any 2.4 GHz device. Not only it works with the 2.4 GHz LoRa® connectivity, it also supports the regular 2.4 GHz WLAN. It comes with a 1m long SMA cable and a mechanical holder for quick and easy mast attachment – when you need that extra network coverage. Compact size and increased durability without sacrificing the power – this antenna will get the job done.



#### 868 Omni antenna

mt.lv/p/554



The upgrade of our antenna kit for LoRa® with a 6.5 dBi Omni antenna for 824-960 MHz, 1m long SMA cable and mechanical holder for quick and easy mast attachment. Smaller size, increased durability, and added IP66

After reviewing your suggestions, we went back to the drawing board and redesigned the Antenna kit for LoRa®. The new kit offers significantly higher durability in a smaller package – without sacrificing performance. The improved cable durability and the added IP66 water resistance with protection against powerful jets make this kit an excellent choice for all kinds of marine and coastal projects.

Mount this antenna on a 25-50 mm mast or on the wall and enjoy the superb coverage!

#### KNOT







The newest addition to the MikroTik IoT product family – KNOT – is a truly universal device with exceptional connectivity options and protocol support. It is an IoT Gateway that uses Narrow Band and CAT-M technology. Because of the low cost, low bandwidth cellular connection, it is supported by countless mobile operators around the globe.

- CAT-M/NB technology
- 2.4 GHz wireless
- Bluetooth
- 2x 100 Mbps Ethernet ports
- PoE-in & PoE-out

- GNSS, GPIO and RS485/Modbus
- MicroUSB
- Brings wireless connectivity to wired sensors and actuators, such as electricity meters and relays

#### **KNOT LR9 kit**







An out-of-the-box 902-928 MHz IoT Gateway solution for LoRa® technology. For ultimate versatility and cost-effectiveness. The first gateway with a CAT-M interface for LoRa®!

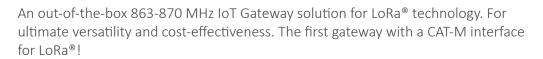
- Supports LoRa® 902-928 MHz frequency
- A pre-installed UDP packet forwarder
- CAT-M/NB technology
- 2.4 GHz wireless
- Bluetooth

- 2x 100 Mbps Ethernet ports
- PoE-in & PoE-out
- GNSS, GPIO and RS485/Modbus
- MicroUSB
- Brings wireless connectivity to wired sensors and actuators, such as electricity meters and relay

#### **KNOT LR8 kit**

mt.lv/p/550







- A pre-installed UDP packet forwarder
- CAT-M/NB technology
- 2.4 GHz wireless
- Bluetooth
- 2x 100 Mbps Ethernet ports

- PoE-in & PoE-out
- GNSS, GPIO and RS485/Modbus
- MicroUSB
- Brings wireless connectivity to wired sensors and actuators, such as electricity meters and relay

#### LtAP LR8 LTE kit

mt.lv/p/531





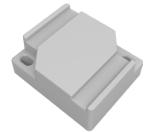
A compact all-in-one solution with LTE, GPS and wireless support for LoRa® in a rugged heavy-duty case.

- All-in-one: High-speed LTE, GPS, Internet-of-things
- 2.4 GHz AP in a rugged heavy-duty case
- 3 MiniSIM slots –perfect for roaming
- Many powering options, including automotive
- Ready for "The Things Network" integration
- Gigabit Ethernet with PoE-in

#### TG-BT5-OUT







An outdoor heavy-duty Bluetooth tag for the MikroTik KNOT or other IoT assettracking/telemetry setups. Built-in temperature sensors and accelerometer. Cast in industrial grade molds for maximum protection.

- Built-in battery that will last for years
- Magnet activation
- BLE (Bluetooth Low Energy) 5.2 with Silabs BG22
- Built-in accelerometer

- iBeacon, Eddystone, Mikrotik telemetry
- Built-in temperature sensors
- Cast in industrial-grade molds
- IP69k ingress protection rating

#### TG-BT5-IN

mt.lv/p/548





Indoor Bluetooth tags for the MikroTik KNOT or other IoT asset-tracking/telemetry setups.

- Built-in battery that will last for years
- Magnet activation
- BLE (Bluetooth Low Energy) 5.2 with Silabs BG22
- Built-in accelerometer
- iBeacon, Eddystone, Mikrotik telemetry

#### R11e-LR8

mt.lv/p/189





Concentrator Gateway card for LoRa® technology in mini PCIe form factor. It enables LoRa® connectivity for any MikroTik product that has mini PCIe slot with connected USB lines.

- 863-870 MHz (EU863-870, RU864-870, IN865-867)
- Receive max sensitivity-137 dB @ SF12
- RF Output power 863-870 MHz 20 dBm

#### Rlle-LR9

mt.lv/p/464





Concentrator Gateway card for LoRa® technology in mini PCIe form factor. It enables LoRa® connectivity for any MikroTik product that has mini PCIe slot with connected USB lines.

- 902-928 MHz (AU915-928, US902-928, AS923, KR920-923)
- Receive max sensitivity-137 dB @ SF12
- RF Output power 902-928 MHz 23 dBm

#### **WAP LR8 kit**

mt.lv/p/465





An out-of-the-box solution to use Gateway solution for LoRa® technology

- supports 863-870 MHz frequency (EU863-870, RU864-870, IN865-867)
- a pre-installed UDP packet forwarder
- 2.4 GHz WLAN interface
- renowned weatherproof wAP form-factor
- 10/100 Ethernet port that could be used as a backend

#### **wAP LR9 kit**



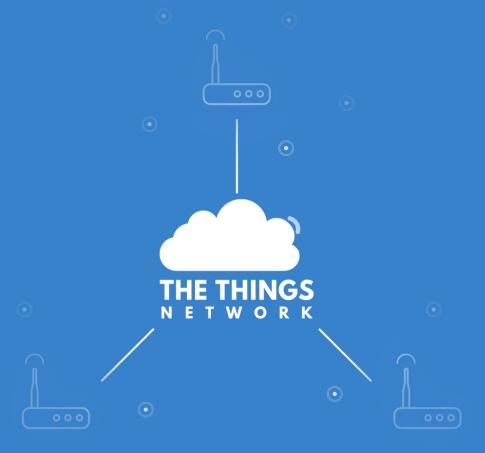


- supports 902-928 MHz frequency (AU915-928, US902-928, AS923, KR920-923)
- a pre-installed UDP packet forwarder
- 2.4 GHz WLAN interface
- renowned weatherproof wAP form-factor
- 10/100 Ethernet port that could be used as a backend

Our LoRa® are ready to work with "The Things Network" - the famous open source infrastructure that provides free LoRa® network coverage and has tons of apps for your needs. With the help of "The Things Network" you can get started with the Internet of things within a day. And it is easily upgradable to enterprise-grade network "The Things Industries".

Cattle tracking, smart irrigation, level monitors for liquids, smart pulse sensors and thermostats, smart parking and so on – the possibilities are endless. And the setup is so easy, anyone can learn it. There is a large community of developers and enthusiasts all around the globe – you will never be alone with your questions and ideas regarding the LoRa® network. No need to reinvent the wheel – join "The Things Network" to save time and energy with smart solutions!

With this product family we aim to provide the most affordable LoRa® solution to date without compromising quality or performance.



#### **Chateau LTE12 kit**

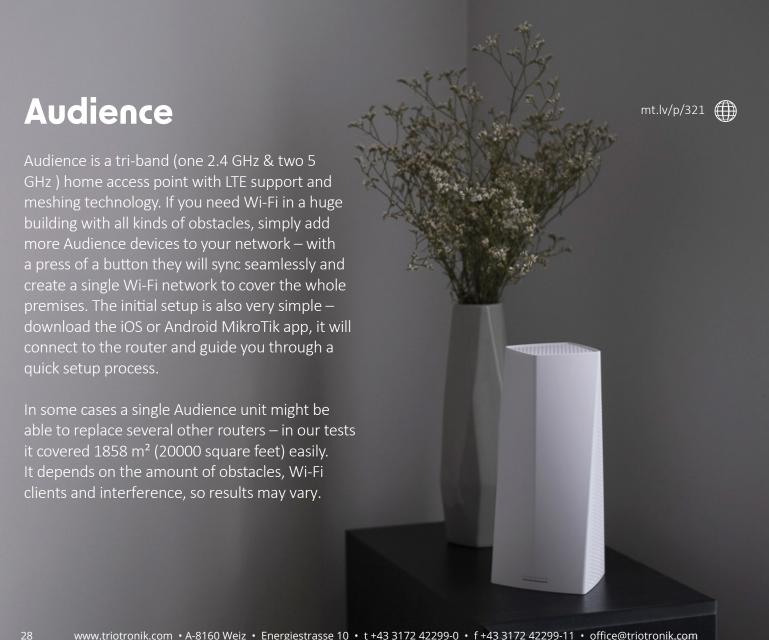
mt.lv/p/288





A high-speed, dual-band home access point with CAT12 LTE for really fast Internet anywhere, anytime.

- Category 12 LTE modem (600 Mbps Downlink, 150 Mbps Uplink, 3x Carrier Aggregation)
- 5 x Gigabit Ethernet ports
- Quad-core 716 Mhz CPU
- 256 MB RAM
- 802.11 b/g/n 2.4 GHz dual-chain high power wireless
- 802.11 a/n/ac 5 GHz dual-chain high power wireless
- Micro SIM slot
- 4 powerful (4x4 MIMO compatible!) integrated antennas with an option to connect 2 external LTE antennas via SMA
- full size USB port



# **PWR-Line AP**

US: mt.lv/p/437



The PWR-Line AP is a small Wi-Fi access point, made as an accessory to your existing network, for places, where your signal or your cable is unable to reach. Especially useful in homes with thick walls, where you can extend Wi-Fi coverage to those rooms, where signal is poor, without having to re-wire your house. Simply plug this device directly into one of the LAN ports of your MikroTik router, and add another one somewhere further in your premises. They will link together through the power lines. You can install up to eight PWR-LINE devices to further build your network.

- Extend your network without extra LAN cables
- Connects over power lines
- 2.4 GHz 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- Type A power plug (commonly used in USA, Canada, Mexico, Thailand)





**PL6400** 

mt.lv/p/453



Power adapter with PWR-LINE functionality for microUSB powered MikroTik router (Type A power plug)

- 10/100 Ethernet
- Built-in microUSB cable for MikroTik products with microUSB port, like hAP mini or hAP lite.
- Type A power plug (commonly used in USA, Canada, Mexico, Thailand)

# CCR2216-1G-12XS-2XQ

mt.lv/p/562

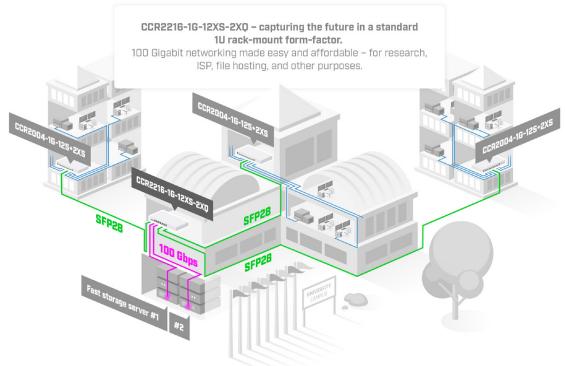


Unleash the power of 100 Gigabit networking with L3 Hardware Offloading!

- Millions of packets per second with L3HW Offloading!
- Powerful Amazon Annapurna Labs ARMv8 16-core CPU
- Marvell Prestera® Aldrin2 DX8525
- Gigabit Ethernet
- 12x 25 Gigabit SFP28

- 2x 100 Gigabit QSFP28
- Dual-redundant hot-swap 150W PSU's
- 16 GB RAM
- 2x M.2 SATA
- Lower power consumption than the previous flagship.





# CCR2116-12G-4S+



10G networking meets the unparalleled power of a modern ARM CPU. The most powerful CCR ever.

- 16-core, 2 GHz ARM CPU
- 16 GB DDR4 RAM
- 128 MB NAND
- Gigabit Ethernet
- 10G SFP+
- USB 3.0
- Dual-redundant power supply



#### CCR2004-IG-2XS-PCle









- Quad-core ARMv8 CPU
- Fully functional CCR2004 in PCIe 3.0 x8 form-factor
- 2x SFP28 cages for 25 Gigabit networking
- Gigabit Ethernet
- 4GB DDR4 RAM
- Low-profile format fits in 2U server chassis
- Powered by the server motherboard



mt.lv/p/571





Up to 300% faster than the previous CCR1009 routers- in a blissful silence!

- 16x Gigabit Ethernet ports
- 2x 10G SFP+ cages
- Powerful quad-core CPU
- RJ-45 console port

# RB5009UG+S+IN

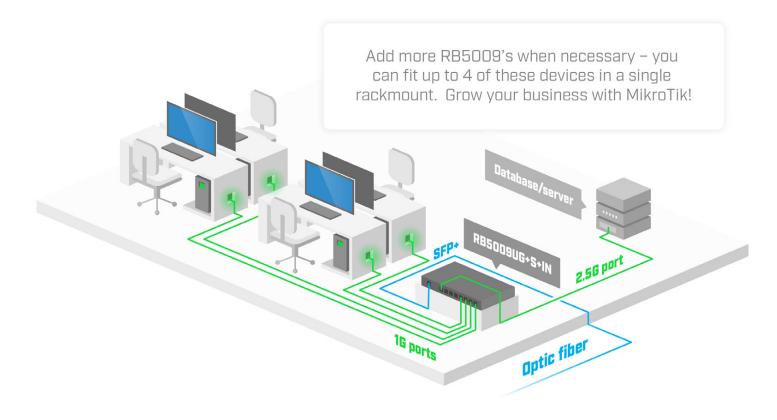


The ultimate heavy-duty home lab router - unprecedented processing power in such a small form factor.

- Marvell Armada 4-core ARMv8 1.4 GHz CPU
- 1GB of DDR4 RAM and 1GB NAND storage
- 1x 2.5 Gigabit Ethernet, 7x Gigabit Ethernet
- 10G SFP+ cage

- Indoor desktop metal enclosure, that works as a massive heat sink
- Full size USB v3.0





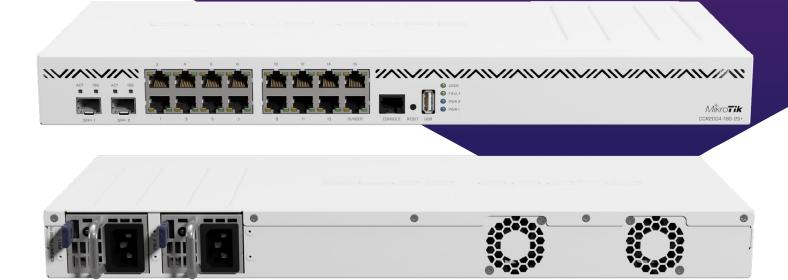
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# CCR2004-16G-2S+



This powerful and affordable router crushes all previous CCR models in single-core performance.

- Annapurna Labs Alpine v2 CPU with 4x 64-bit ARMv8-A Cortex-A57 cores running at 1.7GHz
- 4GB of DDR4 RAM and 128MB of NAND storage
- 16 x Gigabit Ethernet ports
- 2 x 10G SFP+ cages
- Full size USB, RJ-45 console port
- 1U active cooling rackmount case
- Built-in dual redundant power supplies



#### CCR2004-1G-12S+2XS

mt.lv/p/513



The Connectivity Router- your best companion when it comes to SFP, SFP+ and SFP28 management! 1, 10 and 25 Gbps ports in a single device to make your life easier.



- 12 x 10G SFP ports
- 2 x 25G SFP28 ports
- MikroTik router with the most powerful single-core performance so far. It provides incredible results in single tunnel (up to 3.4 Gbps) and BGP feed processing
- Dual redundant power supply
- 4GB DDR4 RAM, 128 MB NAND
- AL32400 1700 MHz quad-core CPU

The hEX series of devices are small form factor Ethernet routers with neat plastic design enclosures. They have a total of five ports.



**hEX** lite

mt.lv/p/56



A small, but powerful five port Ethernet router in a nice plastic case.

- 850 MHz CPU, 64 MB RAM
- Compact size



#### **hEX PoE lite**

mt.lv/p/267



This model supports PoE output on it's Ethernet ports, so you can power other devices.

- 5x 10/100 Mbps Ethernet ports
- 650 MHz CPU, 64 MB RAM
- Ethernet ports 2-5 can power other PoE capable devices



**hEX** 

mt.lv/p/262



The hEX is a small and powerful router with Gigabit Ethernet, IPsec acceleration and more.

- 5 Gigabit Ethernet ports
- Dual core 880 MHz CPU, 256 MB RAM
- IPsec hardware encryption (~470 Mbps) support
- Support for The Dude server package
- microSD slot and USB



**hEX PoE** 

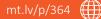
mt.lv/p/295

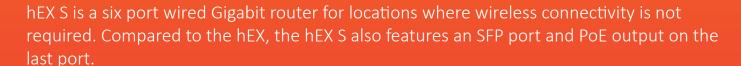


This model also has PoE output capability, but includes Gigabit Ethernet ports and an SFP cage.

- 5 Gigabit Ethernet ports
- SFP port for 1.25 Gigabit connectivity
- Ethernet ports 2-5 can power other PoE capable devices
- 800 MHz CPU, 128 MB RAM

### hEX S







- Dual Core 880 MHz CPU
- 256 MB RAM
- 1.25Gbit/s SFP cage
- USB 2.0 and microSD slot
- 12 V-57 V input support by PoE or power jack
- 802.3at/af support
- IPsec hardware encryption (~470 Mbps)
- Dude Server package support

#### PowerBox series

The PowerBox series of devices are Ethernet routers in outdoor enclosures, ready to be mounted in any weather conditions. They are capable to power MikroTik routers and other supported devices through PoE (Power over Ethernet).



#### **PowerBox**

mt.lv/p/251



The basic model is good for 10/100 Mbit devices and lower bandwidth requirements.

- 5x 10/100 Mbps Ethernet ports
- 650 MHz CPU, 64 MB RAM



#### **PowerBox Pro**

mt.lv/p/313



The professional model adds Gigabit ports and a more capable CPU.

- 5 Gigabit Ethernet ports
- SFP port for 1.25 Gigabit connectivity
- 800 MHz CPU, 128 MB RAM

#### RB2011iL-IN

mt.lv/p/142





The RB2011 lite model comes in a desktop case and features a PoE out port, just like all the other models.

- 600 MHz CPU, 64 MB RAM
- Desktop case

#### RB2011iL-RM

mt.lv/p/161





The RM model is similar, but comes in a larger, rackmountable enclosure.

- 600 MHz CPU, 64 MB RAM
- Rackmount case

#### RB2011iLS-IN

mt.lv/p/153





This device includes an SFP port for fiber and copper modules. See the Accessories chapter for recommended modules.

- SFP port for 1.25 Gigabit connectivity
- 600 MHz CPU, 64 MB RAM
- Desktop case

#### RB2011UiAS-IN

mt.lv/p/157





The U models include more RAM and a USB port.

- SFP port for 1.25 Gigabit connectivity
- 600 MHz CPU, 128 MB RAM
- LCD display and USB
- Desktop case

#### RB2011UiAS-RM

mt.lv/p/162





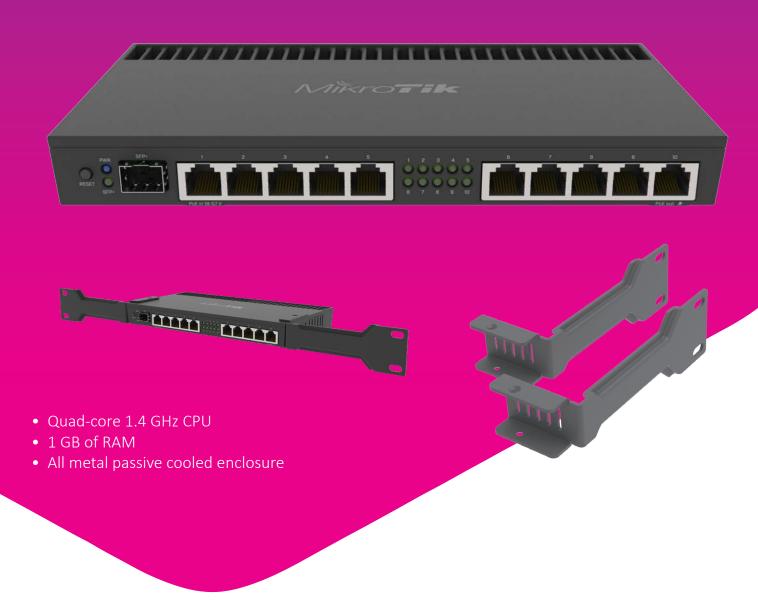
Similar to the above model, but comes in a rackmountable enclosure.

- SFP port for 1.25 Gigabit connectivity
- 600 MHz CPU, 128 MB RAM
- LCD display and USB
- Rackmount case

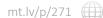
# RB4011iGS+RM

RB4011 series - amazingly powerful routers with ten Gigabit ports, SFP+ 10Gbps interface and IPsec hardware acceleration for a great price!

The RB4011 uses a quad core Cortex A15 CPU, same as in our carrier grade RB1100AHx4 unit. The unit is equipped with 1 GB of RAM, can provide PoE output on port #10 and comes with a compact and professional looking solid metal enclosure in matte black.



#### RB3011UiAS-RM







The RB3011 is a multi port device, our first to be running an ARM architecture CPU for higher performance than ever before.

- 10 Gigabit Ethernet ports
- Dual core ARM 1.4 GHz CPU, 1 GB RAM
- SFP port for 1.25 Gigabit connectivity
- LCD display and USB 3.0

# RB1100AHx4 Dude Edition



The RB1100AHx4 Dude Edition has an Annapurna Alpine AL21400 CPU with four Cortex A15 cores clocked at 1.4 GHz each, for a maximum throughput of up to 7.5 Gbps. The device supports IPsec hardware acceleration and is faster at it than any previous RouterBOARD device (up to 2.2 Gbps with AES128).

The unit comes in a 1U rackmount case, 13 Gigabit Ethernet ports, RS232 serial port and dual redundant power supplies (with - 48 V DC telecom power and 802.3at/af support). The RB1100AHx4 Dude edition features several high speed storage connectors (two SATA and two M.2) for storing The Dude database, proxy cache or for any other storage intensive task. A 60 GB M.2 drive is already included.



- 13 Gigabit Ethernet ports
- Four core Annapurna Alpine 1.4 GHz ARM CPU, 1 GB RAM
- Maximum throughput of up to 7.5 Gbps
- IPsec hardware acceleration (up to 2.2 Gbps with AES128)
- Dual redundant power supplies (with-48 V DC telecom power and 802.3at/af support)
- Two SATA and two M.2 connectors for storage
- 60 GB M.2 drive already installed

#### **RB1100AHx4**

mt.lv/p/327





Powerful 13 Gigabit Ethernet port router in a rackmount case with dual redundant power supplies.

- 13 Gigabit Ethernet ports
- Four core Annapurna Alpine 1.4 GHz CPU, 1 GB RAM
- Maximum throughput of up to 7.5 Gbps
- IPsec hardware acceleration of up to 2.2 Gbps with AES128
- Dual redundant power supplies (with-48 V DC telecom power and 802.3at/af support)

# CCR1072-1G-85+

mt.lv/p/261



Our flagship router, the CCR1072, is powered by a Tilera 72 core CPU, each core is clocked at 1 GHz, and to fully utilize this power, the CCR1072 is equipped with eight independently connected 10G SFP+ ports.

Thanks to the unique 72 core processor and ports that are directly connected to the CPU, the CCR1072 is capable of over 120 million packets per second throughput.



- 1 Gigabit Ethernet port
- 8 SFP+ ports for 10 Gigabit connectivity
- Tilera 72-core CPU, 1 GHz per core, 16 GB RAM
- Up to 120 Mpps throughput in Fast Path mode (wire speed)
- Up to 80 Gbps throughput
- Two built-in M.2 slots, microSD slot and 2x USB
- LCD touch screen
- Two hot swap power supplies for redundancy (two 12POW150 included)
- 1U rackmount enclosure
- PW48V-12V150W can be used asan alternative



The unit comes equipped with two removable (hot plug) power supplies for redundancy, smart card slot, eight SFP+ ports and 16 GB of built in ECC RAM.

The CCR1072 also has two built-in M.2 slots, microSD slot and 2x USB ports for adding storage, to use for proxy cache, user manager and other features. The M.2 slots accept 800 mm Key-M x4 PCIe 2.0 modules.

Our smaller SOHO switches have five Gigabit Ethernet ports and an SFP port for optical fiber connectivity. The devices are powered by RouterOS or SwOS, our switch operating system that gives you all the most important switch configuration options.



RB260GS

mt.lv/p/174



The tiny desktop case is compact enough to mount in narrow places, mounting hooks provide possibility to wall mount it in any direction.

- Five Gigabit Ethernet ports
- SFP port for 1.25 Gigabit connectivity
- Powered by SwOS
- All the basic functionality for a managed switch, plus more



#### RB260GSP

mt.lv/p/218



The P model also includes capability to power other devices.

- Ethernet ports 2-5 can power other PoE capable devices
- Powered by SwOS

#### CRS106-1C-5S

mt.lv/p/305





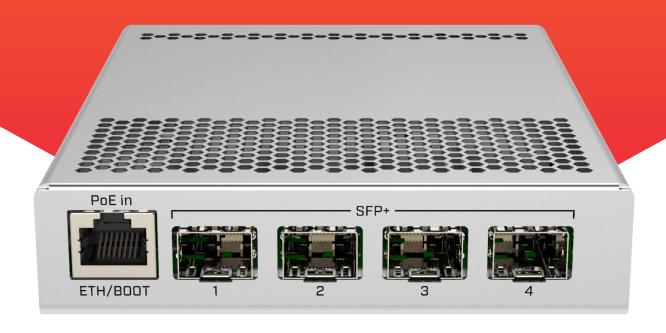
A desktop size smart switch with a Gigabit Ethernet / SFP combo port and five SFP ports for optical fiber connectivity.

- Combo (Gigabit Ethernet or SFP) port
- 400 MHz CPU, 128 MB RAM
- A market leading solution for connecting up to six SFP devices
- Powered by RouterOS

# CRS305-1G-4S+IN

The CRS305 is a compact yet very powerful switch, featuring four SFP+ ports, for up to 10 Gbit per port. The device has a 1 Gbit copper ethernet port for management access and two DC jacks for power redundancy. The device is a very sleek and compact metallic case without any fans, for silent operation.

The device has a "Dual boot" feature that allows you to choose between two operating systems-RouterOS or SwOS. If you prefer to have a simplified operating system with only switch specific features, use SwOS. If you would like the ability to use routing and other Layer 3 features in your CRS, use RouterOS. You can select the desired operating system from RouterOS, from SwOS or from the RouterBOOT loader settings. All the feature set comes with a disruptive price, providing the best price/performance on the market.



- 4 SFP+ ports
- 1 Gigabit Ethernet ports
- Non-Blocking throughput: 41 Gbps
- Switching capacity: 82 Gbps
- Forwarding rate: 61 Mpps
- 2 DC jack for redundancy

- Maximum power consumption: 12 W (with attachments 18 W)
- Supports PoE+ IEEE 802.3at/af and passive PoE 12-57 V
- Metal enclosure
- Fanless

#### CRS504-4XQ-IN

mt.lv/p/568





Your most affordable, compact, energy-efficient doorway to the world of 100 Gigabit networking. The next step in upgrading existing 10 or 25 Gigabit networks.

- 16x25 Gigabit Marvell Prestera switch chip
- Multiple powering options: PoE-in, DC jack, 2-pin terminal
- Dual hot-swap power supplies
- 4x 100 Gigabit QSFP28 ports
- Compatible with 40G, 25G, 10G, and 1G fiber connections
- Uses 25W of power

#### CRS310-1G-5S-4S+IN

mt.lv/p/567





10 Gigabit fiber connectivity way over a 100 meters – for small offices or ISPs. Hardware offloaded VLAN-filtering and even some L3 routing on a budget!

- Gigabit Ethernet
- SFP
- 10 Gigabit SFP+
- PoE-in
- 100-120% faster than the CRS212

#### CRS112-8G-4S-IN

mt.lv/p/258





A desktop size smart switch with 8 Gigabit Ethernet ports and 4 SFP ports for optical fiber connectivity.

- 8 Gigabit Ethernet ports
- 4 SFP ports for 1.25 Gigabit connectivity
- 400 MHz CPU, 128 MB RAM

#### CRS112-8P-4S-IN

mt.lv/p/349





A desktop size smart PoE switch with 8 Gigabit Ethernet ports, 4 SFP ports for optical fiber connectivity and PoE output.

- 8 Gigabit Ethernet ports with PoE output
- 4 SFP ports for 1.25 Gigabit connectivity
- 400 MHz CPU, 128 MB RAM
- 28 V 3.4 A power supply included
- Secondary DC jack on the back of the enclosure that supports 48-57 V power supply (optional)

#### CRS309-1G-8S+IN







The CRS309-1G-8S+ is a very compact, yet powerful networking switch.

- 8 SFP+ ports for 10 Gigabit connectivity
- Dual-core 800 MHz CPU, 512 MB RAM
- Management Ethernet port with PoE power input
- RS232 serial port and a grounding terminal
- Dual boot feature that allows to choose RouterOS or SwOS
- Special rackmount ears for installing unit into the standard rack

#### CSS610-8G-2S+IN

mt.lv/p/521





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Portable, powerful and extremely cost-effective – this switch is an instant classic! The only \$99 10G SFP+ switch on the market!

- 8 x Gigabit Ethernet ports
- 2x SFP+ for 10G fiber
- Port-to-port forwarding, MAC filtering, VLAN
- Traffic mirroring, Broadcast storm control
- DC jack, PoE-in

#### CRS326-24G-2S+IN

mt.lv/p/514



A home network setup doesn't have to be a compromise. This compact and quiet switch is packing some serious server room grade features. CRS326-24G-2S+IN provides all the basic functionality for a managed switch, and even more: port-toport forwarding, MAC filtering, VLAN configuration, traffic mirroring, bandwidth limitation and even adjust some MAC and IP header fields.



- 24 x Gigabit Ethernet ports
- 512 MB RAM
- SwOS / RouterOS (Dual boot)
- Sufficient built-in CPU that can handle basic home user needs such as firewall, NAT and even some VPN
- DC jack, PoE-in

#### netPower 16P

mt.lv/p/516





An outdoor 18 port switch with 16 Gigabit PoE-out ports and 2 SFP+. Power all your access points anywhere!

- The sturdy and compact outdoor enclosure allows the switch to be mounted in all kinds of environments – from damp attics and shafts to towers, masts and poles with hose clamps
- 16 x Gigabit Ethernet ports with PoE-out and two SFP+ ports for 10G fiber uplinks
- When using both the high and low voltage adapters, the netPower will automatically choose the correct PoE standard and voltage, based on the devices you connect to each port
- Compatible with MikroTik power supplies: 24HPOW, 48POW, 48V2A96W

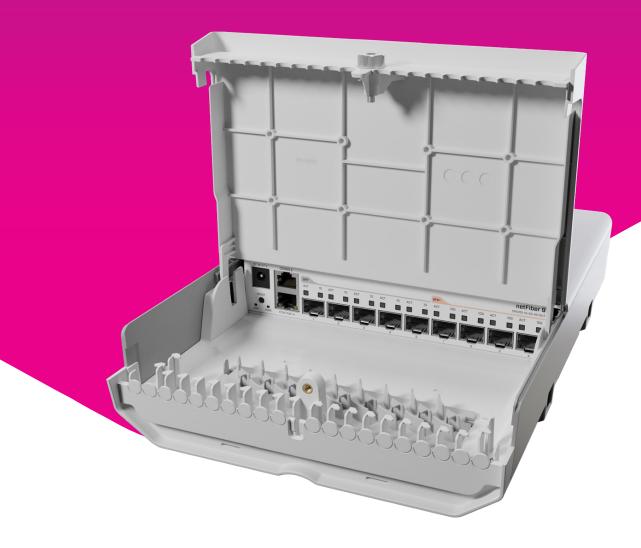
# netFiber9





A remarkable outdoor switch for setting up an optical network that can even perform some light routing. The spiritual successor to the beloved FiberBox.

- 5x 1G SFP ports
- 4x 10G SFP+ ports
- Multiple powering options
- Different mounting options
- Sturdy outdoor case
- Gigabit Ethernet with PoE-in
- 10G networking over long distances



#### netPower Lite 7R







An outdoor reverse PoE switch with Gigabit Ethernet and 10G SFP+ ports. Cut costs, not speed – choose GPEN over GPON!

- 7 reverse PoE Gigabit Ethernet ports\*) 2 x 10G SFP + ports
- durable outdoor enclosure
- DC jack & 2-pin terminal for alternative powering
- Can be powered by a battery
- Deliver high-speed Internet to individual apartments easily

# CRS328-24P-4S+RM



The CRS328-24P-4S+RM is a 28 independent port PoE switch with multiple power options: Passive PoE, low voltage PoE, 802.3af/at (Type 1 "PoE" / Type 2 "PoE+") with per port autosensing. The 4 SFP+ ports provide up to 10 Gigabit connectivity options via either optical fiber or Ethernet modules (not included).

CRS328-24P-4S+RM comes in a 1U rackmount case with 100-240 V AC 500 W power supply built-in.



- 24 Gigabit Ethernet ports with PoE output
- 4 SFP+ ports for 10 Gigabit connectivity
- 800 MHz CPU, 512 MB RAM
- Power output options: Passive PoE, low voltage PoE, 802.3at/af (Type 1 "PoE" / Type 2 "PoE+") with auto-sensing
- 100-240 V AC 500 W power supply built-in
- Non-Blocking throughput: 64 Gbps
- Switching capacity: 128 Gbps
- Dual boot feature that allows to choose RouterOS or SwOS

#### CSS326-24G-2S+RM







A 24 port Gigabit Ethernet switch with 2 SFP+ ports in 1U rackmount case.

- 24 Gigabit Ethernet ports
- 2 SFP+ ports for 10 Gigabit connectivity
- Powered by SwOS
- 1U rackmount case

#### CRS326-24G-2S+RM







A 24 port Gigabit Ethernet router/switch with two SFP+ ports in 1U rackmount case, dual boot.

- 24 Gigabit Ethernet ports
- Two SFP+ ports for 10 Gigabit connectivity
- 800 MHz CPU, 512 MB RAM
- Dual boot feature that allows to choose RouterOS or SwOS
- 1U rackmount case

#### CRS312-4C+8XG-RM

mt.lv/p/431





Switch of the future: the first MikroTik product with 10G RJ45 Ethernet ports and SFP+

- 8 10G Ethernet ports
- 4 Combo 10G Ethernet/SFP+ ports
- Combo ports can be software selected
- Dual power supply
- 1U rackmount case

#### CRS326-24S+2Q+RM







Our fastest switch for the most demanding setups

- Two 40 Gbps QSFP+ ports
- 24 SFP+ ports for 10 Gigabit connectivity
- Dual boot feature that allows to choose RouterOS or SwOS
- Dual power supply
- 1U rackmount case

#### CRS354-48G-4S+2Q+RM

mt.lv/p/479





Best price and best performance on the market – this 48 port switch will rock any setup, including 40 Gbps devices!

- Two 40 Gbps QSFP+ ports
- 48 Gigabit Ethernet ports
- 4 SFP+ ports for 10 Gigabit connectivity
- Dual power supply
- 1U rackmount case

#### CRS125-24G-1S-2HnD-IN

mt.lv/p/202





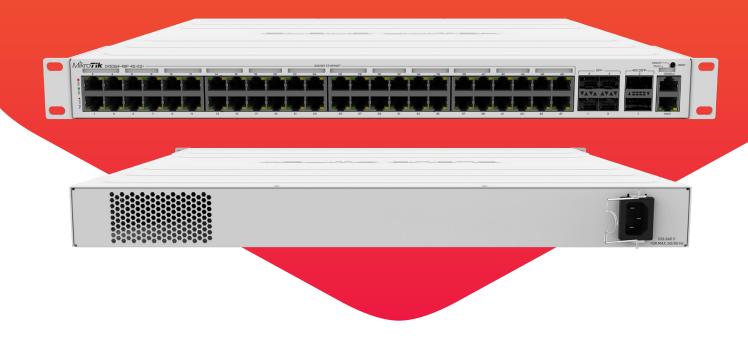
A desktop size smart switch with 24 Gigabit Ethernet ports, an SFP port for optical fiber connectivity and high power 2.4 GHz wireless.

- 24 Gigabit Ethernet ports
- SFP port for 1.25 Gigabit connectivity
- High power 2.4 GHz dual chain wireless
- 600 MHz CPU, 128 MB RAM
- LCD touch screen, microUSB port

# CRS354-48P-4S+2Q+RM



If you are looking for a single switch that will put your network setup ahead of the curve and power all the necessary devices – look no further! The new CRS354-48P-4S+2Q+RM is an effective and adaptable rackmount solution for managing networks in the most demanding environments. Unlike many other switches out there, our products are made with the system administrator in mind.



CRS354-48P-4S+2Q+RM is extremely functional, and it has the best price-point on the market - it will make the perfect addition to a professional setup. The total non-blocking throughput is 168 Gbps, switching capacity is 336 Gbps and the forwarding rate reaches 235 Mpps.

- Two 40 Gbps QSFP+ ports
- 48 Gigabit Ethernet ports with PoE-out
- Passive PoE, low voltage PoE, 802.3af/at (Type 1 "PoE" / Type 2 "PoE+") with auto-sensing
- 4 SFP+ ports for 10 Gigabit connectivity
- 1U rackmount case

#### CRS317-1G-16S+RM





A 1U rackmount manageable switch with 16 SFP+ ports for for 10 Gigabit connectivity and a Gigabit Ethernet port for management.



- Gigabit Ethernet port
- 16 SFP+ ports for 10 Gigabit connectivity
- Dual core 800 MHz CPU, 1 GB RAM
- Dual boot feature that allows to choose RouterOS or SwOS
- Dual redundant power supplies
- Silent passive cooling enclosure
- 1U rackmount case

# CRS328-4C-20S-4S+RM



The CRS328-4C-20S-4S+RM is a 28 independent port switch with a combo group.

This device has twenty SFP ports, four SFP+ ports for 10G modules and four combo ports, where you can choose to use SFP or RJ45 ports from the combo group. These ports can also be software selected, so if you have plugged in all eight cables, you can use scripting, to decide which four combo ports will be active.

The device has a "Dual boot" feature that allows you to choose between two operating systems - RouterOS or SwOS.

If you prefer to have a simplified operating system with only switch specific features, use SwOS. If you would like the ability to use routing and other Layer 3 features in your CRS, use RouterOS. You can select the desired operating system from RouterOS, from SwOS or from the RouterBOOT loader settings. All the feature set comes with our disruptive price, providing best price/performance on the market.



#### Switching features

- Non-blocking Layer 2 switching capacity
- 16K host table
- IEEE 802.1Q VLAN
- Supports up to 4K simultaneous VLANs
- Port isolation
- Port security
- Broadcast storm control
- Port mirroring of ingress/egress traffic
- STP / RSTP / MSTP
- Access Control List
- MikroTik neighbor discovery
- SNMP
- 10218-byte jumbo frames support
- IGMP snooping
- IEEE 802.3ad and static link aggregation

# Quick specifications

- 20 SFP ports
- 4 ETH/SFP combo ports
- 4 SFP+ ports
- Non-Blocking throughput: 64 Gbps
- Switching capacity: 128 Gbps
- Forwarding rate: 95.2 Mpps
- RJ45 serial console port
- Dual PSU
- Maximum power consumption: 43 W
- Temperature based fan control
- 1U rackmount

48



# SXTsq Lite2

mt.lv/p/361



A compact, low-cost and lightweight outdoor 2.4 GHz 802.11b/g/n wireless device with an 10 dBi integrated antenna.

- 2.4 GHz 10 dBi antenna
- 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



LHG<sub>2</sub>

mt.lv/p/333



An outdoor 2.4 GHz 802.11b/g/n wireless device with an 18 dBi integrated antenna for longer distances.

- 2.4 GHz 18 dBi antenna
- 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



LHG XL 2

mt.lv/p/339



An outdoor 2.4 GHz 802.11b/g/n wireless device with an extra large 21 dBi integrated antenna for even longer distances.

- 2.4 GHz 21 dBi antenna
- 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



LDF<sub>2</sub>

mt.lv/p/363



A tiny 2.4 GHz system for super long distance links with satellite offset dish antennas.

- 40 mm diameter to fit any available satellite TV dish with an offset mount
- integrated 2.4 GHz 10 dBi antenna
- 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- RouterOS level 3 (CPE or Point-to-Point)



SXT<sub>2</sub>

mt.lv/p/168



An outdoor 2.4 GHz 802.11b/g/n base station with a 10 dBi, 60 degree integrated sector antenna and Gigabit Ethernet.

- 2.4 GHz 10 dBi 60° sector antenna
- 802.11b/g/n high power dual chain wireless
- Gigabit Ethernet

- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### mANTBox 2 12s

mt.lv/p/417



The mANTBox is based on our new mANT sector antennas, but also has a wireless router built right in. Powered by the RB911 device, the mANTBox comes ready to use with everything included. The device uses a high speed 600 MHz CPU, comes with the Gigabit Ethernet port and has a built in 802.11 b/g/n wireless device with up to 30 dBm output power.

- 2.4 GHz 12 dBi 120° sector antenna 600 MHz CPU, 64 MB RAM
- 802.11b/g/n, dual-chain
- Gigabit Ethernet

- RouterOS level 4 license (AP, CPE or Point-to-Point)

5 GHz integrated directionals \_\_\_\_\_

Up to 10 km distance



#### **SXTsq Lite5**

mt.lv/p/315



A compact and lightweight outdoor wireless device with an integrated antenna. Perfect for point to point links of up to 12 kilometers or as a CPE unit.

- 5 GHz 16 dBi antenna
- 802.11a/n dual chain wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS L3 (CPE or Point-to-Point)



# SXTsq 5 ac

mt.lv/p/336



The SXTsq 5 ac is a compact and lightweight outdoor 5 GHz 802.11ac wireless device with an integrated antenna, perfect for Point-to-Point links or as a CPE unit.

- 5 GHz 16 dBi antenna
- Gigabit Ethernet

- 716 MHz CPU, 256 MB RAM
- 802.11a/n/ac dual chain wireless RouterOS level 3 license (CPE or Point-to-Point)



#### **Disc Lite5**

mt.lv/p/304



An outdoor 5 GHz 802.11a/n/ac wireless device with a high gain 21 dBi integrated antenna.

- 5 GHz 21 dBi antenna
- 802.11a/n/ac dual chain wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### Disc Lite5 ac

mt.lv/p/352



An outdoor 5 GHz 802.11a/n/ac wireless device with a high gain 21 dBi integrated antenna and Gigabit Ethernet for high speed on long distances.

- 5 GHz 21 dBi antenna
- 802.11a/n/ac high power dual chain wireless
- Gigabit Ethernet
- 716 MHz CPU, 256 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)

#### More than 10 km range



#### LHG XL 52 ac

mt.lv/p/309



Powerful 5 GHz backbone with 2.4 GHz backup for long-distance connection without downtime

- 2.4 GHz 18 dBi antenna
- 5 GHz 27 dBi antenna
- 802.11b/g/n and 802.11a/n/ac dual-chain high power wireless
- Gigabit Ethernet port
- 716 MHz quad-core CPU, 256 MB RAM



LHG<sub>5</sub>

mt.lv/p/285



An outdoor 5 GHz 802.11a/n wireless device with a 24.5 dBi integrated antenna for long distances.

- 5 GHz 24.5 dBi antenna
- 802.11a/n dual chain wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### **LHG HP5**

mt.lv/p/316



An outdoor 5 GHz 802.11a/n high power wireless device with a 24.5 dBi integrated antenna for long distances.

- 5 GHz 24.5 dBi antenna
- 802.11a/n dual chain high power wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### **LHG XL HP5**

mt.lv/p/317



An outdoor 5 GHz 802.11a/n high power wireless device with an extra large 27 dBi integrated antenna for extra large distances.

- 5 GHz 27 dBi antenna
- 802.11a/n dual chain high power wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### LHG 5 ac

mt.lv/p/335



An outdoor 5 GHz 802.11a/n/ac wireless device with a 24.5 dBi integrated antenna and Gigabit Ethernet.

- 5 GHz 24.5 dBi antenna
- 802.11a/n/ac dual chain wireless
- Gigabit Ethernet
- 716 MHz CPU, 256 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### LHG XL 5 ac

mt.lv/p/340



An outdoor 5 GHz 802.11a/n/ac wireless device with an extra large 27 dBi integrated antenna for extra long distances and Gigabit Ethernet.

- 5 GHz 27 dBi antenna
- 802.11a/n/ac dual chain wireless
- Gigabit Ethernet
- 716 MHz CPU, 256 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



QRT 5

mt.lv/p/222



An outdoor 5 GHz 802.11a/n high power wireless device for long distances with a 24 dBi integrated antenna and Gigabit Ethernet.

- 5 GHz 24 dBi antenna
- 802.11a/n high power dual chain wireless
- Gigabit Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)

#### QRT 5 ac







An outdoor 5 GHz 802.11a/n/ac high power wireless device for long distances with a 24 dBi integrated antenna and Gigabit Ethernet.

- 5 GHz 24 dBi antenna
- 802.11a/n/ac high power dual chain wireless
- Gigabit Ethernet
- 720 MHz CPU, 128 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



# DynaDish 5





An outdoor 5 GHz 802.11a/n/ac high power wireless device for extra long distances with a 25 dBi integrated antenna and Gigabit Ethernet.

- 5 GHz 25 dBi antenna
- 802.11a/n/ac high power dual chain wireless
- Gigabit Ethernet
- 720 MHz CPU, 128 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



LDF 5

mt.lv/p/301



A tiny 5 GHz system for super long distance links with a satellite offset dish antennas.

- 40 mm diameter to fit any available satellite TV dish with an offset mount
- Integrated 5 GHz 9 dBi antenna
- 802.11a/n dual chain wireless
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



LDF 5 ac

mt.lv/p/338



A tiny 5 GHz system with Gigabit Ethernet and 802.11a/n/ac support for super long distance links with satellite offset dish antennas

- 40 mm diameter to fit any available satellite TV dish with an offset mount
- Integrated 5 GHz 9 dBi antenna
- 802.11a/n/ac dual chain wireless
- Gigabit Ethernet
- 716 MHz CPU, 256 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



SXT SA5

mt.lv/p/195



An outdoor 5 GHz 802.11a/n high power wireless integrated base station with a 14 dBi 90° sector antenna.

- 5 GHz 14 dBi 90° sector antenna
- 802.11a/n dual chain high power wireless
- Gigabit Ethernet
- 600 MHz CPU, 64 MB RAM
- USB
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### SXT SA5 ac

mt.lv/p/233



An outdoor 5 GHz 802.11a/n/ac high power wireless integrated base station with a 14 dBi 90° sector antenna.

- 5 GHz 14 dBi 90° sector antenna
- 802.11a/n/ac dual chain high power wireless
- Gigabit Ethernet
- 720 MHz CPU, 128 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### mANTBox 52 15s

mt.lv/p/522



A dual-band 2.4/5 GHz base station with a powerful built-in sector antenna, PoE support, Gigabit Ethernet and SFP. One powerful package for all your outdoor network needs, perfect for camps, stadiums and parks!

- Strong dual-chain dual-band 2.4/5 GHz wireless
- Gigabit Ethernet & SFP for fiber connectivity
- Powerful built-in dual polarization antenna
- Quad-core CPU
- 802.3af/at PoE-in
- Reach distance up to 20 km
- IPsec hardware offloading



#### mANTBox 15s

mt.lv/p/279



An outdoor 5 GHz 802.11a/n/ac high power wireless integrated base station with a 15 dBi 120° sector antenna and an SFP port.

- 5 GHz 15 dBi 120° sector antenna
- 802.11a/n/ac dual chain high power wireless
- Gigabit Ethernet
- 720 MHz CPU, 128 MB RAM
- SFP port for 1.25 Gigabit connectivity



#### mANTBox 19s

mt.lv/p/280



An outdoor 5 GHz 802.11a/n/ac high power wireless integrated base station with a long range 19 dBi 120° sector antenna and an SFP port.

- 5 GHz 19 dBi 120° sector antenna
- 802.11a/n/ac dual chain high power wireless
- Gigabit Ethernet
- 720 MHz CPU, 128 MB RAM
- SFP port for 1.25 Gigabit connectivity

#### **OmniTik 5**





An outdoor 5 GHz 802.11a/n high power wireless integrated access point with two integrated 7.5 dBi omni antennas and 5 Ethernet ports.

- 2 integrated 5 GHz 7.5 dBi omni antennas
- 802.11a/n dual chain high power wireless
- 5x 10/100 Mbps Ethernet ports
- 600 MHz CPU, 64 MB RAM
- USB

#### OmniTik 5 ac





An outdoor 5 GHz 802.11a/n/ac high power wireless integrated access point with two integrated 7.5 dBi omni antennas and five Ethernet ports.

- 2 integrated 5 GHz 7.5 dBi omni antennas
- 802.11a/n/ac dual chain high power wireless
- 5 Gigabit Ethernet ports
- 720 MHz CPU, 128 MB RAM
- USB

#### **OmniTik 5 PoE**

mt.lv/p/133



An outdoor 5 GHz 802.11a/n high power wireless integrated access point with two integrated 7.5 dBi omni antennas and 5 Ethernet ports with PoE output.

- 2 integrated 5 GHz 7.5 dBi omni antennas
- 802.11a/n dual chain high power wireless
- 5x 10/100 Mbps Ethernet ports (PoE output on ports 2-5)
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)

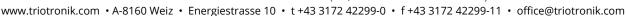
#### OmniTik 5 PoE ac

mt.lv/p/303



An outdoor 5 GHz 802.11a/n/ac high power wireless integrated access point with two integrated 7.5 dBi omni antennas and 5 Ethernet ports with PoE output.

- 2 integrated 5 GHz 7.5 dBi omni antennas
- 802.11a/n/ac dual chain high power wireless
- 5 Gigabit Ethernet (PoE output on ports 2-5)
- 720 MHz CPU, 128 MB RAM
- USB
- RouterOS level 4 license (AP, CPE or Point-to-Point)





#### **Groove 52**

mt.lv/p/186



Our smallest outdoor integrated wireless device with a selectable wireless band (2.4 GHz or 5 GHz) and N-male connector for an external antenna.

- 5 GHz 802.11a/n or 2.4 GHz 802.11b/g/n single chain wireless (selectable)
- N-male connector for external antenna
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 3 license (CPE or Point-to-Point)



#### GrooveA 52

mt.lv/p/187



Our smallest outdoor integrated wireless AP with a selectable wireless band (2.4 GHz or 5 GHz) and N-male connector for external antenna.

- 5 GHz 802.11a/n or 2.4 GHz 802.11b/g/n single chain wireless (selectable)
- 2.4/5 GHz omni directional antenna (6 dBi 2.4 GHz, 8 dBi 5 GHz) included
- 10/100 Mbps Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### GrooveA 52 ac

mt.lv/p/293



Our smallest outdoor integrated wireless AP with a selectable wireless band (2.4 GHz or 5 GHz) and N-male connector for an external antenna.

- 5 GHz 802.11a/n or 2.4 GHz 802.11b/g/n single chain wireless (selectable)
- 2.4/5 GHz omni directional antenna (6 dBi 2.4 GHz, 8 dBi 5 GHz) included
- Gigabit Ethernet
- 720 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### Metal 52 ac

mt.lv/p/286



A small size outdoor integrated super high power wireless AP in a weatherproof metal case with a selectable wireless band (2.4 GHz or 5 GHz) and N-male connector for an external antenna.

- 5 GHz 802.11a/n or 2.4 GHz 802.11b/g/n single chain wireless (selectable)
- 2.4/5 GHz omni directional antenna (6 dBi 2.4 GHz, 8 dBi 5 GHz) included
- Gigabit Ethernet
- 720 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### BaseBox 2



An outdoor 2.4 GHz 802.11b/g/n high power wireless integrated base station with two RPSMA connectors for external antennas and an expansion slot.

- 2.4 GHz 802.11b/g/n dual chain high power wireless
- 2x RPSMA connectors for external antennas
- 10/100 Mbps Ethernet

- 600 MHz CPU, 64 MB RAM
- miniPCle slot, SIM slot, USB
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### BaseBox 5

mt.lv/p/194



An outdoor 5 GHz 802.11a/n high power wireless integrated base station with two RPSMA connectors for external antennas and an expansion slot.

- 5 GHz 802.11a/n dual chain high power wireless
- 2x RPSMA connectors for external antennas
- 10/100 Mbps Ethernet

- 600 MHz CPU, 64 MB RAM
- miniPCle slot, SIM slot, USB
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### NetBox 5

mt.lv/p/234



An outdoor 5 GHz 802.11a/n/ac high power wireless integrated base station with two RPSMA connectors for external antennas.

- 802.11a/n/ac dual chain high power wireless
- 2 RPSMA connectors for external antennas
- Gigabit Ethernet

- 720 MHz CPU, 128 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



mt.lv/p/237



An rock solid, metalic outdoor 5 GHz 802.11a/n/ac high power wireless integrated base station with RPSMA connectors for external antennas. Extra slot for a cellular modem or a second wireless interface, to build a dual band AP.



- 2-3 RPSMA connectors for external antennas
- Gigabit Ethernet
- SFP port for 1.25 Gigabit connectivity
- 720 MHz CPU, 128 MB RAM
- miniPCIe slot for additional interface (some models), USB port
- RouterOS level 4 license (AP, CPE or Point-to-Point)
- Weatherproof metal enclosure (IP66)



# NetMetal ac2

mt.lv/p/480



Our toughest long-range AP, now with dual-band support

- 802.11 b/g/n 2.4 GHz dual-chain high power wireless
- 802.11 a/n/ac 5 GHz dual-chain high power wireless
- Gigabit Ethernet port
- 716 MHz quad-core CPU, 256 MB RAM
- Two RP-SMA connectors for extra antennas
- miniPCle slot for additional interface, USB port
- SFP port for 1.25 Gigabit connectivity



#### CubeSA 60Pro ac

mt.lv/p/566



Enjoy a smooth 60 GHz experience with Cube 60Pro ac and CubeSA 60Pro ac!

- Gigabit Ethernet
- Powerful quad-core CPU
- 5 GHz failover
- Reach greater distance than ever with channel 5 support
- TDMA GPS sync
- Improved design and mounting options
- 60 GHz 802.11ay, compatible with previous 802.11ad products
- 60° Sector Antenna for 60 GHz Access Point coverage



#### Cube 60Pro ac

mt.lv/p/565



Enjoy a smooth 60 GHz experience with Cube 60Pro ac and CubeSA 60Pro ac!

- Gigabit Ethernet
- Powerful quad-core CPU
- 5 GHz failover
- Reach greater distance than ever with channel 5 support
- TDMA GPS sync
- Improved design and mounting options
- 60 GHz 802.11ay, compatible with previous 802.11ad products



#### Wireless Wire Cube Pro

mt.lv/p/564



A 2 Gb/s 60 GHz aggregate link with a 5 GHz failover. Forget about wires or downtime! Best price/performance on the market, stealthy and sturdy design.

- Reach distance up to 800m
- 60 GHz with automatic5 GHz backup connection
- Compact and durable
- iOS/Android app for quick and easy configuration
- Gigabit Ethernet with PoE-in
- Powerful quad-core CPU

#### Wireless Wire Dish

mt.lv/p/353





2 Gb/s aggregate link up to 1500m+ without cables!

- Includes two LHGG 60 devices for 60 GHz link
- 1 Gbps full duplex AES encrypted
- Devices already paired together
- Distances 1,500 m+
- Outdoor weatherproof enclosures
- Four core 716 MHz CPU, 256 MB RAM



#### Wireless Wire

mt.lv/p/331



2 Gb/s aggregate link up to 200m+ without cables!

- Includes two wAP60 devices for 60 GHz link
- 1 Gbps full duplex AES encrypted
- Devices already paired together
- Distances 200 m+
- Outdoor weatherproof enclosures
- Four core 716 MHz CPU, 256 MB RAM

#### **WAP 60G AP**





Weatherproof integrated 60 GHz wireless unit to be used indoors or outdoors as a base station or a CPE.

- 60 GHz phase array 60° beamforming antenna
- 4 core 716 MHz CPU, 256 MB RAM
- Distances 200 m+
- Gigabit Ethernet
- Works through most windows, depending on their material
- Outdoor weatherproof enclosure
- RouterOS level 4 license (AP, CPE or Point-to-Point)

#### wAP 60G





Weatherproof integrated 60 GHz wireless unit to be used indoors or outdoors as a Point-to-Point or a CPE.

- 60 GHz phase array 60° beamforming antenna
- 4 core 716 MHz CPU, 256 MB RAM
- Distances 200 m+
- Gigabit Ethernet
- Works through most windows, depending on their material
- Outdoor weatherproof enclosure
- RouterOS level 3 license (CPE or Point-to-Point)

# Cube 60G ac







A high-speed 60 GHz CPE with Gigabit Ethernet and a 5 GHz failover. The easy and affordable way of eliminating interference and downtime!

- Reach distance up to 800m
- 60 GHz with an automatic 5 GHz backup connection
- Gigabit Ethernet with PoE-in
- Powerful quad-core CPU
- Compact and durable

#### Wireless Wire Cube







A 2 Gb/s 60 GHz aggregate link with a 5 GHz failover. Forget about wires or downtime! Best price/performance on the market, stealthy and sturdy design.

- Reach distance up to 800m
- 60 GHz with an automatic 5 GHz backup connection
- Gigabit Ethernet with PoE-in
- Powerful quad-core CPU
- Includes two Cube 60G ac devices that are already paired together

#### Wireless Wire nRAY

mt.lv/p/518





The most compact wireless 2 Gb/s aggregate link in the 1500 m range or more! Improved snow-resistant design is perfect for harsh weather environments. Cables can no longer limit you!

- Reach distance in the 1500 m range or more
- Preconfigured to connect automatically
- Secure AES encrypted 60 GHz connection
- Gigabit Ethernet
- PoE injectors included

#### 6 GHz integrated units \_\_\_\_\_



SXT 6

mt.lv/p/310



The SXT 6 is an outdoor wireless device for licensed bands with a dual chain 16 dBi 28° 5.9-6.4 GHz integrated antenna.

- 5.9-6.4 GHz 16 dBi antenna for licensed bands
- 802.11a/n dual chain wireless
- Gigabit Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### BaseBox 6

mt.lv/p/421



An outdoor wireless device, fitted with two SMA connectors for antennas, and a cable hood for protection against moisture.

- 5.9-6.4 GHz frequency range
- 802.11a/n dual chain wireless
- Gigabit Ethernet and 2 RP-SMA connectors for antennas
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)



# DynaDish 6

mt.lv/p/323



The DynaDish 6 is an outdoor wireless device for licensed bands with a dual chain 25 dBi 5.9-6.4 GHz integrated antenna.

- 5.9-6.4 GHz 25 dBi antenna for licensed bands
- 802.11a/n dual chain wireless
- Gigabit Ethernet
- 600 MHz CPU, 64 MB RAM
- RouterOS level 4 license (AP, CPE or Point-to-Point)

Single band 2.4 GHz access points \_\_\_\_\_



#### hAP mini

mt.lv/p/311



A tiny size 2.4 GHz SOHO AP with three Ethernet ports in a tower case.

- 802.11b/g/n dual chain wireless
- 3x 10/100 Mbps Ethernet ports
- 650 MHz CPU, 32 MB RAM
- Tiny size (8 cm tall) tower enclosure
- Most affordable MikroTik AP



#### hAP lite TC

mt.lv/p/265



A compact 2.4 GHz SOHO AP with four Ethernet ports in a colorful tower case.

- 802.11b/g/n dual chain wireless
- 4x 10/100 Mbps Ethernet ports
- 650 MHz CPU, 32 MB RAM
- Compact colorful tower case
- Button triggered WPS



#### hAP lite classic

mt.lv/p/253



A compact 2.4 GHz SOHO AP with four Ethernet ports in a desktop case.

- 802.11b/g/n dual chain wireless
- 4x 10/100 Mbps Ethernet ports
- 650 MHz CPU, 32 MB RAM
- Compact desktop case
- Button triggered WPS





A compact 2.4 GHz SOHO AP with five Ethernet ports in a desktop case and PoE support.

- 802.11b/g/n dual chain wireless
- 5x 10/100 Mbps Ethernet ports (PoE output on port 5)
- 650 MHz CPU, 64 MB RAM
- Compact desktop case
- USB



mt.lv/p/240





A small size travel router with 2.4 GHz wireless, two Ethernet ports and PoE output. Configure the ports as desired (one WAN and one LAN, or any other combination).

- 802.11b/g/n dual chain wireless
- 2x 10/100 Mbps Ethernet ports (PoE output on port 2)
- 650 MHz CPU, 64 MB RAM
- Accepts power from a wide variety of sources USB, PoE and power jack
- Small case



#### cAP lite

mt.lv/p/307



A tiny 2.4 GHz AP, perfect for public locations and hospitality businesses.

- Two different casings included ceiling and wall mount
- 802.11b/g/n dual chain wireless
- 1.5 dBi 2.4 GHz antenna
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM



#### cAP

mt.lv/p/245



A Compact 2.4 GHz AP with ceiling case for larger coverage, perfect for public locations and hospitality businesses.

- 802.11b/g/n dual chain wireless
- 2 dBi 2.4 GHz antenna
- 10/100 Mbps Ethernet
- 650 MHz CPU, 64 MB RAM
- Ceiling case



#### RB951Ui-2HnD





A high power 2.4 GHz AP in desktop case with five Ethernet ports and PoE support.

- 802.11b/g/n 2.4 GHz high power dual chain wireless
- 5x 10/100 Mbps Ethernet ports (PoE output on port 5)
- 600 MHz CPU, 128 MB RAM
- Compact desktop case
- USB, NAND memory for storage



#### RB951G-2HnD





A high power 2.4 GHz AP in desktop case with five Gigabit Ethernet ports.

- 802.11b/g/n 2.4 GHz high power dual chain wireless
- 5 Gigabit Ethernet ports
- 600 MHz CPU, 128 MB RAM
- Compact desktop case
- USB, NAND memory for storage

#### RB2011UiAS-2HnD-IN





A high power multi port 2.4 GHz AP in a metal desktop case with PoE functionality and support for optical fiber connectivity.

- 802.11b/g/n 2.4 GHz high power dual chain wireless with external dipole antennas
- 5x Gigabit Ethernet ports
- 5x 10/100 Mbps Ethernet ports
- Ethernet port 10 can power other PoE capable devices
- SFP port for 1.25 Gigabit connectivity
- 600 MHz CPU, 128 MB RAM, LCD display and USB
- Sturdy metal desktop enclosure



#### mAP lite

mt.lv/p/283



A tiny size travel router with 2.4 GHz AP functionality.

- Our smallest wireless access point, barely larger than a matchbox
- 802.11b/g/n dual chain wireless
- 10/100 Mbps Ethernet
- Can be used as a client device to improve laptop signal range
- 650 MHz CPU, 64 MB RAM



#### hAP ac lite

mt.lv/p/278



A compact dual concurrent 2.4 GHz  $\!\!/$  5 GHz SOHO AP with five Ethernet ports in a desktop case and PoE support

- 802.11b/g/n dual chain and 802.11a/n/ac single chain wireless
- Five 10/100 Mbps Ethernet ports (PoE output on port 5)
- 650 MHz CPU, 64 MB RAM
- Compact classic desktop case
- USB



#### hAP ac lite tower

mt.lv/p/299



A compact dual concurrent 2.4 GHz / 5 GHz SOHO AP with five Ethernet ports in a universal case and PoE support.

- 802.11b/g/n dual chain and 802.11a/n/ac single chain wireless
- Five 10/100 Mbps Ethernet ports (PoE output on port 5)
- 650 MHz CPU, 64 MB RAM
- Universal case to be positioned either horizontally or vertically
- USB



hAP ac

mt.lv/p/284



A dual concurrent 2.4 GHz  $\!\!\!/$  5 GHz high power AP with five Gigabit Ethernet ports, SFP and PoE support.

- 802.11b/g/n triple chain and 802.11a/n/ac triple chain high power wireless
- 5 Gigabit Ethernet ports (PoE output on port 5)
- SFP port for 1.25 Gigabit connectivity, USB
- 720 MHz CPU, 128 MB RAM



#### wsAP ac lite

mt.lv/p/350



An in-wall dual concurrent 2.4 GHz / 5 GHz wireless access point with three Ethernet ports and telephone jack pass through for hospitality networks.

- In-wall case that fits US and EU most popular telecommunication sockets
- 802.11b/g/n 2.4 GHz dual chain and 802.11a/n/ac 5 GHz single chain wireless
- Pass through telephone jack (RJ11)
- USB for charging mobile devices or for storage
- 650 MHz CPU, 64 MB RAM

The hAP ac2 is a Dual-concurrent Access Point, that provides Wifi coverage for 2.4 GHz and 5 GHz frequencies at the same time. Five 10/100/1000 Ethernet ports provide Gigabit connections for your wired devices, and USB can be used for external storage or 4G/LTE modem.



New design universal case allows unit to be positioned either horizontally (desktop) or vertically (tower case). Wall anchored mounting kit is provided.



- 802.11b/g/n dual chain high power wireless
- 802.11a/n/ac dual chain high power wireless
- 4 core 716 MHz CPU, 128 MB RAM
- New design universal case to be positioned either horizontally (desktop) or vertically (tower case)
- Support for IPsec hardware encryption and The Dude monitoring server
- USB





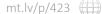


A powerful dual concurrent 2.4 GHz / 5 GHz wireless access point with two Gigabit Ethernet ports and PoE functionality, that looks beautiful on both walls and ceilings.



- 802.11a/n/ac dual chain wireless
- 2 Gigabit Ethernet ports (PoE output on port 2)
- 716 MHz CPU, 128 MB RAM
- The customizable mode button in the device center will turn off all lights and sounds, can be reconfigured to launch any RouterOS script.
- Two different casings included circular and square, to match any taste.









The RB4011 uses the amazingly powerful quad core Cortex A15 chip from Annapurna labs, an Amazon company, same as in our carrier grade RB1100AHx4 unit.

- Quad-core 1.4 GHz CPU
- 1 GB of RAM
- Quad chain 5 GHz, dual chain 2 GHz access point
- All metal passive cooled enclosure
- External antennas for best coverage



A wireless dual-band router with Gigabit Ethernet ports and external high gain antennas for more coverage. The new enclosure allows mounting the device vertically or horizontally. A wall mount set is also included.

- 5 x Gigabit Ethernet ports
- iOS/Android app for quick and easy configuration
- USB
- PoE-in/PoE-out
- 128 MB NAND, 256 MB RAM
- Strong dual-chain dual-band 2.4/5 GHz wireless
- Powerful external high gain antennas (3 – 5.5 dBi). You can use the SMA ports to add antennas of your choice
- Powerful quad-core CPU



Black mt.lv/p/525



White mt.lv/p/524



# wAP ac - upgraded version

A new revision of the popular dual-band weatherproof wireless access point for mounting on a pole, wall, or the ceiling. This wAP ac features 2x Gigabit Ethernet ports, enhanced wireless antenna performance, more RAM, and a powerful quad-core CPU!

- Two Gigabit Ethernet ports
- PoE-in
- Better cooling
- Weatherproof outdoor case, available in white or black
- Can be fixed to any external wall from the inside of the case – for extra security and less visible attachments



# cAP XL ac



The ceiling AP on steroids! Our bestseller cAP is back – juiced up and stronger than ever. Compared to the previous cAP models, the improved high-gain antenna increases the covered area by up to 100%!

- Gigabit Ethernet
- Improved dual-band 2.4/5 GHz signal
- PoE-in, PoE-out
- Inconspicuous and compact



#### **Devices with LTE support**

# Proof of the state of the state

Three versions are available:

#### wAP ac LTE series

The wAP ac LTE is a small dual band weatherproof wireless access point with a built in cellular modem that supports 2G, 3G and 4G (LTE) connectivity. It has two Gigabit Ethernet ports, a powerful quad-core 716 MHz CPU and 128 MB of RAM. Dual-chain 2.4 GHz and dual-chain 5GHz wireless for dual concurrent AP coverage will solve most interference issues in a crowded environment.

- **wAP R ac** wAP R ac is shipped without an LTE card (there is an extra empty miniPCI-e slot), so you can use your own LTE card.
- wAP ac LTE kit includes LTE modem that supports International LTE bands 1,2,3,7,8,20,38 and 40.
- **wAP ac LTE6 kit** includes the new R11e-LTE6 Category 6 modem, which enables carrier aggregation and allows the device to use multiple bands at the same time. It supports LTE FDD bands 1(2100)/2(1900)/3(1800)/5(850)/7(2600)/8 (900)/12(700)/17(700)/20(800)/25(1900)/ 26(850), as well as LTE TDD bands 38(2600)/39(1900)/40(2300)/41n(2500).



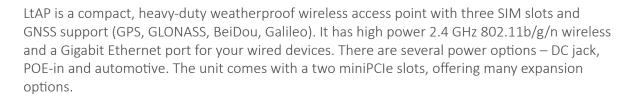
#### wAP LTE series

The wAP LTE is a small weatherproof wireless access point with a built in cellular modem that supports 2G, 3G and 4G (LTE) connectivity. Connect to the wAP's built-in 802.11b/g/n wireless and access the LTE network from your phone or any other wireless device. The wAP LTE also has one 10/100 Ethernet LAN port for your wired devices.

- **wAP LTE kit** includes LTE modem that supports International LTE bands 1,2,3,7,8,20,38 and 40.
- wAP R is shipped with without LTE card installed (empty miniPCI-e slot), so you can use your own LTE card.

Two versions are available:

#### LtAP LTE series





Three versions are available:

- LtAP is shipped without an LTE card (there is an extra empty miniPCI-e slot), so you can use your own LTE card.
- **LtAP LTE kit** includes LTE modem that supports International LTE bands 1,2,3,7,8,20,38 and 40. One miniPCle slot is already populated with the LTE modem.
- LtAP LTE6 kit includes the new R11e-LTE6 Category 6 modem, which enables carrier aggregation and allows the device to use multiple bands at the same time. It supports LTE FDD bands 1(21 00)/2(1900)/3(1800)/5(850)/7(2600)/8 (900)/12(700)/17(700)/20(800)/25(1900)/ 26(850), as well as LTE TDD bands 38(2600)/39(1900)/40(2300)/41n(2500). One miniPCle slot is already populated with the LTE modem.

# Adicornic

Two versions are available:

#### LtAP mini series

The LtAP mini LTE kit is a small weatherproof wireless access point with a built in cellular modem that supports 2G (international version only), 3G and 4G (LTE) connectivity. It is also available separately, without the modem, so you can use your own.

- LtAP mini LTE kit includes LTE modem that supports International LTE bands 1,2,3,7,8,20,38 and 40.
- **LtAP mini** is shipped with without LTE card installed (empty miniPCI-e slot), so you can use your own LTE card.

#### LHG LTE series

The LHG LTE kit is a device for remote locations that are within cellular network coverage. Mount it outdoors, on a pole, mast or any high enough structure, and connect even where cell phones can't. Due to it's large sized high gain antenna, the device is capable to connect to cell towers in extreme rural locations, giving you the ability to provide last mile internet access where nothing else is available. The unit is equipped with one Ethernet port, has a built in high quality Category 4 modem for speeds of up to 150 Mbit/s downlink and 50 Mbit/s uplink. There is also a new Category 6 version for higher speed and additional features, see the list below.

- LHG LTE kit includes LTE modem that supports International LTE bands 1, 2, 3, 7, 8, 20, 38 and 40.
- **LHG LTE6 kit** features the new R11e-LTE6 Category 6 modem, which enables carrier aggregation and allows the device to use multiple bands at the same time. It supports LTE FDD bands 1(2100)/2(1900)/3(1800)/5(850)/7(2600)/8 (900)/12(700)/17(700)/20(800)/25(1 900)/ 26(850), as well as LTE TDD bands 38(2600)/39(1900)/40(2300)/41n(2500).
- **LHG R** is shipped without an LTE card (there is an extra empty miniPCI-e slot), so you can use your own LTE card.
- **LHGG LTE6 kit** features a 300 Mbps CAT6 LTE modem, which enables carrier aggregation and allows the device to use multiple bands at the same time.



Five versions are available:

The RouterBOARD PCB series of devices come without enclosures, allowing you to build custom solutions or use existing telecomunication boxes for installations. These devices are versatile and customizable for any situation.

#### **RBMIIG**

mt.lv/p/324



The RBM11G is a fully featured RouterBOARD device perfect for using with your own enclosure or building a custom solution. It uses the same square PCB and mounting holes as it's predecessors, you can simply swap out the older models with the brand new RBM11G.

- RB411 and RB911 form factor
- Powerful dual core 880 MHz CPU, 256 MB RAM
- Gigabit Ethernet port
- miniPCle slot, SIM slot
- Power jack

#### RB912UAG-2HPnD

mt.lv/p/191



A small AP type OEM router with an integrated 2.4 GHz dual chain wireless, Gigabit Ethernet and expansion options.

- Small size
- 802.11b/g/n 2.4 GHz dual chain high power wireless onboard
- 600 MHz CPU, 64 MB RAM
- Gigabit Ethernet port
- miniPCI slot, SIM slots, USB
- Power jack
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### **RB911-5HnD**

mt.lv/p/225



A small CPE type OEM router with an integrated 5 GHz dual chain wireless.

- Low cost, small size
- 802.11a/n 5 GHz dual chain wireless onboard
- 600 MHz CPU, 64 MB RAM
- 10/100 Mbps Ethernet
- RouterOS level 3 license (CPE or Point-to-Point)



#### RB911-5HacD

mt.lv/p/287



A small CPE type OEM router with an integrated 5 GHz 802.11a/n/ac dual chain wireless.

- Low cost, small size
- 802.11a/n/ac 5 GHz dual chain wireless onboard
- 650 MHz CPU, 64 MB RAM
- 10/100 Mbps Ethernet
- RouterOS level 3 license (CPE or Point-to-Point)



#### RB911G-5HPnD





A small CPE type OEM router with an integrated 5 GHz dual chain wireless and Gigabit Ethernet.

- Low cost, small size
- 802.11a/n 5 GHz dual chain high power wireless onboard
- 600 MHz CPU, 32 MB RAM
- Gigabit Ethernet port
- Power jack
- RouterOS level 3 license (CPE or Point-to-Point)



#### RB912UAG-5HPnD

mt.lv/p/184



A small AP type OEM router with an integrated 5 GHz dual chain wireless, Gigabit Ethernet and expansion options.

- 802.11a/n 5 GHz dual chain high power wireless onboard
- 600 MHz CPU, 64 MB RAM
- Gigabit Ethernet port
- miniPCI, SIM slots, USB
- RouterOS L4 (AP, CPE or Point-to-Point)



#### RB911G-5HPacD

mt.lv/p/241



A small CPE type OEM router with an integrated 5 GHz 802.11a/n/ac dual chain wireless and Gigabit Ethernet.

- 802.11a/n/ac 5 GHz dual chain high power wireless onboard
- 720 MHz CPU, 128 MB RAM
- Gigabit Ethernet port
- Power jack
- RouterOS level 3 license (CPE or Point-to-Point)



#### RB922UAGS-5HPacD

mt.lv/p/242



A small, powerful AP type OEM router with an integrated 5 GHz 802.11a/n/ac dual chain wireless, Gigabit Ethernet, SFP and expansion options.

- 802.11a/n/ac 5 GHz dual chain high power wireless onboard
- 720 MHz CPU, 128 MB RAM
- One Gigabit Ethernet port
- SFP port for 1.25 Gigabit connectivity
- miniPCle, SIM slots, USB
- RouterOS level 4 license (AP, CPE or Point-to-Point)



#### **RB450Gx4**

mt.lv/p/362



The RB450Gx4 is powered by MikroTik RouterOS. It comes without an enclosure, you are free to use it in your own. The device form factor is identical to our previous RB850 and RB450 series, so you can even use the same enclosures.

- 4 core 716 MHz CPU, 1GB RAM
- microSD slot, two Power jacks, RS232 serial port
- Supports 10 V-57 V input, 802.3af/at compliant
- Hardware IPsec encryption supported
- RouterOS level 5 license

#### RBM33G

mt.lv/p/334





The RBM33G is a fully featured RouterBOARD device perfect for using in your own enclosure or building a custom solution. It uses the same PCB form factor and the same mounting holes as its predecessors (RB433 and RB953 series).

The RBM33G features a new MediaTek dual core CPU running at 880 MHz and 256 MB of DDR3 RAM and three Gigabit Ethernet ports. It is specially designed for setups that require two 3G/LTE modems.

- Powerful dual core 880 MHz CPU, 256 MB RAM
- 3 Gigabit Ethernet ports
- 2 miniPCle slots, two SIM slots
- USB, microSD and a PCIe M.2 slot
- RouterOS level 4 license (AP, CPE or Point-to-Point)

#### Accessories



**CA433U** 

mt.lv/p/61



A medium size aluminium indoor case.

- Fits RBM33G, RB433, RB953 series
- Comes with changeable front panels
- 3 holes for N-female bulkhead connectors or swivel antennas and a hole for USB on the back
- High profile to accommodate high power wireless cards



**CA150** 

mt.lv/p/59



An indoor aluminium case for Ethernet RouterBOARDs.

- Fits RB450 and RB850 series
- Wall mounting holes on the back

72





A small aluminium indoor case.

- Fits RBM11G, RB411, RB911, RB912 and RB922 series
- Comes with changeable front panels
- High profile to accommodate high power wireless cards
- Wall mounting holes on the back

#### RB2011 mount

mt.lv/p/145





The RB2011 wall mount kit for protecting the cables from unplugging.

- Ideal for public installations such as shared server rooms, attics, accessible closets and cabinets
- Fits all standard RB2011 desktop cases



# **RB4011 wall mount kit**

mt.lv/p/438



A simple solution for mounting the RB4011 in public locations to avoid unplugging of cables.

- Fits RB4011 series
- Made from durable steel
- Wall mounting holes on the back

#### Accessories for LTF



#### R11e-LTE6

mt.lv/p/473



2G/3G/4G/LTE miniPCI-e card with carrier aggregation support (up to 300 Mbps) for bands 1/2/3/5/7/8/12/17/20/25/26/38/39/40/41n

- Two U.FL connectors
- Can be used with any MikroTik products with RouterOS and miniPCle slot (except RB800 and RB4011)



## Rlle-LTE

mt.lv/p/341



LTE miniPCIe card for international bands.

- 2G/3G/4G/LTE miniPCle card
- Support for international LTE bands 1/2/3/5/7/8/20/38/40
- Two U.FL connectors
- Can be used with any MikroTik products with RouterOS and miniPCle slot (except RB800)

# **ACSMAUFL**

mt.lv/p/337





U.FL-SMA female pigtail.

- To be used to connect an LTE card to an external antenna
- U.FL connector on one side, SMA female on other
- Designed for use with the wAP R



#### **mANT LTE 50**

mt.lv/p/359



An omnidirectional antenna specifically designed for LTE frequencies.

- Omnidirectional 360 degrees LTE antenna
- Sesigned for MikroTik LTE products
- Improve the connection in the areas with inadequate LTE service coverage
- 2 SMA female connectors
- 699 MHz- 2.7 GHz range

#### **ACGPSA**

mt.lv/p/354





The active GPS antenna is the perfect companion for the LtAP mini, giving you the possibility to get accurate geographical coordinates of your router, even when it is mounted indoors.

The long cable allows to bring the antenna outside and mount it with the included magnet, or double sided tape.

- 1575.42 MHz center frequency
- 100% waterproof (IP67)
- SMA connector
- 26 dB gain



# **SMASMA**

mt.lv/p/348



SMA-Male to SMA Male cable.

- To be used to connect LTE card to an external antenna (via ACSMAUFL)
- 100 cm long, SMA-Male connectors on both sides
- Designed for use with the wAP R



## **DINrail PRO**

mt.lv/p/434



DINrail PRO is a mounting bracket for LtAP mini series products, designed to fit standard 35 mm × 7.5 mm DIN rails. This bracket will allow to install LtAP mini next to the industrial control equipment like water meters etc., as well as in equipment racks. Mounting bracket is made from metal and comes with a metal ring.

#### Accessories for fiber

#### **XQ+31LC02D**

mt.lv/p/575





Add this QSFP module for distances up to 2km to your CCR2216 or CRS504 setups and enjoy real speed and ultimate reliability. This optical module offers four independent full-duplex channels with up to 25 Gbps per channel bandwidth and an aggregate bandwidth of 100 Gbps. The module has built-in digital diagnostic functions, including optical power monitoring, and will perform well in environments up to 70° C. It has been designed to meet the harshest conditions, including temperature, humidity, and EMI interference, so we definitely recommend this as a reliable solution for all your 100 Gbps QSFP28 devices.



# XQ+BC0003-XS+

mt.lv/p/576



This addition to the MikroTik 100 Gigabit product line allows you to connect multiple 25 Gigabit devices to your CRS504 or CCR2216. With the integrated SFP28 modules, connecting numerous devices becomes as simple as it gets. The cable is 3 meters long – the perfect length to reach all the necessary spots while keeping your server room neat and tidy.



#### XQ+DA0003

mt.lv/p/578



Connect any two MikroTik 100 Gigabit heroes (CCR2216 & CRS504) without a hassle- this cable has integrated QSFP28 modules. Just plug it in and enjoy the speed! The cable is 3 meters long – the perfect length to reach all the necessary spots while keeping your server room neat and tidy. It is fairly flexible – you can keep your devices apart or on top of each other.



#### XQ+DA0001

mt.lv/p/577



Connect any two MikroTik 100 Gigabit heroes (CCR2216 & CRS504) without a hassle- this cable has integrated QSFP28 modules. Just plug it in and enjoy the speed! The cable is one meter long, which should be enough for most setups, but there is also a 3-meter version available. It is fairly flexible – you can keep your devices apart or on top of each other.

# S-85DLC05D

mt.lv/p/180



1.25G SFP transceiver for up to 550 meter fiber connection.



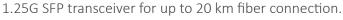
- Multi mode
- Up to 550 meter fiber connection
- For use in MikroTik products with SFP ports for 1.25 Gigabit connectivity
- Compatible with non-MikroTik SFP devices as well



# **S-31DLC20D**

mt.lv/p/181







- Single Mode
- Up to 20 km fiber connection

• 1310 nm Dual LC connector

- For use in MikroTik products with SFP ports for 1.25 Gigabit connectivity
- Compatible with non-MikroTik SFP devices as well



mt.lv/p/179





A pair of 1.25G SFP transceivers for up to 20 km fiber connection on a single optical cable.

- 1.25G single mode optical SFP module with a LC connector, T1310 nm/R1550 nm
- 1.25G single mode optical SFP transceiver with an LC connector, T1550 nm/ R1310 nm
- Up to 20 km fiber connection
- For use in MikroTik products with SFP ports for 1.25 Gigabit connectivity
- Compatible with non-MikroTik SFP devices as well





# S-4554LC80D





- Pair of 1.25G Single Mode optical SFP modules with a LC connector
- Supports any MikroTik device that has SFP or SFP+ ports
- Well suited for distances up to 80 km.

# S+85DLC03D

mt.lv/p/198





10G SFP+ transceiver for up to 300 meter 10 Gbps fiber connection.

- 850 nm Dual LC connector
- Multi mode
- Up to 300 meter 10 Gbps fiber connection
- For use in MikroTik products with SFP+ ports
- Compatible with non-MikroTik SFP+ devices as wel



#### **S-55DLC80D**

mt.lv/p/419



- 1.25G Single Mode optical SFP module with a Dual LC connector
- Supports any MikroTik device that has SFP or SFP+ ports
- Well suited for distances up to 80 km



S-RJ01

mt.lv/p/228



Converts SFP port for 1.25 Gbps connectivity in fully functional Gigabit Ethernet port.

- Compatible with most Gigabit SFP ports available on various networking devices
- Up to 1.25 Gpbs bi-directional data links
- 100 m transmission over unshielded



S+RJ10

mt.lv/p/329



Converts SFP+ port in fully functional 10 Gigabit Ethernet port.

- Supports any MikroTik device that has SFP+ ports
- Supports 10 Mbps, 100 Mbps, 1 Gbps, 2.5 Gbps, 5 Gbps, 10 Gbps data rates
- For distances up to 200 m



#### S+A00005

mt.lv/p/446



This is highly cost-effective way to connect two SFP/SFP+ devices for very short distances, within racks and across adjacent racks.

- 5 m SFP+ direct attach active optical cable
- Works with all our products with SFP/SFP+ ports



# XS+2733LC15D

mt.lv/p/539

, , ,

A kit of two combined 1.25G SFP, 10G SFP+ and 25G SFP28 modules.

- Contains two SFP+ modules
- Can be used as a pair to achieve operating data rate up to 25 Gbps for distances up to 15km on a single optical cable
- Bidirectional
- SFP / SFP+ / SFP28
- 1270nm + 1330nm

#### XS+DA0001

mt.lv/p/527





Direct attach cable that supports not only SFP 1G and SFP+ 10G, but also the 25G SFP28 standard!

- A highly cost-effective way to connect two SFP/SFP+/SFP28
- Perfect for short distances within racks and across adjacent racks
- Low cost, low power and low latency interconnect solution for 25-Gigabit Ethernet, Fiber Channel and other industry standards
- 1 meter long
- Direct attached compliant
- Fully conforms to the SFP+ MSA specification

# XS+DA0003

mt.lv/p/528





Direct attach cable that supports not only SFP 1G and SFP+ 10G, but also the 25G SFP28 standard!

- A highly cost-effective way to connect two SFP/SFP+/SFP28
- Low cost, low power and low latency interconnect solution for 25-Gigabit Ethernet, Fiber Channel and other industry standards
- 3 meters long
- Direct attached compliant
- Fully conforms to the SFP+ MSA specification

## XS+31LC10D

mt.lv/p/532





A combined 1.25G SFP, 10G SFP+ and 25G SFP28 module.

- A direct upgrade of our previous 10G SFP+ 10 km module: more functionality for the same price
- Added 25G SFP28 support you can use one module in all your setups
- Perfect for the CCR2004-1G-12S+2XS connectivity router and any other multiport devices

# **CWDM**

The CWDM is a passive MUX/DEMUX unit, which allows to combine up to eight fiber links into one, to simplify and reduce the cost of long distance fiber installations.

At the other location, the combined line is split back up again, so that instead of eight long fiber lines, you would only need one. The Coarse Wavelength-Division Multiplexing (CWDM) technology offers a solution which will increase capacity of existing fiber infrastructure by enabling multiple channels/ wavelengths over the same fiber cabling and will reduce costs for a new fiber optic deployment.

Available separately is a 1U mounting bracket and a wide variety of CWDM fiber optics modules, depending on your requirements.





FTC



Fiber to copper converter in weatherproof outdoor case.

- 12-57 V PoE input
- Supports 1.25G 1000Base-X fiber to 10/100/1000 Mbps copper



# 12POW150

mt.lv/p/300



Hot swap 12 V 150 W AC/DC power supply for CCR1072-1G-8S+.

- 12 V 150 W AC/DC
- Hot swappable, zero downtime



# PW48V-12V150W

mt.lv/p/326



Hot swap-48 V DC telecom power supply for CCR1072-1G-8S+.

- 48 V DC.
- Hot swappable, zero downtime



**18POW** 

mt.lv/p/81



A spare power supply for most RouterBOARD models.

- 24 V 0.8 A DC jack power supply
- Fits hAP mini, hAP lite and mAP lite
- Available with EU, UK, AR, AU or US plug









A spare high power supply with plug.

- 24 V 2.5 A stand alone power supply
- Recommended for RouterBOARD models with high power consumption (e.g. models with PoE output or for long cable runs with several high power wireless cards)
- Available with EU, UK or US plug



48POW

mt.lv/p/85



A spare high power supply with plug.

- 48 V 1.46 A 70 W stand alone power supply
- Recommended for RouterBOARD models with 48 V support (like RB800)
- Recommended for powering 48 V devices (IP cameras etc.) through PoE output of supported devices like CRS112-8P-4S-IN
- Available with EU, UK or US plug



#### MT48-480095-11DG

mt.lv/p/504



48 V, 0.95 A power supply for long Ethernet cable runs.

- Part of our GPEN concept
- Allows using long Ethernet cable runs and multiple GPER units



#### MT48-570080-11DG

mt.lv/p/505



57 V, 0.8 A power supply for long Ethernet cable runs.

- Part of our GPEN concept
- Allows using long Ethernet cable runs and multiple GPER units



#### **GESP+PoE-IN**

mt.lv/p/542



A passive PoE injector with surge protection. Combine it with the GESP devices for maximum security and peace of mind.



# **GESP** (upgraded revision)

mt.lv/p/452



New revision of the Gigabit Ethernet Surge Protector in a waterproof enclosure. It can make all the difference when it comes to lightning strikes or static build-up.

- Can absorb multiple impacts
- Sealed inside a new and improved IP67 weatherproof enclosure
- Comes with a grounding wire



# MT-HotSwapFan

mt.lv/p/570



Be prepared for the unexpected with the backup hot-swappable fans for our newest devices, such as the flagship CCR2216! If your fans go out of order at some point, you can swap them without unnecessary downtime, as there is no need to turn the router off.



mt.lv/p/556





Hot swap power supply for the CCR2004-16G-2S+ - so you can replace the power supply without having to turn off or even restart the router. Zero downtime! CCR2004-16G-2S+ comes with two hot swap dual redundant power supplies. If one of them goes out of order at some point, the other one will take over. Then you can use this kit to replace the old power supply – and you don't even have to restart the router!



### 48V2A96W

mt.lv/p/358



Spare 48 V power supply with plug for resource-hungry PoE-out devices.

- 48 V 2 A 96 W power supply
- Recommended for powering 48 V devices (IP cameras etc.) through PoE output of supported devices like CRS112-8P-4S-IN
- Providing 30% more current than the old model 48POW, more power per port
- Available with EU, UK or US plug



# **RBPOE**

mt.lv/p/86



Low-cost passive PoE base unit for powering passive PoE devices over Ethernet.

- Helps reducing number of wires that lead up the tower
- Support 10-28 V PoE powering
- Input needs to be at least 18 V to accommodate any losses in cables



### **RBGPOE**

mt.lv/p/100



Passive Gigabit PoE base unit for powering passive PoE devices over Ethernet.

- Helps reducing number of wires that lead up the tower
- For using with any RouterBOARD that supports 9-48 V PoE
- Shielded connectors

# **RBGPOE-CON-HP**







48 to 24 V Gigabit PoE Converter.

- Allows to use any 48 V PoE source (including Passive PoE, telecom PoE, 802.3af and 802.3at) to power RouterBOARD devices
- Supports any 8-30 V capable RouterBOARD devices and 10/100/1000 Mbps Ethernet
- Capable to provide high power output up to 24 W (up to 1 A at 24 V)
- Integrated heatsink; has mounting holes for attaching to a wall



# MTP250-53V47-OD & MTP250-26V94-OD

mt.lv/p/546



mt.lv/p/547



Outdoor AC/DC power supply units for the MikroTik netPower product line. MTP250-53V47-OD can output 53V, while the MTP250-26V94-OD works with a 26V output. Both power supplies come in a sturdy IP67 enclosure with extra protection from dust and moisture.

# Antennas and antenna accessories ———



#### **mΔNT 15s**

mt.lv/p/269



5 GHz 15 dBi 120° sector antenna with two RP-SMA connectors.

- Perfect companion for the BaseBox, NetBox, NetMetal or any other outdoor wireless device with RPSMA connectors
- 5.17-5.825 GHz 15 dBi 120° sector
- 2 RP-SMA connectors
- quickMOUNT pro included



#### **mANT 19s**



5 GHz 19 dBi 120° sector antenna with two RP-SMA connectors for larger coverage.

- Perfect companion for the BaseBox, NetBox, NetMetal or any other outdoor wireless device with RPSMA connectors
- 5.17-5.825 GHz 19 dBi 120° sector
- 2 RP-SMA connectors
- Metallic U bolt type mount included



mANT30

mt.lv/p/226



30 dBi parabolic dish antenna for 5 GHz.

- Professional class 4.7-5.875 GHz 30 dBi dish antenna
- Designed for BaseBox, NetBox and NetMetal
- Can be used for any pole mounted wireless device
- 2 RP-SMA Female connectors
- 2 FlexGuide cables included
- Recommended to use with quickMOUNT extra



## mANT30 PA

mt.lv/p/227



30 dBi parabolic dish antenna with precision alignment mount for 5 GHz.

- Professional class 4.7-5.875 GHz 30 dBi dish antenna
- Designed for BaseBox, NetBox and NetMetal
- Can be used for any pole mounted wireless device
- 2 RP-SMA Female connectors
- 2 FlexGuide cables included
- · Comes with a precision alignment mount



# Radome Cover Kit for mANT30

mt.lv/p/247



Cover kit for mANT reduces wind load, increases antenna operational life.

- Protects reflector surfaces from harsh environment
- Protects the antenna feed from falling objects
- Sustains wide range of temperature and direct sunlight
- Compatible with mANT30 and mANT30 PA



Sleeve30

mt.lv/p/277



Sleeve30 kit for mANT30

- Enhance point-to-point link performance by reducing noise
- Reduce impact on adjacent RF devices by removing the side radiation
- Reduces wind load
- Protects antenna reflector and feed from harsh environment
- Excellent RF signal transparency
- Compatible with mANT30 and mANT30 PA

# quickMOUNT







Basic wall mount adapter for small Point-to-Point and sector antennas (SXT, OmniTIK etc.)

- Simple and low cost
- To be mounted on the wall or use as an adapter from large diameter pole to small size antenna
- Gives possibility to turn antenna within 190°
- Possible to simultaneously mount two SXTs
- Supports any pole mountable device with weight less than 1.5 kg
- Very durable due to it's special composite material anvilNITE (TM)



# quickMOUNT extra

mt.lv/p/276



Basic wall mount adapter for large Point-to-Point and sector antenna.

- To be mounted on the wall or use as an adapter from large diameter pole to small size antenna
- Gives possibility to turn antenna within 190°
- Supports mANT, SXT, OmniTIK, BaseBox, DynaDish, mANT 30 etc.
- Recommended for long range heavy antennas with weight less than 8 kg
- Very durable due to it's special composite material anvilNITE (TM)



# nRayAIM-DHI

mt.lv/p/523



nRayAIM-DH1 is an alignment and aiming attachment for the nRAY. Use it to attach a scope of your choice for even greater precision and easier installation of the Wireless Wire nRAY.



# quickMOUNT pro

mt.lv/p/263



Advanced wall mount adapter for small Point-to-Point and sector antennas (SXT, OmniTIK, BaseBox etc.).

- To be mounted on the wall or use as an adapter from large diameter pole to small size antenna
- Gives possibility to turn antenna within 140° both in horizontal and vertical plane
- Possible to perfectly set antenna alignment using integrated graduated scale
- Supports any pole mountable device with weight less than 1.5 kg
- Very durable due to it's special composite material anvilNITE (TM)



# quickMOUNT pro LHG

mt.lv/p/294



Advanced wall mount adapter for LHG.

- Advanced wall or pole mount adapter for our LHG antennas
- Gives possibility to turn antenna within 140° both in horizontal and vertical plane
- Possible to perfectly set antenna alignment using integrated graduated scale
- Very durable due to it's special composite material anvilNITE (TM)

#### LHG mount

mt.lv/p/435



The LHG mount is a basic pole mount adapter for LHG series products.

- Simple and low cost
- Supports all LHG series, products, including LHG XL
- Made from metal
- Package also includes a U-bolt and a K-58 mounting kit



#### solidMOUNT

mt.lv/p/439



Advanced pole mount adapter for LHG series products.

- Allows adjustment both vertically and horizontally
- Supports all LHG series, products, including LHG XL
- Made from metal
- Package also includes a U-bolt and a mounting kit



QM-X

mt.lv/p/281



quickMOUNT-X – additional axis for pole-mounting SXTsq devices

- Enables vertical and horizontal adjustment on the pole
- Glass fiber reinforced nylon
- Lightweight, easy to use, extremely durable
- Maximum antenna weight- 2 kg
- Compatible with SXTsq series, DISC 5



#### **QMP-LDF**

mt.lv/p/572



An advanced pole/mast mount adapter for our LDF series – for extra ease of use and versatility. There are two standard mounting options and additional QMP compatibility for mounting LDF on a wall. The adapter offers extra durability due to its unique plastic composite material – anvilNITE™.

# Other accessories



mt.lv/p/456





RBMQS- Mobile Quick Setup. A special tool that lets you manage MikroTik and other devices (including Ethernet-only!) from your smartphone over a Wi-Fi connection. Power it with a USB power bank and it will power your CPE over PoE.

- Portable assistant for CPE install, bandwidth test and configuration
- Can also be used as a temporary travel AP
- 10/100 Ethernet port
- 2.4 GHz 802.11b/g/n Wireless
- Passive PoE-in, 5-30 V
- Passive PoE-out, 12 V 400 mA (when USB 5 V input is used)
- Max power consumption- 1 W



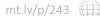


5 GHz 802.11a/n dual chain miniPCle card with 2 MMCX connectors.

- 4920-5920 MHz 802.11a/n dual chain wireless
- 2 MMCX connectors
- Perfect for any RouterBOARD with a miniPCle slot
- Output power up to 27 dBm



## R11e-5HacD





5 GHz 802.11a/n/ac dual chain miniPCle card with 2 MMCX connectors.

- 4920-6100 MHz 802.11a/n/ac dual chain wireless
- Output power up to 27 dBm



#### R11e-2HnD

mt.lv/p/209



2.4 GHz 802.11b/g/n dual chain low profile miniPCle card with 2 U.FL connectors.

- 2192-2732 MHz 802.11b/g/n dual chain wireless
- Perfect for any RouterBOARD with a miniPCle slot
- Low profile, small heat-sink, designed for laptops
- Output power up to 29 dBm



#### R11e-2HPnD

mt.lv/p/208



2.4 GHz 802.11b/g/n high power miniPCle card with 2 MMCX connectors.

- 2192-2732 MHz 802.11b/g/n high power dual chain wireless
- Perfect for any RouterBOARD with a miniPCle slot
- Output power up to 30 dBm



# R52HnD

mt.lv/p/291



2.4 GHz/5 GHz 802.11a/b/g/n high power miniPCI card with 2 MMCX connectors.

- 2192- 2732 MHz 802.11b/g/n high power dual chain wireless
- 4.920-6.100 GHz 802.11a/n high power dual chain wireless
- Output power up to 26 dBm



# 2.4GHz Dipole

mt.lv/p/213



2.4 GHz dipole antenna with RPSMA connector. Attach two of those to the BaseBox 2 to have 2x2 MIMO 2.4 GHz access point.

- 2.4 GHz 5 dBi dipole antenna
- RPSMA connector
- Waterproof for outdoor use

# Woobm



The Wireless out of band management USB stick (Woobm-USB) is a useful assistant for any network administrator. Simply plug it into any RouterBOARD USB port and it will allow you to access the console of that device over wireless. It sets up as a wireless access point and has a simple web interface where you can access a fully featured terminal interface to configure your router, and where you can configure the Woobm itself.

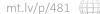
It can even work as a wireless client: if you wish to manage many devices, just connect all the Woobms to one AP inside your server room and manage the routers through there.

- Supports 2.4 GHz 802.11b/g/n
- Antenna gain 1.5 dB
- Can work as a wireless client and AP at the same time
- Discovers neighbour RouterOS devices





# **HGO-antenna-OUT**





Outdoor antenna with RP-SMA Male.

- Dual-band 2.4GHz / 5 GHz
- Provides 3.3 dBi gain for the 2.4 GHz band and 5.5-7.1 dBi gain for the 5 GHz band









A handy IoT combo antenna for both LTE and LoRa® frequencies. Perfect for the MikroTik KNOT LR series!

No need to buy several antennas for your Internet-of-things setups – just grab the new HGO-LTE-W antenna that can handle an impressive frequency spectrum: 699MHz – 3,8GHz.

That's right – you can use the same antenna for LTE, CAT-M/NB and LoRa® connectivity.

This antenna will transmit whichever signal your modem provides. For example, if you are using our KNOT LR8/LR9 kit, you can use this powerful 1.5 – 4 dBi antenna to communicate with all your 868 MHz devices and then send the data to the cloud via LTE.



# **ACMMCXRPSMA**

mt.lv/p/212



Designed for adding second wireless interface to BaseBox, NetBox or NetMetal.

- MMCX to RPSMA pigtail
- 26 cm long, MMCX connector on one side, RPSMA to other
- Compatible with most of our miniPCI and miniPCIe wireless cards



# Flex-guide

mt.lv/p/210



Ideally suited for our BaseBox, NetMetal and other products with RPSMA connectors.

- Low loss 50 cm RPSMA cable
- 50 cm long, RPSMA connectors on both sides
- For use with up to 6 GHz frequency
- Works with most antennas
- Suited for indoor and outdoor use
- Soldered, not crimped, for the best possible signal quality



# RB5009 rackmount kit K-79





Kit for mounting RB5009 devices in 1U rackmounts.



# Rack-holder SR-10U

mt.lv/p/555



A 19" 10U desktop rack with adjustable angle and additional space for cable management.

Mount it under the table or put it on the table – like we do it in our testing department. You can even attach a multi-plug extension cord to the back of this sturdy and lightweight aluminium rack.

Compatible with all MikroTik (and other vendor!) devices that would fit in a standard 19" rack. But there's more! With the small K-79 accessory kit, you can fit up to four RB5009UG+S+IN routers in a single 1U rackmount space or up to 40 routers in total!



# **RMK-2/10**

mt.lv/p/595



1U Dual or 10" rackmount kit. RMK-2/10 allows installing two of the smaller MikroTik form-factor devices within traditional 19-inch racks, such as our neat and handy SR-10U!

Alternatively, you can permanently remove a part of the bracket to install a single 200 mm device into a classic 10-inch rack.









PRODUKTION DISTRIBUTION SCHULUNGEN

Glasfaser / FTTx Wireless LAN Strukturierte Gebäudeverkabelung Aktive Komponenten Video-Sicherheits-Systeme

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