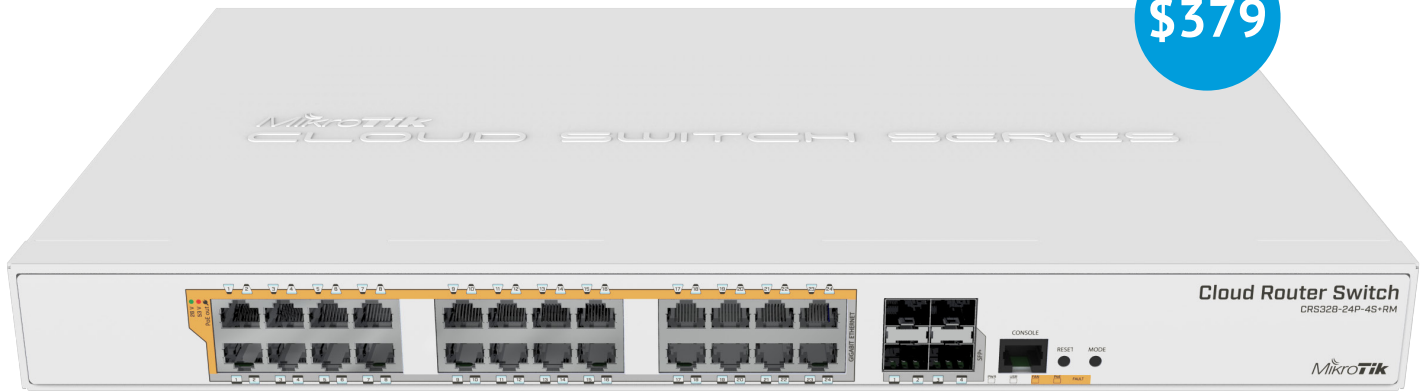


# CRS328-24P-4S+RM with 24 PoE-out Gigabit Ethernet ports

CRS328-24P-4S+RM is a 28 independent port switch, it has 24 Gigabit Ethernet ports, which offer different power output options: Passive PoE, low voltage PoE, 802.3af/at (Type 1 “PoE” / Type 2 “PoE+”) with auto-sensing. The four SFP+ ports provide up to 10 Gbps connectivity options via either optical fiber or Ethernet modules.

**\$379**



CRS328-24P-4S+RM comes in a 1U rackmount case with 100-240 V AC 500 W power supply built-in. The device consumes up to 44 W leaving guaranteed 450 W (3x150 W per every 8 Ethernet ports) to power your PoE devices. Each port can provide up to 30 W with high voltage, and 26 W with low voltage power output.

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

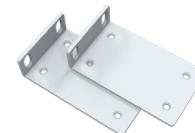
## Quick specifications

- 24 Gigabit Ethernet ports
- 4 SFP+ ports
- RJ45 serial console port
- Non-Blocking throughput: 64 Gbps
- Switching capacity: 128 Gbps
- Forwarding rate: 95.2 Mpps
- Maximum power consumption: 44 W (without PoE devices connected)
- Supports PoE+ IEEE 802.3at/af and 26 V Passive PoE (per port individually selected/auto)
- Temperature based fan control
- 1U rackmount
- Selectable power output per port (26 / 53 V)

[View online](#)



IEC power cord



Rackmount ears

## wsAP ac lite, in-wall Dual Band AP

The wsAP ac lite is a perfect access point (AP) for hospitality networks (hotels, shopping malls, hospitals, airports etc.). It has an unobtrusive case that fits in standard wall power sockets. This way, the unit doesn't attract attention and blends into any environment.



The device also has a pass through telephone jack (RJ11) to connect a desktop phone in a hotel room, for easier cable management. As a separate accessory you can order a special screw set (product code K50), that ensures the bottom door can only be opened by the owner.

Mounting bracket fits US and EU most popular telecommunication sockets.



The wsAP has three Ethernet ports: one on the back side for easy PoE-in, and two LAN ports behind the front door. The device provides Dual concurrent 2.4 GHz and 5 GHz WiFi coverage, it supports 802.11ac, as well as legacy standards. A USB 2.0 port is provided, to charge mobile devices or for storage.



[View online](#)

# Disc Lite 5 ac, high-gain, low-cost 5 GHz 21 dBi CPE/Backbone

The DISC is a low cost high gain 5 GHz CPE. We have improved antenna design, added Gigabit Ethernet port and 802.11a/n/ac support to achieve even more speed on longer distances.

DISC Lite5 ac is equipped with 21 dBi dual chain antenna, 802.11a/n/ac integrated wireless, quad-core 716 MHz CPU, 256 MB RAM, 1x Gigabit Ethernet port and RouterOS Level 3 license. It comes complete with a power supply, Gigabit PoE injector and a mounting ring. The device is also compatible with our SXT mounting systems, including the quickMOUNT pro series.

The RouterOS Level 3 allows to use the DISC Lite5 ac as a CPE or for 5 GHz Point-to-Point links.



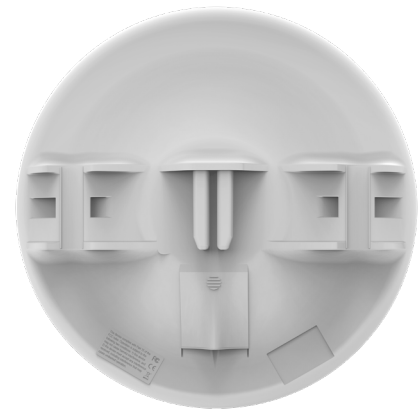
24 V 0.38 A power adapter



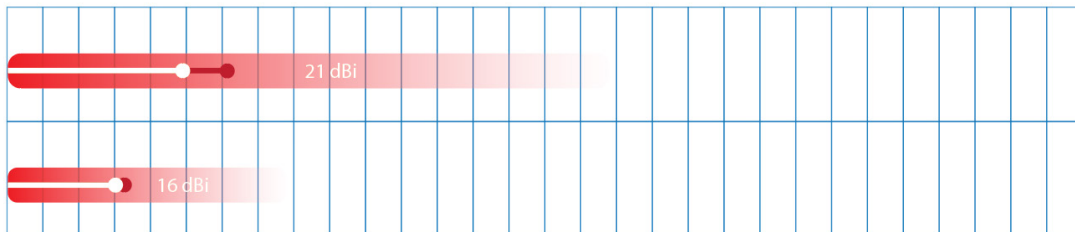
Metal ring



Gigabit PoE injector



SXTsq 5 ac



0.5 1 1.5 2 3 5 8 10 11 12 13 14 15 16 17 20 25 30 35 40 45 50 60 70 80 90 100 110 120 130 km

○ Distance at max supported 802.11ac data rate (eg. 866Mbit) ● Distance at max supported 802.11n data rate (eg. 300Mbit) ■ Max range at -70 signal

Note: line of sight, interference, alignment, weather and other outside factors will affect the wireless link performance and possible distance

[View online](#)

# Only five weeks until MUM Europe 2018!

## MikroTik User Meeting in Berlin, Germany, April 05 - 06, 2018

## MUM

We are glad to announce that MikroTik User Meeting Europe 2018 will take place in Berlin, Germany on April 5-6, Thursday - Friday.

- Largest WISP conference in Europe.
- More than 2,000 participants from 80+ countries expected.
- More than 60 exhibitors.
- MikroTik roadmap for year 2018.
- New revolutionary product announcements.
- Two days of workshops and presentations.
- FREE hardware gifts from MikroTik and exhibitors.
- Raffle at the end of MUM with great prizes.
- Meet n' greet on April 4 from 6PM with FREE beer, wine and soft drinks.

## THE VENUE

MUM will take place at Hotel MOA Berlin.

- Accommodation rooms from EUR 99, including breakfast and free Wi-Fi.
- Between airport and city center, close to world famous attractions such as the Brandenburg Gate, the Reichstag building and the Berlin Zoo.
- Enjoy great beer, food and shopping.
- Plenty of affordable flight options.

**Hurry up and book your room now!**

## TRAINING

If you hold a valid MikroTik certificate and wish to become an official trainer, we are also announcing a Train the Trainer course in our RouterOS Training Center in Riga, Latvia, taking place April 9-11.

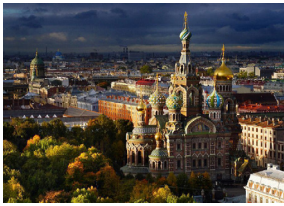
**[Register for the training here!](#)**

[Register for the MUM now!](#)

## Upcoming MUM events in 2018



Ekaterinburg, Russia, March 13, 2018



St. Petersburg, Russia, March 16, 2018



Berlin, Germany, April 05 - 06, 2018



Baltimore, USA, April 12 - 13, 2018



Mexico City, Mexico, April 16 - 17, 2018



Tokyo, Japan, May 08, 2018



Dhaka, Bangladesh, May 12, 2018



Melbourne, Australia, May 18, 2018



Auckland, New Zealand, May 21, 2018



Minsk, Belarus, June 05, 2018



Kiev, Ukraine, June 08, 2018

## Train the Trainer courses in Europe and USA

- **APRIL 9 - 11, 2018**  
**RIGA, LATVIA, ROUTEROS TRAINING CENTER**
- **APRIL 9 - 11, 2018**  
**BALTIMORE, MD, USA**

**Sign up now!**

Are you a certified MikroTik specialist? This is your chance to start a new business as a trainer!

We invite you to become a certified trainer!

- April 9 - April 11, 2018, RouterOS Training center, Riga, Latvia.
- April 9 - April 11, 2018, Radisson Hotel Baltimore Downtown, Baltimore, MD, USA

A MikroTik certified trainer can conduct MikroTik certified training courses anywhere in the world.

Become a MikroTik certified trainer and give the gift of knowledge!



## New CHR features added in latest RC releases

Our special RouterOS version that is made for virtual systems has seen a major feature boost in the latest release candidate builds. Lots of new hardware support has been added, and, perhaps most importantly, we have added VIRTIO-SCSI support. This opens up new possibilities of using CHR. For example, previously unavailable cloud providers are now compatible with CHR, such as Hetzner and Google Compute Engine.

We have written new articles with step-by-step guides on using GCE and Linode:

[https://wiki.mikrotik.com/wiki/Manual:CHR\\_GCE](https://wiki.mikrotik.com/wiki/Manual:CHR_GCE)

[https://wiki.mikrotik.com/wiki/Manual:CHR\\_Linode](https://wiki.mikrotik.com/wiki/Manual:CHR_Linode)

To try the new systems, make sure you download the CHR RAW disk image version 6.42rc28 or newer, and follow the above documentation.

### Full changelog

- ) chr - added "virtio-scsi" driver on KVM installations;
- ) chr - added support for Hyper-V ballooning;
- ) chr - added support for Hyper-V guest quiescing;
- ) chr - added support for Hyper-V host-guest file transfer;
- ) chr - added support for Hyper-V integration services;
- ) chr - added support for Hyper-V static IP injection;
- ) chr - added support for NIC hot-plug on VMware and Xen installations;
- ) chr - fixed additional disk detaching on Xen installations;

## User Manager now supported on ARM and MMIPS devices

One of the most requested features for RouterOS has always been to expand the compatibility of User Manager, to add more high speed devices to the list of hardware where you can run our management server. We are pleased to announce that finally User Manager can be run on MMIPS and ARM devices, including RB3011 and the recently introduced multicore MMIPS devices, like the hEX. User Manager can now be run on nearly all MikroTik devices.

## 60 GHz devices certified for outdoor point-to-multipoint setups in Europe

We have received many questions about using the wap60G devices outdoors in European Union, where devices need specific certification type to be used outdoors. The Wireless Wire, and the wAP60G devices, that this kit consists of, can be legitimately used in outdoors environments in point-to-multipoint setups. RouterOS already supports AP/Client modes in these devices, all you need to do, is set one of your devices as an access point, and you are good to go. The devices support a maximum of 8 simultaneous clients.

We have written a tutorial on how to change your existing Wireless Wire setup, to allow for multiple clients. **[Just follow these steps online!](#)**

