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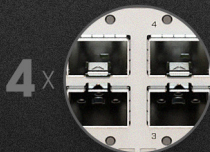
CRS520-4XS-16XQ-RM

$ 2195 | **PDF** | 🌐

An **ultra-fast enterprise switch** with extra processing power due to the CCR series CPU & the **best price per 100 Gigabit port** on the market!

LOW POWER CONSUMPTION: ONLY UP TO 123W* GREAT FOR YOUR WALLET, GREAT FOR THE PLANET!

4 X

25 GIGABIT SFP28 PORTS

(SUPPORT 1G / 2.5G / 10G / 25G SPEEDS, depending on module)

16 X

100 GIGABIT QSFP28 PORTS

(SUPPORT 4X 1G / 4X 2.5G / 4X 10G / 4X 25G / 1X 40G / 2X 50G / 1X 100G SPEEDS, depending on module)

2 X

10 GIGABIT ETHERNET PORTS

(SUPPORT 10M / 100M / 1G / 10G SPEEDS)

4GB DDR4 RAM

HOT-SWAP POWER SUPPLIES & COOLING

MIGHTY QUAD-CORE 2 GHZ ARM CPU

CONSOLE PORT

* Depending on the attachments

Welcome to the forefront of networking: the future-proof CRS520-4XS-16XQ-RM with **extra processing power, 4 GB of DDR4 RAM**, and the best price per 100 Gigabit port we've seen so far.

With **16x 100 Gigabit** QSFP28 ports, **4x 25 Gigabit** SFP28 ports, and an extra **pair of 10 Gigabit Ethernet** ports, this switch can bring a lot of value to complicated enterprise networks, data centers, multimedia studios, and other setups where you would typically use several devices. Now – a single CRS520 can do the trick!
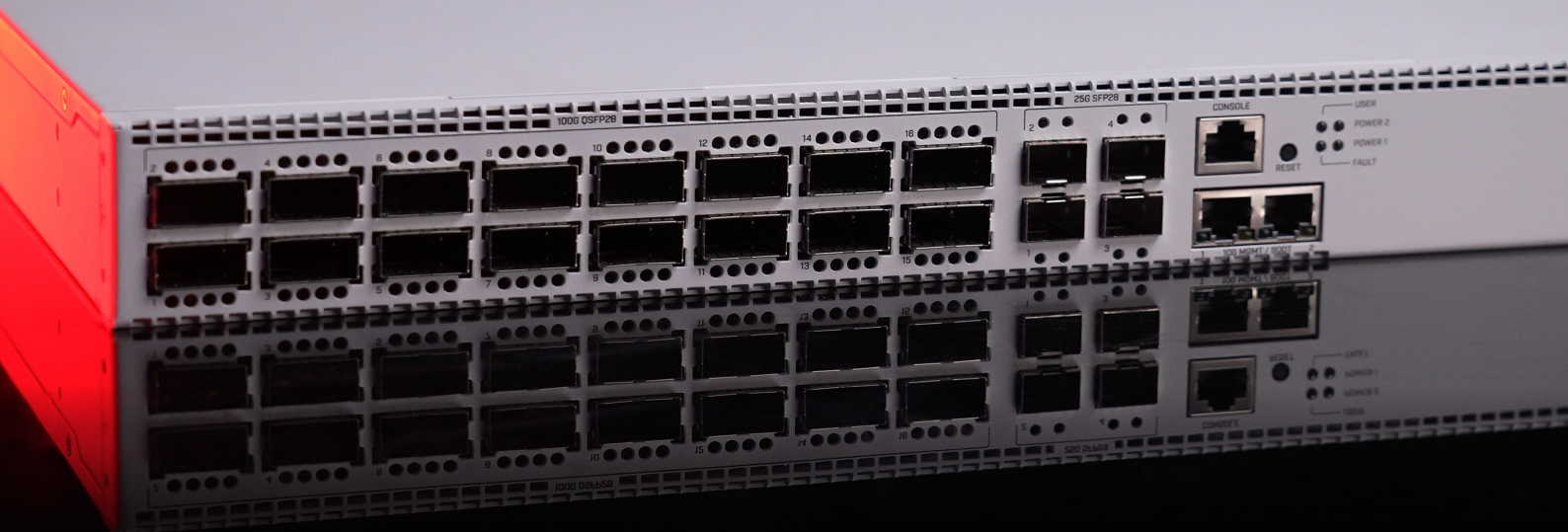
Avid CCR users might recognize the **powerful quad-core ARM CPU** running at 2 GHz, and ask – why would a switch need all that power? Two reasons:

1) CRS520 is more than a switch. You can **run OSPF/BGP**, out-of-band/management **VPNs**, ACLs, Jumbo frames and even **L3HW Offloaded routing**;

2) Future-proofing: as our friends at Marvell keep expanding the capabilities of their spectacular switch-chips, our in-house software team is busy exploring ways to add even more Hardware Offloaded features. You can expect software updates that will take the CRS520 to the *next* level! And all that without any paywalls or subscriptions.

CRS320-8P-8B-4S+RM

The first MikroTik high-power PoE++ (802.3bt) switch — for easy and cost-effective powering of 4K security cameras, ad panel screens, or even industrial automation systems. Forget about countless power cables — create a cleaner space with PoE++!

⚡ UP TP 90W PER PORT	🔌 PoE++ (802.3bt)	17X GIGABIT ETHERNET PORTS
CONSOLE PORT	PSU EXPANSION SLOT	SFP 4X 10G SFP+ FOR UPLINK

Cable management can get really exhausting. But it doesn't have to. Our first PoE++ or 802.3bt switch can make your cable management so much easier, as it can output enough power for all your hotel, conference hall, office and high-rise building needs!

4K security cameras with built-in winter heating elements, LED ad screens, PoE-powered light fixtures — CRS320 can **output up to 90W per port**, enough even for the most demanding devices! It comes with a reliable 600 W power supply, but we've reserved an expansion slot for an additional PSU, in case you need to raise the power output to 1150 W.
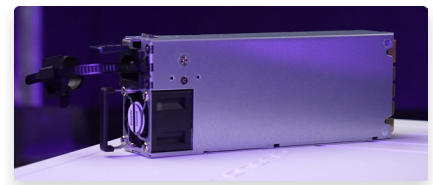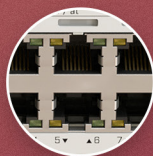
G1483-0600WNB, hot-swap 600 W power supply, available for purchase separately!

Max power output: **1150 W!**

17 X
1 GIGABIT ETHERNET PORTS
(SUPPORT 10M / 100M / 1G SPEEDS)

4 X
10 GIGABIT SFP+ PORTS
(SUPPORT 1G / 2.5G / 10G SPEEDS, depending on module)

Best price per PoE++ port!

At its core, this convenient switch has a phenomenal Marvel switch-chip — the same one you've seen in ISP bestsellers like the netPower 16P and netFiber 9! It can handle the heaviest loads, including VLAN-filtering and hardware-offloaded Layer-3 routing. If you've been looking for a way to simplify your cable management — this is it! With a single CRS320, you can ditch that endless mess of DC power adapters and start living the clean minimalist PoE dream.

Unlike our previous 802.3af/at Power Sourcing Equipment, **this is our first PoE switch with full implementation of the 802.3af/at/bt standard**. It supports only fully compliant 802.3 at/af/bt Powered Devices - mAP-lite / RB1100AHx4 / CRS510-8XS-2XQ / CRS504-4XQ / FTC11XG / CRS305-1G-4S+OUT. While it can also power "802.3af/at/bt-compatible" Powered Devices, *you must avoid specific grounding scenarios*. Please refer to the official Help page.

LtAP mini LTE kit (2024)

Tiny, affordable weatherproof access point with a built-in LTE modem and GPS.
Add extensive networking and tracking options to your vehicle without breaking the bank!

⚡ **BUILT-IN GPS**	📡 **EXTENSIVE LTE BAND SUPPORT**	▢ **EXTRA DURABLE AND COMPACT ENCLOSURE**
🚗 **FLEXIBLE POWERING: POE-IN, DC JACK, MICROUSB**	▭ **CONSOLE PORT FOR EASY CONFIGURATION**	▤ **TWO MINISIM SLOTS FOR ROAMING**

LtAP Mini LTE kit is a compact and rugged wireless access point designed to keep your vehicle connected wherever you go. Whether you're riding through the Great Outdoors or navigating busy urban streets, this tiny device ensures you're always online and ready to upload location data.

LtAP mini has a special **extra-durable enclosure** with a wall mounting kit, **two SIM slots** to alternate between cellular providers, and integrated GPS support, making this a perfect device for tracking moving vehicles like cars, buses or trains.

There's an Ethernet port for your wired devices and a classic 2.4 GHz wireless radio. The RS232 serial port gives you console access for debugging.

> *The power options are as flexible as they get. You have the classic DC jack, passive PoE-in, and a microUSB option. We have even seen users powering the LtAP mini with a portable power bank throughout the day!*

The new LTE card offers a better price and the support of the most popular LTE bands, including the B28 band! It is connected to two internal antennas with u.FL connectors, so you can unplug the connectors and add your own external LTE antenna for even better coverage.

We have provided a simple tracking application example in the RouterOS documentation - to help you start tracking your vehicle's location in real-time. You will need to connect an external GPS antenna, we recommend using the ACGPSA antenna with IP67 water resistance rating – available separately.

G1483-0600WNB

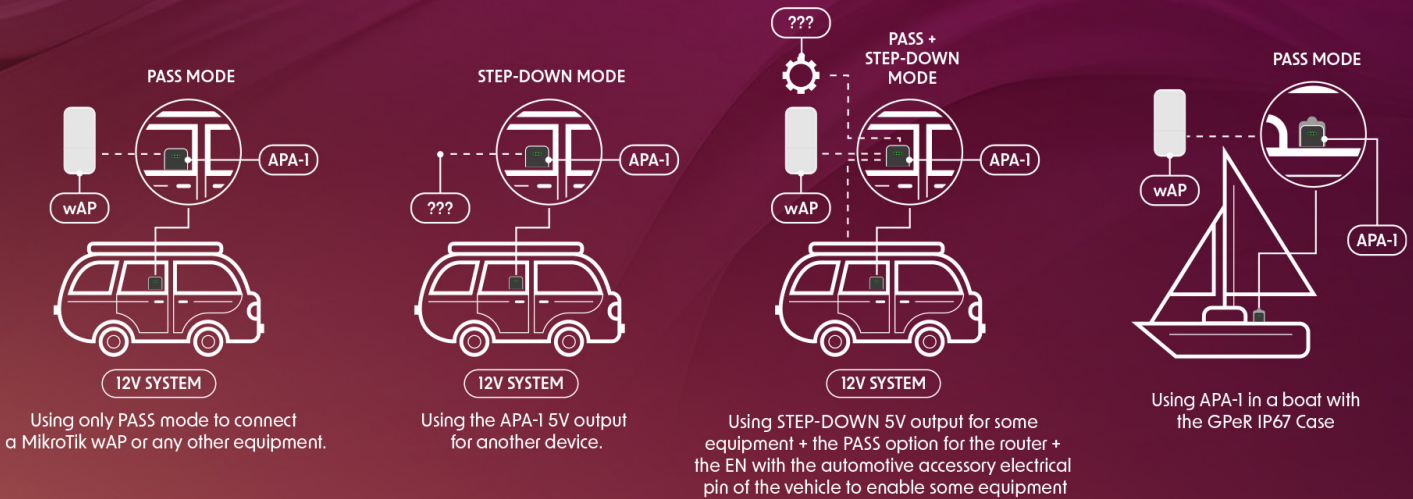Hot-swap 54.5V 10.35A power supply for the CRS320-8P-8B-4S+RM PoE++ switch.
The switch comes with a single 600W PSU and an expansion slot for a second PSU that can raise the total power output all the way to 1150 Watts, up to 90 Watts per PoE++ port.
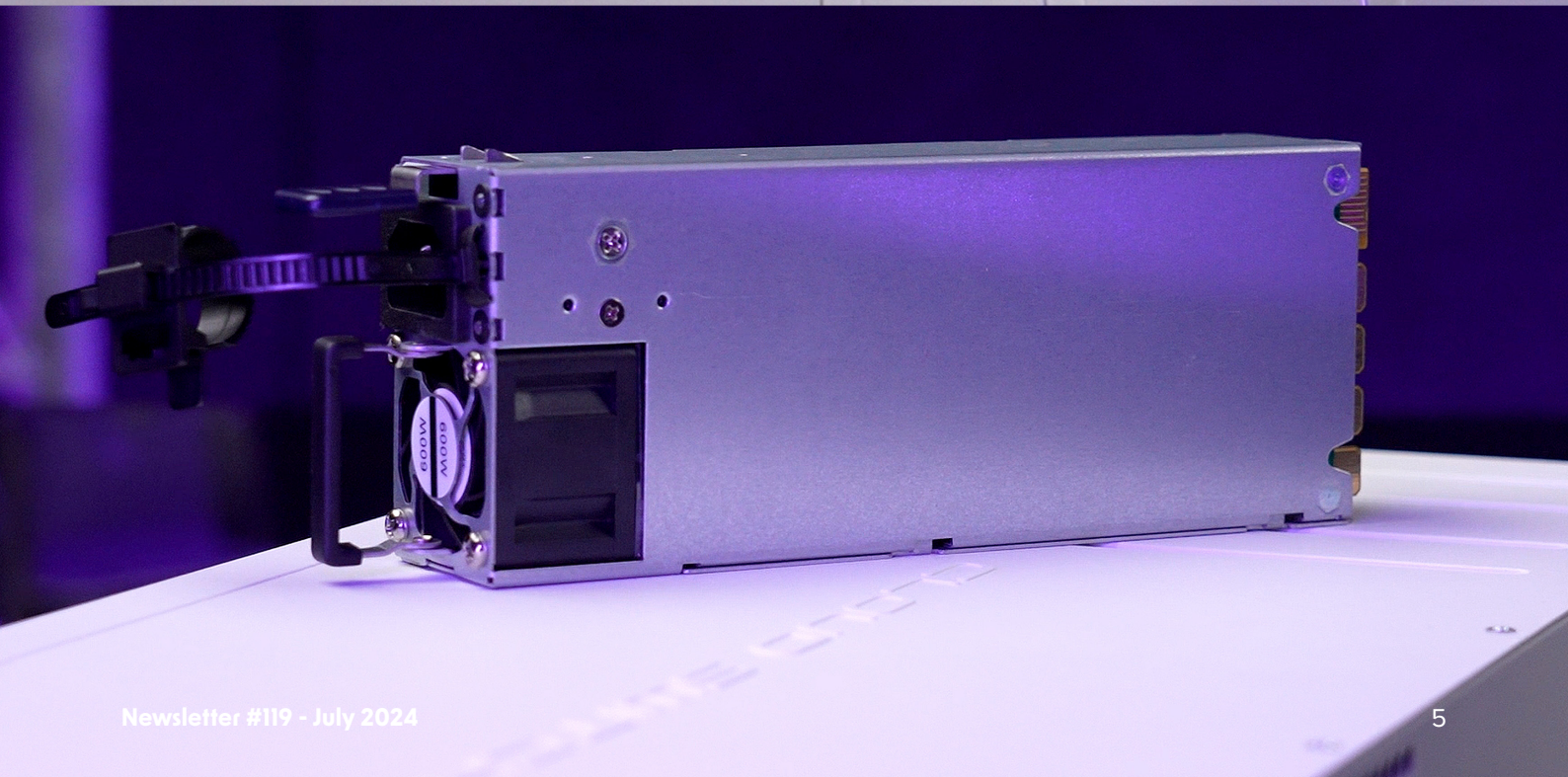
Some ways to use the APA-1

We've received some questions regarding potential Automotive Power Adapter APA-1 use cases, so we've added some practical examples to the product page, let us know if you have any further questions!

INPUT FROM A CAR (12V), BUS (24V), TRACTOR OR OTHER VEHICLE

PASS MODE
APA-1
wAP
12V SYSTEM
Using only PASS mode to connect a MikroTik wAP or any other equipment.

STEP-DOWN MODE
APA-1
???
12V SYSTEM
Using the APA-1 5V output for another device.

???
PASS +
STEP-DOWN
MODE
APA-1
wAP
12V SYSTEM
Using STEP-DOWN 5V output for some equipment + the PASS option for the router + the EN with the automotive accessory electrical pin of the vehicle to enable some equipment

PASS MODE
wAP
APA-1
Using APA-1 in a boat with the GPeR IP67 Case

Using APA-1 as a standard step-down converter with an input range of 12-57V

AMPERE hardware support in RouterOS 7.15

Starting from RouterOS 7.15, ARM64 installation files can be used on physical Ampere devices and as a Cloud-Hosted Router (virtual machine) on the Ampere-powered cloud hosting services - such as Hetzner.

MikroTik Cheat Sheets –

OSPFv2/v3 standard area LSA propagation
by StubArea51.NET

Our dear friend and one of the best MikroTik experts worldwide - the one and only Kevin Myers - has created a helpful blog for MikroTik students and professionals alike.

> *"When learning how to use OSPF with MikroTik, it can sometimes be difficult to understand how the different LSA types flow between areas. To better illustrate how the LSAs work, I created these graphical overviews for OSPFv2 and OSPFv3. When troubleshooting OSPF, it's very helpful to understand which LSAs you should see in an area and how IPv4 and IPv6 differ. "*
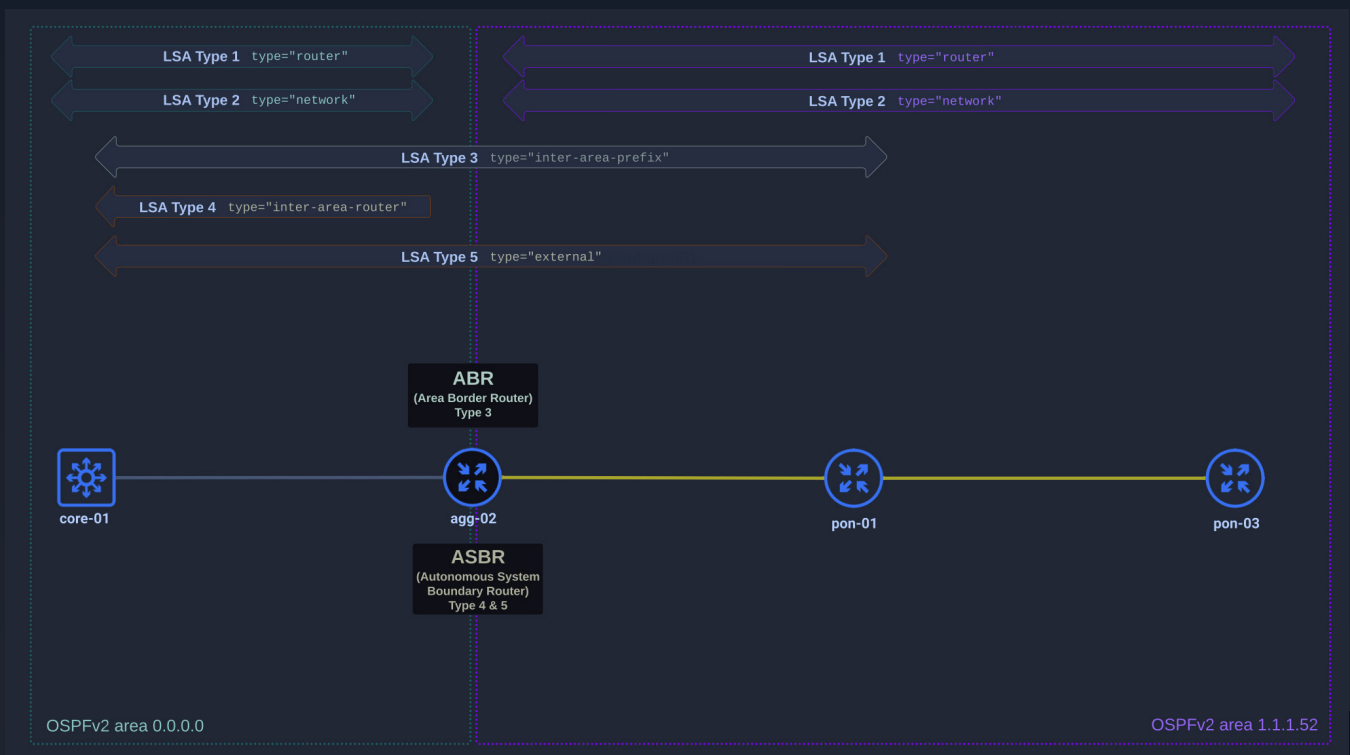
See Kevin's blog for the full-sized cheat sheets and more useful information.

DLNA

We've rolled out an exciting RouterOS update - version 7.15! One of the standout features is the integration of a built-in DLNA (Digital Living Network Alliance) media server, which enables streaming content wirelessly to devices such as smart TVs, digital picture frames, and even ad screens in elevators or hotel TVs.

For home users, this feature means you can easily share your favorite movies, TV shows, and music with friends and family on their devices without the need for additional software.

The DLNA media server also supports multiple concurrent streams, making it perfect for businesses looking to stream content to multiple displays at once. Whether you're a hotel owner wanting to offer in-room entertainment options or a mall manager seeking to enhance the shopping experience with engaging ads, RouterOS version 7.15 has got you covered. So go ahead, explore the new DLNA media server feature in RouterOS and let us know what you think!

With RouterOS, you can share your media almost instantly. All you need is a storage drive with your files and a single line of configuration.

Popular DLNA use cases

Hotel entertainment systems: instead of installing endless flash drives or other convoluted systems in each room, a single router can push tailored media content to your guests' TVs. While parents are watching some grown-up action movies in their room, little Timmy can rewatch "Shrek 2" in his room... from the same source!

Conference halls: handling every exhibitor booth screen manually can be an absolute nightmare of logistics... and don't get us started on stolen USB drives! With DLNA, you can eliminate these risks and stream each exhibitor's marketing materials to their stand.

Public ad panels (elevators, bus stops, public transport): once you start dealing with the chaotic environment of public media screens, you'll quickly find out that they don't really have unified hardware standards, so local hard drives become another hassle, on top of the aforementioned logistical nightmare. With DLNA, your router can serve as a central hub for all the various content displays, including in-flight movie rental, public transport announcement systems, and bus stop advertising.

MikroTik & KaaIoT joining forces to make asset tracking and management easier

We're excited to announce that KaaIoT and MikroTik have partnered to make it easier for businesses across industries to keep track of their IoT assets. The Kaa Cloud handles the data management layer. It offers a comprehensive suite of features to simplify and streamline asset tracking operations. Below is a brief overview of the advantages Kaa offers.

- Centralized monitoring
- Advanced device management
- Customizable dashboards

- Scalability and flexibility
- Notifications and alerts

Kaa can integrate external AI and ML modules, so you can unlock advanced IoT analytics capabilities and gain valuable insights from the data collected by KNOT gateways. Thanks to that, companies can optimize resource utilization, predictive maintenance, and operational efficiency. You can read more in KaaIoT blog and the "MQTT/HTTP and Kaa IoT setup" Help page.

NEW MERCH!

If your favorite superhero is the CAPsMAN... it's time to slap a cAP on your bag with the latest addition to the MikroTik merch store!

New #MikroTips and tricks!

Spotted in the Wild

MikroTik Train-The-Trainer: routers used by experts?

Do YOU want to become a MikroTik Trainer - and build your brand, business, community and legacy? Join us here!

Here you can download all the visuals used in this newsletter