In this newsletter read about

hAP ax S

$ **79** PDF 🌐

High-performance SOHO Wi-Fi 6 with unbeatable value.

Triple-chain 5 GHz:
stronger coverage and gigabit-class performance.

2.5 G SFP Port:
fiber-ready flexibility for NAS or direct FTTH links.

Our latest Wi-Fi 6 radio (Dual-Band):
faster, more efficient in a crowded space.

5 × Gigabit Ethernet::
reliable wired connectivity for your essentials.

PoE-in + PoE-out:
power flexibility for access points and switches.

RouterOS v7:
enterprise-grade network management tools without paywalls.

Dual-Core ARM CPU:
solid performance on a budget.

Meet the new **hAP ax S** – our most cost-effective Wi-Fi 6 access point yet.
It costs far less than most mid-range, mass-produced routers… while delivering far more flexibility and longevity right out of the box!
Under the sleek exterior lies a **dual-core ARM CPU, dual-band Wi-Fi 6, USB, five Gigabit Ethernet ports,** and a **2.5 Gigabit SFP cage.** You can connect **direct fiber-to-home** or link up a **high-speed NAS** for lightning-fast local access.

Check out our YouTube and TikTube videos for this product!

Triple-chain 5 GHz: the key to stable, gigabit-class Wi-Fi

The new hAP ax S features a **triple-chain 5 GHz radio** that achieves real-world throughput of around **800–900 Mbit/s**. That means smooth streaming, faster downloads, and stable performance across multiple devices – even in crowded environments.

It's also perfect as a dedicated Wi-Fi 6 VR streaming access point for PC VR headsets, offering higher resolution and lower latency without the cables. Unlike single-purpose "gaming" access points, the hAP ax S gives you the full performance, flexibility, and future-proofing of RouterOS v7!

Enjoy **dual powering options** – **DC jack** or **PoE-in** – and a **passive PoE-out port** to power another MikroTik device, such as an additional AP or a compact desktop switch. This makes it ideal for both home setups and small offices where clean cable management matters.

Your network, your rules

Despite the low price, the hAP ax S runs a full version of RouterOS v7, the most flexible networking software on the market.

In the age of growing data security and privacy challenges, RouterOS gives you complete control – with **no subscriptions, no upsells, no locked features**. Whether you're configuring your first Wi-Fi network through the MikroTik app or building complex topologies, RouterOS v7 grows with you.

VLANs, firewalls, VPN tunnels, traffic shaping, scripting, SMS automation – the possibilities are endless. For example: you can easily isolate IoT devices into separate subnets to protect your home network from unwanted access via the smart fridge or those flashy LED light hubs.
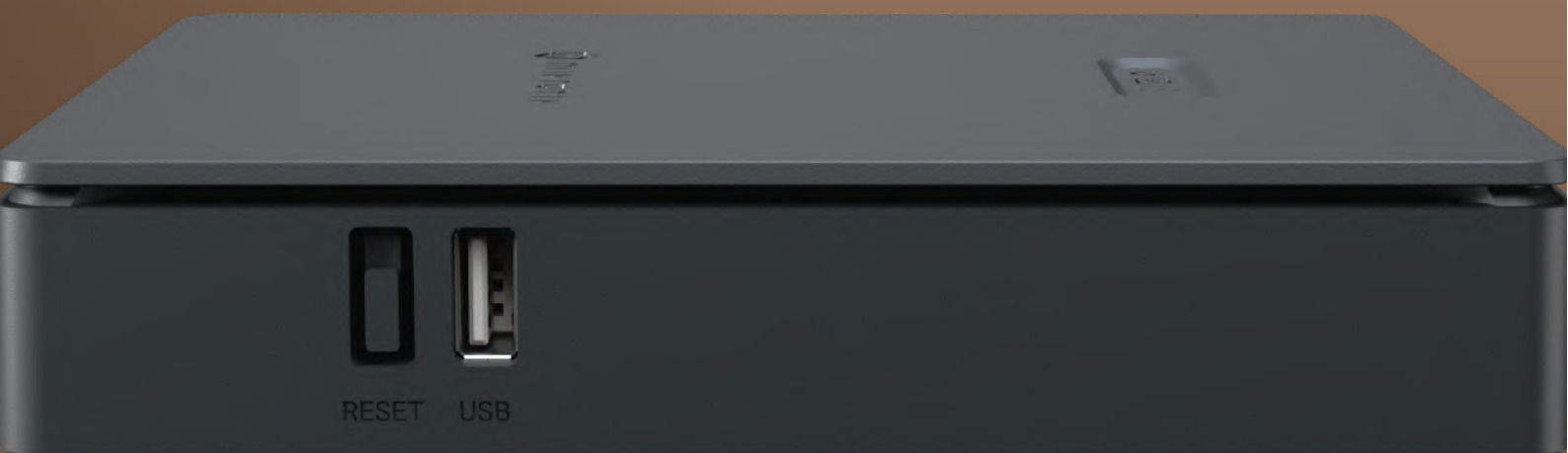
KNOT LR9G kit

$ 179   PDF 🌐

An industrial-grade IoT gateway for smart asset tracking, remote monitoring, and efficient automation – now with enhanced LoRa® reception, concurrent GPS + LTE CAT-M, and a lower price.

LoRa ® 915MHz	CAT-M/NB technology	2x 100 Mbps Ethernet ports	2.4 GHz wireless
Bluetooth	GNSS	GPIO	RS485/Modbus	PoE-In & PoE-Out

Smart IoT Connectivity That Just Works

The KNOT LR9G is a compact, out-of-the-box gateway for LoRa®-based networks, designed to bring affordable, reliable connectivity to even the most remote or infrastructure-light environments. It supports **LTE CAT-M1 and NB2, Bluetooth 5.2, 2.4 GHz Wi-Fi, GPS,** and **Ethernet with PoE**, making it a flexible centrepiece for any IoT deployment.

ⓘ CAT-M1 and NB2 mobile internet connectivity allows you to save tons of money and remotely monitor and manage equipment without needing high-cost data plans or full LTE coverage.

Whether you're tracking high-value assets across a hospital, managing a vending machine in a shopping mall, or monitoring sensors in an agricultural field – the KNOT LR9G ties everything together and keeps everything connected.

Key Features & Upgrades

- **Concurrent GPS and LTE CAT-M**

  Track assets in motion with precise GPS while maintaining a live LTE CAT-M1 connection. Ideal for mobile units like service vehicles, containers, or roaming field equipment.

- **Versatile Powering**

  Choose from PoE-in, DC jack, or MicroUSB – including PoE-out on Ether2 for powering other devices.

- **SMA Female Connectors for All Main Interfaces**

  Easy antenna setup for LTE, GPS, and LoRa®.

- **Improved 915 MHz LoRa® Reception**

  Enhanced sensitivity for stronger signal and longer range, even in interference-heavy environments.

- **Lower Price, Same Reliability**

  Cost-effective for large-scale deployments without sacrificing performance.

- **Powered by RouterOS v7**

  – for full control, custom scripting, and advanced routing features.

Practical Use Cases

Hospital Asset Tracking

Attach Bluetooth beacons to critical medical equipment. Install a KNOT LR9G in each storage area. As gear moves, KNOT detects nearby tags, tracks location via GPS, and sends updates over LTE CAT-M – keeping inventory up-to-date and reducing manual audits.

Cold Chain Monitoring

Use wired Modbus sensors to monitor temperature and humidity inside refrigerated containers. KNOT converts Modbus to TCP and forwards data securely via MQTT or HTTPS, using low-bandwidth LTE or NB-IoT.

Agriculture & Remote Sites

Deploy KNOT to gather soil or weather sensor data in rural fields. Its wide band support, LoRa® reception, GPS compatibility make it ideal for long-range, low-power data collection.

Industrial Automation

Bridge legacy wired sensors and actuators to the cloud. With DIN rail support and GPIO monitoring, KNOT easily integrates into industrial cabinets or manufacturing environments.

Lightweight, Powerful, Cost-Effective

At just 6W consumption and small footprint (122 × 87 × 26 mm), the KNOT LR9G is perfect for deployments where space, power, and budget are limited – but performance can't be.

KNOT: track, monitor, automate – smarter and cheaper than ever before.

MIKROTIK | Connectivity

IS HERE!

Available now: our new built-in eSIM solution that makes LTE and 5G device setup faster and easier than ever. No more lost, damaged, or missing SIM cards -- just instant activation through your MikroTik account.

eSIM | SGP.22 | 5G ready | NO VENDOR LOCK

The eSIM is integrated directly into the routers, allowing multi-operator switching, automatic regional connectivity, and hassle-free roaming across supported countries. Perfect for anyone who needs to get connected right away on a new device — no physical SIM required.

Read more

How to use MikroTik Connectivity eSIM data plans: a step-by-step guide

Check out this video on TikTube!

TRAIN THE TRAINER November 26-28

Do you want to become a MikroTik certified trainer and conduct your own training courses? Then join our Train-the-Trainer course in Riga this autumn - we will teach you all there is! As always, we offer a discount code for your stay in the local Rixwell and Wellton hotels: *Mikrotik2025*

Video   **Learn more**

#UserStories
Multi-site File Cluster
with RDS2216 and SeaweedFS

One of our users built a powerful distributed file services cluster in Vietnam using two RDS2216 units across different sites, deploying **SeaweedFS for replicating and redundant storage**. Each site also hosts **Nomad Docker servers** connected via high-speed network ports, using NFS shares for persistent container data.

The setup delivers fast, reliable file storage and sharing between sites, and the team plans to expand to four RDS nodes to achieve full multi-site redundancy without relying on costly public cloud storage.

"The RDS2216 gave us the flexibility to build our own multi-site storage cluster without paying for external cloud storage," the client said. "It's reliable, powerful, and fits perfectly into our infrastructure plans."

If you also have an RDS2216 use-case you're willing to show the world, send a photo or a video with a short description to **marketing@mikrotik.com** — and we'll send you a €20 MikroTik merch coupon as a thank you. From enterprise cloud hosting to database clusters or encrypted storage — your real-world applications help us inspire others.

Latvia takes a quantum leap

with

MIKrOTIK

A new milestone in data security has been reached in Latvia. In cooperation with the Latvian State Radio and Television Center (LVRTC), MikroTik has developed and implemented a quantum-secure data transmission solution, now available to end users. Starting with RouterOS v7.21beta2, MikroTik devices can already use encryption keys generated by quantum communication systems, making Internet connections secure even against future threats from quantum computers.

"The developed software is designed with high reliability and flexibility. If the device temporarily loses communication with the quantum communication device, data transmission is not interrupted but continues to operate using other available key synchronization methods. This ensures uninterrupted and secure connection operation," says MikroTik project manager Uldis Čerņevskis.

Tested within Latvia's national quantum infrastructure and based on international standards (RFC 8784), this achievement highlights how local collaboration between engineers, researchers, and public institutions can transform advanced research into practical innovation. Latvia is steadily becoming a regional hub for quantum technology, and MikroTik is proud to help lead that journey.

Read more　　**Documentation**

MikroTik on the move – from Japan to Riga and beyond

This autumn has been packed with great conversations and new connections. We had a fantastic time at CEATEC in Japan, where visitors showed strong interest in our latest 5G solutions. Shortly after, the Techritory Forum 2025 in Riga brought together innovators shaping Europe's digital future, and TheThingsConference gave us another chance to meet the growing IoT community face to face. As you all know, we really mean a full ecosystem when it comes to networking – and our IoT product line is growing steady alongside advances in LTE, Wi-Fi, routing, and switching.

Each event reminded us how far the MikroTik community reaches – from hobbyists to global integrators – all driven by curiosity, creativity, and practical problem-solving that our company is built upon.

Many thanks to our users, colleagues, and the Investment and Development Agency of Latvia, who are always looking out for the best ways to connect the right people at the right time. See you all at the next events!

Better than the Olympics, high-tech like the F1

Indonesia's brightest young networkers shine at the MikroTik Olympiad 2025**

Indonesia once again showed its vibrant tech spirit during the MikroTik Networking Olympiad 2025 (Olimpiade Jaringan MikroTik), where talented students from SMK TKJ (vocational high schools specializing in computer and network engineering) competed in a week of learning, teamwork, and networking challenges.

Hosted by the legendary Citraweb, the national-level event combined hands-on practice with theory, covering everything from basic configuration, DHCP, DNS, and packet flow to more advanced topics like QoS, HTB, and queue tree.

After several elimination rounds testing knowledge from MTCNA to MTCTCE, 12 finalist teams battled it out for the top six spots in the grand final. Along the way, they learned real-world networking skills, strengthened teamwork, and built friendships that will help shape Indonesia's (and the planet's!) future network professionals.

The enthusiasm, talent, and spirit on display once again proved that the future of networking is bright, safe, and powered by true curiosity, knowledge, and... MikroTik! :)

To every young engineer who took part: keep building, keep connecting, and keep dreaming big. The world runs on networks, and you are the ones who make them come alive!

You can find more info and pictures on the Citraweb **FB page**.

New #MikroTips and tricks!

HERE YOU CAN DOWNLOAD ALL THE VISUALS USED IN THIS NEWSLETTER