



MUM Europe Ljubljana

February 2016

# More than 120 MUM events



# *Mikro***Tik** at the MUM

John Tully (CEO)

Arnis Riekstins (CTO)

Janis Jankovskis (sales)

Edmunds Aperans (sales, training)

Karlis Oga (sales)

# *Mikro***Tik** at the MUM

Uldis Cernevskis (support, wireless)

Janis Megis (support, CCR, firewall)

Martins Strods (support)

Emils Zilnieks (support, routing)

Kaspars Krampis (training)

Sergejs Boginskis (support, training)

# MikroTik

- MikroTik is located in Latvia (Europe)
- More than 160 employees
- Established in 1996
- MikroTik RouterOS created in 1997
- RouterBOARD created in 2002
- First MUM in Prague 2006
- Biggest MUM Indonesia 2015 - 2650 people

A map of Europe with the Mikrotik logo overlaid in the center. The logo consists of a stylized 'M' with a curved line above it, followed by the word 'Mikrotik' in a bold, italicized sans-serif font. The country of Lithuania is highlighted in a solid green color. Other countries are labeled in black text.

**Mikrotik**



Lithuania

# MUM Europe

## **25.02**

09:00 - 12:30 - Presentations

12:30 - 14:00 - Lunch with ticket

14:00 - 18:00 - Presentations

## **26.02**

09:00 - 12:30 - Presentations

12:30 - 14:00 - Lunch with ticket

14:00 - 16:30 - Presentations

16:30 - Raffle and closing of the MUM

# MUM Europe Exhibitors

45 exhibitors!!!

Glass room

Garden room

White room

# After the MUM

Presentation slides - [mum.mikrotik.com](http://mum.mikrotik.com)

Videos - [youtube.com/mikrotik](https://youtube.com/mikrotik)

Live feed - [mikrotik.com](http://mikrotik.com) or [youtube.com](https://youtube.com)

License will be emailed

RECENTLY INTRODUCED

# mANTBox 15s

- mANT sector antenna 15dBi
- 120 degree
- RB921 inside (720MHz, 128MB RAM)
- 802.11 a/n/ac
- SFP port



\$139

# mANTBox 19s

- mANT sector antenna 19dBi
- 120 degree
- RB921 inside (720MHz, 128MB RAM)
- 802.11 a/n/ac
- SFP port



\$199

# hAP ac lite

- Dual band Access Point
- 2.4GHz 2 chains 802.11n
- 5GHz 1 chain 802.11ac
- 5x100Mbps ports
- 650MHz CPU
- PoE-out on port 5



\$49.95

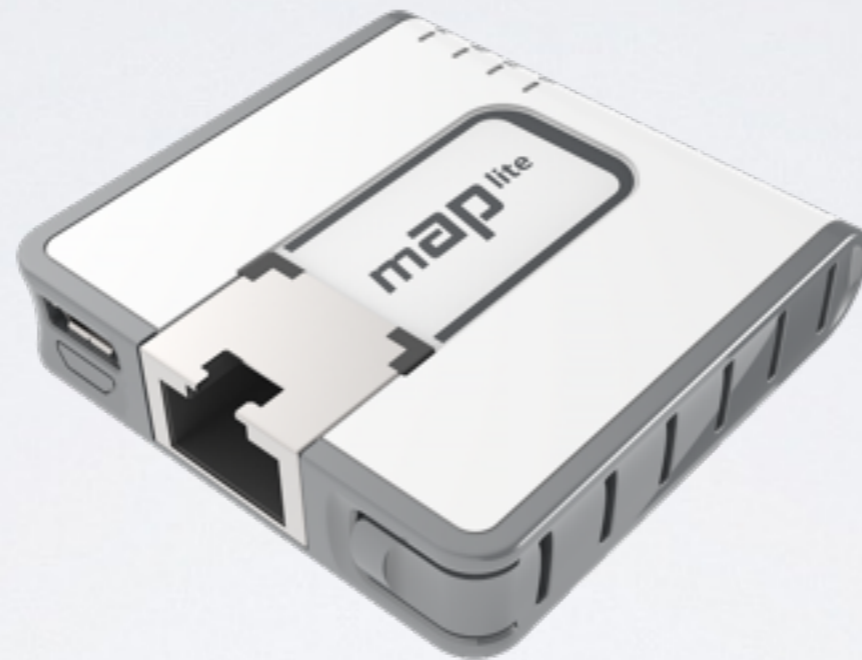
# hAP ac

- Gigabit dual concurrent home AP
- 2.4GHz high power 3 chain 802.11n
- 5GHz high power 3 chain 802.11ac
- 5x1 Gbps ports & 1 SFP cage
- 720MHz CPU
- PoE-out on port 5



\$129

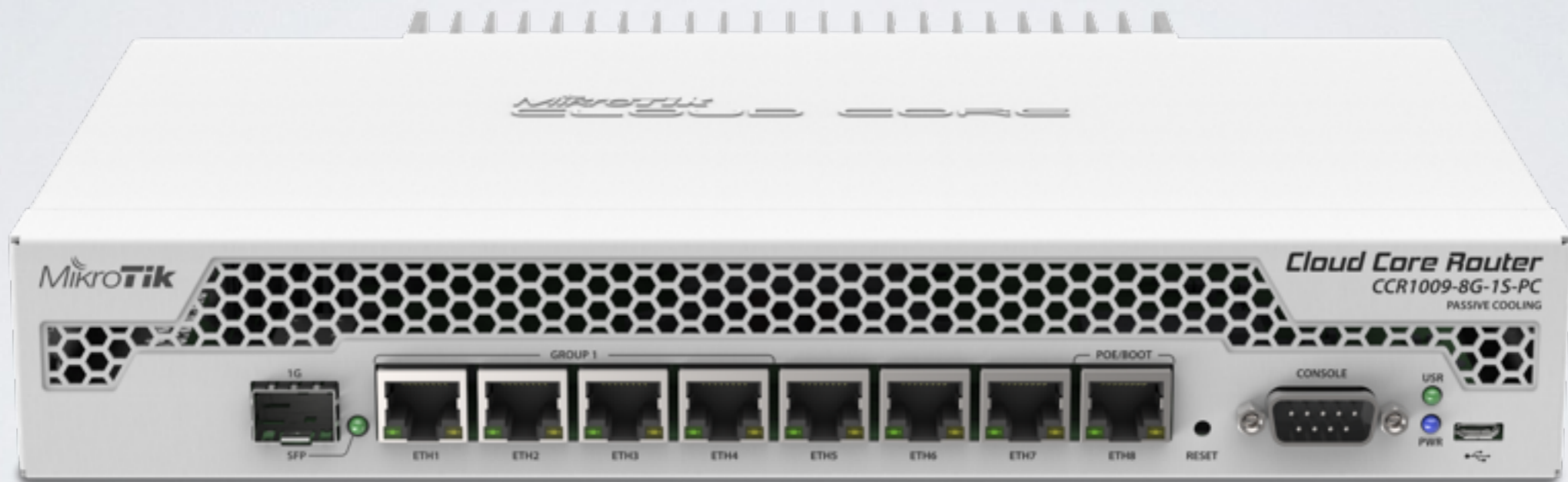
# mAP lite



Tiny size 2.4GHz Dual Chain access point  
with a 650MHz CPU, 64MB RAM and one Fast Ethernet

\$25

# CCR1009-8G-1S-PC



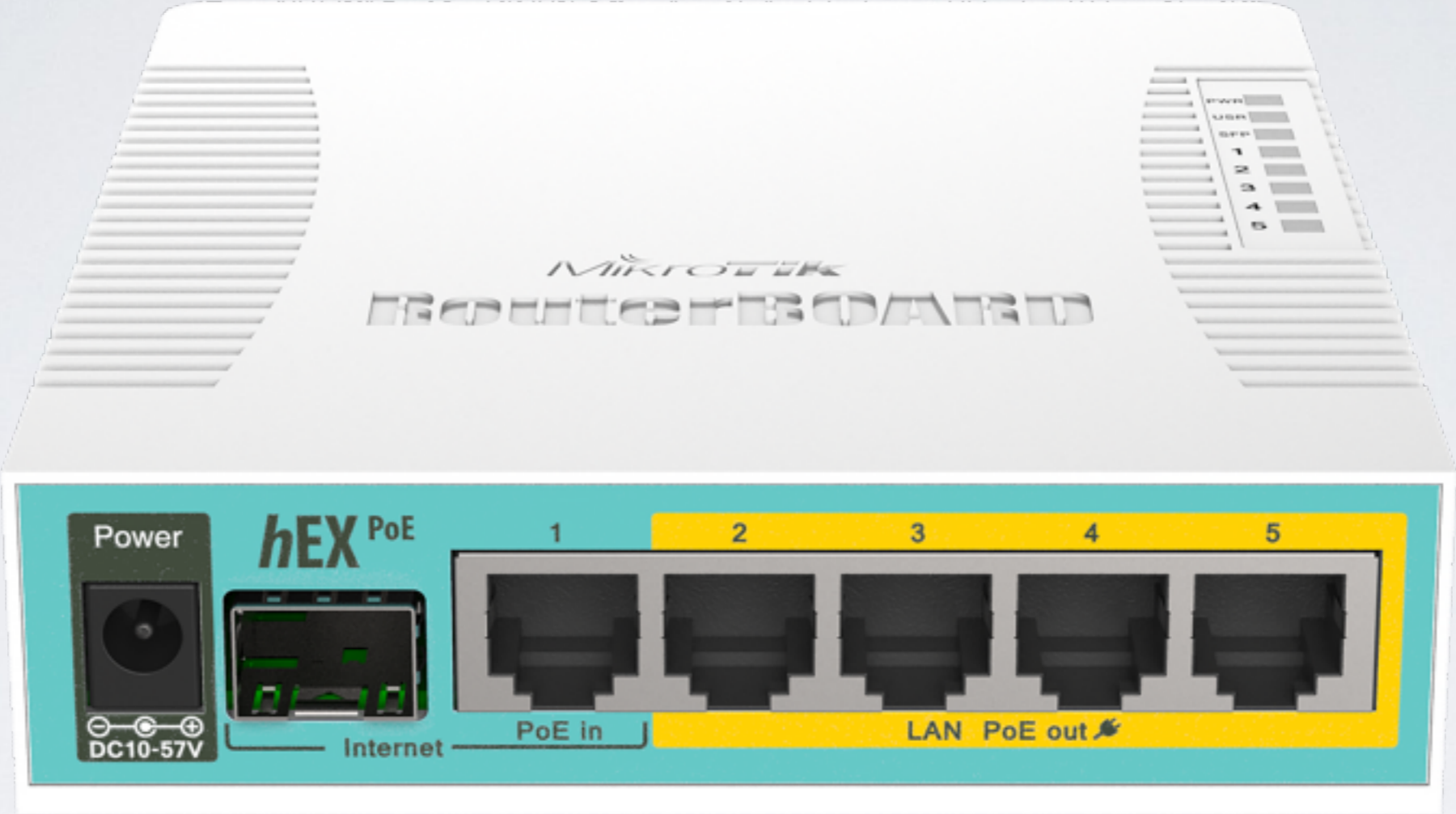
9 cores, each 1 GHz, Passive cooling case

1 SFP, PoE-in

\$425

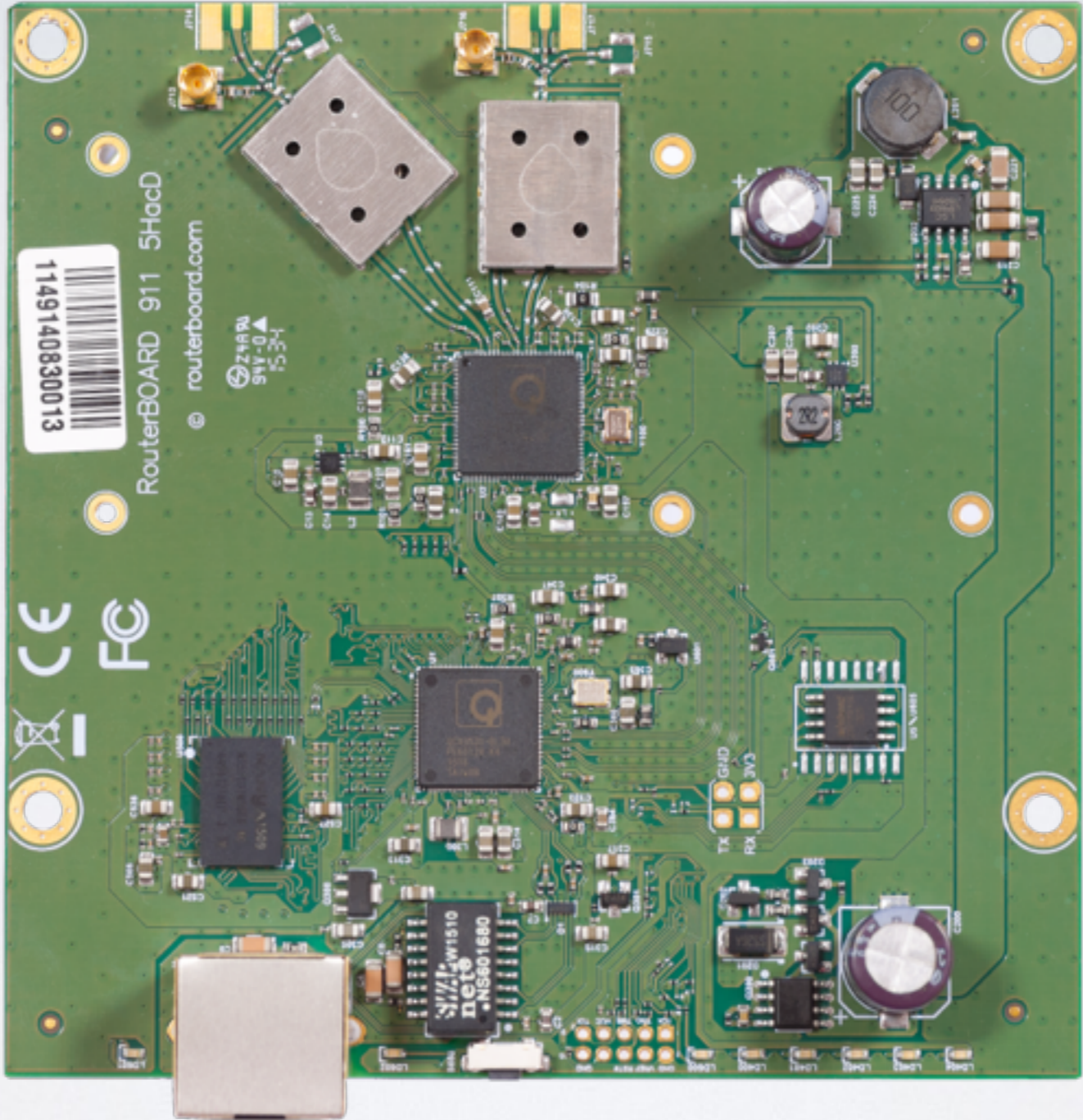
NEW PRODUCTS!

# hEX PoE



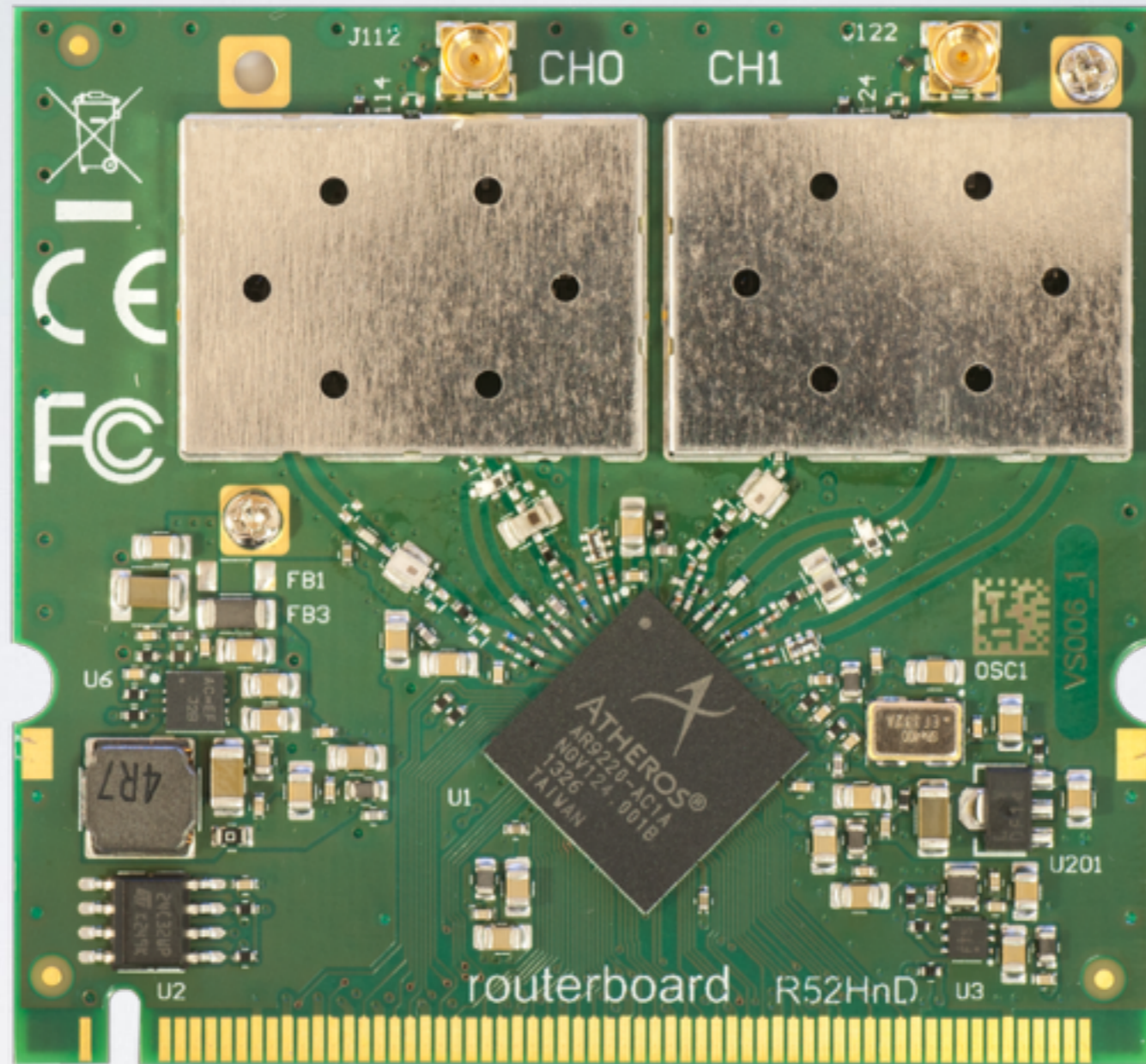
5 gigabit ports, 4 PoE out

# 911 Lite 5ac



ac update for extremely affordable board

# R52HnD



tx-power 26 dbm, R52HnD replacement

# Groove 52 ac



ac update for popular Groove model



# Metal 52 ac



Waterproof, rugged with a super high power (31 dBm)

802.11 b/g/n and 802.11 a/n/ac, 1 gigabit Ethernet

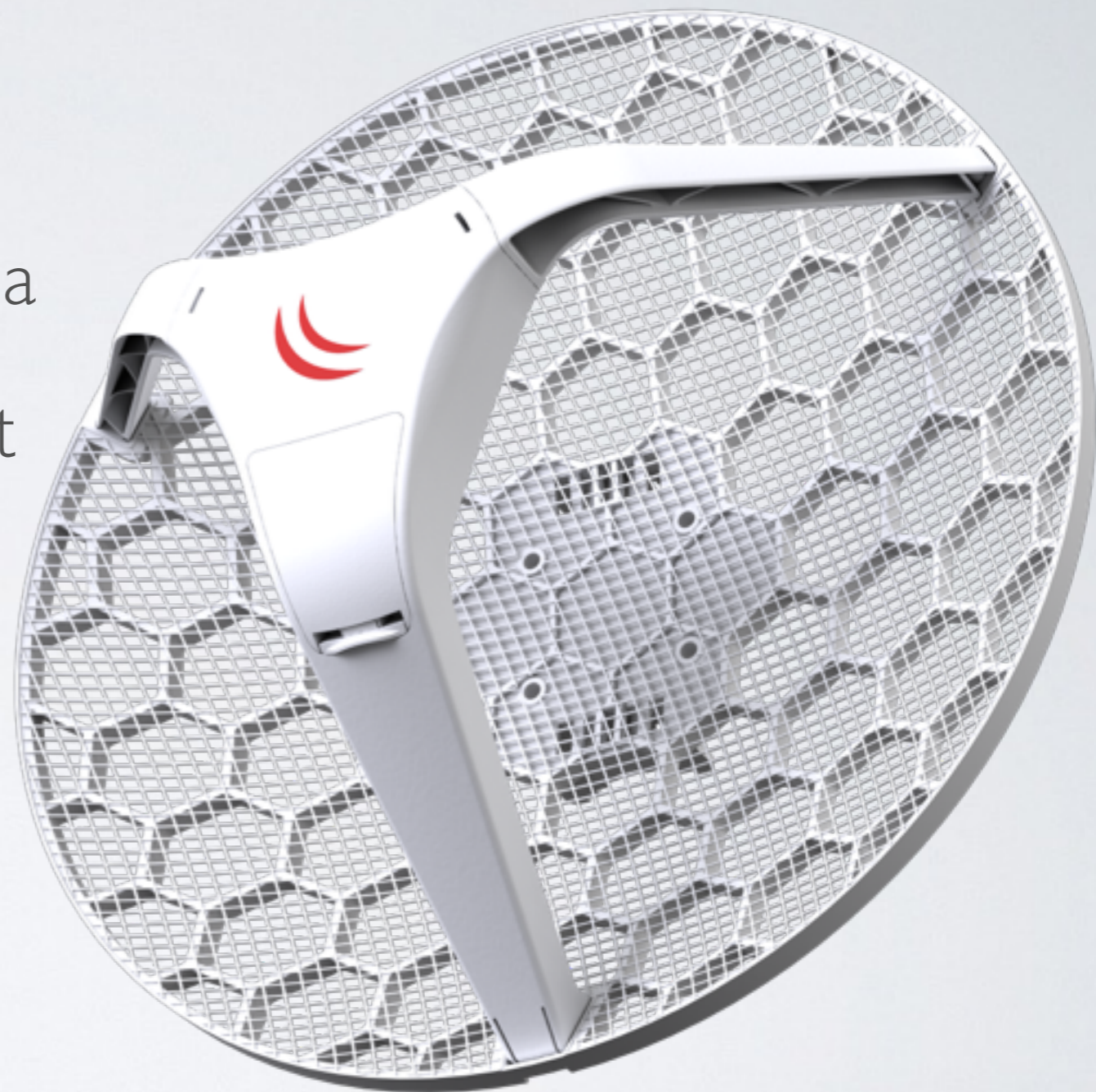
wAP ac



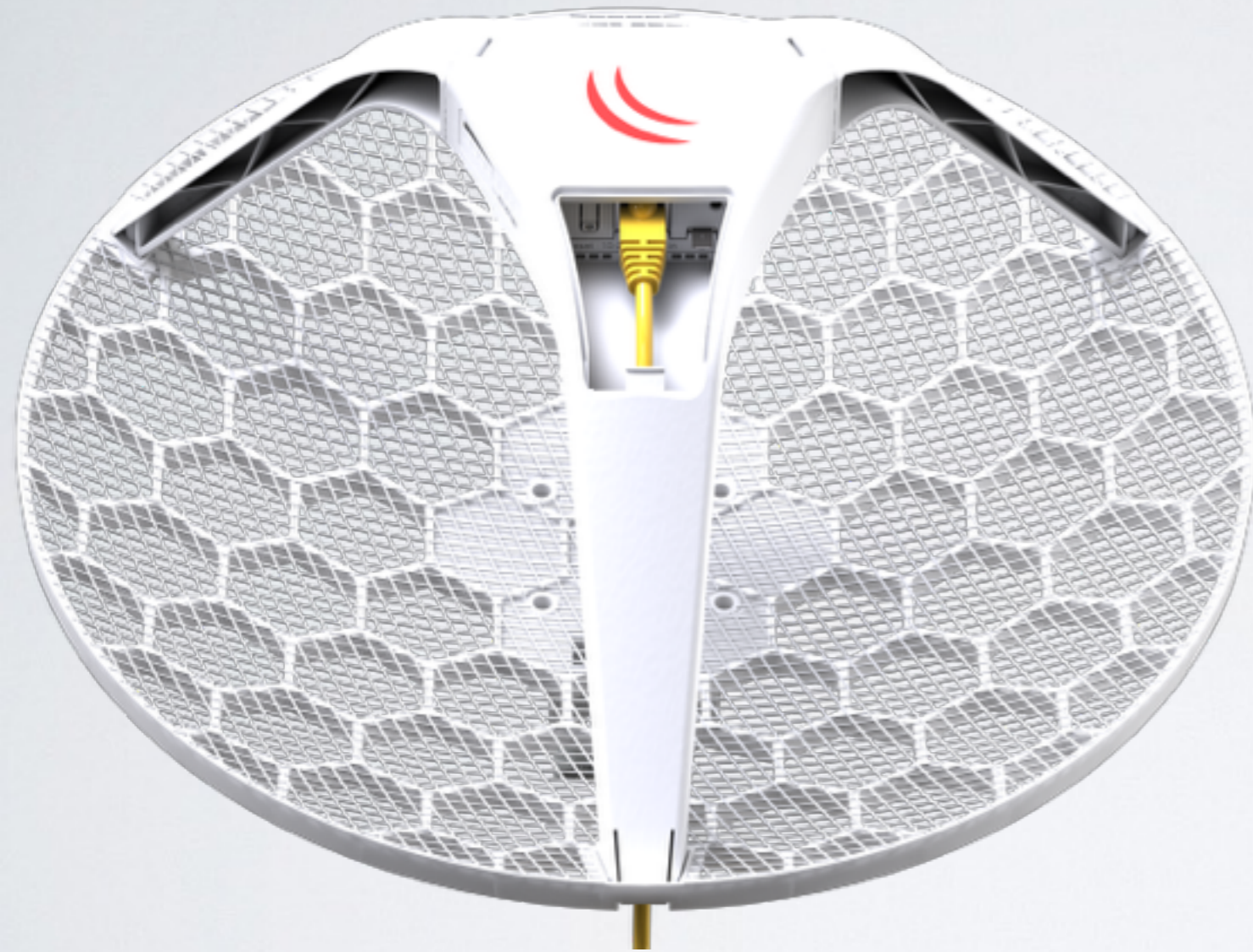
ac update for wAP, gigabit, dual-band!!

# LHG 5

- Light Head Grid, 24.5 dBi antenna
- Antenna is built into wireless unit
- 802.11 a/n dual chain
- Very affordable



# LHG 5



# ALL PRODUCTS

- Include free software upgrades for life
- Run the same RouterOS software

New RouterOS features

# RouterOS Version Types

- **Bugfix only** - long time support version with bug fixes included
- **Current** - version with the latest tested features
- **Release candidate** - the latest release candidate version with the newest features
- **Development** - latest version of v7 beta version (not available yet)

# Life Cycle

- **6.32.4** - bugfix only
- **6.34.2** - current
- **6.35rc12** - release candidate

# Life Cycle Explained

- **6.34.2** - current version
- bugfixes added 6.34.3, 6.34.4
- might become “bugfix only”
  
- **6.35rc** - release candidate
- new features added 6.35rc | 5
- will become “current”

...one more thing

6.34 RouterOS Changelog!

**147** lines

# CHR

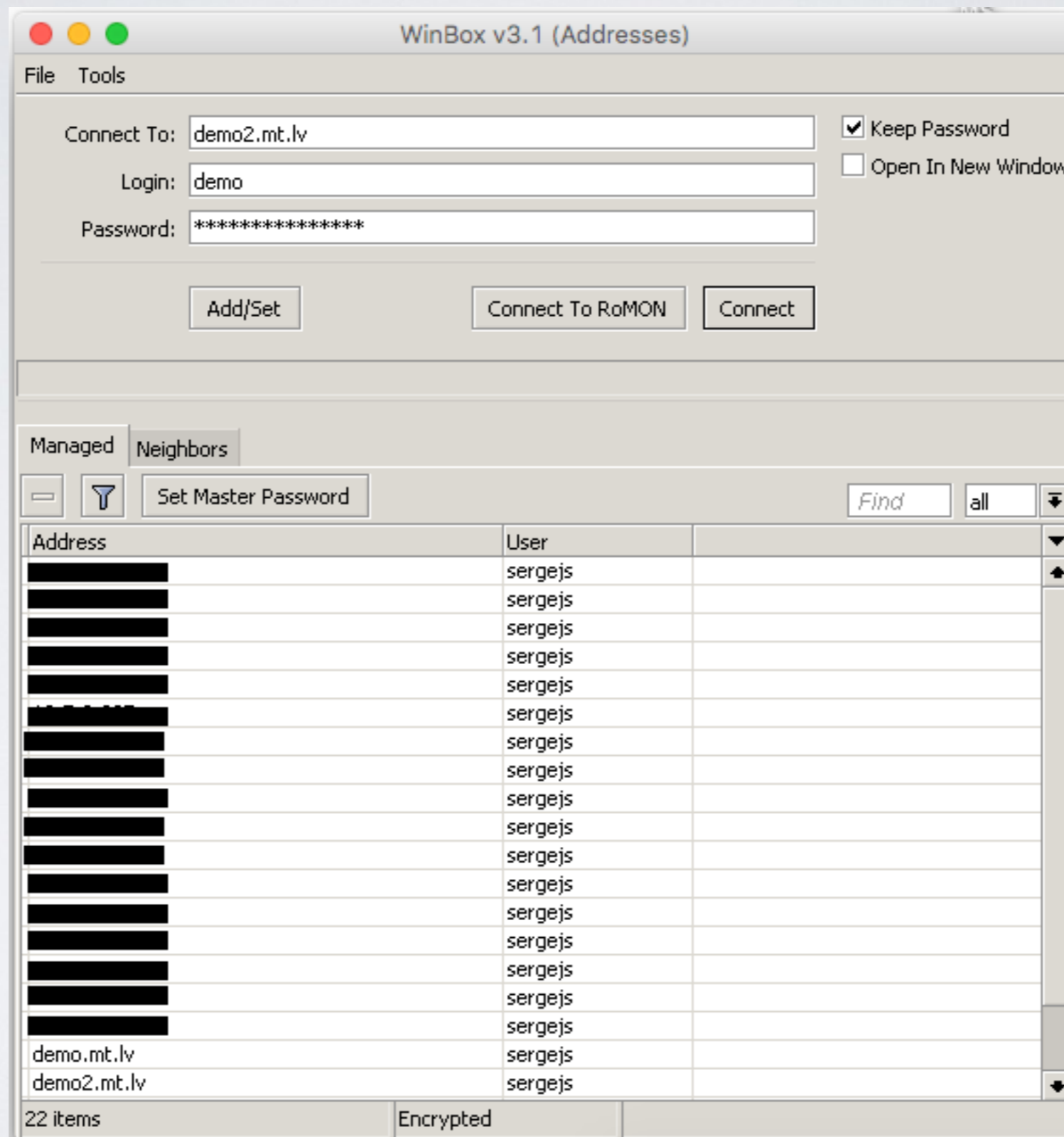
- New life for x86 devices
- 64bit architecture support
- Runs on: VMWare, Hyper-V, VirtualBox, KVM, etc.

# CHR licenses

License	Speed limit	Price
Free	1 Mbit	FREE
PI	1 Gbit	\$45
PI0	10Gbit	\$95
P-Unlimited	Unlimited	\$250

- 60 day trial available
- license can be transferred

# WinBox v3.x



# WinBox v3.x Suggestions?!

[support@mikrotik.com](mailto:support@mikrotik.com)

# Wireless in v6.35

- new wireless package!
- repeater, background scan...

12:00, presentation by Uldis

Wireless in v6.x

Ask this man in the red shirt



# LNS Support

- Introduced in v6.33
- Improved compatibility with most popular LAC implementations in v6.35rc
- PPPoE over L2TP in LNS mode
- RFC3817

# FastPath News

- FastPath for PPPoE!!
- Fasttrack and more

| 4:45, presentation by Janis

FastPath, CCR, etc., etc.

Ask this man in the black shirt



# The Dude

What's new in v6.34 (2016-Jan-29 10:25):

\*) dude - The reports of my death have been greatly exaggerated;

# The Dude

- server on CCR and x86 (CHR)
- server as a regular RouterOS package
- Windows client
- new features to come!

The logo for Microtik features a stylized icon of three curved lines above the letter 'i' in 'Mikro'. The word 'Mikro' is in a thin, italicized sans-serif font, while 'Tik' is in a bold, italicized sans-serif font. The entire logo is reflected on a light gray surface below it.

*Mikro***Tik**