



MikroTik User Meeting

# More than 80 MUM events





# MikroTik

- MikroTik is located in Latvia (Europe)
- More than 150 employees
- Established 1996
- RouterOS created in 1997
- RouterBOARD created in 2002
- First MUM in Prague 2006
- Biggest MUM in 2014, Indonesia - 2000 people



# What we do

- MikroTik provides routing and wireless equipment for all possible uses: RouterBOARD, Cloud Core Router, Cloud Router Switch
- Our RouterOS software now supports most common and many special features



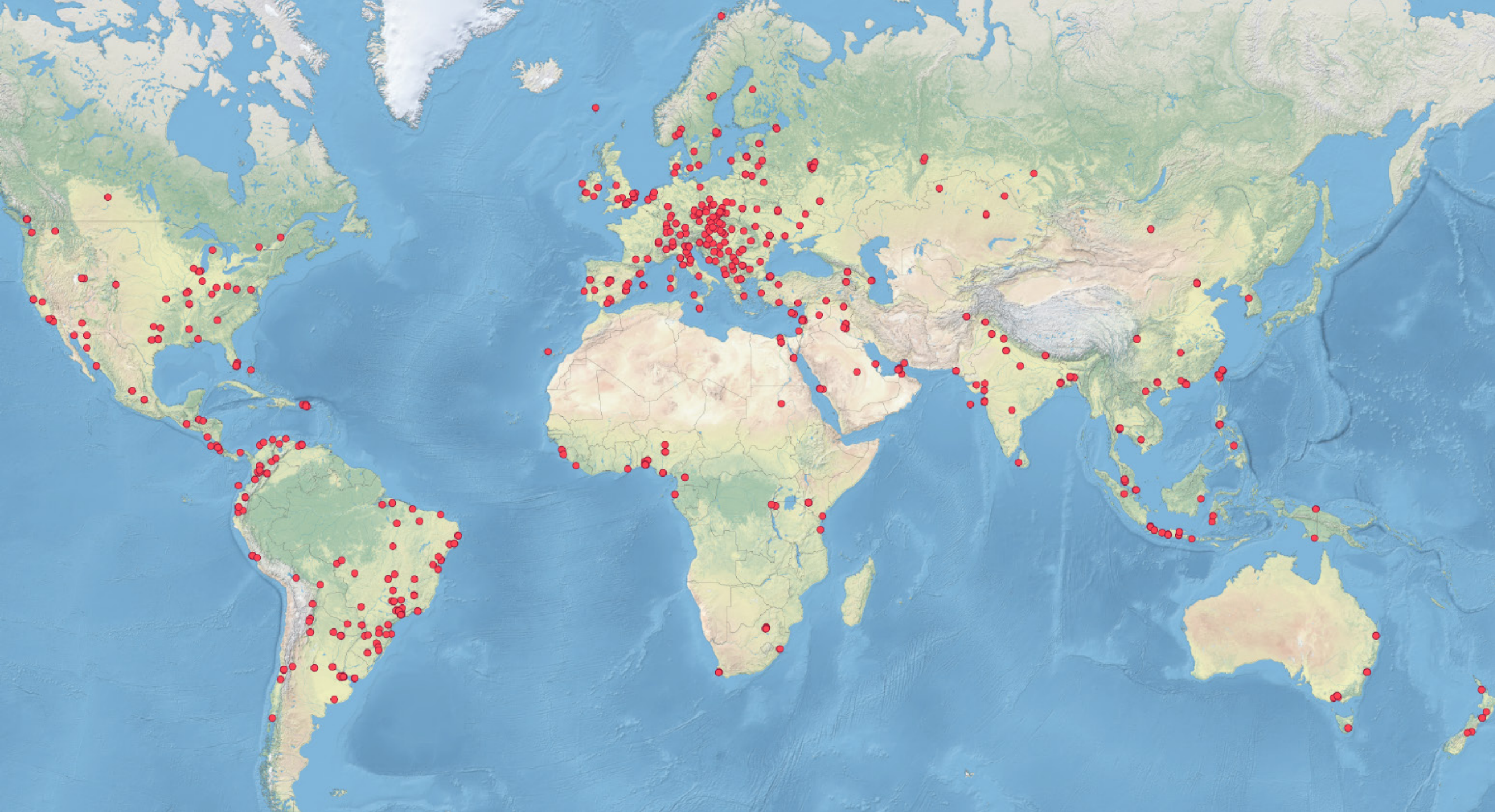
# RouterOS

- MikroTik RouterOS is the operating system of RouterBOARD hardware
- Routing, firewall, bandwidth management, wireless access point, backhaul link, hotspot gateway, VPN server and more
- Stand-alone operating system based on the Linux v3.3.5 kernel

# Why us

- Millions of RouterOS powered devices currently routing the world
- 18 years of developing networking software and hardware
- Over 20'000 RouterOS trained and certified network engineers







# Why us

- More than 1600 training classes in the last 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 at the MUM

- Edmunds Aperāns
- Normunds Rustanovičs



# After the MUM

- Presentation slides - [wiki.mikrotik.com](http://wiki.mikrotik.com)
- Videos - [tiktube.com](http://tiktube.com)
- License will be emailed

# Special thanks

Maxbit

Maximum Business Information Technology,  
Cambodia



# PRODUCT SERIES

# ETHERNET ROUTERS

- From small to big, for every need
- RouterBOARD and CCR series
- Desktop and Rackmount





# SWITCHES

- Simple or Sophisticated
- CRS gives Layer 3 features
- 5 to 24 port devices



# WIRELESS SYSTEMS

- Professional outdoor links
- AP, PtP, PtMP, etc
- Rugged and powerful
- 802.11ac technology





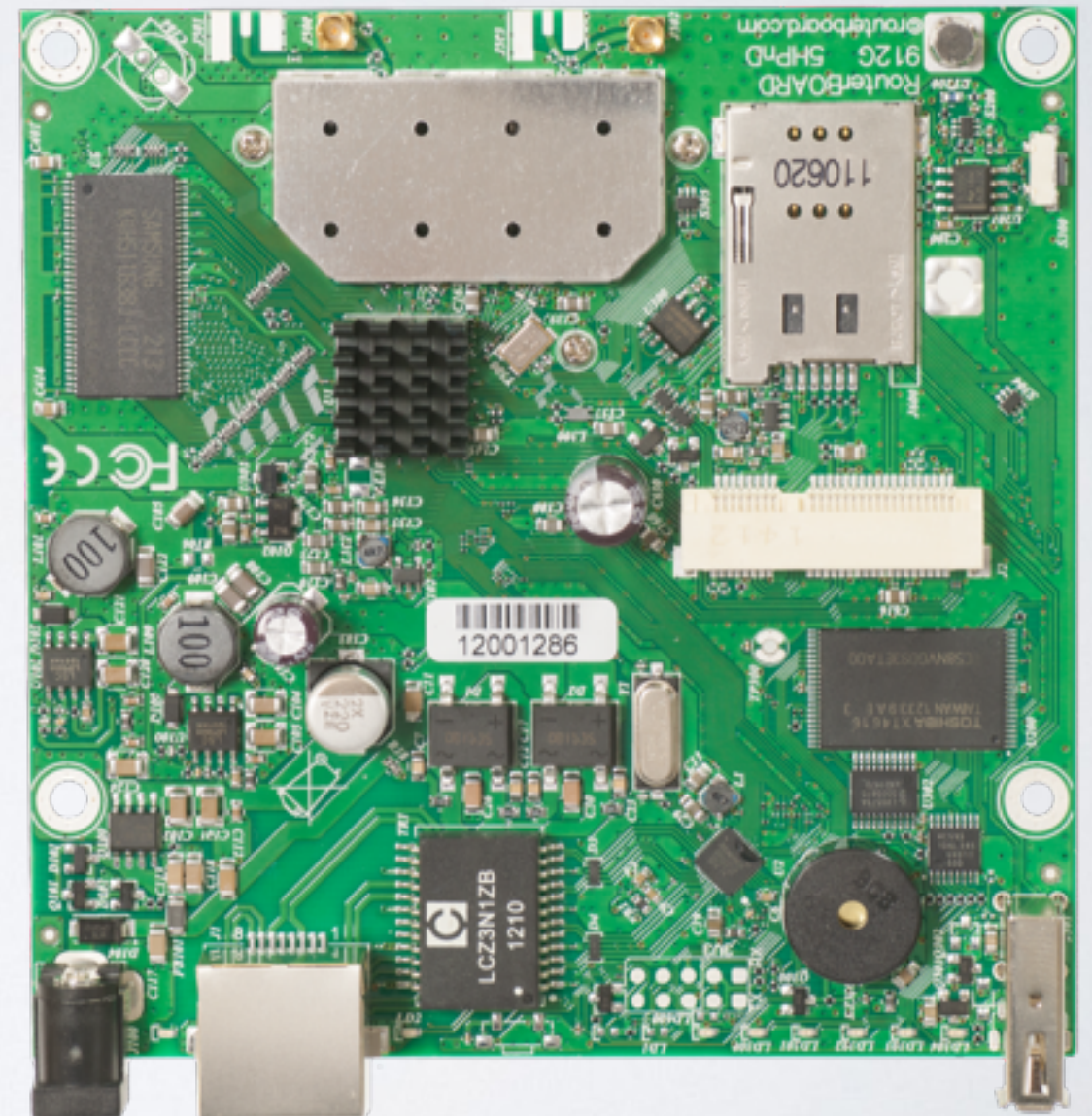
# FOR HOME AND OFFICE

- Low cost and small
- Good looking and friendly
- LCD touchscreen, file sharing, Quickset



# ROUTERBOARD

- Build your own device
- Use custom case
- Upgrade or expand with ease
- Choose model based on ports, features and speed





# INTERFACES AND MORE



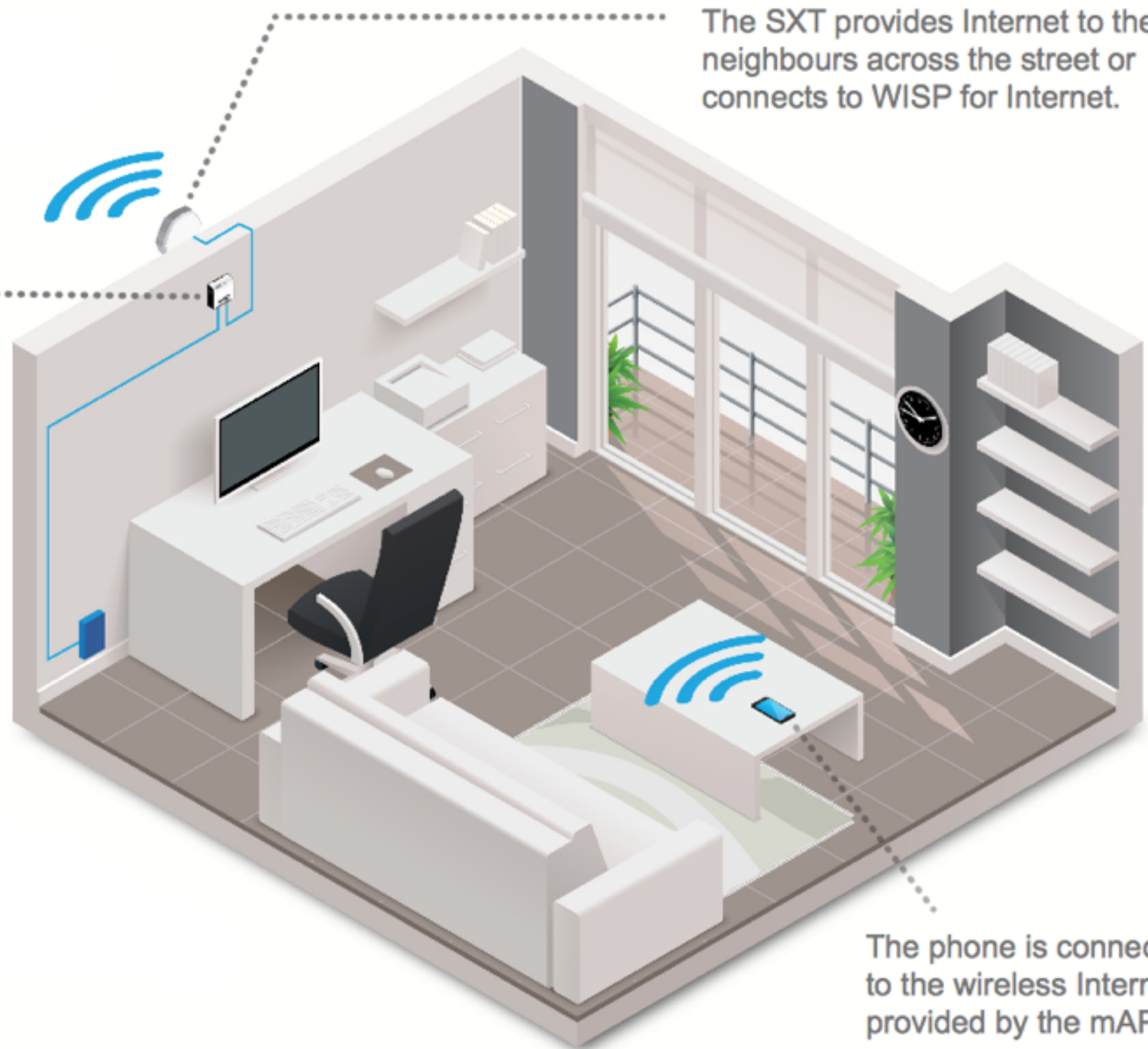
- Wireless cards
- SFP modules
- Adapters
- Converters
- Antennas



from the home ...



The first port of the mAP is connected to the Internet router. The second provides connectivity and power to a SXT unit outside the building.

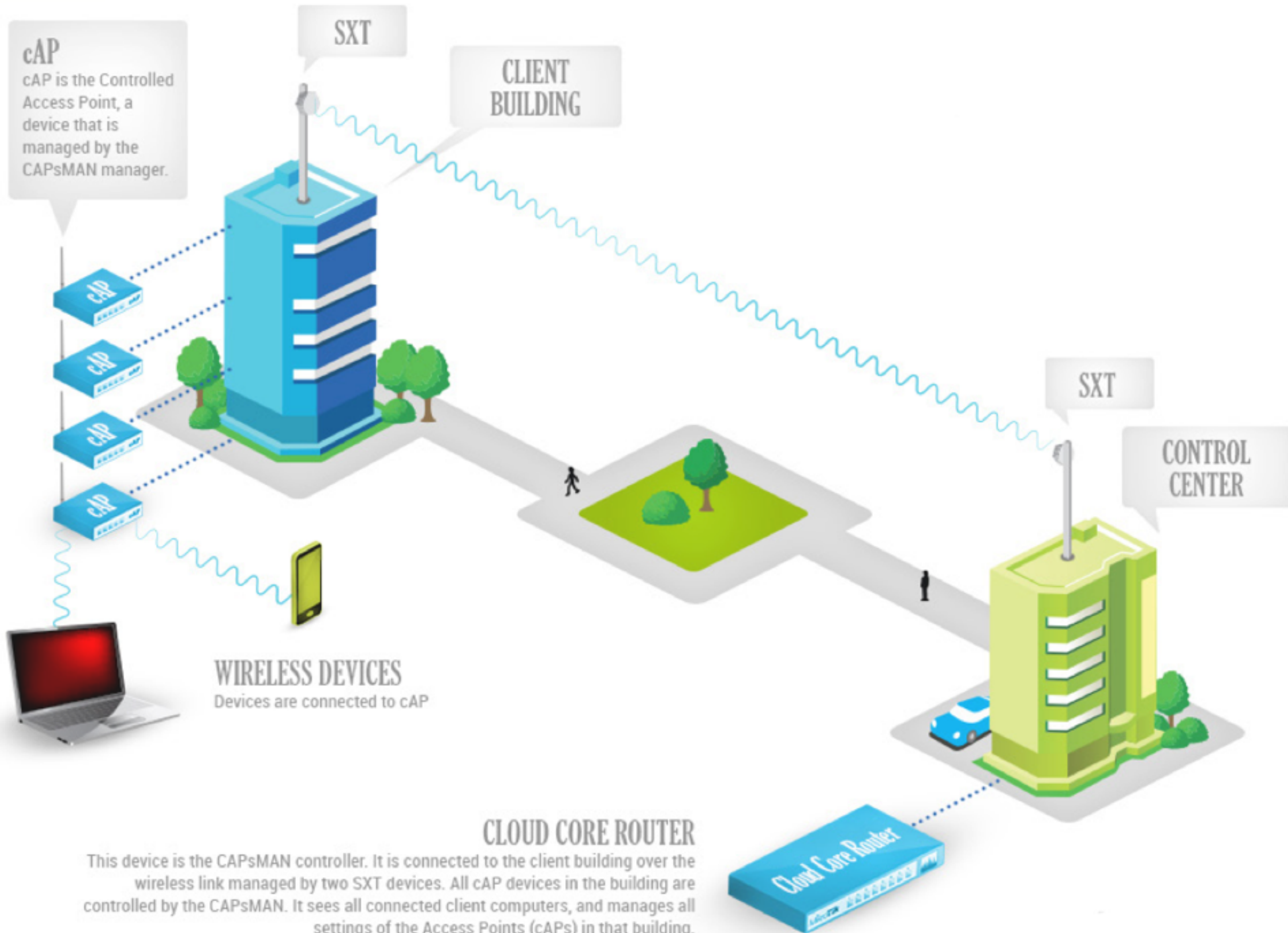


The SXT provides Internet to the neighbours across the street or connects to WISP for Internet.

The phone is connected to the wireless Internet provided by the mAP.

... to the global network





# ALL PRODUCTS

- Include free software upgrades for life
- Run the same RouterOS software
- Can be purchased from our worldwide distributor network

# NEED HELP?

- Ask a local **distributor**
- Read the manual **wiki.mikrotik.com**
- Email **support@mikrotik.com**
- Hire a consultant
- Attend a training class or join an Academy class in a University



# WHAT THEN

Consultant



Configures and helps

Trainer



Certifies and advances

Distributor

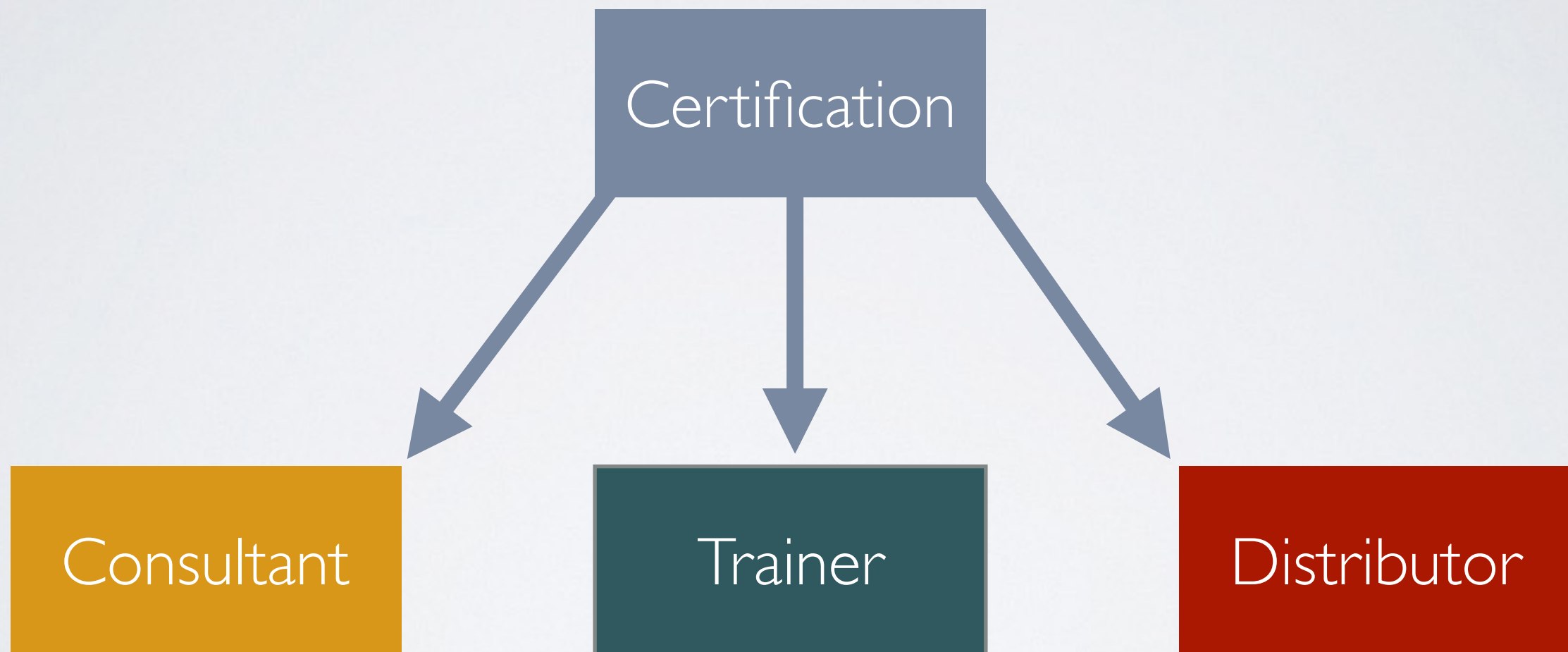


Offers products and services

# HOW TO PARTICIPATE

- Become a Distributor
- Take classes and become a certified Trainer
- Start offering consulting services
- Coordinate a new MikroTik academy in a local University
- Create accessories and enclosures with the MFM program

# WHY LEARN





# To become:

- **consultant**, get a certificate from trainers
- **trainers**, get a certificate from MikroTik
- **distributor**, certify your employee and email MikroTik

RECENTLY INTRODUCED



# hAP lite

- Very affordable home Access Point
- Full RouterOS functionality
- 2.4GHz dual chain 802.11n
- 4 Fast Ethernet
- 650MHz CPU
- powered with 5V (from USB)

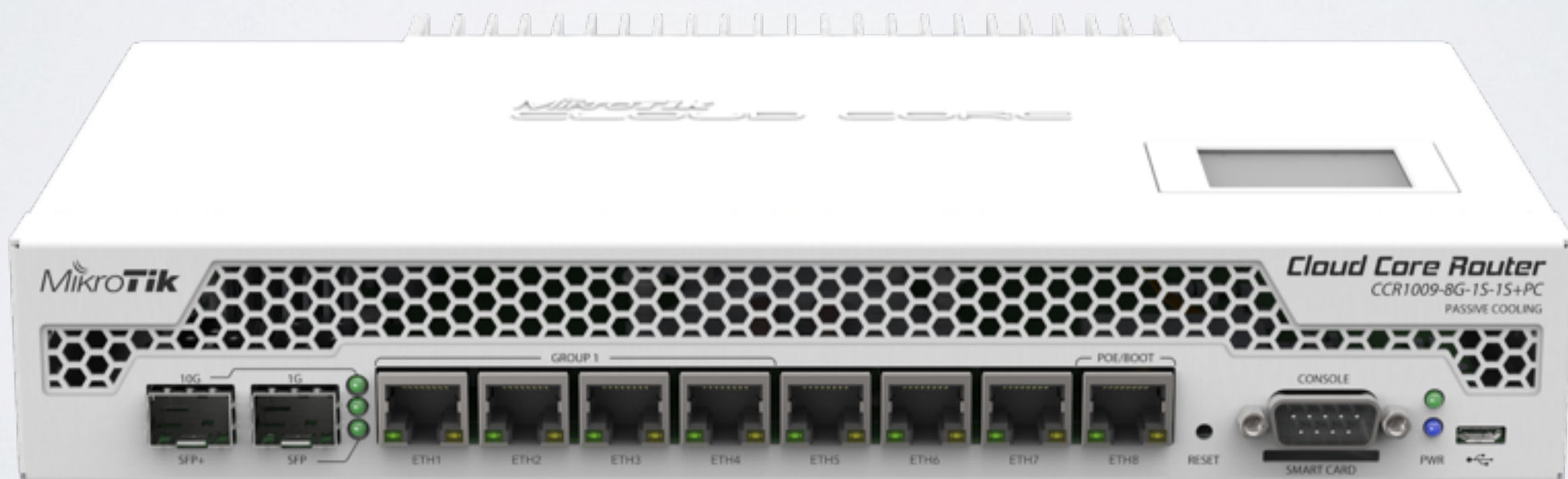


\$21.95



# CCR1009 PC

- 9 core TILERA networking CPU
- Silent, passive cooling case
- 8 Gigabit Ethernet, 1 SFP and 1 SFP+



\$495

# Powerbox

- Outdoor Ethernet router
- Powers other devices over PoE
- Weatherproof and pole mountable



\$69

# S+2332LC10D

- Bidirectional SFP+ 10G module kit
- two SFP+ modules
- up to 10KM distance



\$349



# SOFTWARE FEATURES

# RoMON

Router Management Overlay Network

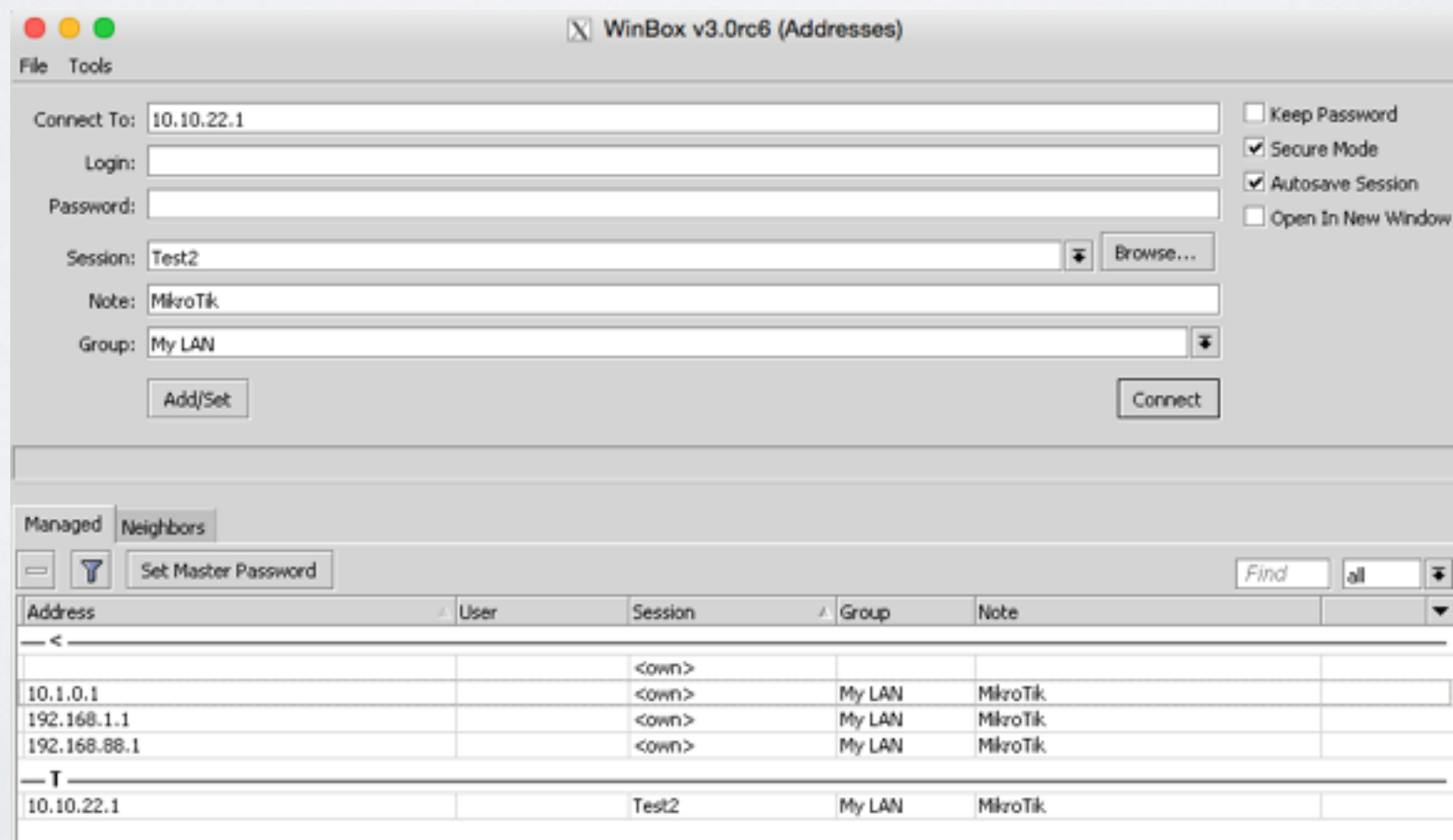
# Features

- Works similar to neighbour discovery, but over multiple hops
- Secure Layer 2 style access to all MikroTik devices with a physical connection or through a L2 tunnel
- Discover, manage and upgrade your entire network with an easy tool
- mac Winbox/SSH/ping on **steroids**
- More info in our manual:  
<http://wiki.mikrotik.com/wiki/Manual:RoMON>



# Winbox 3

- Sort, group and protect saved devices
- Save, load and move device lists
- Save all layout preferences and move them between devices



NEW PRODUCTS



# hAP

- Upgrade for/replaces RB951-2n
- 2.4GHz dual chain 802.11n
- 5 Fast Ethernet
- 650Mhz CPU
- 300MHz DDR2 RAM
- PoE-in
- PoE-out on port 5



\$45



# hAP ac lite

- Our first dual concurrent home Access Point
- 2.4GHz dual chain 802.11n
- 5GHz single chain 802.11ac
- 5 Fast Ethernet
- 650MHz CPU
- 300MHz DDR2 RAM
- PoE in
- PoE-out on port 5





# hAP ac

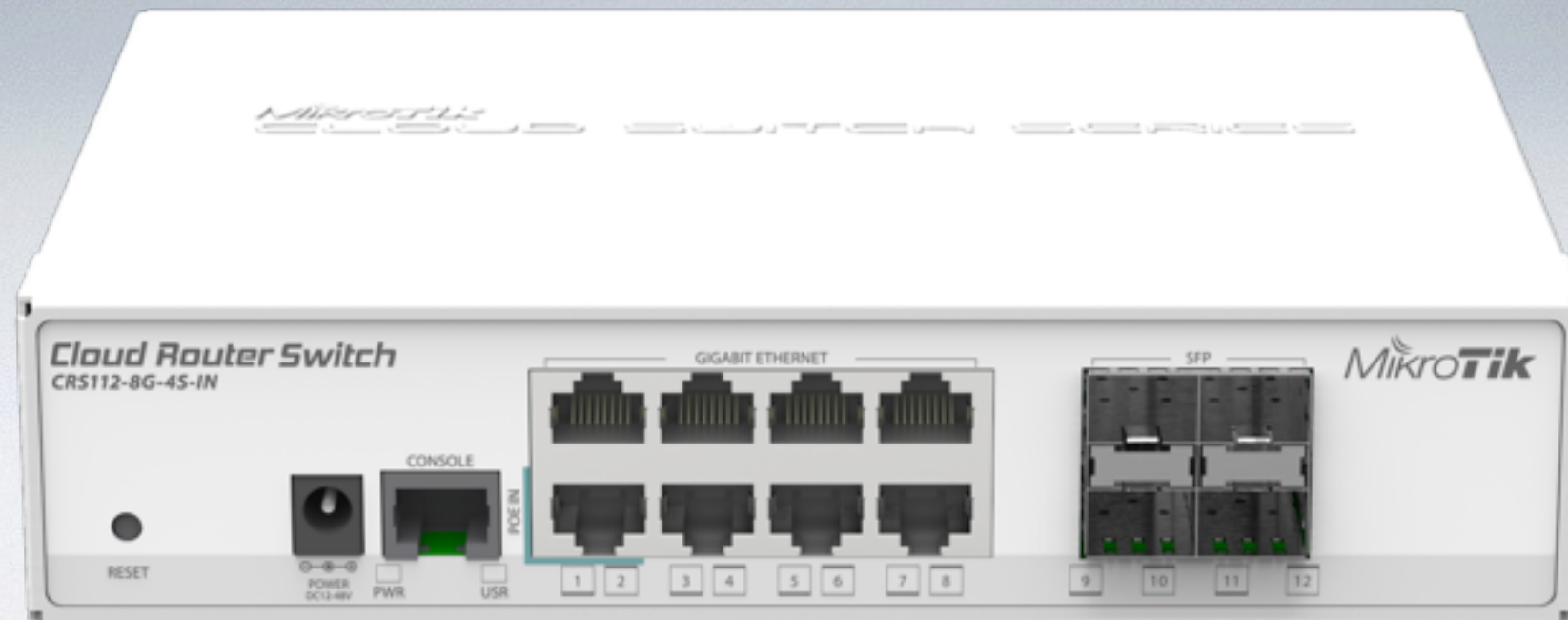
- Our first Gigabit dual concurrent home AP
- 2.4GHz high power 2 chain 802.11n
- 5GHz high power 3 chain 802.11ac
- 5 Gigabit Ethernet & 1 SFP cage
- 720MHz CPU
- 300MHz DDR2
- PoE in
- PoE-out on port 5





# CRS112-8G-4S-IN

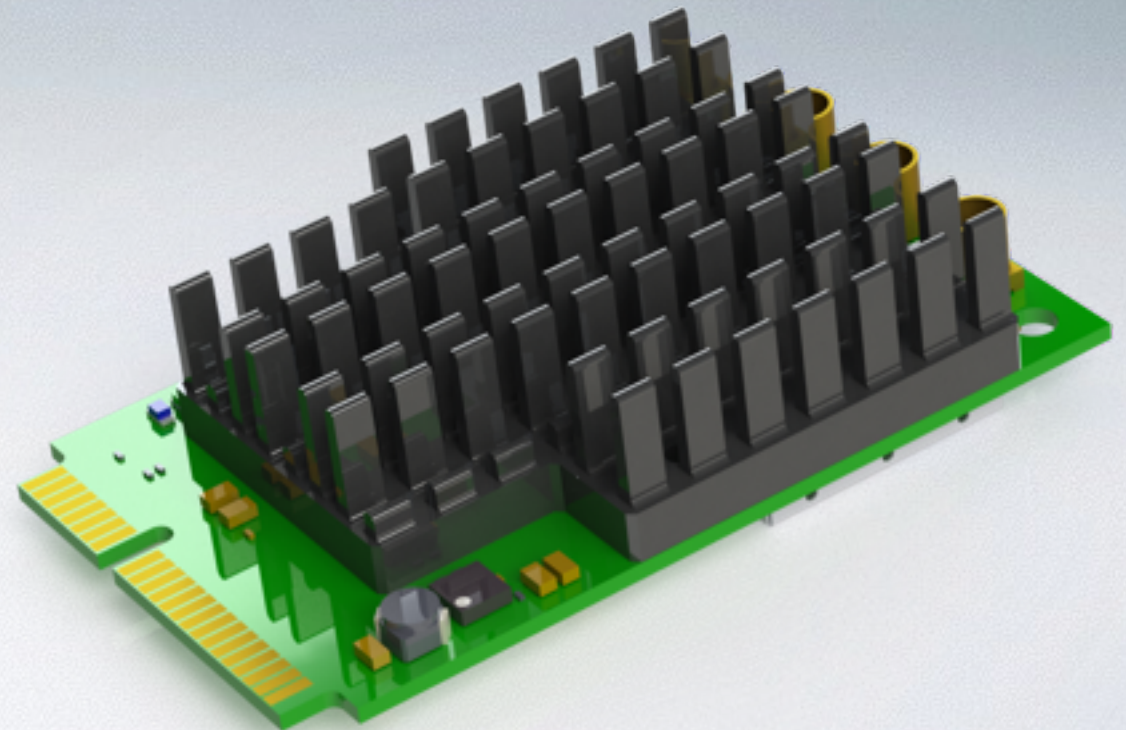
- Small size desktop switch, powered by RouterOS
- 4 SFP ports and 8 Gigabit Ethernet





# R11e-5HacT

- miniPCle card with 5GHz triple chain 802.11ac
- Upgrade your existing devices to 802.11ac standard





# QRT 5 AC

- 802.11ac upgrade for QRT 5
- Same design and antenna
- Same robust design with upgraded internals for 802.11ac



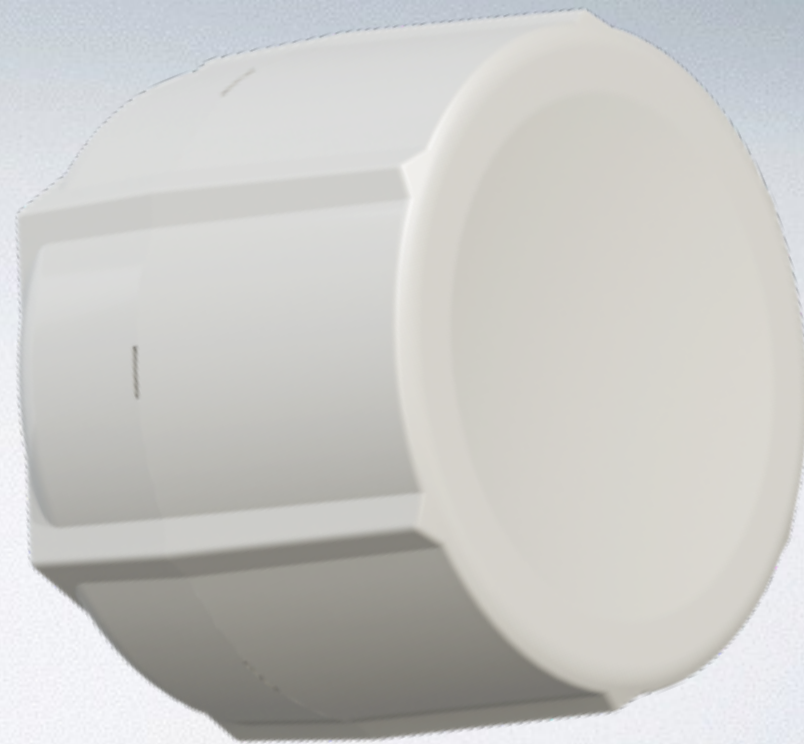
\$179



# SXT HG5 AC



- 802.11ac upgrade for SXT HG5
- 720Mhz CPU
- DDR2
- 17dBi



\$119

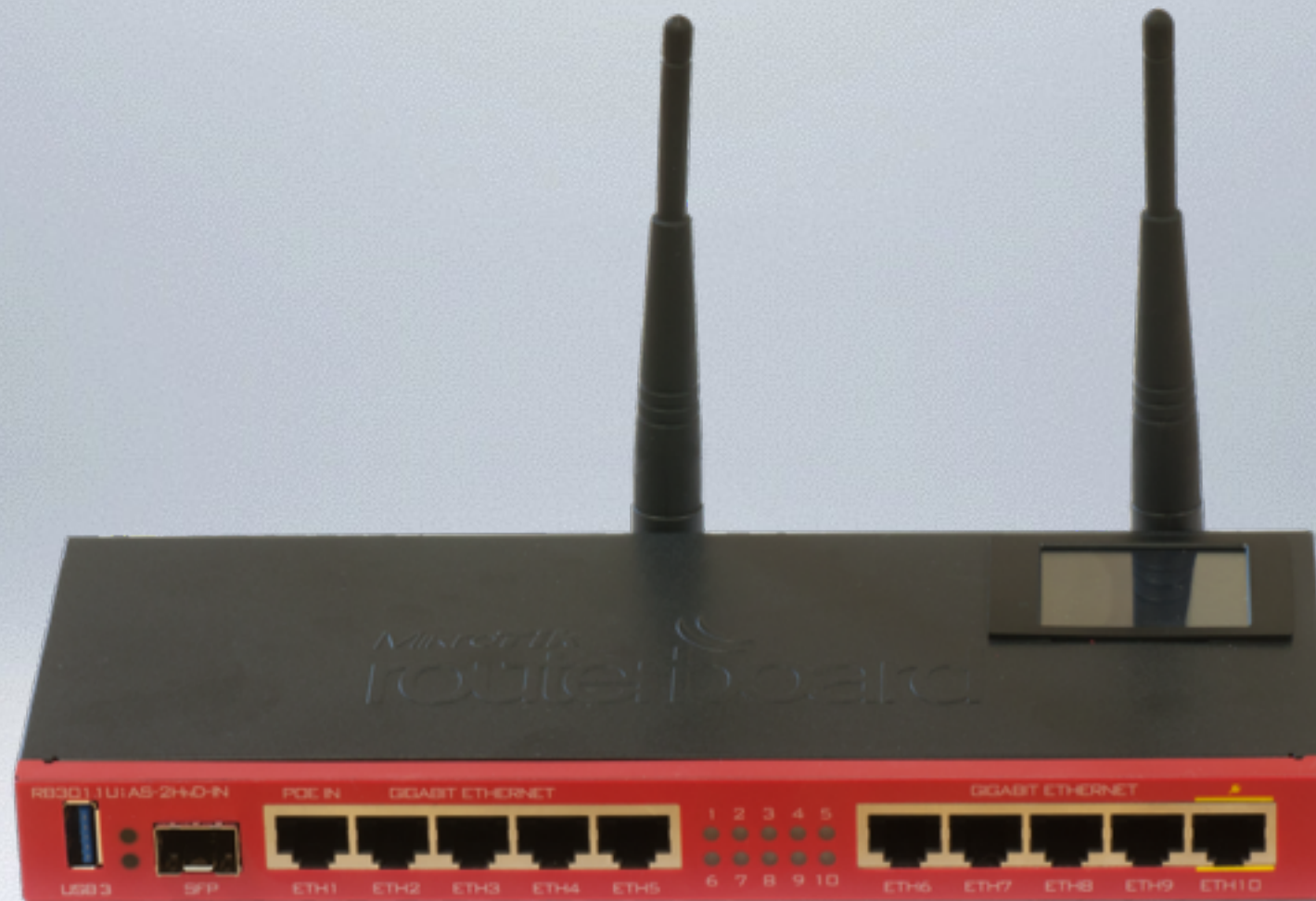


# RB3011 Series

- Upgrade for RB2011 Series
- Dual core 1.2GHz ARM CPU
- more than 2x performance
- 10x Gigabit Ethernet
- Regular size USB3
- Rackmount and Indoor wireless AP
- miniPCle slot and SFP port



# RB3011 Series

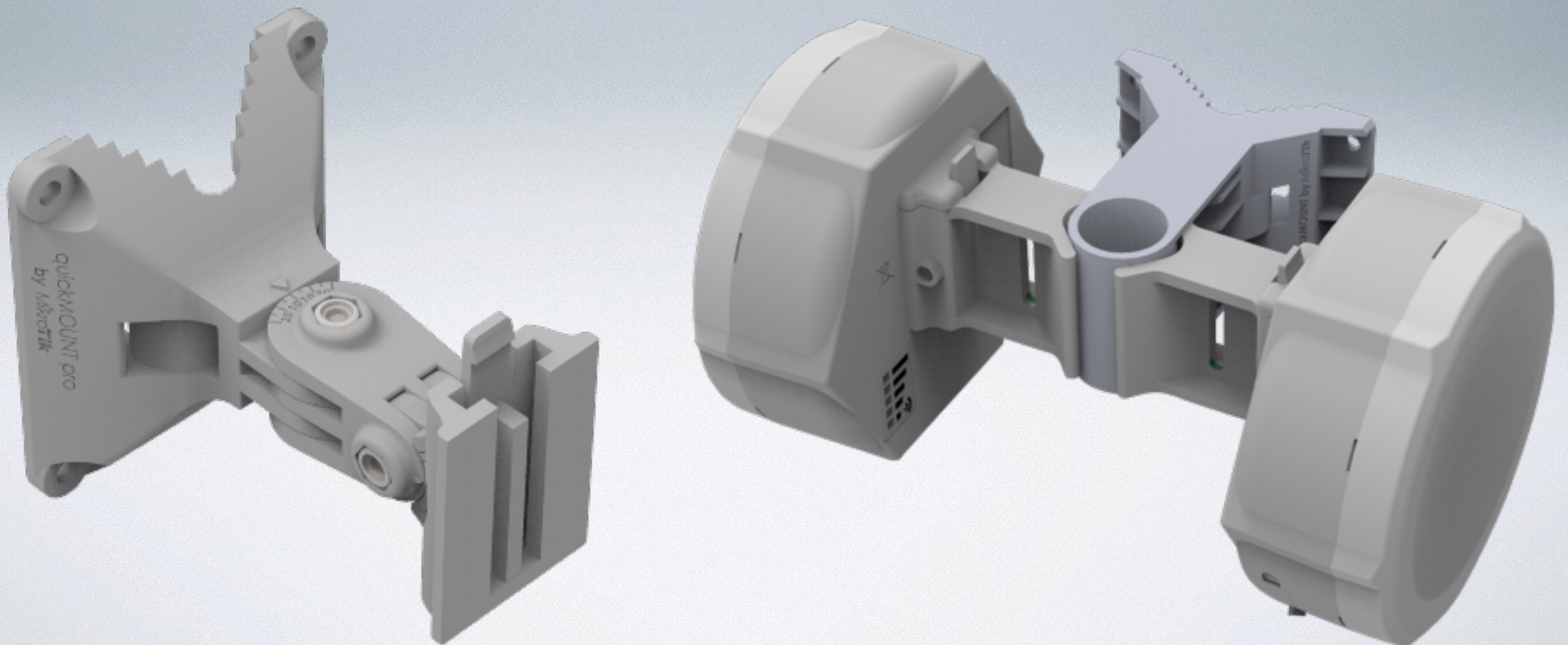


- RB3011UiAS-RM: \$179
- RB3011UiAS-2HnD-IN: \$199



# QuickMount

- Easy to mount to wall, SXT or other devices
- Able to mount two SXT units for repeater setup
- Pro model allows precise alignment





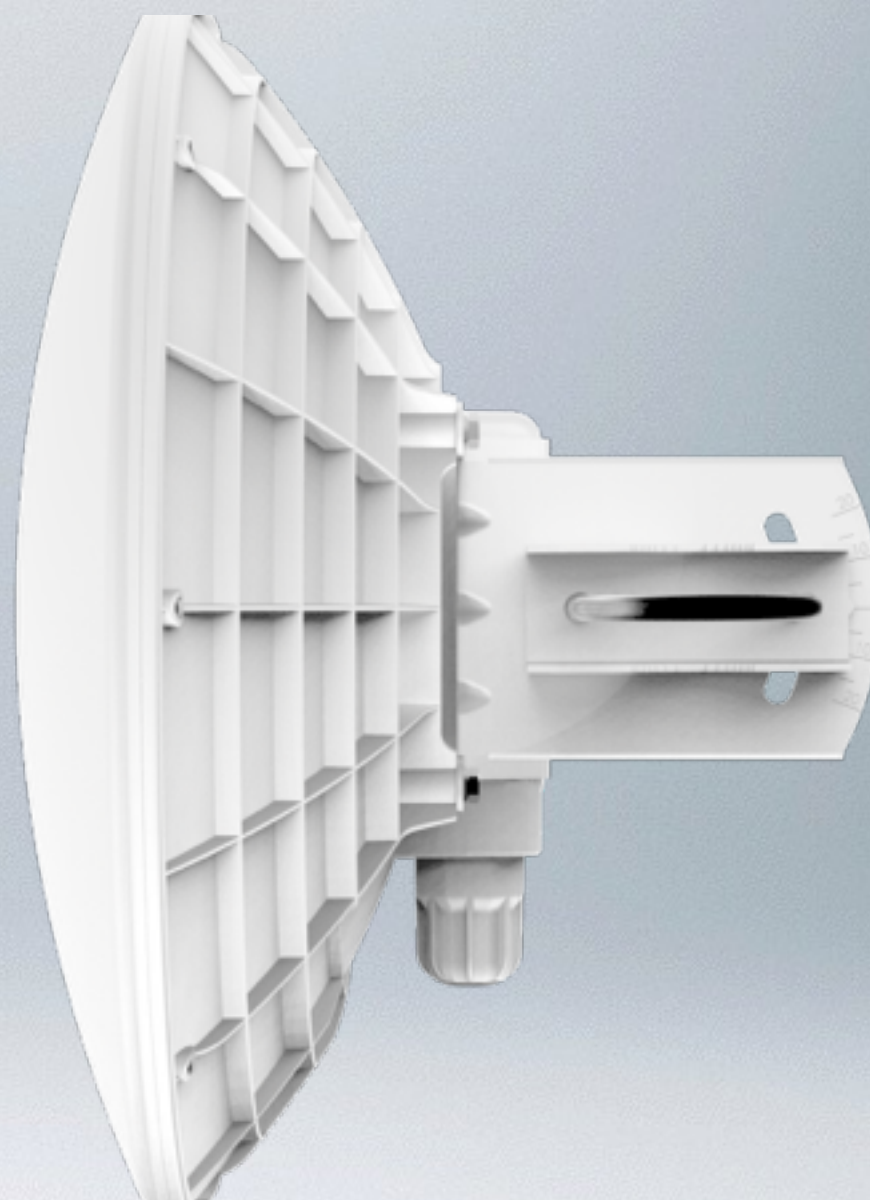


# DynaDish 5

- new 802.11ac outdoor device
- ideal for long distance point-to-point links
- 5GHz dual chain board integrated into 23dBi dish antenna with 8 degree beam width
- 720Mhz CPU 300MHz DDR2
- one Gigabit Ethernet port

\$179





DynaDish

Enjoy the MUM!