

MUM Perú

Febrero 2019



What do we do?

We create networks

MikroTik

- Established 1996
- RouterOS created in 1997
- RouterBOARD created in 2002
- First MUM event in Prague 2006
- MUM Indonesia 2018 had over 3700 people
- 31 events in 2018


LETONIA
Iceland
Finland
Sweden
Norway
Russia
Estonia
Den-
mark
Lithuania
Ireland
United
Kingdom
Belarus
Kazakhstan
Nether-
lands
Poland
Belgium
Germany
Ukraine
Luxembourg
Czech Republic
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Croatia
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Armenia
Monaco
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Serbia
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Marino
Andorra
Monte-
negro
Bulgaria
Portugal
Italy
Iran
Spain
Mace-
donia
Vatican City
Al-
ba-
nia
Turkey
Greece
Syria
Iraq

TECHNOLOGIES

- Wired routers, Ethernet, SFP
- Switches
- Wi-Fi 802.11ac, 2GHz, 5GHz
- Mobile networks, 4G, LTE
- 60GHz connectivity.

PRODUCT FAMILIES

RouterOS
built and advanced for more than 20 years

RouterBOARD
Wireless outdoor, indoor, Ethernet routers

CRS
Switches with RouterOS

CSS
Switches with SwOS

More than 190 MUM events around the world



STAFF

Look for MikroTik staff in the red t-shirts:

- Karlis Oga (sales)
- Sergejs Boginskis (technical support)
- Kaspars Krampis (training)

Agenda

Presentaciones	10:00
Almuerzo (con vouchers)	13:15
Presentaciones	14:45
Sorteo	17:00

mt.lv/agenda

WiFi

SSID: **MUM**

Password: **MikroTik**

MUM Live

www.youtube.com/mikrotik

Special Thanks

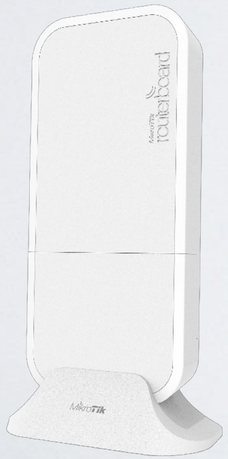




Some of our latest products

60GHz device family

wAP60



LHG60



SXTsq Lite60



LHG Lite60



MikroTik 60GHz Products

PtP Link Distances at Full Speed

LHG 60G	**1500+ meters**	**LHG 60G**
LHG 60G	**800+ meters**	**wAP 60G**
LHG Lite60	**800+ meters**	**wAP 60G**
SXTsq Lite60	**200+ meters**	**wAP 60G**
wAP 60G	**200+ meters**	**wAP 60G**

LHG Lite60

- 60 GHz CPE
- LHG design
- 100 Mbps Ethernet
- For distance 800 meters +
- Price $99



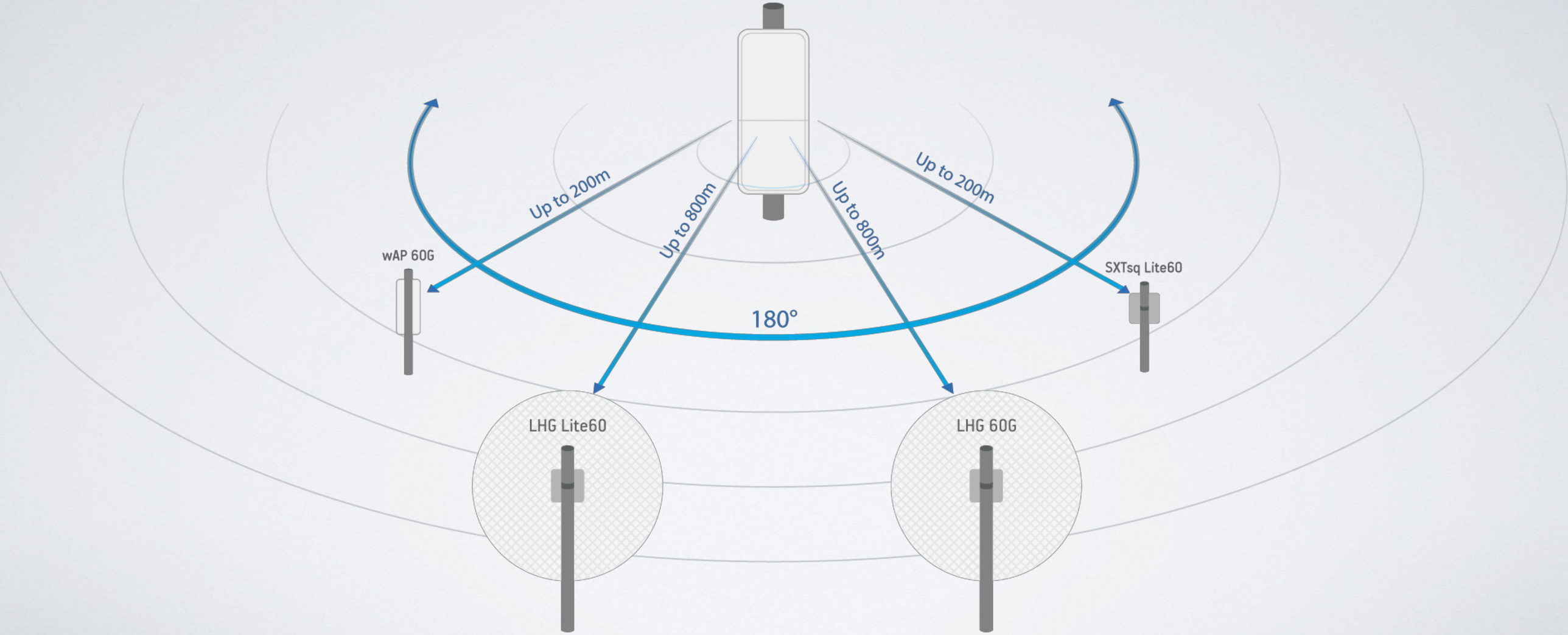
wAP 60Gx3 AP

- 60 GHz AP
- Now with 180° beam width

  (3x times wider!)
- Supports up to 8 clients
- 1 Gbps Ethernet
- Price $199



wAP 60Gx3 AP

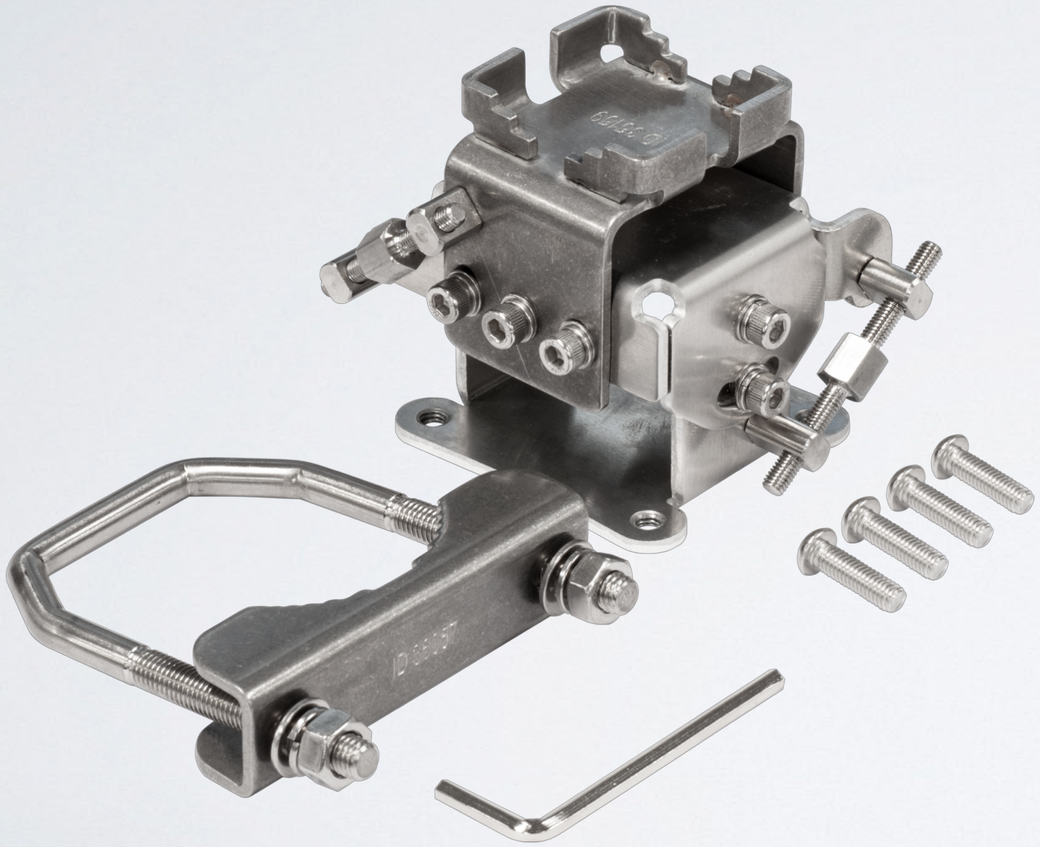

Up to 200m
Up to 800m
Up to 800m
Up to 200m
wAP 60G
SXTsq Lite60
180°
LHG Lite60
LHG 60G

LHG LTE kit



- LTE built-in modem
- 17 dBi, 25 angle
- 4 category (150 Mbps/50 Mbps) LTE
- 3G - R7/R8
- For long distances
- Kit price $159

solidMOUNT

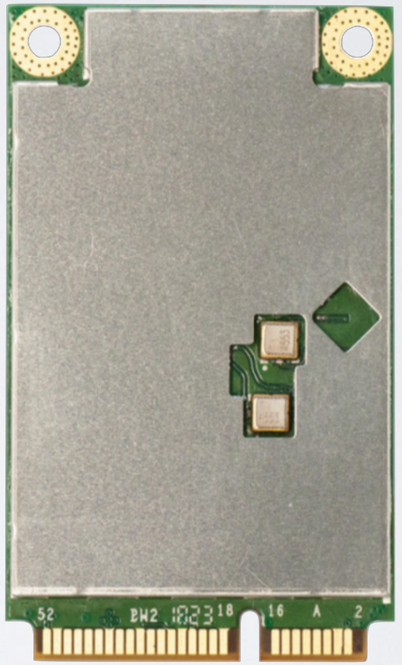


- Allows vertical and horizontal adjustments
- Supports all LHG series (including LHG XL)
- Made from metal
- Includes U-bolt and mounting kit
- $29

R11e-4G

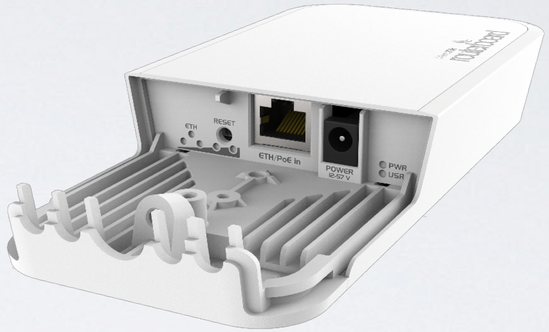
- 4G Modem (no 2G/3G)
- 4 Category (150Mbps/ 50Mbps)
- 3,7,20,31 FDD bands
- 41n,42,43 TDD bands
- $79





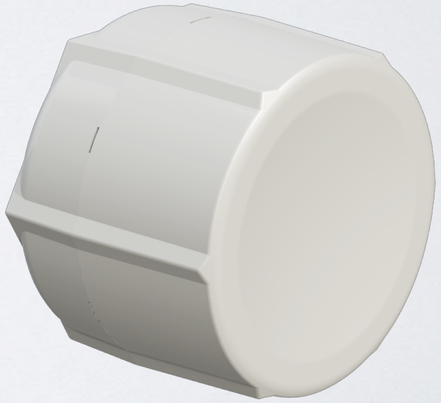
4G kits

- wAP 4G kit $129
- LtAP mini 4G kit $139
- SXT 4G kit $139
- LHG 4G kit $169



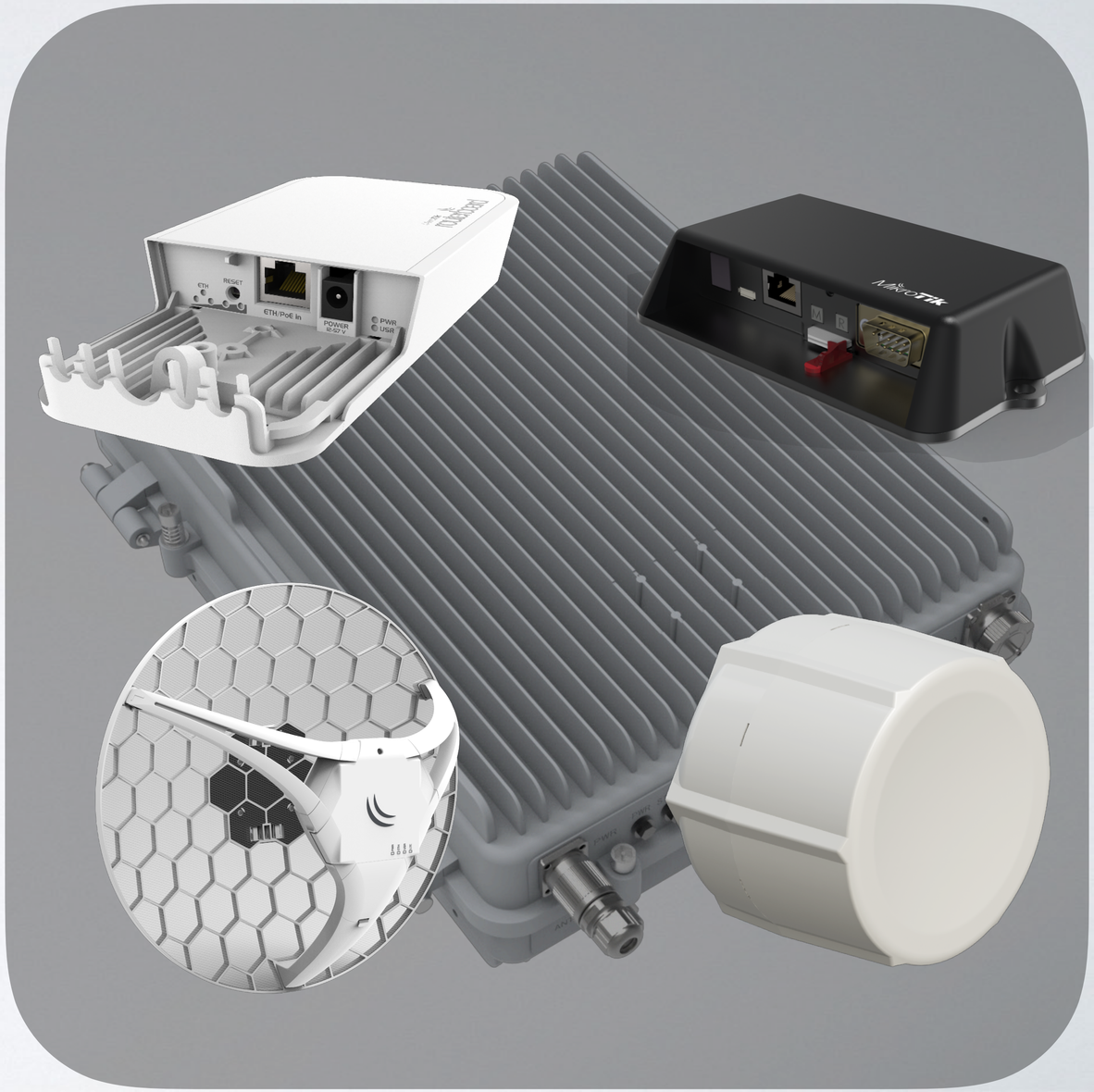






InterCell - LTE base station

- LTE base station for WISPs or mobile operators
- LTE bands 38 and 39 (4 models)
- Up to 192 clients
- Can use together with MikroTik LTE CPE's
- Price $2200 - $3500



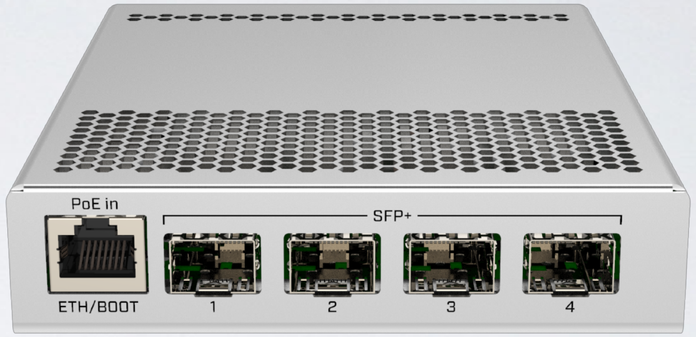
mANTBox2 12s

- 2 GHz sector antenna
- 12 dBi
- RouterBOARD built-in
- Price $99



CRS305-1G-4S+IN

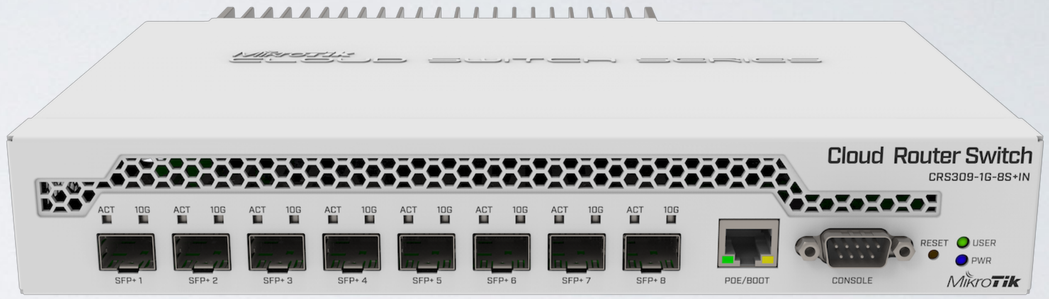
- 4x SFP+ ports
- 1x Gigabit Ethernet
- Dual boot: RouterOS / SwOS
- Metallic enclosure, silent
- Dual DC jacks
- Kit price $149

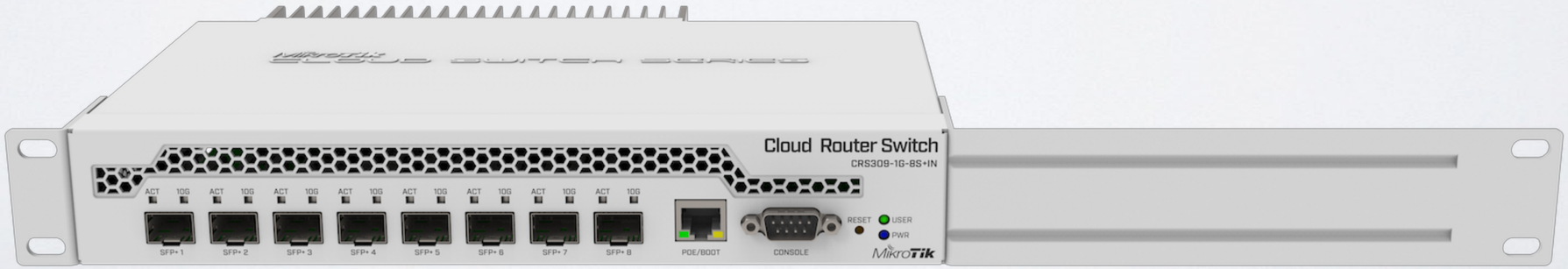


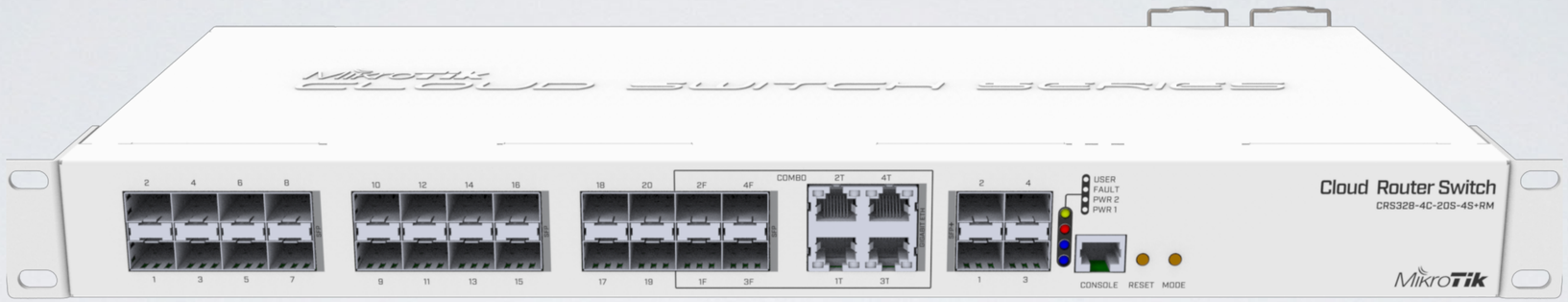


CRS309-1G-8S+PC

- 8x SFP+ ports
- 1x Gigabit Ethernet
- Dual boot: RouterOS / SwOS
- Passive cooling case, silent
- Redundant power using PoE
- Kit price $269







CRS328-4C-20S-4S+RM

- 20x SFP ports
- 4x SFP+ ports
- 4x ETH/SFP combo ports
- Dual PSU
- Kit price $369

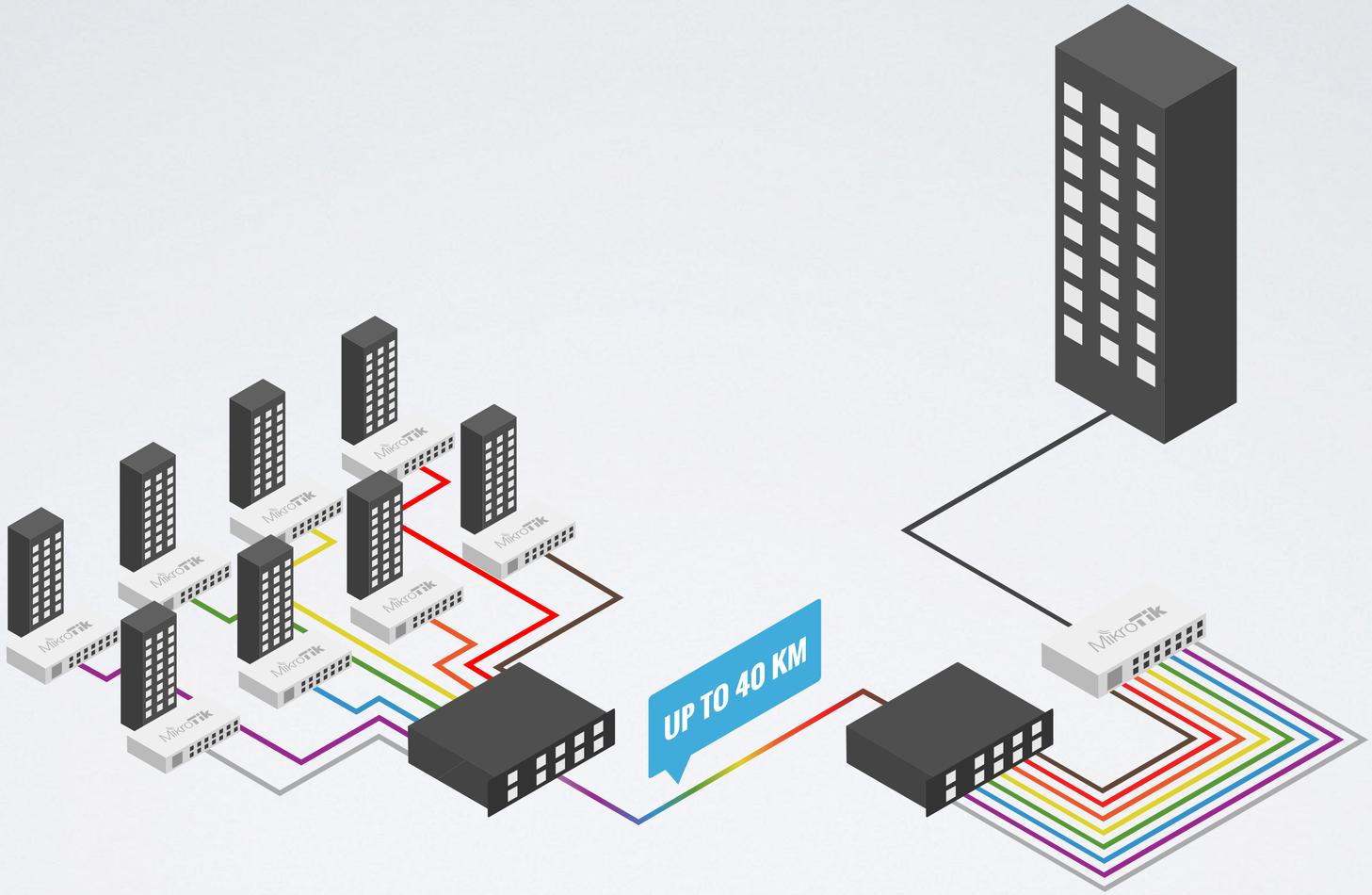
CWDM



- Passive MUX/DEMUX unit
- Combine up to eight Fiber links into one
- Supports both SFP and SFP+
- Price $359



CWDM



RouterBOARD 4011



RouterBOARD 4011

- 4 Core Cortex A15 CPU
- 10 Gigabit SFP+
- IPsec hardware encryption
- 1 GB RAM
- PoE out
- Price $199



RouterBOARD 4011



RouterBOARD 4011

- 2 chains for 2 GHz, 802.11 b/g/n
- 4 chains for 5 GHz, 802.11 a/n/ac
- 160 MHz channel width
- 1733 Mbps + 300 Mbps data rates
- Price $249



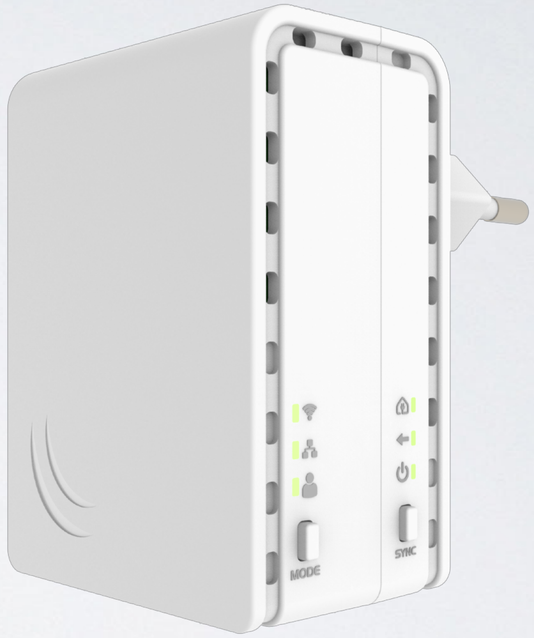
RouterBOARD 4011

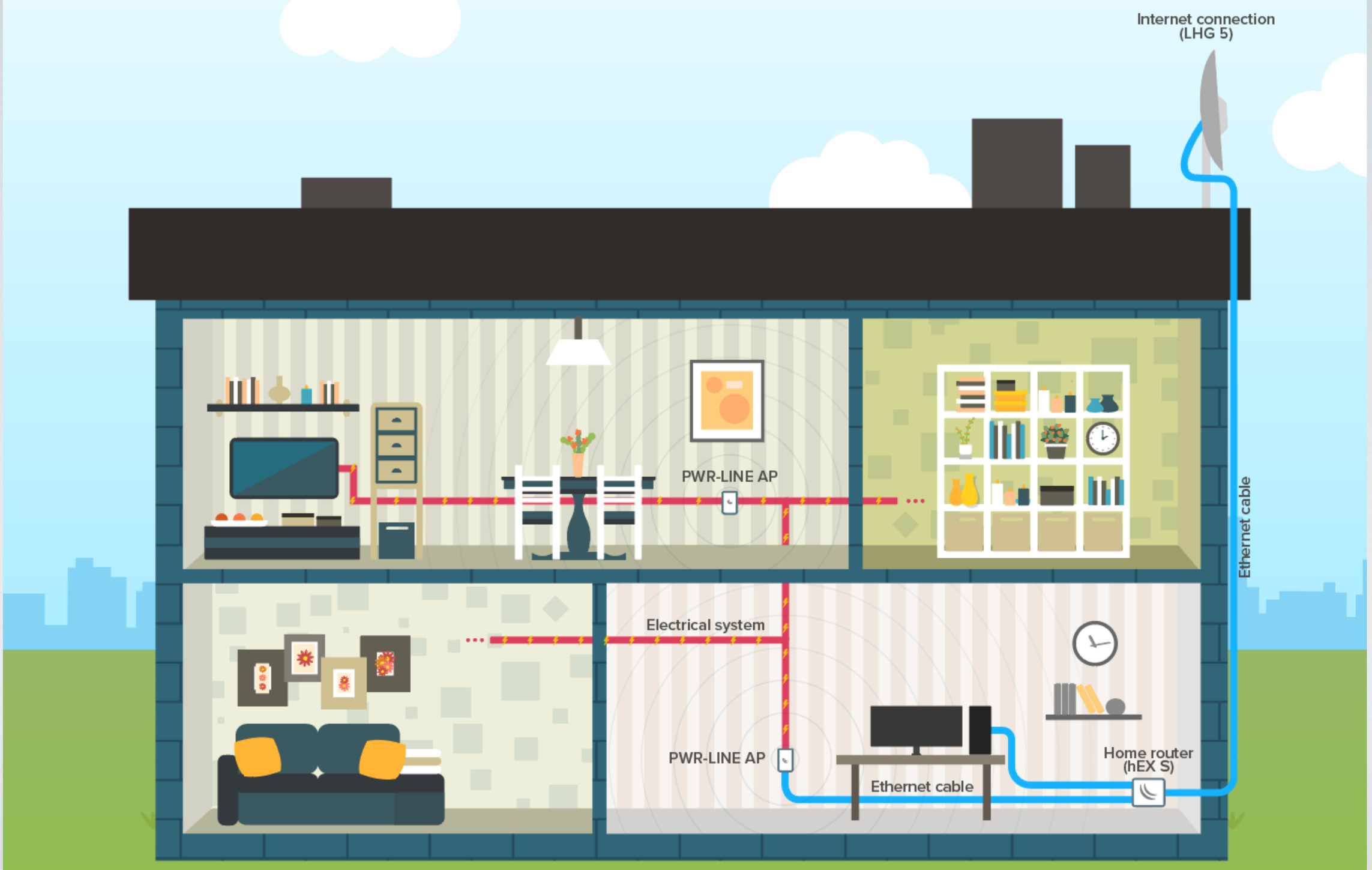


RB4011 wall mount kit -12$

PWR-Line AP

- Small AP that directly plugs into socket
- Makes 100 Mbps links with others like it
- Build WiFi network without special cabling
- Automatically pairs with new devices
- Uses HomePlug AV standard




Internet connection
(LHG 5)
Ethernet cable
PWR-LINE AP
Electrical system
PWR-LINE AP
Ethernet cable
Home router
(hEX S)

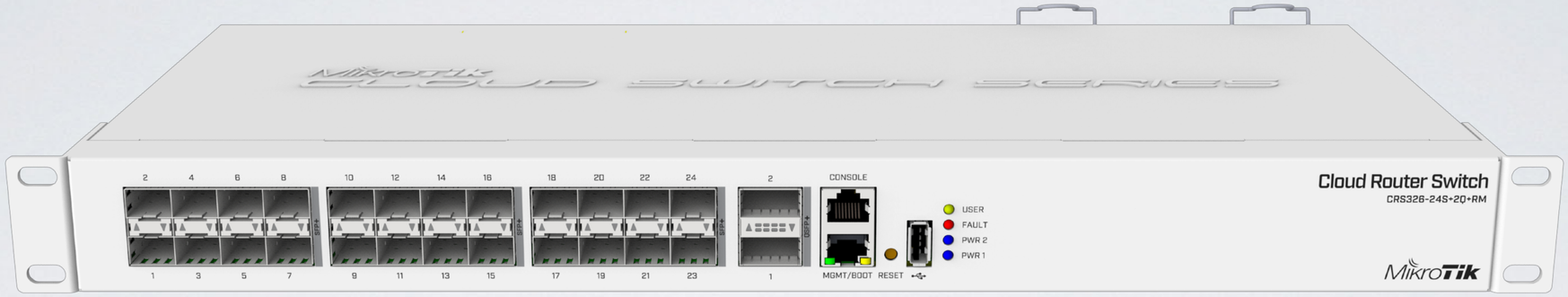
Some of our upcoming products

LtAP

- 2.4 GHz AP in a rugged case
- 2x miniPCIe for LTE
- Built-in GPS
- Optional external antenna for GPS and LTE
- 1 Gbps Ethernet interface
- Perfect for outdoor and mobile applications

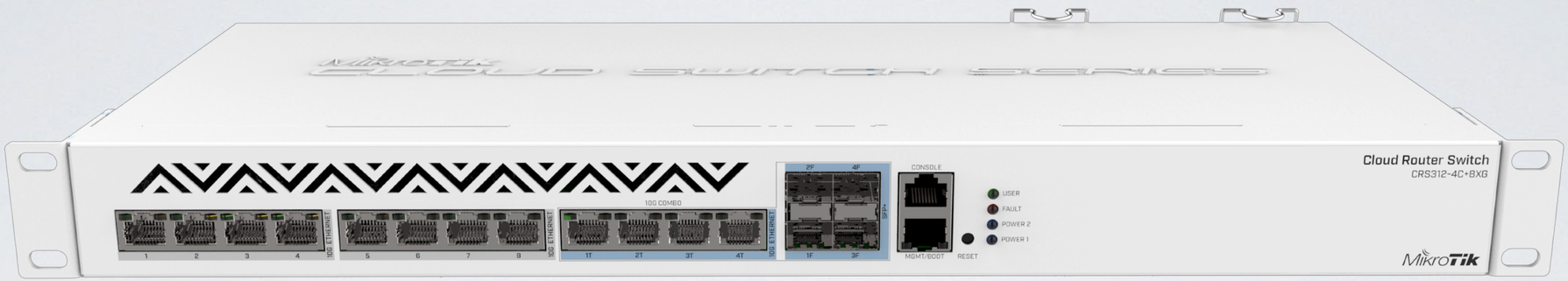






CRS326-24S+2Q+RM

- 24x SFP+ for 10 Gbit connections
- 2x QSFP+ ports for 40 Gbit connections
- RJ45 console and Ethernet ports for management
- USB port, Dual PSU



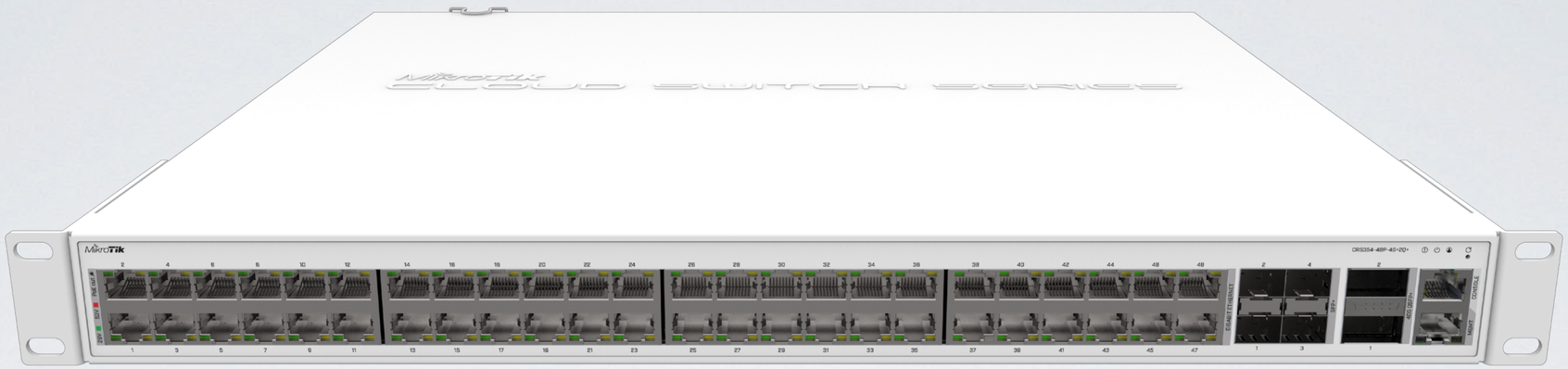
CRS312-4C+8XG

- 8x 10G Ethernet ports
- 4x 10G Ethernet / 10G SFP+ combo ports
- Console and management ports
- Dual PSU



CRS354-48G-4S+2Q+

- 48x Gigabit ports
- 4x SFP+ for 10 Gbit connections
- 2x QSFP+ ports for 40 Gbit connections
- Dual PSU



CRS354-48P-4S+2Q+

- 48x Gigabit ports with PoE out
- 4x SFP+ for 10 Gbit connections
- 2x QSFP+ ports for 40 Gbit connections

Software related news

60 GHz Improvements

- Major received signal sensitivity improvements
- Maximum reachable distance improvements (up to 4 KM at full speed)
- Decreased re-connection time on lost connection
- PtMP performance improvements
- Added hardware stats [/interface w60g print stats]
- Other improvements

Security updates

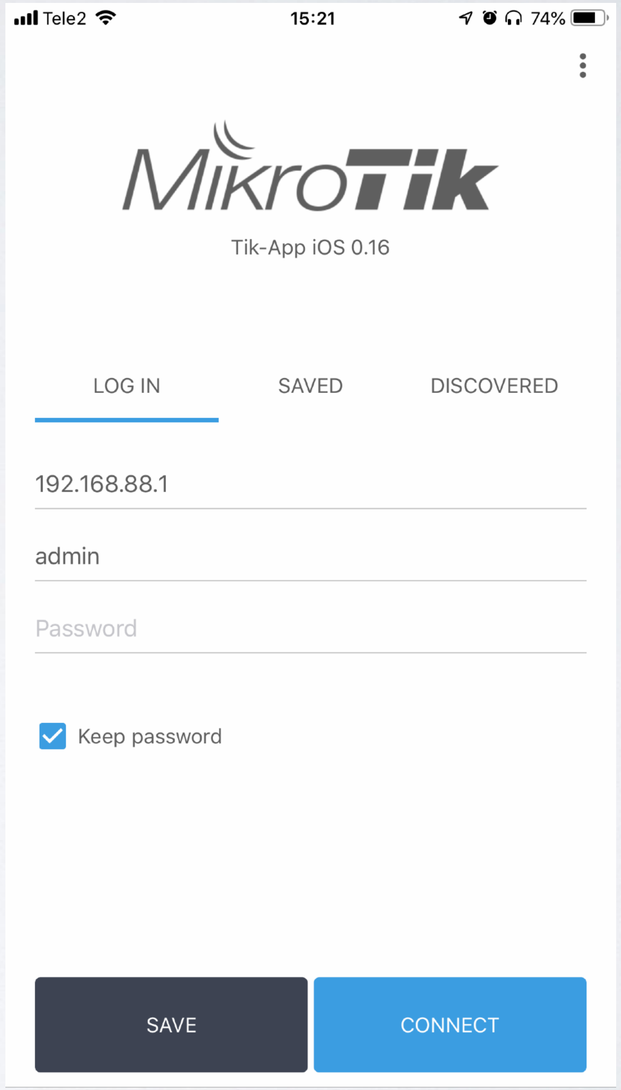


https://blog.mikrotik.com

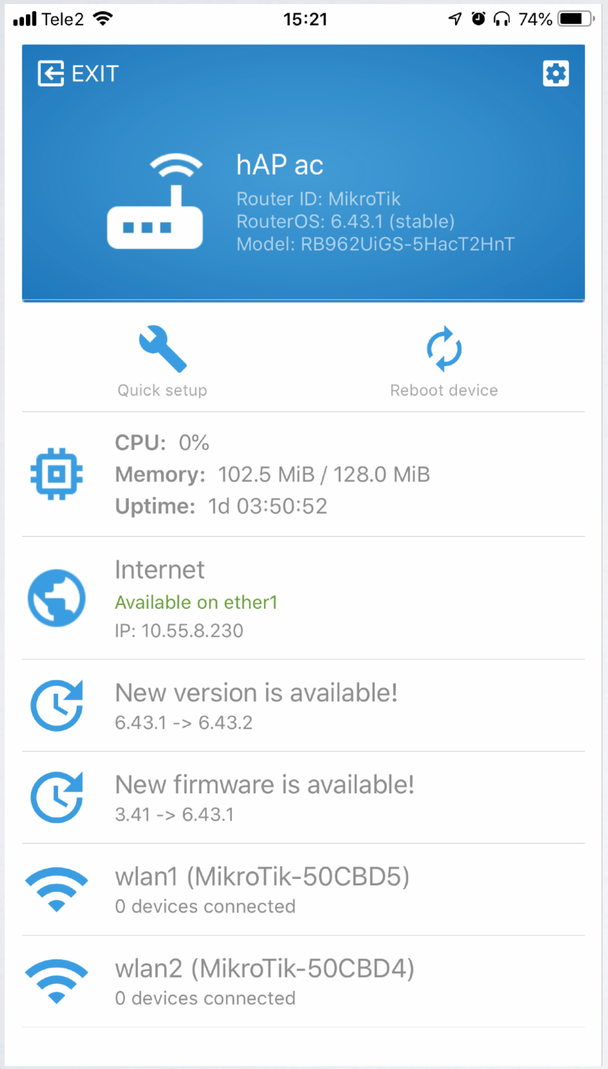
- Fixed within 24 hours (in April, 2018)
- Affects only devices with no firewall for Winbox services
- MikroTik routers **have** default firewall
- Versions that include fix - v6.40.8 (long-term), v6.42.1 (stable)

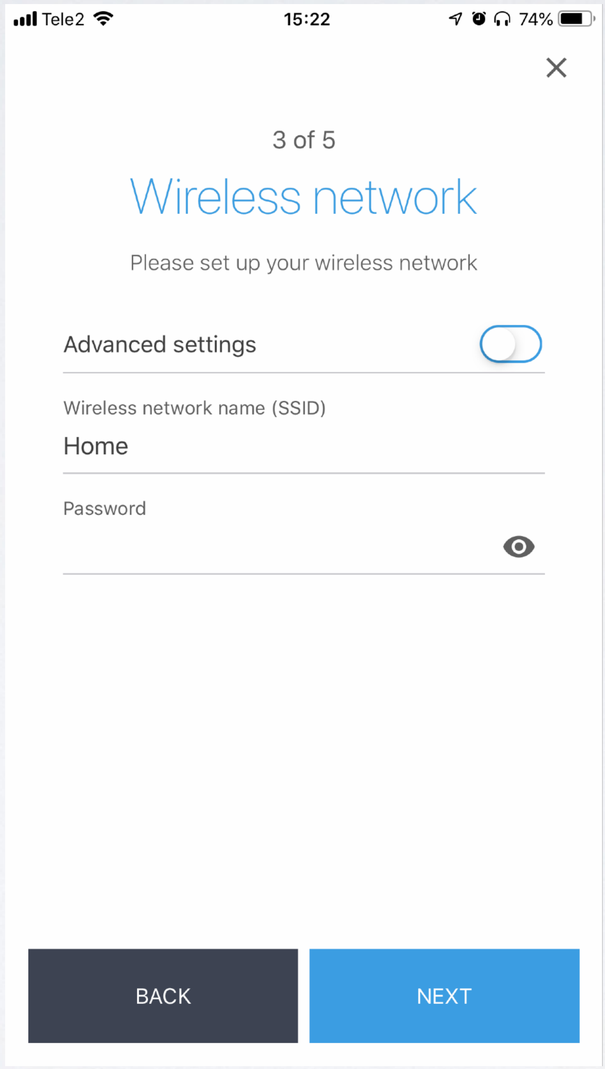
MikroTik App iOS / Android

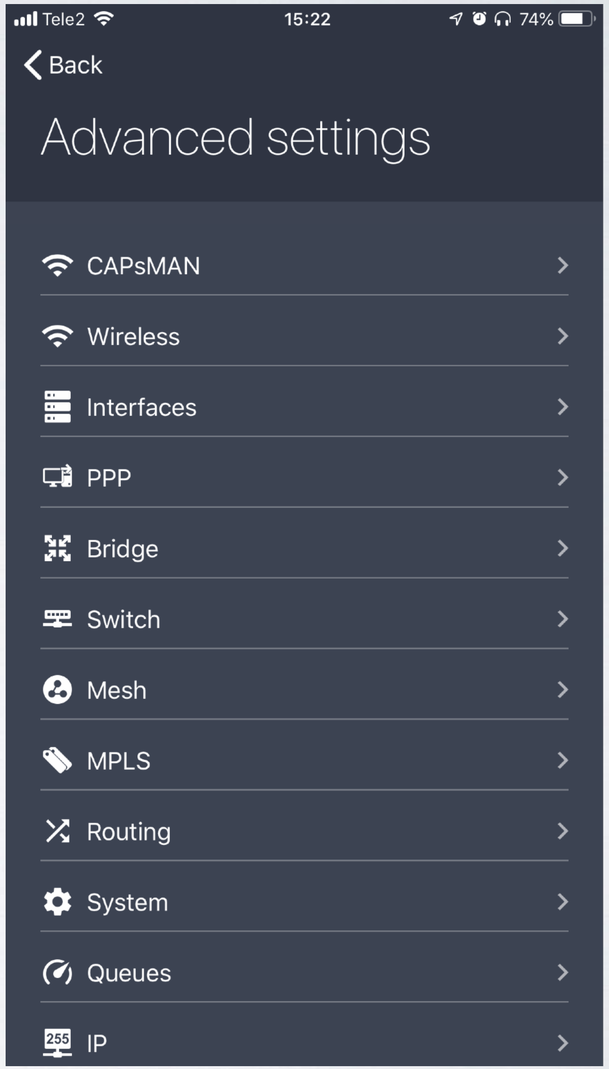
- Auto-Configuration
- Simplified interface
- Questions and suggestions: support@mikrotik.com



MikroTik App iOS / Android

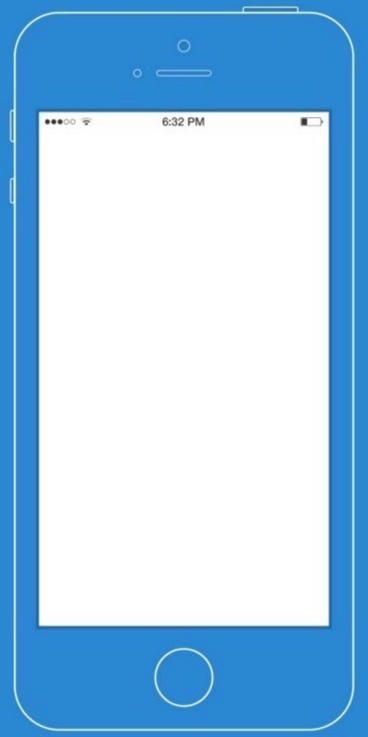






MikroTik Tik-App **iOS** beta invite

TestFlight



Need help?

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

After the MUM

- All presentations - mum.mikrotik.com
- Videos - youtube.com/mikrotik
- License for paid and voucher registrations will be sent by an e-mail


MikroTik