More than 150 MUMs all around the world

- Established 1996
- RouterOS created in 1997
- RouterBOARD created in 2002
- First MUM event in Prague 2006
- MUM in Indonesia had 2500 people
- 34 events in 2016

MikroTik
LETONIA
Iceland
Finland
Sweden
Norway
Russia
Estonia
Lithuania
Denmark
Ireland
United Kingdom
Belarus
Netherlands
Poland
Belgium
Germany
Ukraine
Luxembourg
Czech Republic
Slovakia
Moldova
France
Switzerland
Liechtenstein
Austria
Hungary
Romania
Slovenia
Croatia
Georgia
Armenia
Monaco
San Marino
Bosnia and Herzegovina
Serbia
Andorra
Montenegro
Bulgaria
Portugal
Spain
Italy
Vatican City
Macedonia
Albania
Turkey
Greece
Syria

Edmunds Aperans (sales)
Kaspars Krampis (training)
Sergejs Boginskis (support)

STAFF

Horario

9:00AM	Presentaciónes
12:00PM	Almuerzo (con vouchers)
1:30PM	Presentaciónes
6:15PM	Sorteo (lottery)
	Bebidas (GRATIS)

mt.lv/agenda

WiFi

SSID: MUM_Ecuador _2017

Password: mikrotik

MUM live

www.youtube.com/mikrotik

¡Muchisimas gracias!

Altala

Our products include

RouterOS
built and advanced for more than 20 years

RouterBOARD
Wireless outdoor&indoor, Ethernet routers

CRS
Switches with RouterOS

CSS
Switches with SwOS

now

cAP lite

- Small and light 2.4GHz AP
- Case can be changed
- Print your own cases
- Perfect for hotel, public areas and extending networks in your house

now

hAP mini

- Tiny 2GHz AP with three ports
- Upright design in new colours
- Only 8cm tall
- Two LAN ports, one WAN
- Configure differently if needed

hAP mini

8cm

hAP mini

hAP lite

now

DynaDish 6 and SXT 6

- Great for use in less used 6GHz spectrum
- Same familiar designs

wAP LTE kit

- Wireless AP for LTE
- EU/Int version supports LTE
  bands 1,2, 3, 7, 8, 20, 38, 40
- 2G, 3G, LTE supported
- Optional external antennas
- Comes with a stand mount

wAP LTE kit (US)

- Wireless AP for LTE
- US version supports LTE
  bands 2, 4, 5,12
- 3G, LTE supported
- Optional external antennas
- Comes with a stand mount

LtAP mini

- 2.4GHz AP in a rugged case
- miniPCIe for LTE
- Built in GPS
- Serial port for other devices
- Perfect for cars or outdoor mobile applications

MIKROTIK
M
R

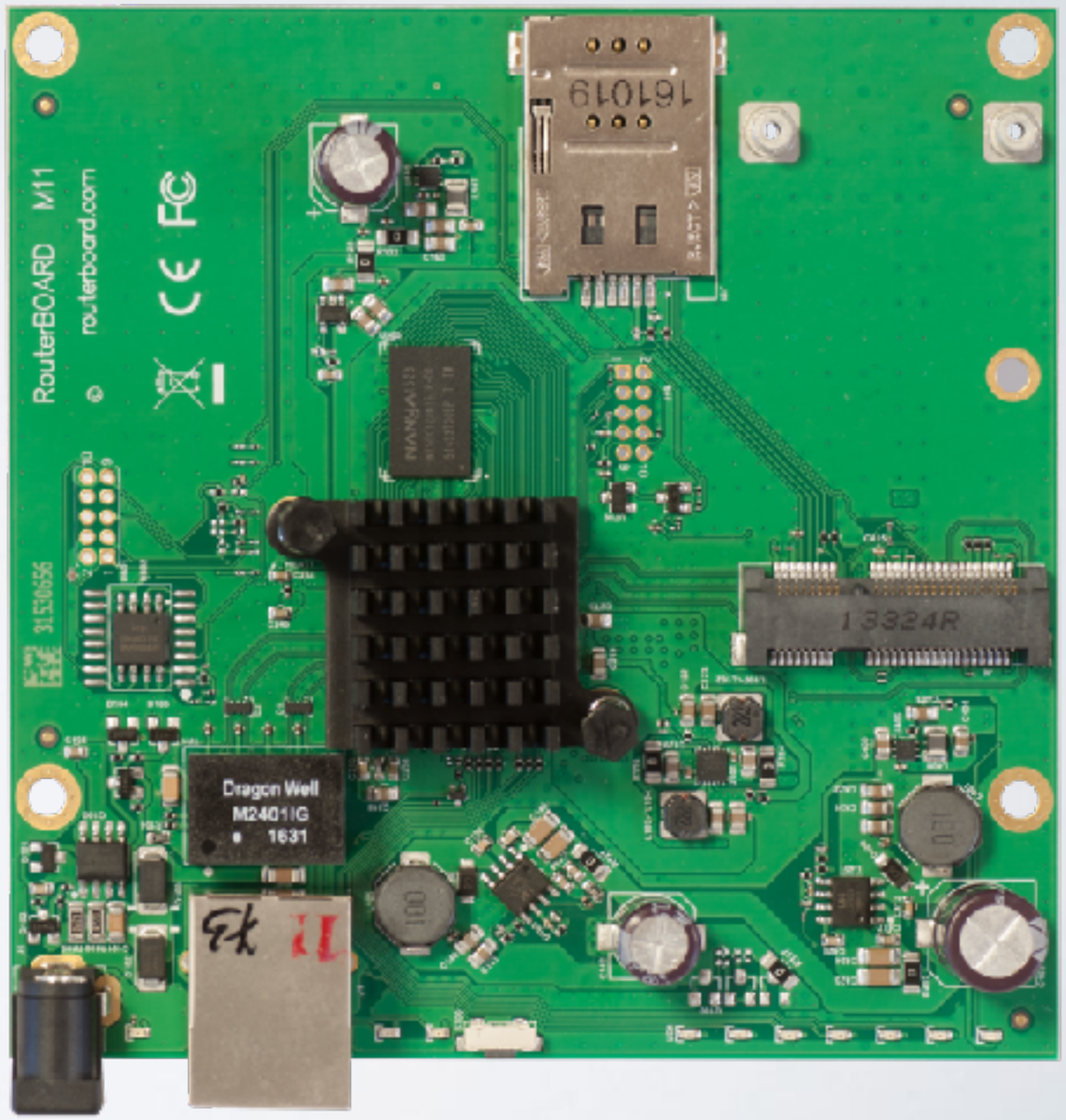
LtAP

- 2x miniPCIe
- Built in 2.4GHz AP
- MMIPS Mediatek CPU 880MHz
- 2x MMCX connectors
- Built in GPS

ecobee

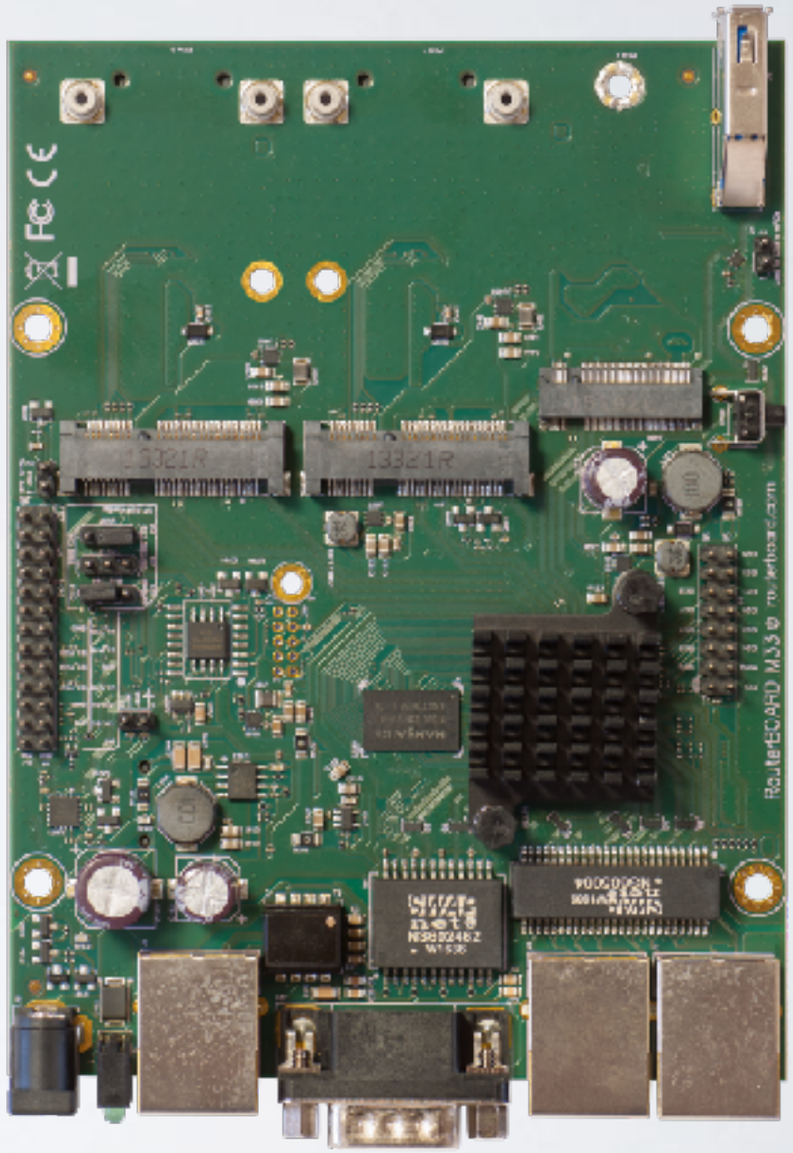
M11

- Four core 880MHz CPU
- 1 miniPCIe slot
- 1 Gigabit ethernet
- Upgrade for RB411



M33

- Four core 880MHz CPU
- 3 Gigabit ethernet
- 2 miniPCIe slots
- 1 M.2 slot
- USB 3.0 and serial port
- Upgrade for RB433



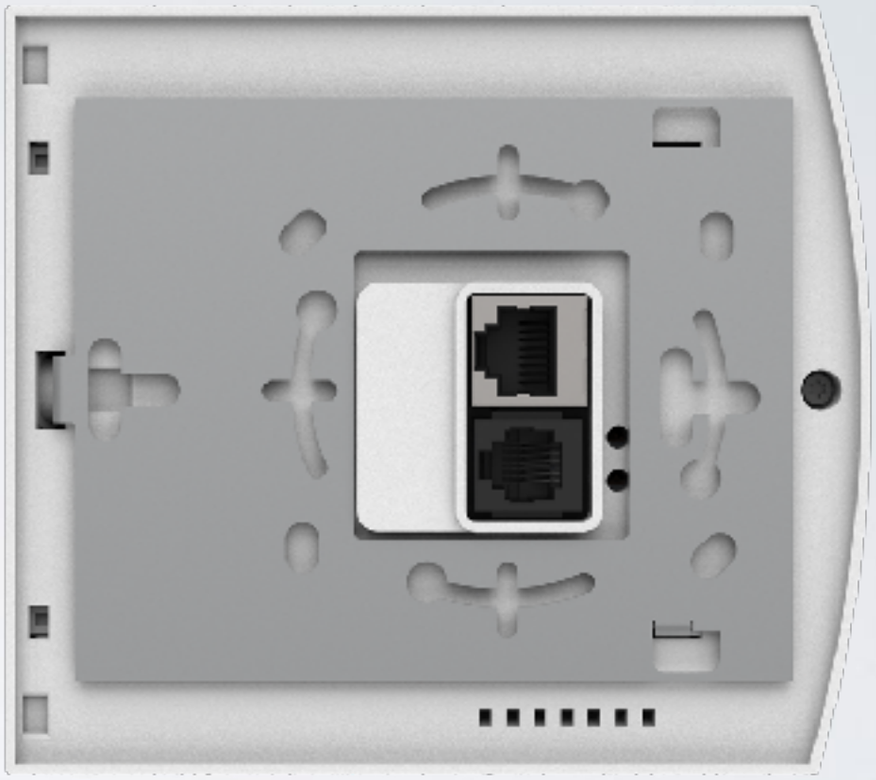
PowerBox Pro

now

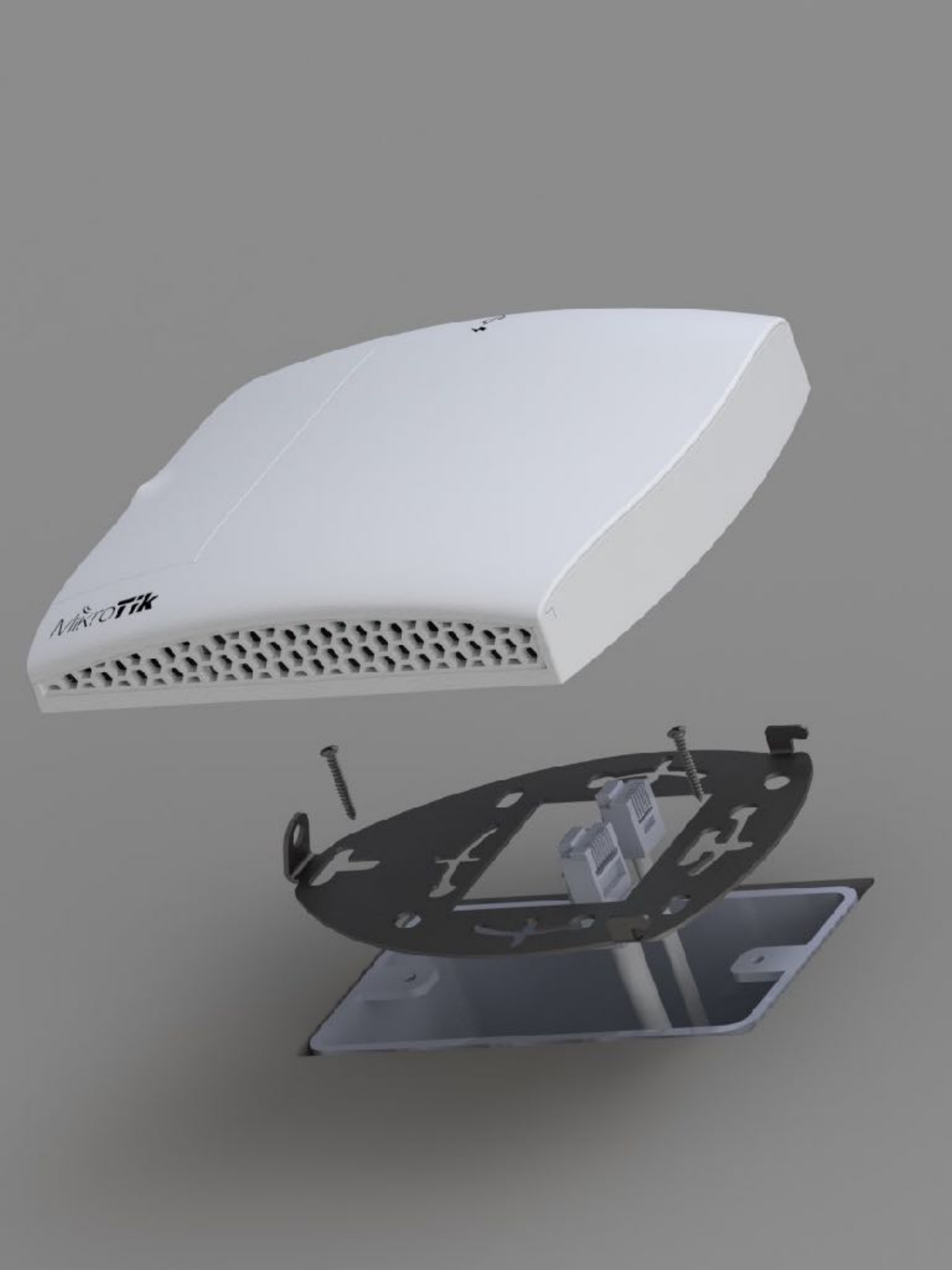
- Gigabit ethernet ports
- PoE output for your CPEs
- Same as hEX PoE
- Supports 802.3af/at
- SFP for fiber to the tower (FttT)
- Improved design

wsAP ac lite

- Mount into standard EU or US electrical sockets
- Dual band ac (2.4 and 5GHz)
- Phone jack passthrough
- Two LAN ports
- USB for charging cell phones



MikroTik


MIKROTIK

now

CSS326-24G-2S+RM

Multiport SwOS switch

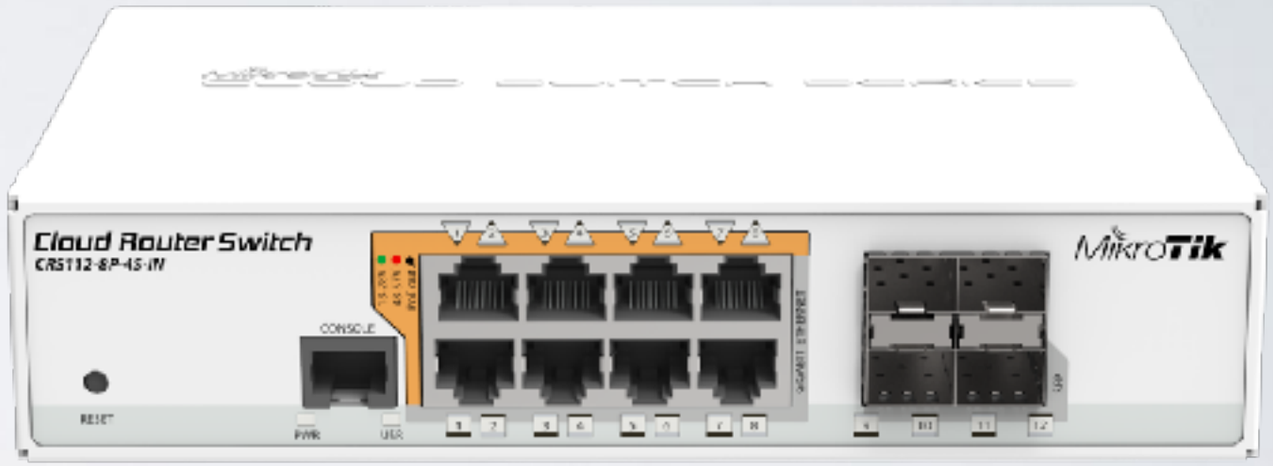
now

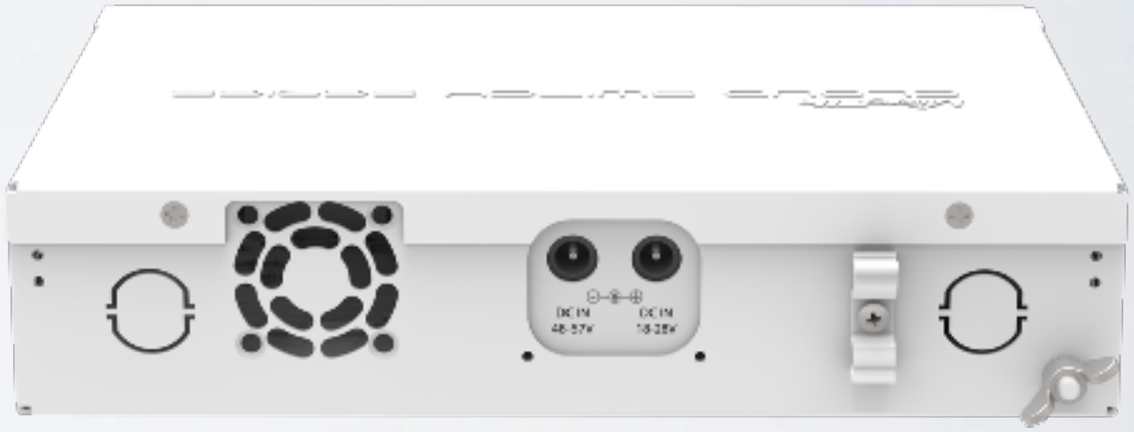
CRS326-24G-2S+RM

Multiport dual boot RouterOS/SwOS switch

CRS112-8P-4S

- PoE out 802.3af/at
- Eight Gigabit ethernet ports
- Separate PSU for passive or 802.3af/at PoE out
- Low voltage PSU included
- Per port auto detection of PoE standard
- Four SFP ports



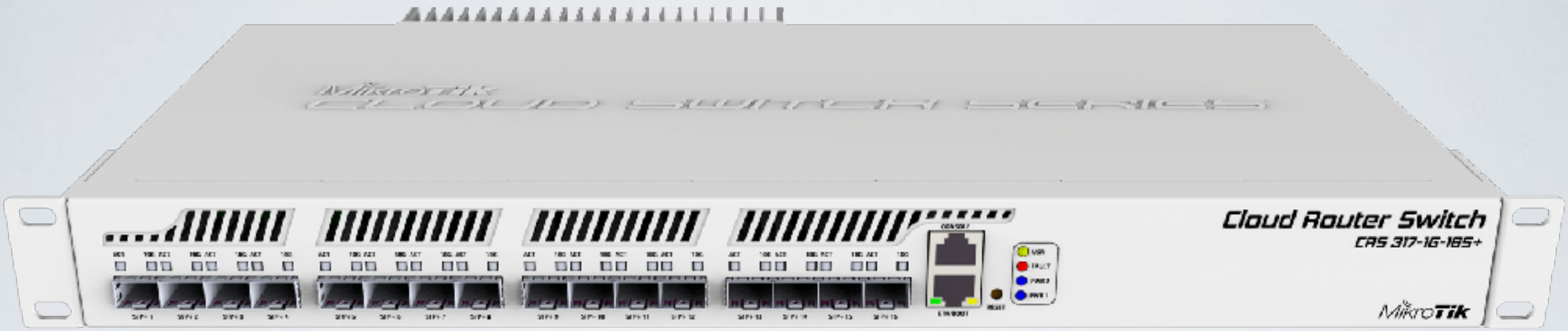


CRS328-24P-4S+RM

PoE out switch

CRS328-24P-4S+RM

- Dual boot SwOS or RouterOS
- 24 ports with PoE out function
- Supports 802.3af/at output
- Per port auto detection of PoE standard
- Four SFP+ ports for 10GbE
- One 120/220V IEC connector



CRS317-1G-16S+

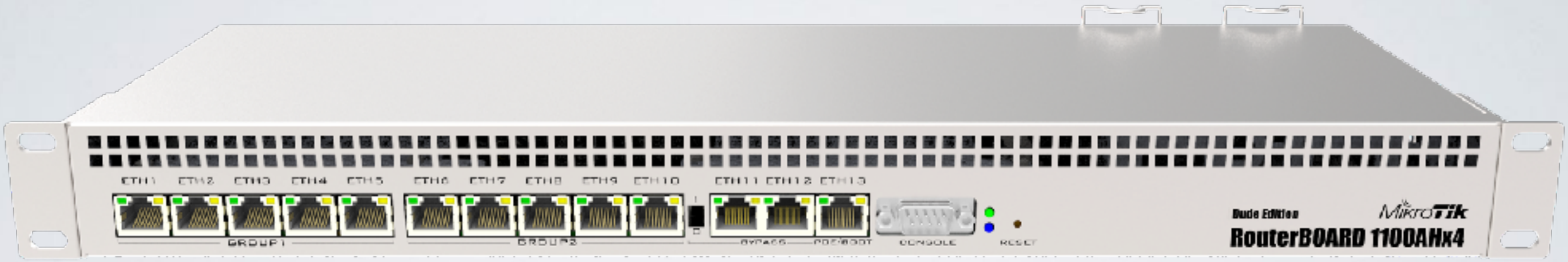
high performance SFP+ switch

now

CRS317-1G-16S+

- 16 SFP+ ports
- Next generation switching chip
- Wire speed for all 10GbE ports
- Hardware-based Spanning Tree Protocol
- Dual boot SwOS or RouterOS

now

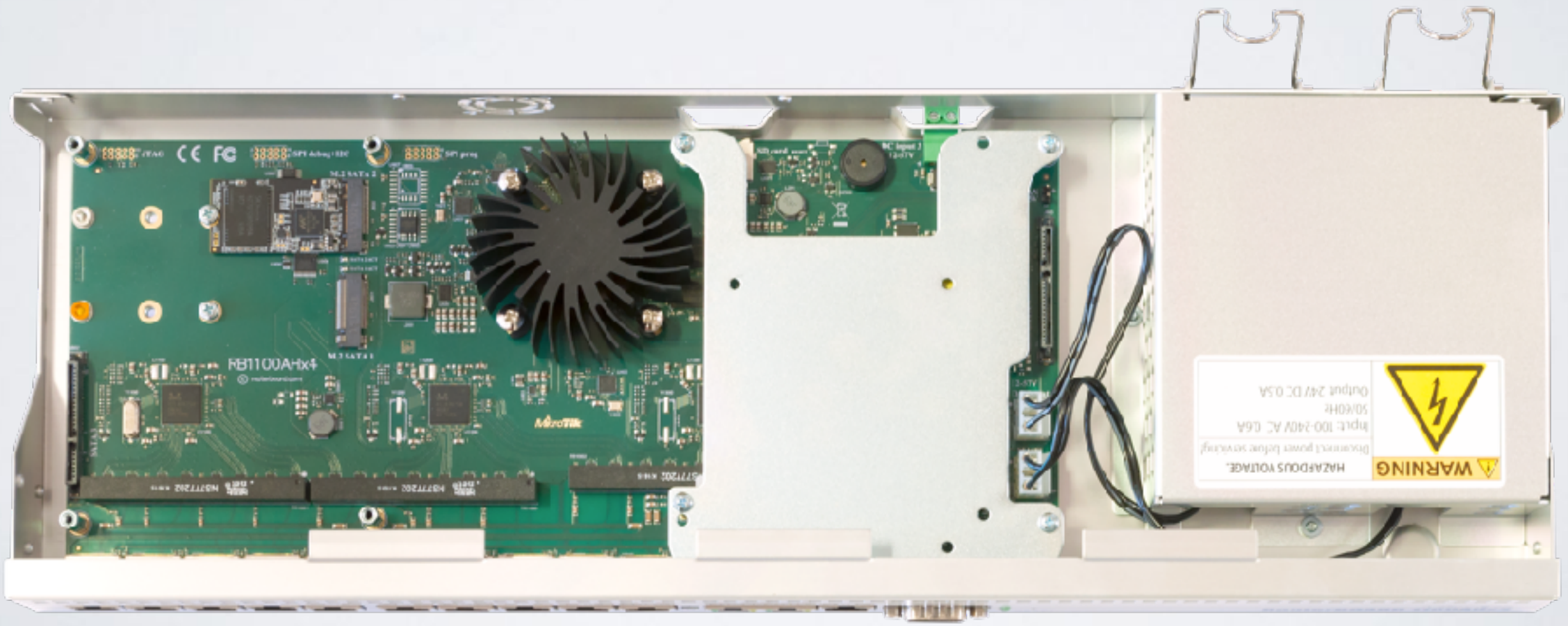


RB1100AHx4

The timeless classic upgraded
with a new quad core CPU and more

Annapurna Alpine AL21400 CPU with
four Cortex A15 cores clocked at 1.4 GHz

- Two SATA3 ports
- Two M.2 ports
- 60GB SSD included
- Accelerated IPsec
- -48V DC telecom power
- Dual PSU



- 5.5 million PPS
- 7.5Gbps
- IPsec up to 2.2Gbps with AES128
- Overclock up to 2GHz

Two editions

- **RB1100AHx4**
- **RB1100AHx4 Dude edition**
  includes 2x M.2 and 2x SATA3 ports

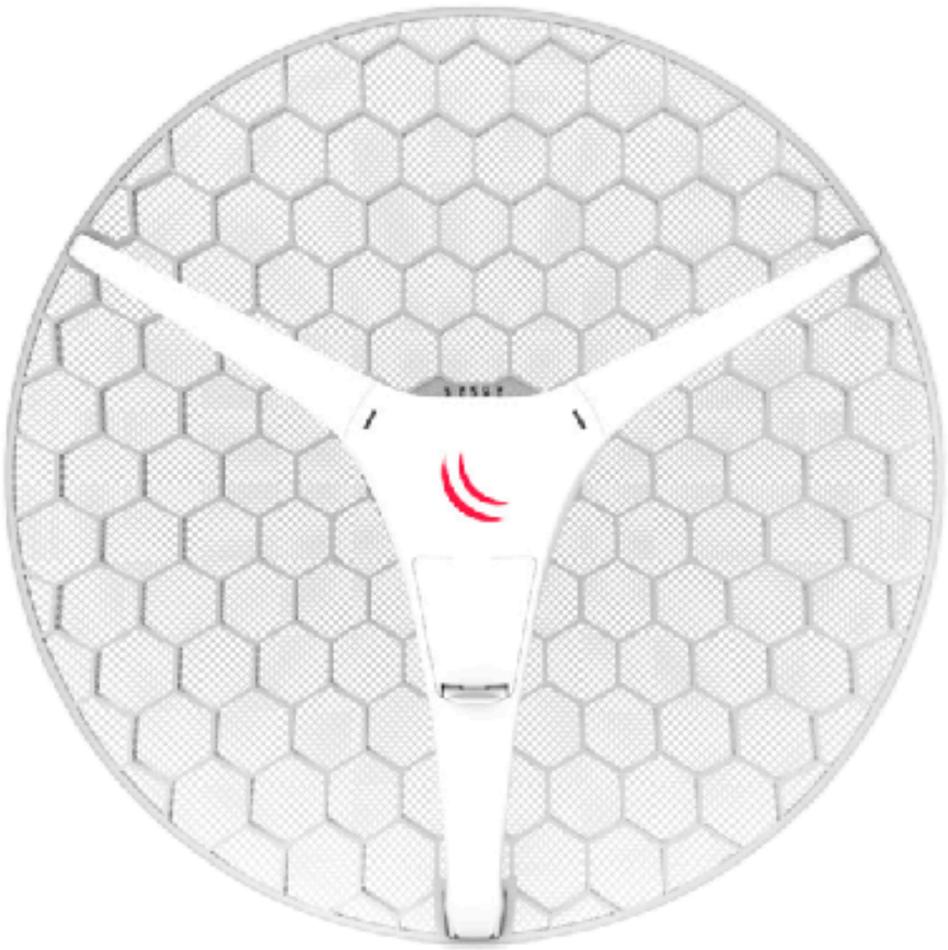
wAP 60G

- 1Gbit full duplex (wire speed)
- Works in 60GHz spectrum
- “Wireless wire” kit preconfigured
- Quad-core ARM CPU
- Targeted for up to 100m distances

LHG 60G

- 1 Gbit full duplex (wire speed)
- Works in 60GHz spectrum
- Familiar LHG design
- Quad-core ARM CPU
- Low cost and low weight
- Targeted for longer distances than 100m

NEW LHG!



LHG XL HP5

LHG HP5

LHG 5

now

LHG HP5

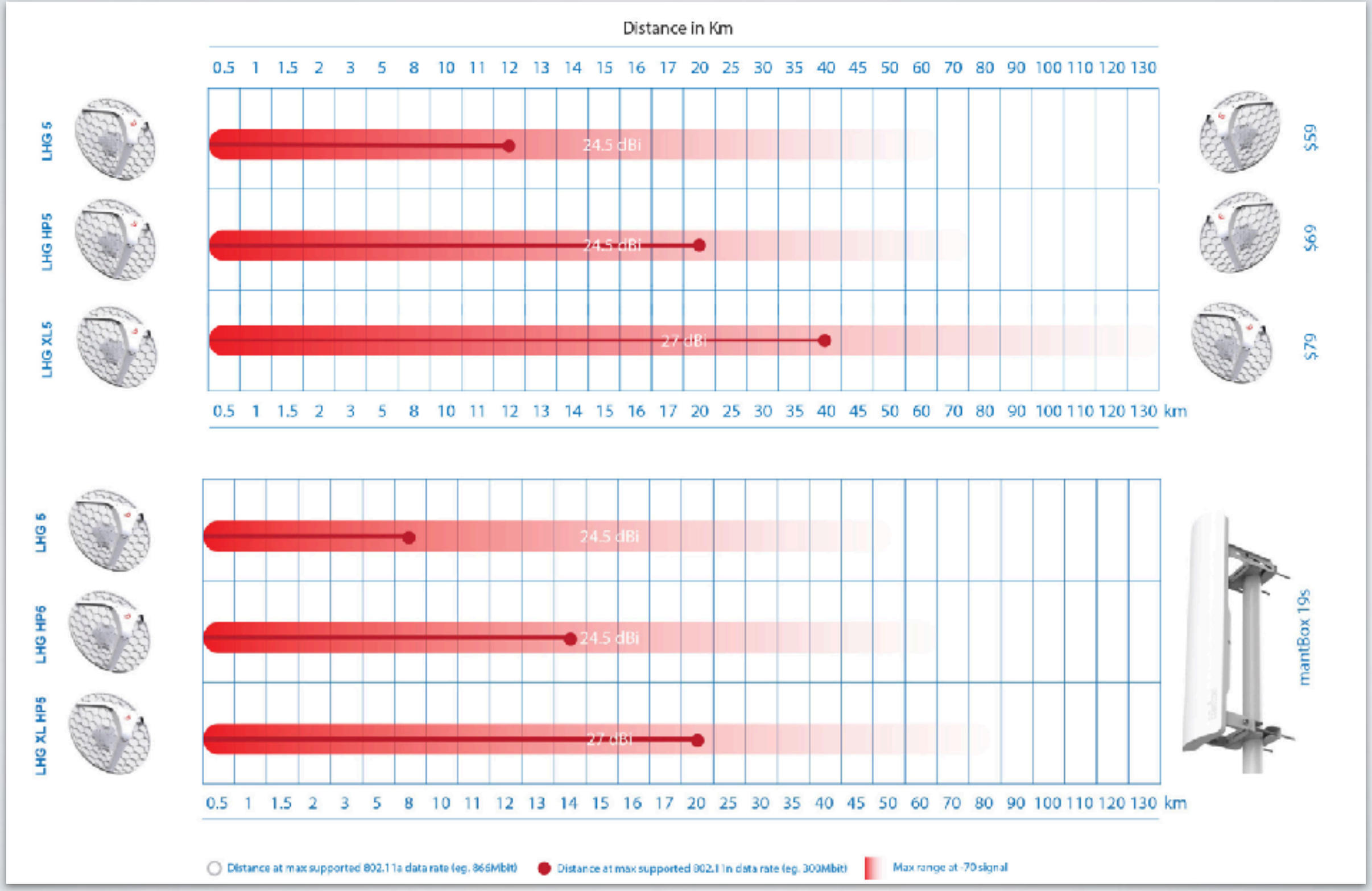
- 630mW
- 20km full speed link
- Familiar LHG design
- Low cost and low weight
- Kit price $69

now

LHG XL HP5

- 630mW
- 40km full speed link
- 27 dBi antenna gain
- Familiar LHG design
- Low cost and low weight
- Kit price $79

NEW LHG!


Distance in Km
0.5 1 1.5 2 3 5 8 10 11 12 13 14 15 16 17 20 25 30 35 40 45 50 60 70 80 90 100 110 120 130
LHG 5
24.5 dBi
$59
LHG HP5
24.5 dBi
$69
LHG XL5
27 dBi
$79
0.5 1 1.5 2 3 5 8 10 11 12 13 14 15 16 17 20 25 30 35 40 45 50 60 70 80 90 100 110 120 130 km
LHG 5
24.5 dBi
LHG HP5
24.5 dBi
LHG XL HP5
27 dBi
mantBox 19s
0.5 1 1.5 2 3 5 8 10 11 12 13 14 15 16 17 20 25 30 35 40 45 50 60 70 80 90 100 110 120 130 km
Distance at max supported 802.11a data rate (eg. 866Mbit)
Distance at max supported 802.11n data rate (eg. 300Mbit)
Max range at -70 signal

now

SXTsq Lite5

- Compact and lightweight
- Two times thinner!
- 16dBi antenna
- 12km wireless link
- Low cost and low weight
- Kit price $46

All Products

- Include free software upgrades for life
- Run the same RouterOS software
- For more info see **routerboard.com**

ROUTEROS FEATURES

CHR

Cloud Hosted Router

- RouterOS version tailored for running in virtual environments
- Runs on VMware Workstation and ESXi, VirtualBox, HyperV, KVM, XenServer, etc.
- Cloud services - Amazon, Azure and others

CHR

Use cases

- Firewall for your cloud services
- VPN server in the cloud
- The Dude monitoring server
- Simulate networks for learning or training
- And many more

CHR

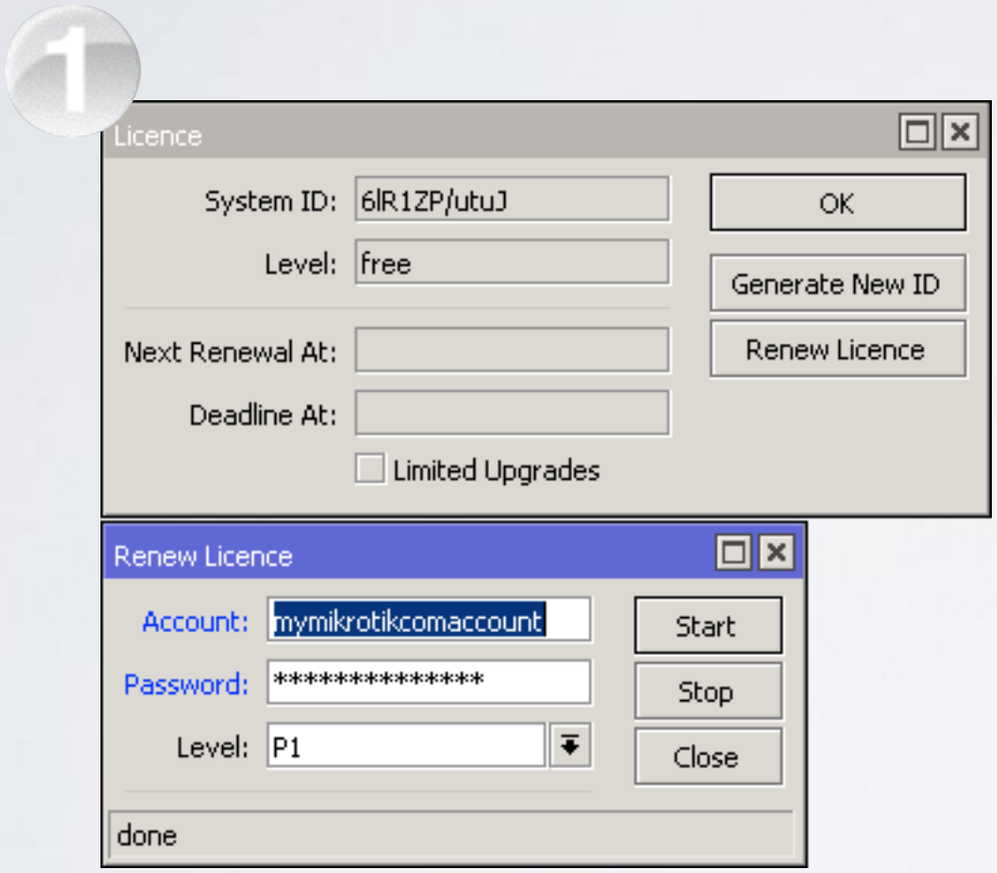
Licensing

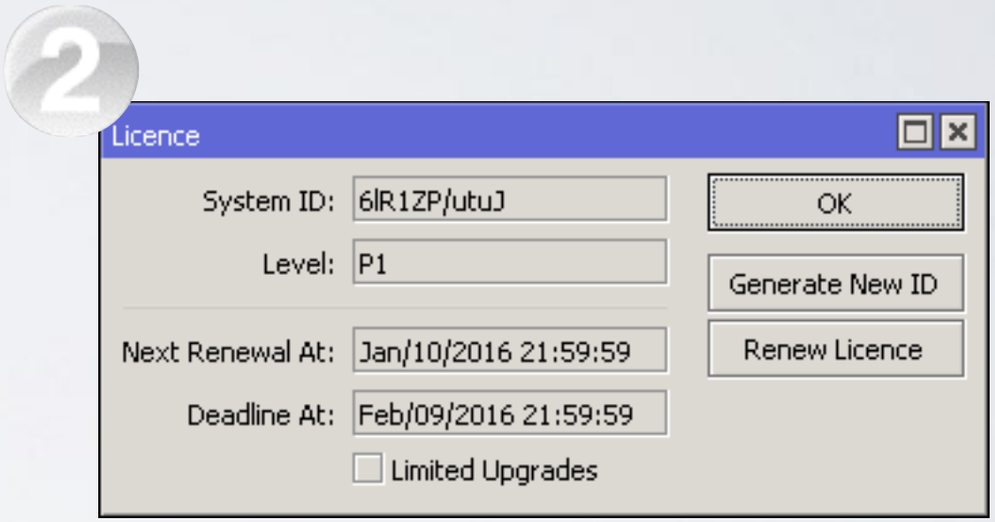
License	Speed limit	Price
Free	1Mbit	FREE
P1	1Gbit	US$45
P10	10Gbit	US$95
P-Unlimited	Unlimited	US$250

- 60 day trial available
- Purchased license can be transferred

CHR

Licensing





WinBox → System → License

CHR

Cloud Hosted Router

- For more info, see the CHR page on our wiki: https://wiki.mikrotik.com/wiki/Manual:CHR
- Available on the download page: https://mikrotik.com/download#chr

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

After the MUM

- All presentations - mum.mikrotik.com
- Video - youtube.com/mikrotik
- License will be added to your account

¡Disfrutar el MUM!

Horario:

mt.lv/agenda

MikroTik