


# MikroTik User Meeting
# Cambodia 2017

MikroTik

What do we do?

# We create networks

# Our products include

RouterOS
built and advanced for more than 20 years

RouterBOARD
Wireless outdoor, indoor, Ethernet routers

CRS
Switches with RouterOS

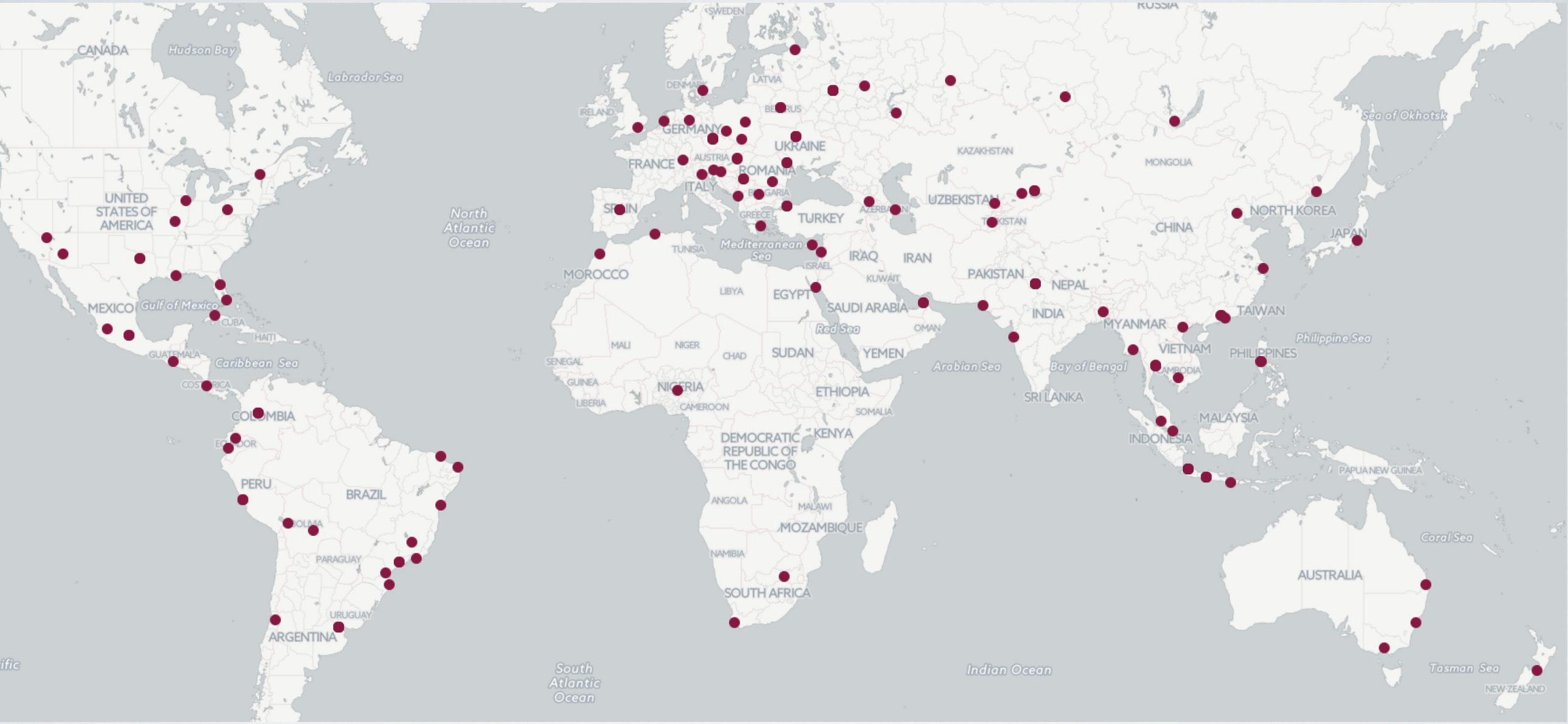
CSS
Switches with SwOS

MikroTik

- 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


Iceland
Finland
Sweden
Norway
Russia
Estonia
Latvia
Lithuania
Den-
mark
Ireland
United
Kingdom
Belarus
Nether-
lands
Poland
Belgium
Germany
Ukraine
Luxembourg
Czech Republic
Slovakia
Mol-
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France
Switzer-
land
Liecht.
Austria
Hungary
Romania
Slove-
nia
Croatia
Georgia
Bosnia and
Herzego-
vina
Serbia
Monaco
San
Marino
Andorra
Bulgaria
Monte-
negro
Portugal
Italy
Spain
Vatican City
Mace-
donia
Al-
ba-
nia
Turkey
Greece
Syria

no matter where you are


CANADA
Hudson Bay
Labrador Sea
UNITED STATES OF AMERICA
MEXICO
Gulf of Mexico
CUBA
HAITI
GUATEMALA
COSTA RICA
Caribbean Sea
COLOMBIA
ECUADOR
PERU
BRAZIL
BOLIVIA
PARAGUAY
URUGUAY
ARGENTINA
North Atlantic Ocean
South Atlantic Ocean
SWEDEN
DENMARK
LATVIA
BELARUS
IRELAND
GERMANY
UKRAINE
FRANCE
AUSTRIA
ROMANIA
ITALY
BULGARIA
SPAIN
GREECE
TURKEY
Mediterranean Sea
TUNISIA
ISRAEL
IRAQ
IRAN
KUWAIT
MOROCCO
LIBYA
EGYPT
SAUDI ARABIA
Red Sea
OMAN
MALI
NIGER
CHAD
SUDAN
YEMEN
SENEGAL
GUINEA
LIBERIA
NIGERIA
CAMEROON
ETHIOPIA
SOMALIA
DEMOCRATIC REPUBLIC OF THE CONGO
KENYA
ANGOLA
MALAWI
MOZAMBIQUE
NAMIBIA
SOUTH AFRICA
Arabian Sea
Bay of Bengal
Indian Ocean
RUSSIA
KAZAKHSTAN
MONGOLIA
UZBEKISTAN
AZERBAIJAN
TURKMENISTAN
CHINA
NORTH KOREA
JAPAN
Sea of Okhotsk
PAKISTAN
NEPAL
INDIA
SRI LANKA
MYANMAR
TAIWAN
VIETNAM
PHILIPPINES
Philippine Sea
MALAYSIA
INDONESIA
PAPUA NEW GUINEA
AUSTRALIA
Coral Sea
Tasman Sea
NEW ZEALAND

# Special thanks!

## Innovation Technology Training Center (ITTC)



# MikroTik staff available!

Martins – Support
Pauls – Support
Edmunds – Sales/Training

STAFF

# Agenda

| | |
|---|---|
| 08:00 | Check-in |
| 09:00 | Opening |
| 09:45 | Presentations (Part 1) |
| 12:30 | Lunch (with voucher) at Café Monivong |
| 13:30 | Presentations (Part 2) |
| 17:15 | Lottery |
| 17:45 | Evening drinks |

shall we?

# cAP lite

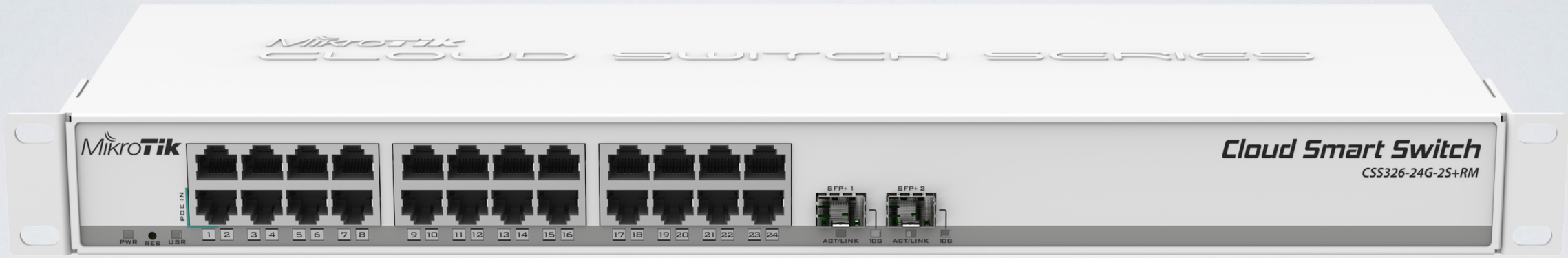
- Small and light 2GHz AP
- Case can be changed
- Print your own cases
- Perfect for hotel, public areas and extending networks in your house









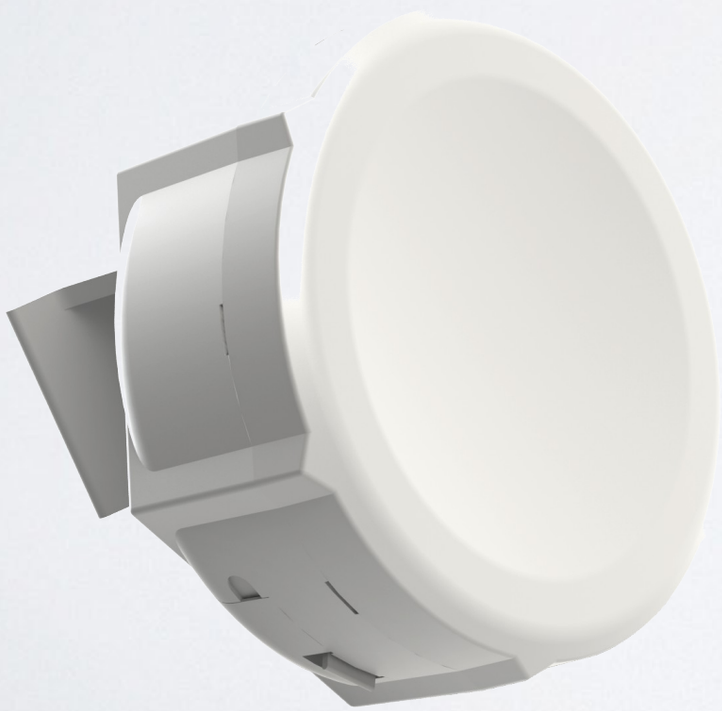



# CSS326-24G-2S+RM

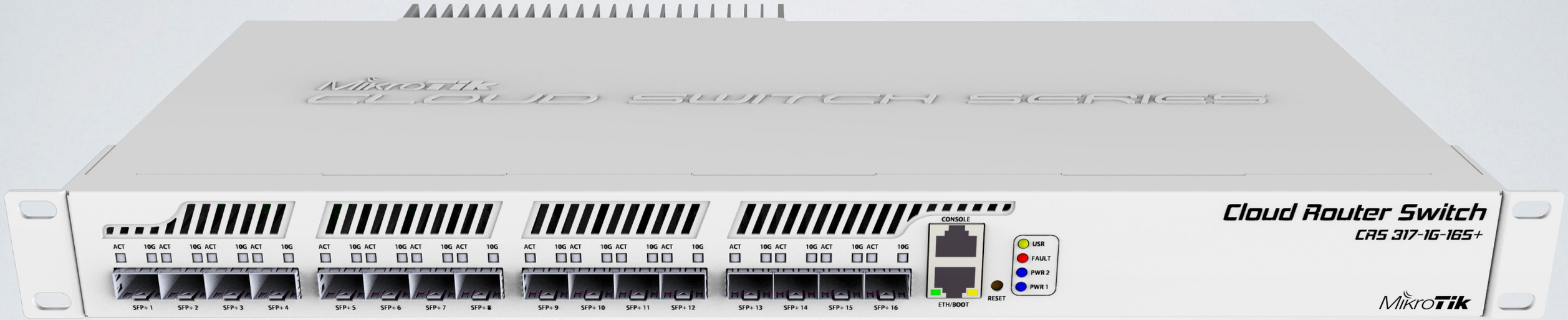
Multiport SwOS switch

# DynaDish 6 and SXT 6

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








# CRS317-1G-16S+

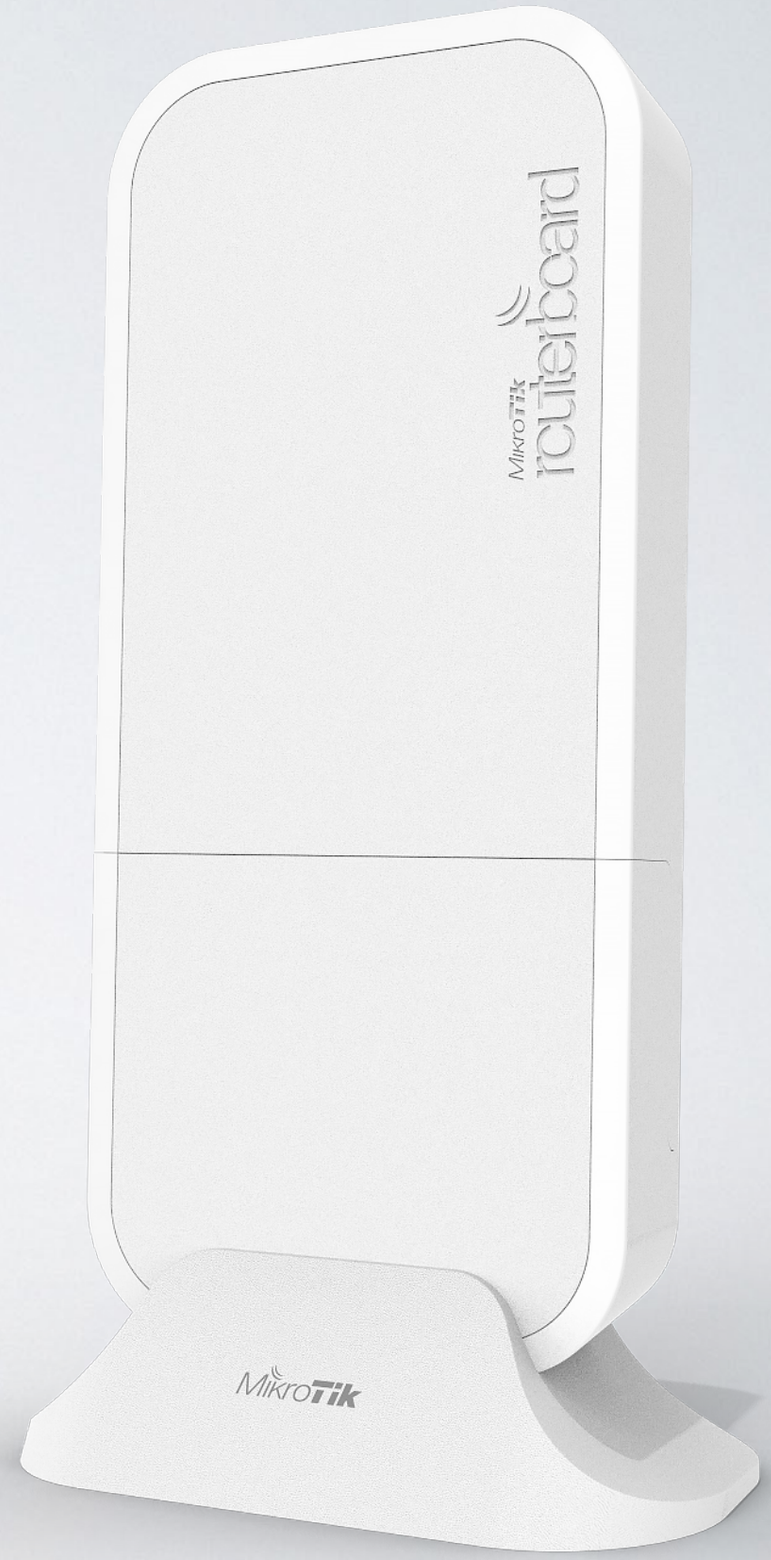
high performance SFP+ switch

# 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

# wAP LTE kit

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



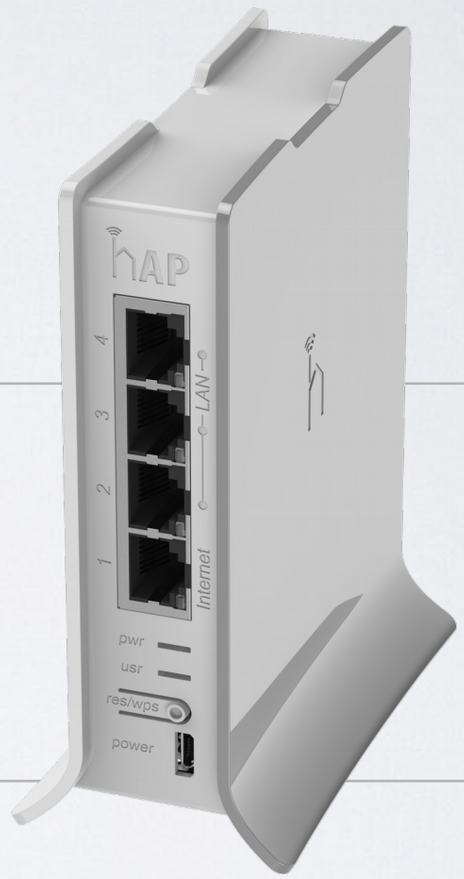
# hAP mini

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

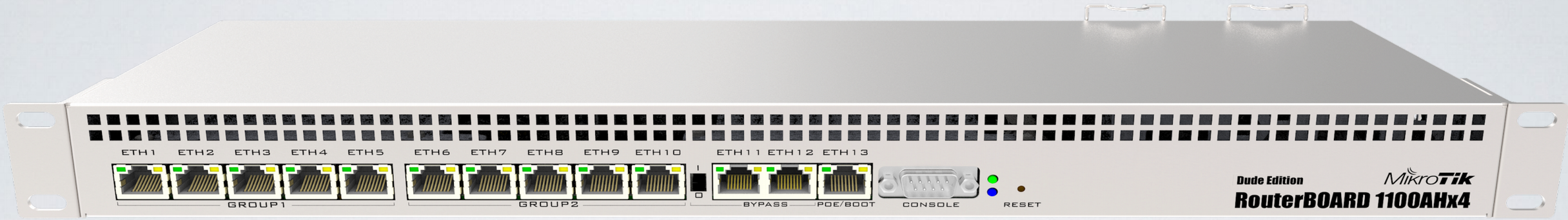


8cm


MikroTik
Internet


hAP
4
3
2
1
LAN
Internet
pwr
usr
res/wps
power

12cm

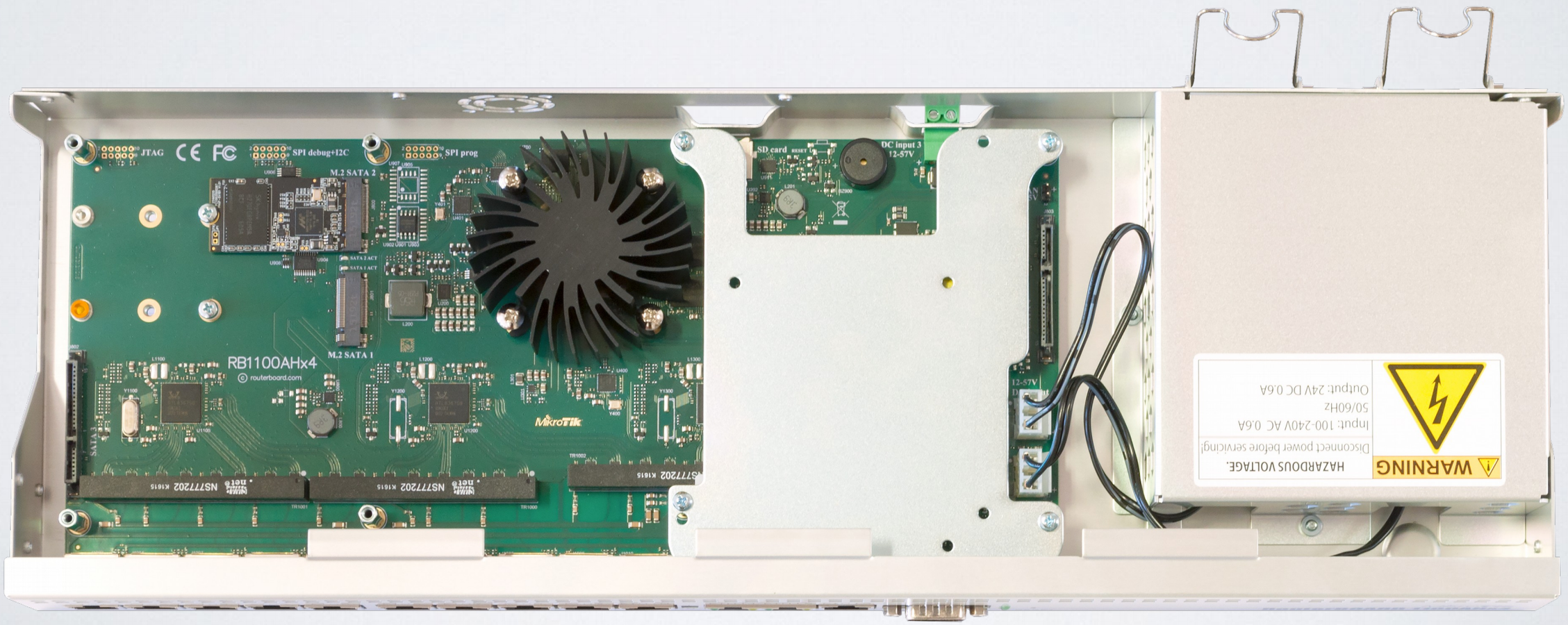



# RB1100AHx4

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 M2 and 2x SATA3 ports

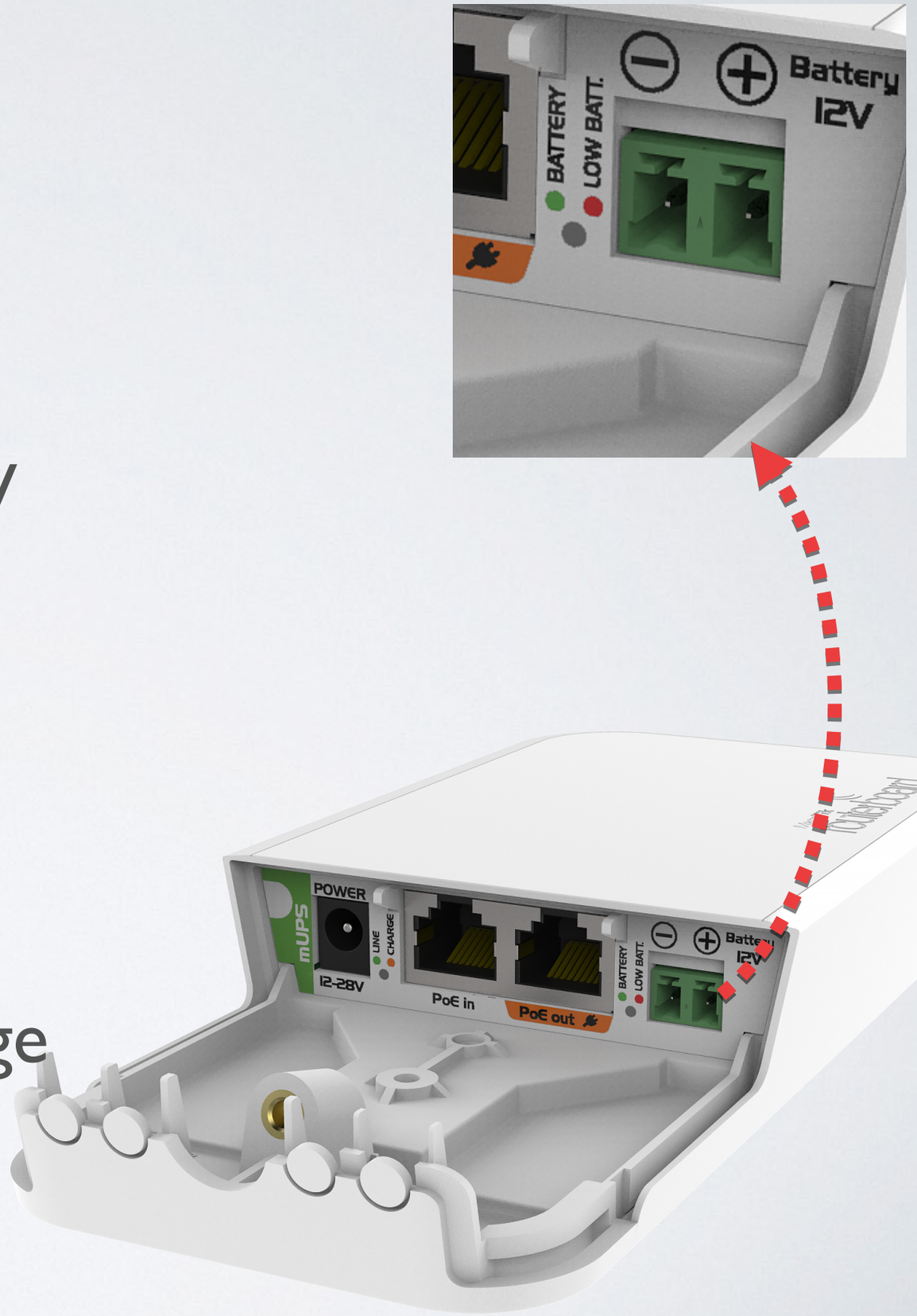
# PowerBox Pro

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



# mUPS

- Just like a smart PoE injector
- Battery connector for 12V batteries (external)
- Battery kicks in when power is lost
- Step up converter keeps device going even if Voltage differs
- Can charge and monitor



# LtAP mini

- 2GHz AP in a rugged case
- miniPCIe for LTE
- Built in GPS
- Serial port for other devices
- Perfect for cars or outdoor mobile applications




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R

# LtAP

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

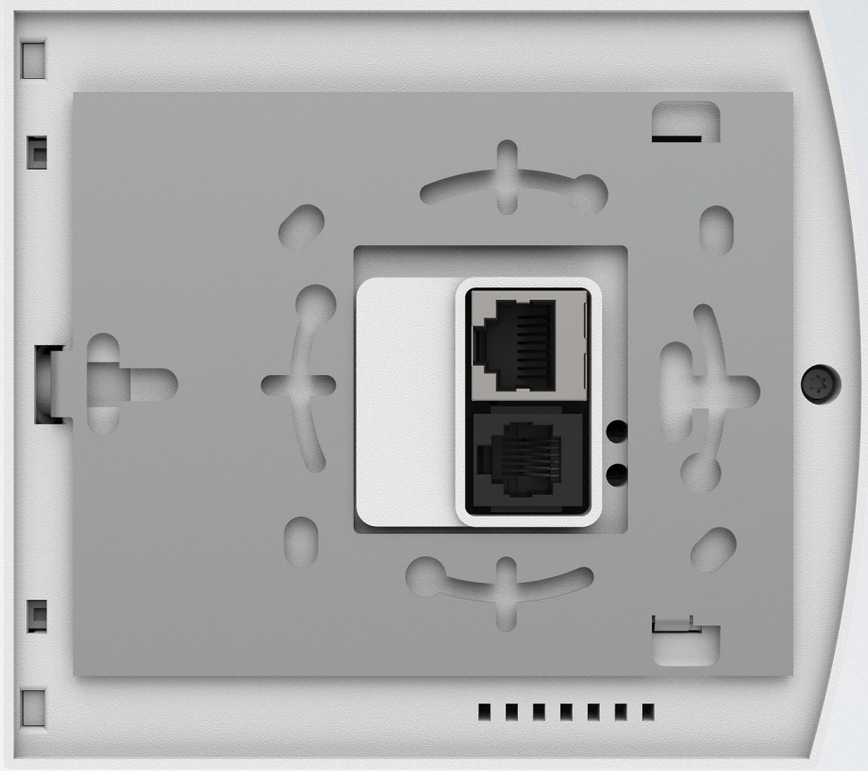



routerboard

# wsAP ac lite

- Mount into standard EU or US electrical sockets
- Dual band ac
- Phone jack passthrough
- Two LAN ports
- USB for charging phones








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# wAP 60G

- 1Gbit full duplex (wire speed)
- “Wireless wire” kit preconfigured
- Works in 60GHz spectrum
- Quad-core ARM CPU
- Targeted for up to 100m distances
- Q2/Q3



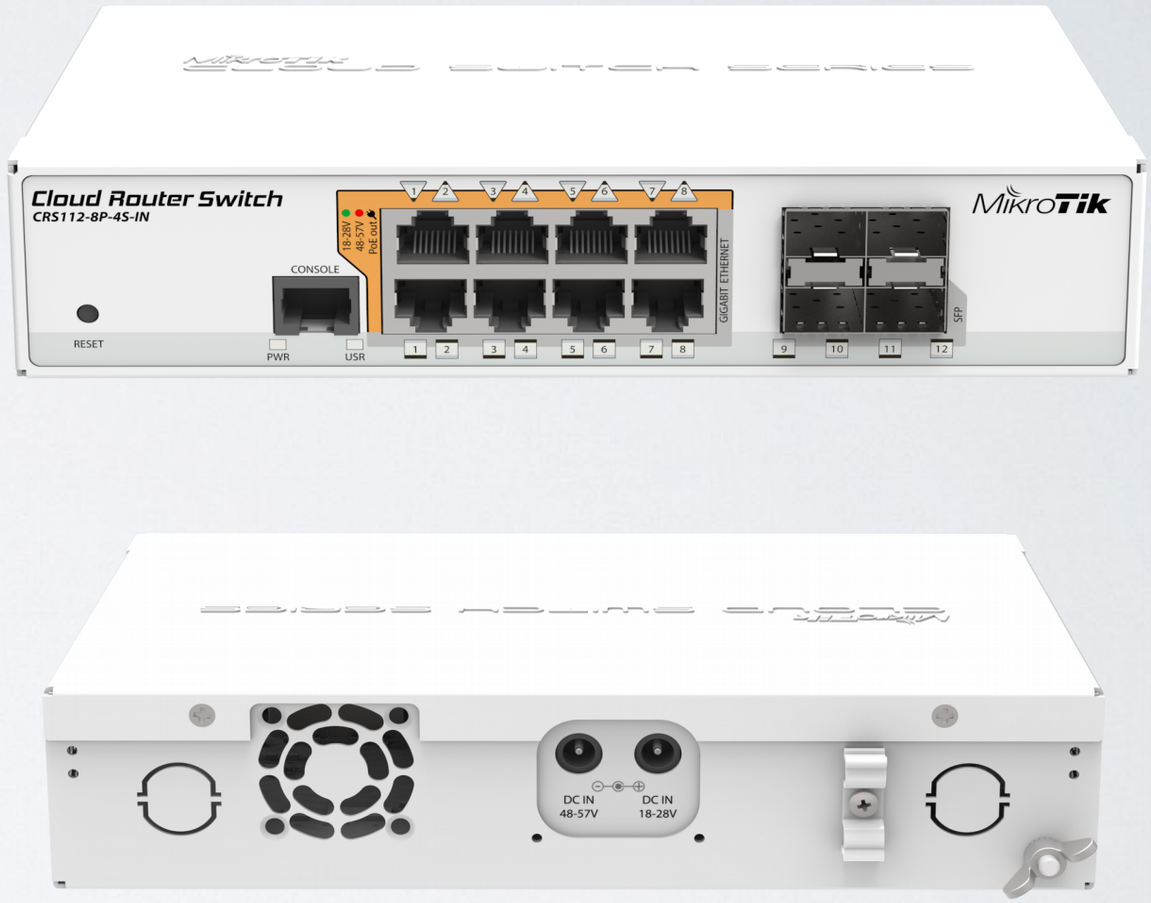
# LHG 60G

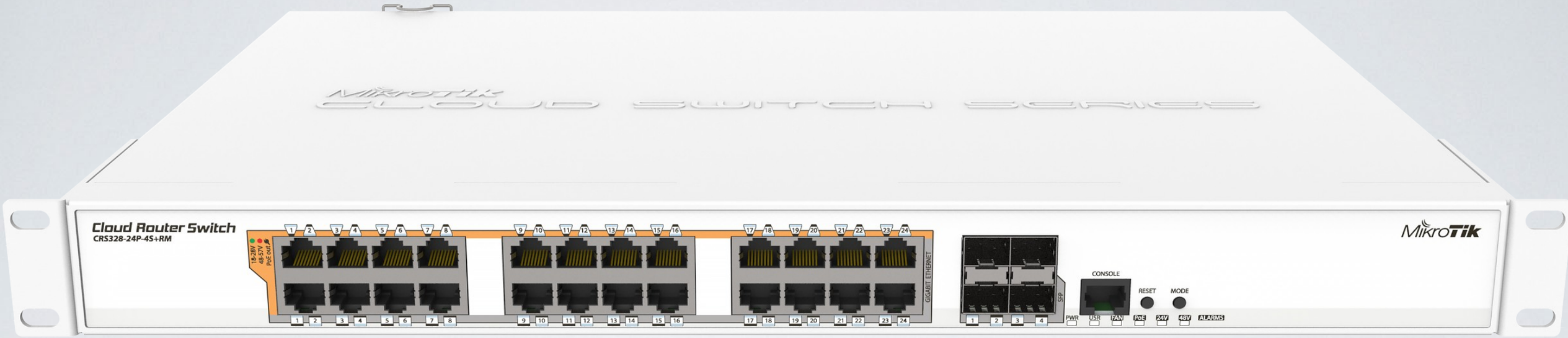
- 1Gbit full duplex (wire speed)
- Works in 60GHz spectrum
- Familiar LHG design
- Quad-core ARM CPU
- Low cost and low weight
- Longer distance than100m
- Q2/Q3



# CRS112-8P-4S

- PoE out 802.3af/at
- Eight gigabit 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

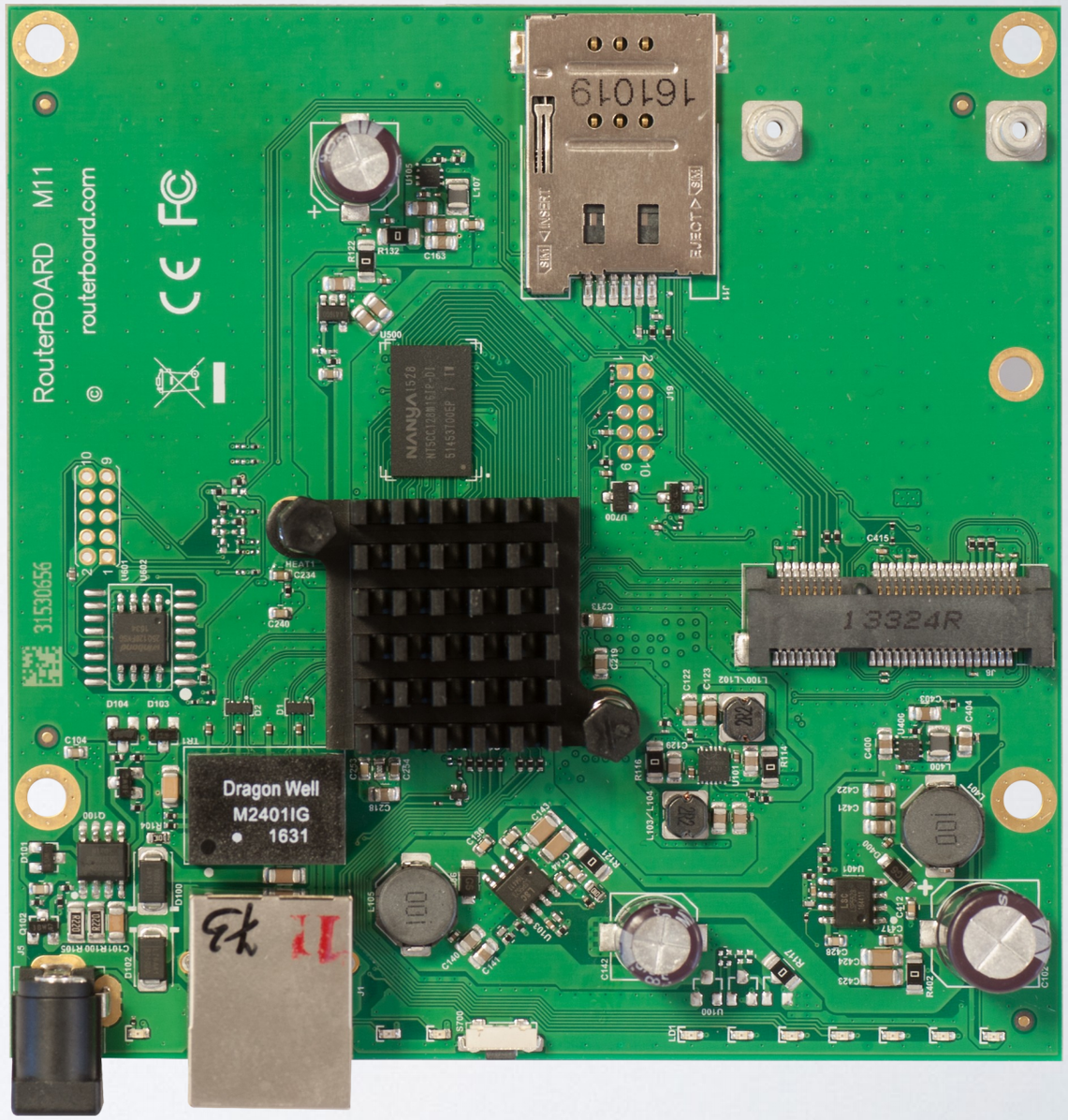
# Woobm

- Wireless out of band management (Woobm)
- Plug into a device to have a new management AP
- Can work as client to use in CCR rackmounts



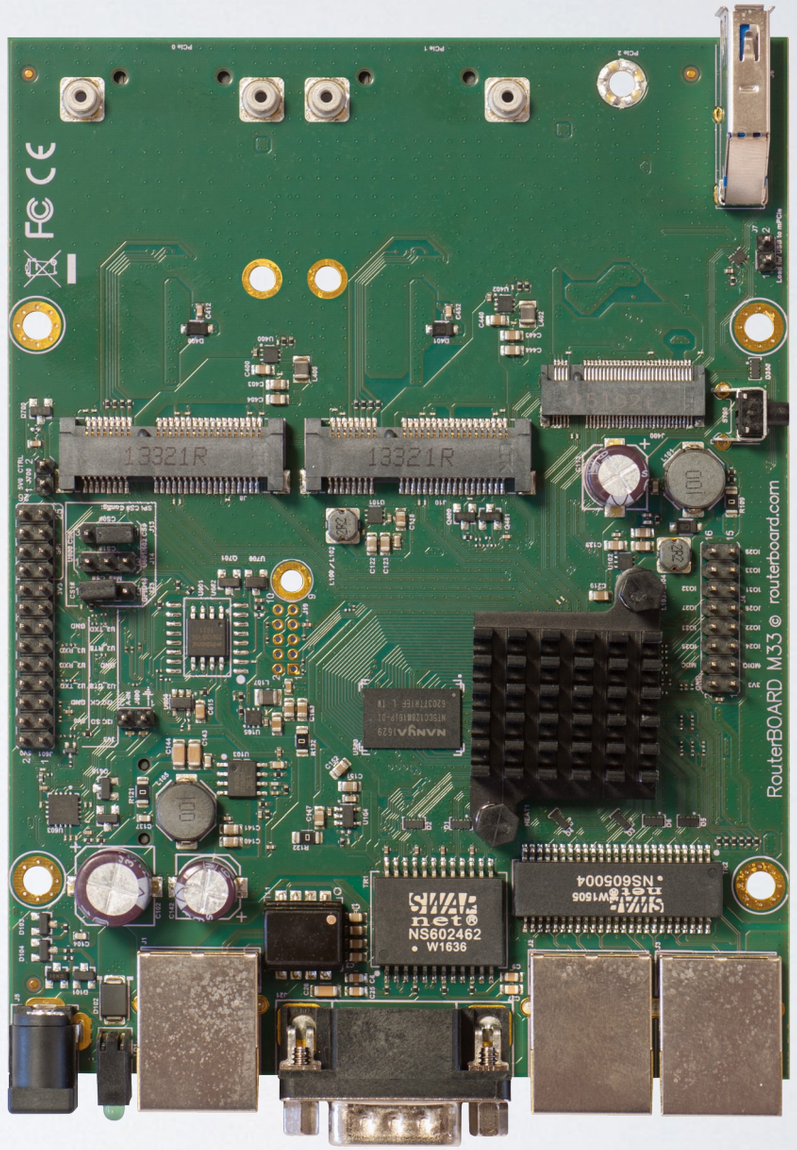
# M11

- Four core 880MHz CPU
- 1 miniPCIe slot
- 1 Gigabit ethernet



# M33

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



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