



MikroTik, What should I choose? (Guide especially for Korean users)

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1 MikroTik?





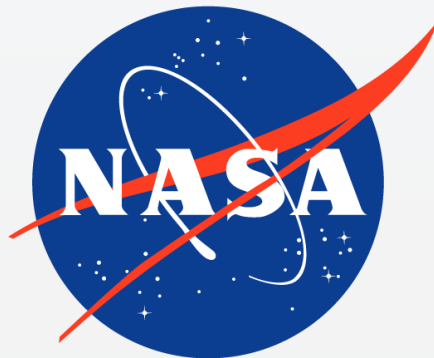
Cost
Effective

Enterprise
Grade

Stability



MikroTik?



Jet Propulsion Laboratory
California Institute of Technology

Oh, Did you see that?

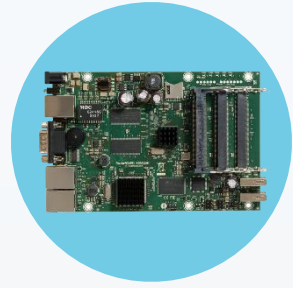
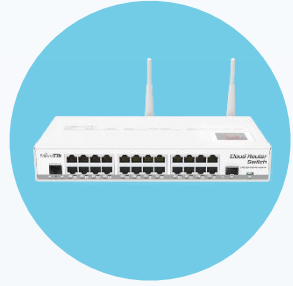


2 TrueNetworks

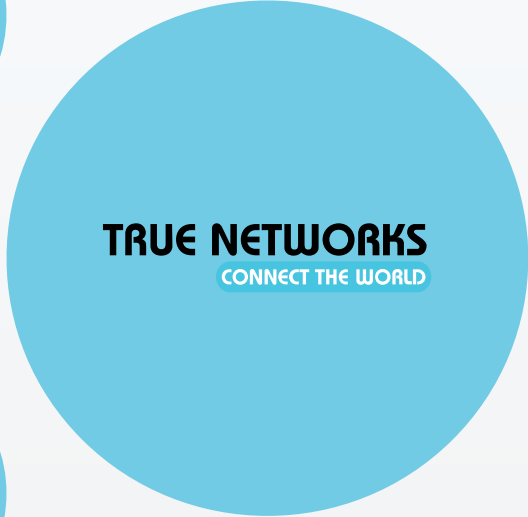




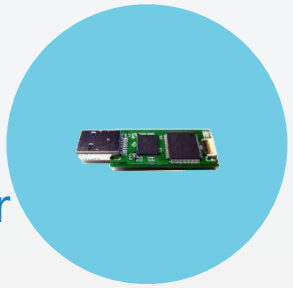
NUC
Server



Network
Service
Provider



Quantum
Random
Number
Generator



Virtual
Private
Network



R&D





3 MikroTik, What should I get?



I'm newbie



So, what should I get?





My hope

You say : Shut up and Take my money!

I say : Oh. Thank you.★



But it is not easy to do so...





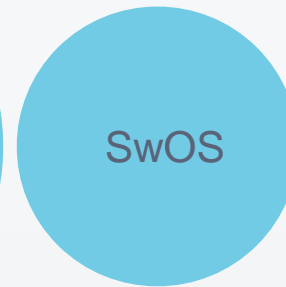
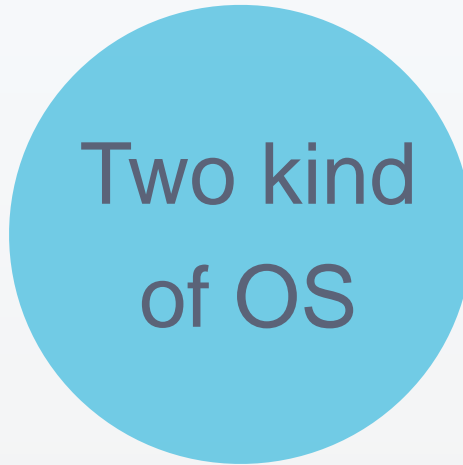
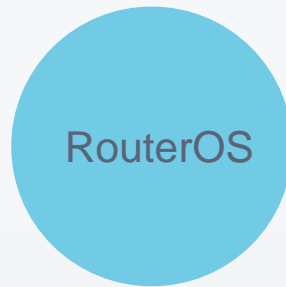
3-1 Taste MikroTik



Before you buy



For
Router,
some
switch



Some
switch

Almost same feature

From Low-end to High-end





Taste MikroTik – Web Demo



demo.lt.mv

demo2.lt.mv

The screenshot shows the MikroTik RouterOS v6.39.1 (stable) web interface. The left sidebar contains various system management options. The main content area displays the 'Interface List' page, which includes a navigation bar with tabs for 'Interface', 'Interface List', 'Ethernet', 'EoIP Tunnel', 'IP Tunnel', 'GRE Tunnel', 'VLAN', 'VRRP', 'Bonding', and 'LTE'. Below the navigation bar, there is an 'Add New' button and a search filter set to '사각형 캡처(R)'. The interface list shows 7 items, including three Ethernet interfaces (ether1-demo3, ether2, ether3) and four wireless interfaces (pppoe-out1, wlan1-uplink, wlan2-demo2, wlan3). The table columns are Name, Type, Actual MTU, L2 MTU, Tx, Rx, Tx Packet (p/s), Rx Packet (p/s), and FP Tx.

		Name	Type	Actual MTU	L2 MTU	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)	FP Tx
	R	ether1-demo3	Ethernet	1500	1526	0 bps	0 bps	0	0	0 bps
		ether2	Ethernet	1500	1522	0 bps	0 bps	0	0	0 bps
		ether3	Ethernet	1500	1522	0 bps	0 bps	0	0	0 bps
;;; Uplink pppoe										
	R	pppoe-out1	PPPoE Client	1480		636.1 kbps	61.9 kbps	77	55	0 bps
	R	wlan1-uplink	Wireless (Atheros AR5413)	1500	1600	649.7 kbps	73.4 kbps	77	55	0 bps
	R	wlan2-demo2	Wireless (Atheros AR5413)	1500	1600	0 bps	0 bps	0	0	0 bps
		wlan3	Wireless (Atheros AR5413)	1500	1600	0 bps	0 bps	0	0	0 bps

Taste MikroTik – RouterOS x86 Free/Trial



Propriety OS based on LINUX for x86

Provided with install ISO file or can buy preinstalled disk from local distributor.(with license)

Just install on your useless computer and taste MikroTik.

Without registration, you can only use 24 hours for trial.

With free registration, you can trial more with some limitation.

Level number	0 (Trial mode)	1 (Free Demo)	3 (WISP CPE)	4 (WISP)	5 (WISP)	6 (Controller)
Price	no key ↗	registration required ↗	volume only ↗	\$45	\$95	\$250
Initial Config Support	-	-	-	15 days	30 days	30 days
Wireless AP	24h trial	-	-	yes	yes	yes
Wireless Client and Bridge	24h trial	-	yes	yes	yes	yes
RIP, OSPF, BGP protocols	24h trial	-	yes(*)	yes	yes	yes
EoIP tunnels	24h trial	1	unlimited	unlimited	unlimited	unlimited
PPPoE tunnels	24h trial	1	200	200	500	unlimited
PPTP tunnels	24h trial	1	200	200	500	unlimited
L2TP tunnels	24h trial	1	200	200	500	unlimited
OVPN tunnels	24h trial	1	200	200	unlimited	unlimited
VLAN interfaces	24h trial	1	unlimited	unlimited	unlimited	unlimited
HotSpot active users	24h trial	1	1	200	500	unlimited
RADIUS client	24h trial	-	yes	yes	yes	yes
Queues	24h trial	1	unlimited	unlimited	unlimited	unlimited
Web proxy	24h trial	-	yes	yes	yes	yes
User manager active sessions	24h trial	1	10	20	50	Unlimited
Number of KVM guests	none	1	Unlimited	Unlimited	Unlimited	Unlimited



Taste MikroTik – CHR(Cloud Hosted Router)



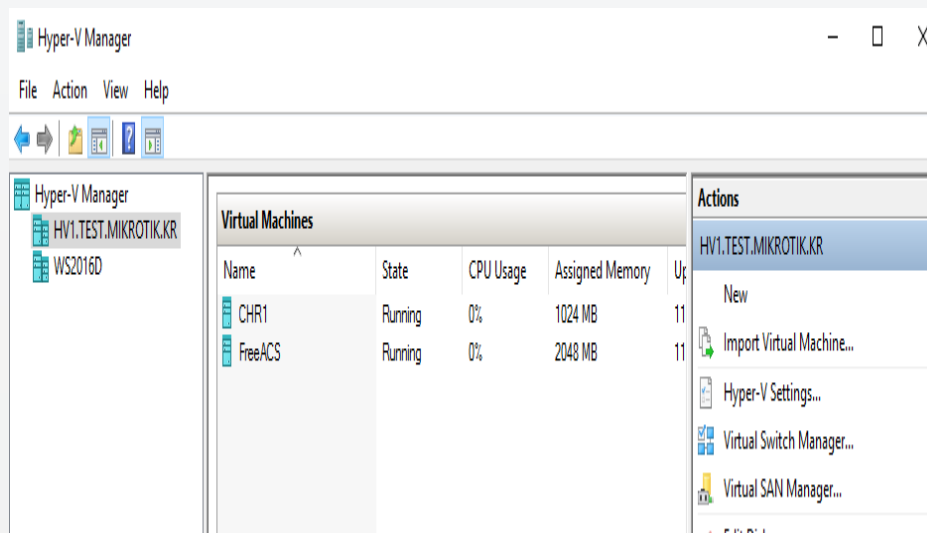
64bit version of RouterOS, fitted in virtualization environment.(You can see CHR on AWS market.)

Provided with preinstalled virtual machine.(Hyper-V / VirtualBox / VMware)

Just download and register to your hypervisor. And taste MikroTik.

Without registration, there is limitation for bandwidth of each interface.(1Mbps)

With 60 day trial, there is no limitation



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

Taste MikroTik – Nope. I want REAL machine!



hAP mini

Low-end MikroTik device that you can get at affordable price.(Under \$20)

Has almost same functions of High-end MikroTik device(CCR series)

Powered by MicroUSB

You can use this as travel router or wireless repeater

after you tasting MikroTik.





3-2 Taste good?



Taste good?



Taste good?

Show us your love with MikroTik!



Taste good? Choose your machine!



Do you want AP for home or office?

I will not introduce high power outdoor APs cause of strong regulation on wireless in Korea



Taste good? Choose your machine!



wAP series

AP suitable for mounting on any wall.(Outside of house, Garden...)

2.4Ghz only version(100M Ethernet) / Dual band version(gigabit Ethernet)

Can be powered by PoE.

Can be controlled by central management system(CAPsMAN)

or can be used stand-alone mode without any license



Taste good? Choose your machine!



cAP lite

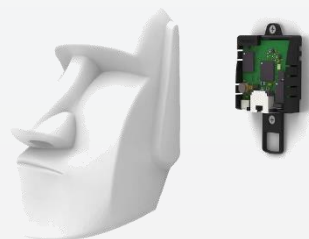
Low cost small AP that can be installed on wall or ceiling.

Powered with PoE

Can be controlled with CAPsMAN

or can be used stand-alone mode without any license

You can design your own housing with provided 3D design file.



Taste good? Choose your machine!



mAP lite

Low cost tiny AP that can be attached on something with its magnet.

Powered with PoE or microUSB

Can be used as travel router or wireless repeater.

Can be controlled with CAPsMAN

or can be used stand-alone mode without any license



Taste good? Choose your machine!

hAP ac ★

The ultimate all-in-one MikroTik device(NAT router+AP) for home and small office.

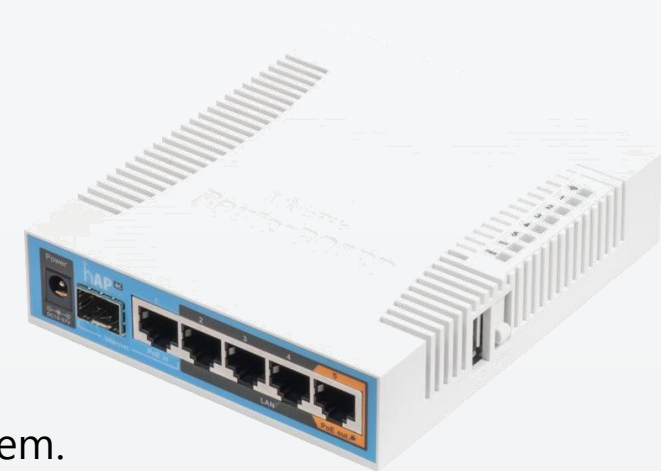
Dual band(2.4/5GHz)

Supports 802.11ac and gigabit internet.

USB port supports storage or wireless modem.

Some people has interest on this with believing

this device gives good quality of audio with optical cable in PC-Fi system.



Taste good? Choose your machine!

Do you want wired router?

Taste good? Choose your machine!

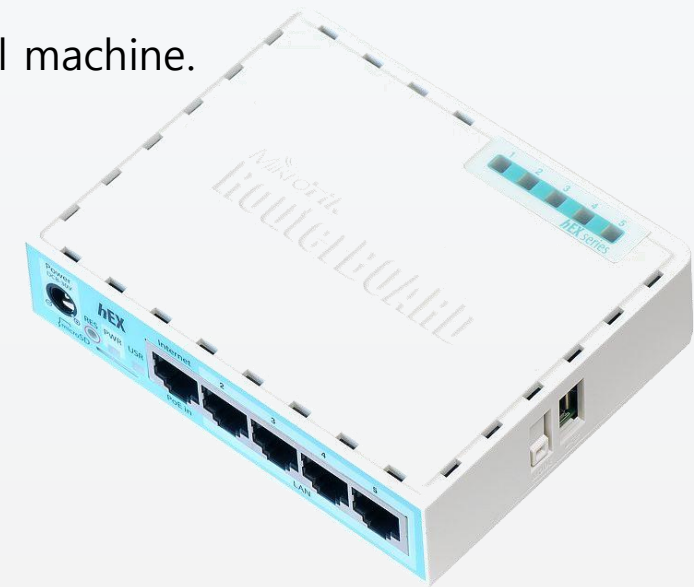
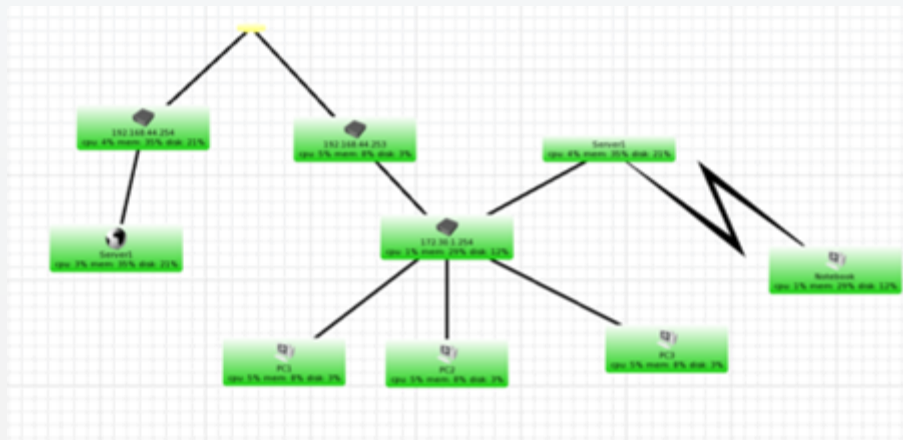


hEX(RB750Gr3) ★

Can be used as cost-effective gigabit NAT router from MikroTik.

Supports IPsec hardware encryption.(around 450Mbps in total / AES128-cbc, SHA1, 50% load)

You can install and use "The dude"(Free NMS software) on this small machine.



Taste good? Choose your machine!



RB2011 series ★

Maybe one of the most known, proven MikroTik product.

Have two type of enclosure(rackmount/desktop type).

You can attract IT man's attention with nice touch screen LCD that is displaying bandwidth, packet graph in realtime (except of RB2011iL series)



Taste good? Choose your machine!

RB3011UiAS-RM

First ARM processor based MikroTik router.

Same form factor, but powerful than previous RB2011 series.

Can be used as the Dude server.



Taste good? Choose your machine!



CCR1009-7G-1C-1S+PC / CCR1009-7G-1C-1S+RM ★

The ultimate off the shelf, wired router for home and small office ever.

No fan noise(CCR1009-7G-1C-1S+PC, passive cooling model)

Powered by 9-core TileGx processor.

Equipped with 10Gbps SFP+ port,

can be with used with switch, NAS

Hardware based failover function(Combo port)

The dude server capable device.



Taste good? Choose your machine!



CCR1036-8G-2S+ / CCR1036-12G-4S

Fit for virtualized environment. (CCR is acronym of **Cloud** Core Router)

Optimized for dealing with massive packets from lots of VMs with powerful 36-core TileGx CPU

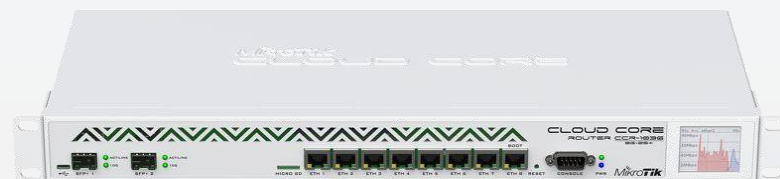
Equipped with two 10Gbps SFP+, 8 gigabit ethernet port(CCR1036-8G-2S+)

Equipped with four SFP port, 12 gigabit ethernet port(CCR1036-12G-4S)

Can process up to 41/28 million(around) packets per second

Can upgrade RAM(using SODIMM usually used in laptop)

The dude server capable device.



Taste good? Choose your machine!



CCR1072-1G-8S+

The most powerful router that MikroTik have ever made.

Comes with 72 core TileGx processor and 16GB RAM

Can process up to 0.1 billion(around) packets per second.

Can install two M.2. SSD as storage.

The dude server capable device.



Taste good? Choose your machine!

Do you want ethernet switch?

Taste good? Choose your machine!

CRS210-8G-2S+IN ★

RouterOS based management L3 switch.

Provides two SFP+ port and 8 gigabit ethernet port.

Fits for small office or home those are using 10Gbps NAS or something.

No fan, no noise.



Taste good? Choose your machine!



CRS226-24G-2S+RM

RouterOS based management L3 switch.

Provides two SFP+ port and 24 gigabit ethernet port.

It is seems to be used this device as all in one device(router+switch) but it is not recommended.



It seems this is discontinued after this slide is made.....
CRS326-24G-2S+RM will replaces this position.



Taste good? Choose your machine!



CSS326-24G-2S+RM / CRS326-24G-2S+RM

SwOS based management L2 switch. / SwOS, RouterOS Dual boot capability.

Provides two SFP+ port and 24 gigabit ethernet port.



We are waiting...

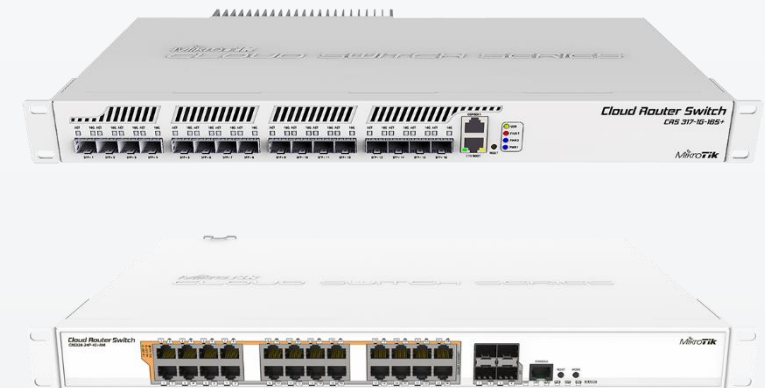


CRS317-1G-16S+RM / CRS328-24P-4s+RM

RouterOS/SwOS capable 16 SFP+ port switch.

RouterOS/SwOS capable 24 Port PoE out switch.

No detailed information at this time.





Enjoy your MUM!

Thank You

