MikroTik Newsletter, issue #57 - April 2014

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Cloud Core Router 1009

The CCR1009 is a powerful Ethernet router based on the cutting edge TILERA 9 core CPU with the best price/performance.

$495

CCR-1009-8G-1S-1S+

$425

CCR-1009-8G-1S

Included

IEC Cord   USB cable   Rackmount ears

CCR1009-8G-1S-1S+ throughput

CCR1009-8G-1S-1S+ (1200Mhz)		All port test		RouterOS			
Mode	Configuration	1518 byte		512 byte		64 byte	
		Mbps	kpps	Mbps	kpps	Mbps	kpps
Bridging	none (fast path)	11,968.5	974.0	9,328.0	2,200.0	7,379.3	11,249.0
Bridging	25 bridge filter rules	11,968.5	974.0	6,080.2	1,434.0	989.9	1,509.0
Routing	none (fast path)	11,968.5	974.0	8,403.7	1,982.0	6,514.7	9,931.0
Routing	25 simple queues	11,968.5	974.0	7,585.4	1,789.0	1,274.0	1,942.0
Routing	25 ip filter rules	7,544.8	614.0	3,014.6	711.0	501.8	765.0

Model	CCR1009-8G-1S	CCR1009-8G-1S-1S+
CPU	Tilera TILE-Gx8009 CPU (9-cores, 1.2Ghz per core)	
RAM	RAM: 1GB DDR3 800 MHz	RAM: 2GB DDR3 800 MHz
Ethernet	8 RJ-45 Gigabit Eth ports	
SFP 1.25G cage	One	
SFP+ 10G cage	-	One, supports also SFP 1.25G
Expansion	microUSB port	microUSB port, SmartCard slot, MicroSD slot
Dual power supply for redundancy	-	Yes (if one power line fails, the other one will take over automatically)
LCD color touchscreen	-	Yes
Smart Card slot	-	Yes (to store your private key for use in all features that support Certificate based authentication)
Compatible with 1.25 Gb/s SFP	S-31DLC20D S-3553LC20D S-85DLC05D	
Compatible with 10 Gb/s SFP	S+DA0003 S+DA0001	S+31DLC10D S+85DLC03D S+DA0003 S+DA0001

Available now! More details:

See PDF ▶

Using DNS names in VPN address now possible

We have made an often requested feature possible in the latest RouterOS release. Starting from RouterOS v6.12 it is now possible to specify DNS names in your VPN tunnel destination address. This is convenient for devices that connect to PPTP/L2TP or other tunnel provides which change their IP addresses often. You can simply configure a Dynamic DNS provider on that VPN server, and use the DNS name like "vpn.dnsprovider.com" in your VPN configuration address setting.
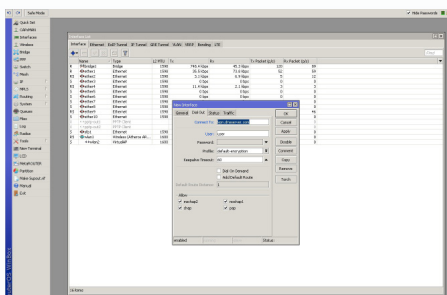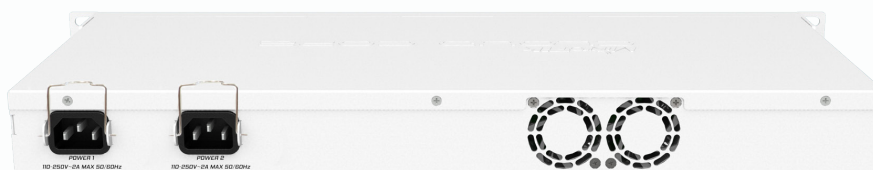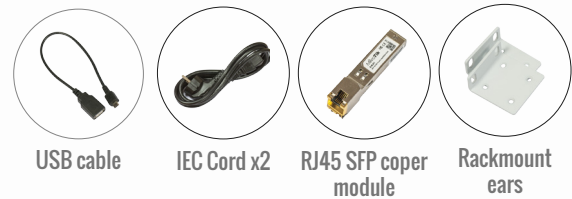
CCR1016-12S-1S+

CCR1016 is an industrial grade router with a cutting edge 16 core Tilera CPU. If you need to forward many millions of packets per second - Cloud Core Router is your best choice.

This model has twelve SFP ports and one SFP+ port for 10G connectivity. It is available in a 1U rackmount case and also has a serial console port, a touchscreen LCD and a USB port.

The CCR1016-12S-1S+ comes with redundant power supplies and one RJ45 SFP 10/100/1000M coper module for management.

- 12x SFP ports for 1 Gigabit connectivity
- 1x SFP+ port for 10 Gigabit connectivity
- 16 core Tilera CPU, 1.2GHz clock per core
- 12 Mbytes total on-chip cache
- State of the art TILE GX architecture
- Ports directly connected to CPU
- 1U rackmount case
- Color touchscreen LCD display
- two power supplies for redundancy

Included

| USB cable | IEC Cord x2 | RJ45 SFP coper module | Rackmount ears |

$745

Available now! More details:

View on the web ▶

Compatible with

S+DA0003	SFP+ 3m direct attach cable	
S+DA0001	SFP+ 1m direct attach cable	
S-31DLC20D	SFP (1.25G) module, 20KM, Single Mode	
S+31DLC10D	SFP+ (10Gbit) module, Long range 10km, Single Mode	
S-3553LC20D	Two SFP (1.25G) module kit, 20Km, single mode	
S-85DLC05D	SFP (1.25G) module, 550m, Multi Mode	
S+85DLC03D	SFP+ (10Gbit), 300m, Multi Mode	

Introducing High Power 23dbi 5Ghz Backbone- QRT-5!

- high power up to ~1000mW TX!
- 23dBi 10.5 degree antenna
- 4.900-5.920GHz frequency
- 802.11a/n 2x2 MIMO
- Gigabit Ethernet
- Comes with RouterOS L4
- Can be used as sector AP, long-distance Backbone, or CPE
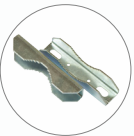
$169

Product code: **RB911G-5HPnD-QRT**
http://routerboard.com/RB911G-5HPnD-QRT

Included

Precision mounting bracket	U bolts	Pole clamp	Screw kit	Gigabit PoE injector	24V 1.2A Adapter

Heartbleed - MikroTik RouterOS is not affected

On April 7th, a vulnerability named Heartbleed was disclosed that affected OpenSSL, a software library that is used by many websites and programs to secure your communication. MikroTik products are not affected by this security exploit, as we do not utilize the affected OpenSSL library in our core product.

All RouterOS versions are secure against this issue.

All versions prior to v6.12 used an unaffected, older version of OpenSSL, and since v6.12 the latest OpenSSL version will be used, where the heartbleed issue is fixed.

We didn't use any of the affected OpenSSL versions in any of our products, so no specific action is required on your side.

RB911 Series

Perfect for building low cost CPE devices.

The RB911 is a small CPE type RouterBOARD wireless router with an integrated wireless card. It's equipped with powerful 600Mhz CPU, providing superb value for money.

These devices include RouterOS, the operating system which can be a router, firewall, bandwidth manager, a CPE and more, all at the same time.

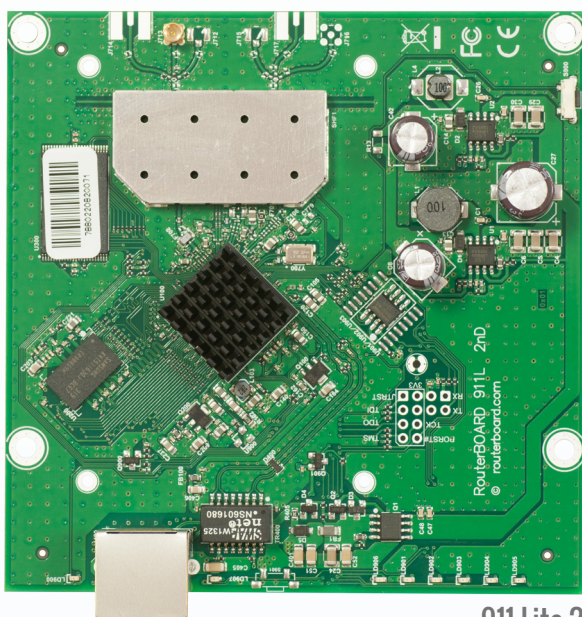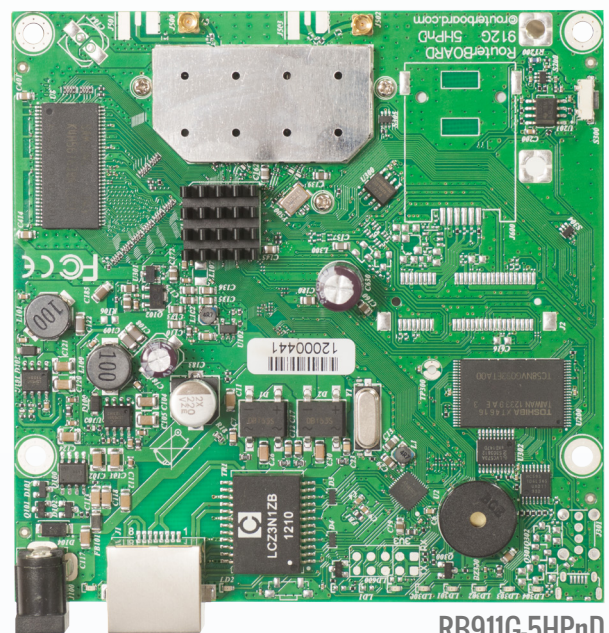RB911 series include several models. See below table for their differences.

	$39	$45	$39	$55	$49
Model	911 Lite 5	911 Lite 5 dual	911 Lite 2	RB911G-5HPnD	RB911G-2HPnD
Product code	RB911-5Hn	RB911-5HnD	RB911-2Hn	RB911G-5HPnD	RB911G-2HPnD
CPU	AR9344 600MHz	AR9344 600MHz	AR9344 600MHz	AR9342 600MHz	AR9342 600MHz
RAM	64MB DDR2	64MB DDR2	64MB DDR2	32MB DDR	32MB DDR
Flash memory	16MB SPI flash			128MB NAND flash	
Band	5GHz	5GHz	2.4GHz	5GHz	2.4GHz
Chains	1	2	1	2	2
Gigabit	-	-	-	+	+
High Power	-	-	-	+	+
Power jack	-	-	-	+	+
Consumption	5W	7W	4W	11W	11W
Beeper	-	-	-	+	+
Voltage monitor	-	-	-	+	+
PCB temperature monitor	-	-	-	+	+
Max TX power	23dBm	26dBm	24dBm	30dBm	30dBm
Dimensions	105x105mm				
Power options	PoE: 8-30V DC on Eth 1 (Non 802.3af)				
RouterOS Licence	WISP CPE (level 3) license				

911 Lite 2

RB911G-5HPnD

Available now! More details:

See PDF ▶

CRS features added in RouterOS v6.12

We have added a plethora of new features for CRS series Switch devices in our RouterOS v6.12 release. As you can see in the following list, more than half of the options are new. Upgrade your Switch to professional level with simple software update. Even more features will be added in upcoming versions.

Key Features

- Fully manageable switch, full wire-speed switching
- Configurable ports for switching or routing
- Ethernet, Fiber or 4G (with optional USB modem) gateway connection to Internet
- LCD touchscreen
- RJ45 serial port
- Reset switch; beeper; voltage and temperature monitoring
- Passive cooling
- RouterOS, L5 license

Switch-chip Features

- All Forwarding Databases support IVL and SVL
- Configurable port based and VLAN based learning limit
- Up to 16K MAC entries in Unicast FDB for Layer 2 unicast forwarding
- Up to 1K MAC entries in Multicast FDB for multicast forwarding
- Up to 256 MAC entries in Reserved FDB for control and management purposes
- Local switching allows packets to be sent back to original port
- Jumbo frame support (CRS125: 4064 Bytes; CRS226: 9204 Bytes)

Quality of Service (QoS) New

- Flexible QoS classification and assignment
    - Port based
    - DSCP based
    - PCP/DEI based
    - Protocol based
    - VLAN based
    - ACL based
- QoS remarking and remapping for QoS domain translation between service provider and user networks
- Overriding of each QoS assignment according to the configured priority

VLAN

- Fully compliant with IEEE802.1Q and IEEE802.1ad VLAN
- 4K active VLANs
- Flexible VLAN assignment:
    - Port based VLAN
    - Protocol based VLAN
    - MAC based VLAN
- From any to any VLAN translation and swapping
- 1:1 VLAN switching – VLAN to port mapping
- VLAN filtering

Trunking New

- Supports IEEE802.3ad and IEEE802.1ax Link Aggregation Protocols
- Up to 8 Trunk groups
- Up to 8 trunk member ports per Trunk group
- Hardware automatic failover and load balancing

Port Isolation and Leakage New

- Applicable for Private VLAN implementation
- 3 port profile types: Promiscuous , Isolated and Community
- Up to 28 Community profiles
- Leakage profiles allow bypassing egress VLAN filtering

Mirroring New

- Various types of mirroring:
    - Port based VLAN
    - Protocol based VLAN
    - MAC based VLAN
- 2 independent mirroring analyzer ports

Access Control List (only on CRS226) New

- Ingress and Egress ACL tables
- Up to 512 ACL rules
- Classification based on ports, L2, L3, L4 protocol header fields.
- ACL actions include filtering, forwarding and modifying of the protocol header fields

Bandwidth Shaping and Packet Scheduler New

- Shaping per port, per queue, per queue group
- 8 queues on each physical port

IP Routing

- Wire-speed static IP routing (Coming soon)

CRS125-24G-1S-IN   CRS125-24G-1S-RM   CRS125-24G-1S-2HnD-IN   CRS226-24G-2S+IN