

RouterBOARD 750G

The RB750G is a small SOHO router in a nice plastic case. It has five independent **Gigabit** ethernet ports and optional Switch Chip functionality for wire speed Gigabit throughput. Only for **\$69.95** !

It's probably the most affordable MPLS capable Gigabit router on the market. With it's compact design and clean looks, it will fit perfectly into any SOHO environment.

Comparing to RB750, the G version adds not only Gigabit capable ports, but a new 680MHz Atheros 7161 CPU for increased throughput. Up to 580Mbps throughout with larger packets, and up to 91500pps with small packets.



RB750G packets per second performance

Firewall	Conntrack	Mode	64 bytes	512 bytes	1500 bytes
N/A	Off	Routing	71000	66000	43500
N/A	On	Routing	57600	54000	43500
Off	Off	Rstp-bridge	91500	84200	47200
On	Off	Rstp-bridge	65500	64400	46500
On	On	Rstp-bridge	50200	47000	41600

Stopping commands run by others

Imagine a situation where another Administrator user has connected to your router, and has started some monitoring action, bandwidth test, scan or any other feature that runs indefinitely, and then gone home.

You can terminate other running commands from your console within the "/system script job" menu.

```
[admin@MikroTik] > system script job print
# SCRIPT          OWNER          STARTED
0                 admin         nov/16/2009 08:40:02
1                 admin         nov/16/2009 08:40:04
[admin@MikroTik] > system script job remove numbers=1
```

MikroTik User Meeting everywhere!

The MikroTik User Meetings in Argentina, Brazil and Indonesia were huge successes. The amount of visitors exceeded any expectations - around 450 people attended the show in Indonesia, and around 400 people attended the MUM in Brazil and Argentina each!

Presentations, meeting new people, finding new customers, finding new suppliers - and of course free drinks and t-shirts - everything is there at the MUM.

All Videos and pictures will be available here:

<http://wiki.mikrotik.com/wiki/Events>

Some pictures from the MUM events:



MUM in Brazil, 2009



MUM in Indonesia, 2009



MUM in Argentina, 2009

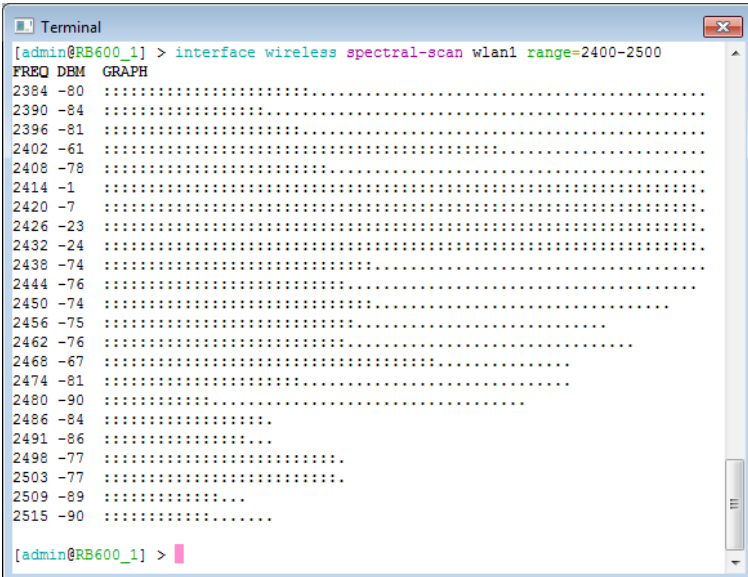
Wireless spectrum analyzer

From RouterOS v4.3, we have added initial support for a new feature - spectrum analyzer. It can scan all frequencies supported by your wireless card, and plot them directly in console. It can also show you interference from different devices, like: bluetooth-headset, bluetooth-stereo, cordless-phone, microwave-oven, wifi.

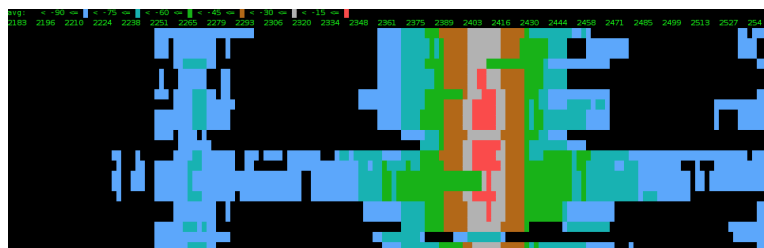
The analyzer can also output sounds, so you can hear which frequencies are more busy, if a console is not available at the time.

This feature is still being developed, and a graphical interface will be added soon. Currently only RouterBOARD R2N and R52N cards are supported.

More: http://wiki.mikrotik.com/wiki/Spectrum_analyzer



```
[admin@RB600_1] > interface wireless spectral-scan wlan1 range=2400-2500
FREQ DBM  GRAPH
2384 -80  .....
2390 -84  .....
2396 -81  .....
2402 -61  .....
2408 -78  .....
2414 -1   .....
2420 -7   .....
2426 -23  .....
2432 -24  .....
2438 -74  .....
2444 -76  .....
2450 -74  .....
2456 -75  .....
2462 -76  .....
2468 -67  .....
2474 -81  .....
2480 -90  .....
2486 -84  .....
2491 -86  .....
2498 -77  .....
2503 -77  .....
2509 -89  .....
2515 -90  .....
```



BFD protocol for routing

Starting from RouterOS version v4.4, BFD is supported.

BFD is a protocol intended to detect faults in the bidirectional path between two forwarding engines, including physical interfaces, subinterfaces, data link(s), and to the extent possible the forwarding engines themselves, with potentially very low latency. It operates independently of media, data protocols, and routing protocols.

Bidirectional Forwarding Detection (BFD):

- * hello protocol for checking bidirectional neighbor reachability;
- * provides sub-second link failure detection support;
- * not routing protocol specific, unlike protocol hello timers or such

Features supported:

- * asynchronous mode (draft-ietf-bfd-base-09.txt)
- * BFD timer and detection multiplier configuration per interface;
- * enabling BFD for OSPF interfaces
- * enabling BFD for BGP peers
- * single hop IPv4 and IPv6 transport (draft-ietf-bfd-v4v6-1hop-10.txt)
- * multihop IPv4 and IPv6 transport (draft-ietf-bfd-multihop-08.txt)

Using it:

OSPF:

```
/routing ospf interface add interface=all use-bfd=yes
```

BGP:

```
/routing bgp peer add remote-address=x.x.x.x remote-as=xxxxx use-bfd=yes
```

BFD timer configuration:

```
/routing bfd interface
```

BFD neighbor status:

```
/routing bfd neighbor
```


RouterBOARD 800

The RB800 is an advanced high performance wireless platform. It has four miniPCI slots, three Gigabit ethernet ports, two daughterboard connectors, a miniPCI-e slot and a compact flash slot.

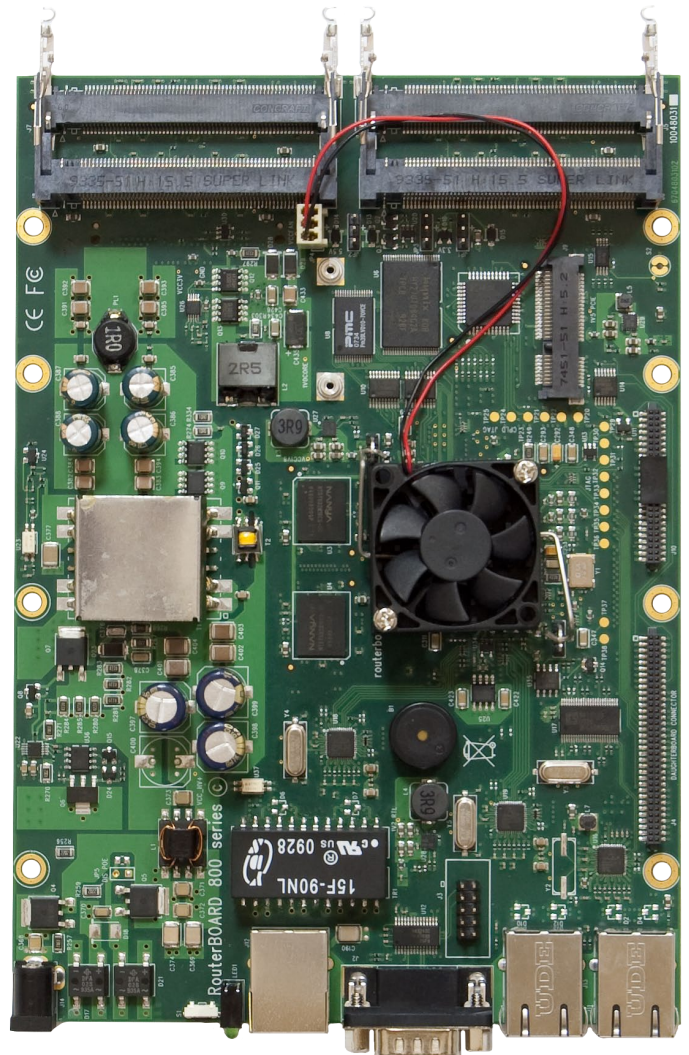
The two daughterboard connectors allow you to expand the number of wired and wireless ports, and the new high power CPU is capable of supporting them all.

The RB800 includes the MPC8544 carrier class gigabit communications processor.

This is the new definition of wireless networking power. Combined with RouterOS - RB800 is the most powerful and sophisticated wireless router, firewall and bandwidth manager with many expansion options.

As this is our flagship wireless RouterBOARD, it is bundled with the unlimited RouterOS Level6 license.

The list price for this device is \$359, indoor case is available for \$20. We are working on Daughterboard extension modules which will be announced soon.



CPU	MPC8544 800MHz
Memory	256MB DDR SDRAM onboard memory
Boot loader	RouterBOOT
Data storage	NAND memory chip, CF slot on back
Ethernet	Three 10/100/1000 Mbit/s Ethernet ports with Auto-MDI/X
miniPCI	4 x miniPCI, 1 x miniPCI-e
Expansion	regular PCI daughterboard port, PCI-e daughterboard port
Extras	Reset switch, Beeper, 4x Fan headers (JP1,JP3 = 3.3V, JP2,JP4 = 5.5V)
Serial port	One DB9 RS232C asynchronous serial port, One serial port header
LEDs	Power, 1x User LED
Power options	Power over Ethernet: 36-56V DC (including power over datalines) Power jack: 10-56V DC
Dimensions	14 cm x 20 cm (5.51 in x 7.87 in), 285 g
Operating System	MikroTik RouterOS v4, Level6 license
Two port throughput	276000pps with small packets, and wire speed throughput on big packets