

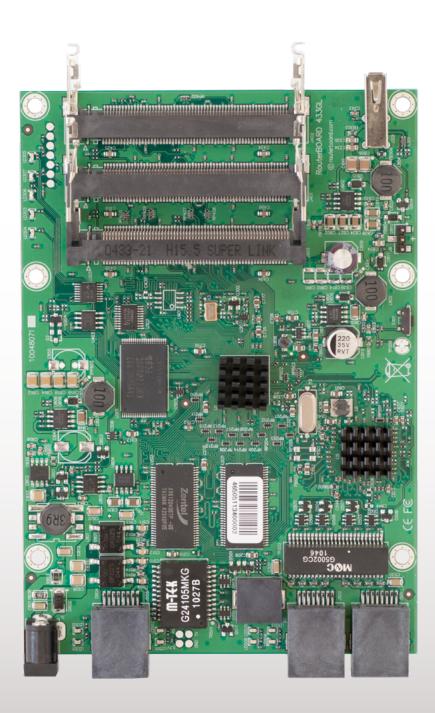
Perfect for building custom CPE devices

The RB411 are our low cost customizable routers with one Ethernet and one miniPCI slot. The new RB411L series are lower cost, and don't have some of the ports present on other RB411 devices. There are eight models in the RB411 series.

Use this device in an outdoor case for a AP/CPE device, or a point to point wireless link installation. The miniPCI slot allows you to choose your own preferred wireless card model.

Data storage	NAND memory chip
Ethernet	One 10/100 Mbit/s Ethernet port with Auto-MDI/X
miniPCI	One MiniPCI Type IIIA/IIIB slot
Extras	Reset switch, beeper
LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-28V DC on Ether1 (Non 802.3af).
Dimensions	105 mm x 105 mm, Weight: 105g
Power consumption	1,4W board only, 10W available to minIPCI card
Operating System	MikroTik RouterOS

Feature / Model	411L	411	411U	411AR	411AH	411UAHL	411GL	411UAHR
CPU MHz	300	300	300	300	680	680	680	680
RAM MB	32	32	64	32	64	64	64	64
Power jack	-	yes	yes	yes	yes	yes	yes	yes
Serial port	-	yes	yes	yes	yes	-	-	yes
USB	-	-	yes	-	-	yes	yes	yes
miniPCI express	-	-	yes	-	-	-	-	yes
Integrated wireless	-	-	-	2.4GHz	-	-	-	2.4GHz
Gigabit LAN	-	-	-	-	-	-	yes	-
RouterOS License	L3	L3	L4	L4	L4	L4	L4	L4



Perfect for building custom AP devices

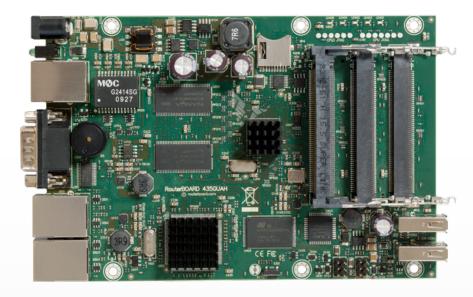
The RB433 is a multi port device. Use it in an outdoor case for a sector AP installation, or for a wireless backhaul. Three ports give you plenty of configuration options for many wireless scenarios.

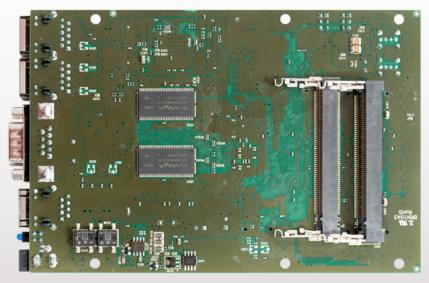
New to the RB433 family is the RB433L series - a light version with only the most essential features and available at a lower cost.

We currently have six different models in the RB433 series.

CPU	Atheros AR7130/ AR7161
Memory	DDR SDRAM onboard memory
Boot loader	RouterBOOT
Data storage	NAND memory chip
Ethernet	Three 10/100 Mbit/s Ethernet ports with Auto-MDI/X
miniPCI	Three MiniPCI Type IIIA/IIIB slots
Extras	Reset switch, beeper, voltage monitor
LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-28V DC on Ether1 (Non 802.3af)
Dimensions	105 mm x 154 mm, Weight: 137g
Power consumption	2W board only, 14W available to minIPCI cards
Operating System	MikroTik RouterOS

Feature / Model	433L	433	433AH	433UAHL	433UAH	433GL
CPU MHz	300Mhz	300Mhz	680Mhz	680Mhz	680Mhz	680Mhz
RAM MB	64MB	64MB	128MB	128MB	128MB	128MB
Power jack	-	yes	yes	yes	yes	yes
Serial port	-	yes	yes	-	yes	-
USB	-	-	-	yes	yes, two	yes
Integrated wireless	L4	L4	L5	L5	L5	L5
Gigabit LAN	-	-	-	-	-	Yes
RouterOS License	L3	L3	L4	L4	L4	L4





RB435G

Five miniPCI slots and three Gigabit Ethernet ports give you enough connectivity options to use the RB435G as the central part of your network. Now with Gigabit ports, to properly utilize all the speed 802.11n with Nv2 wireless.

Five miniPCI slots to be used for four sectors and a backbone, or any other configuration you need.

The two USB 2.0 ports can be used for extending storage, adding a 3G wireless modem for backup connectivity, for a mobile installation or all together.

The RB435G comes with a 680MHz Atheros CPU and is preinstalled with a Level5 RouterOS license.

CPU	Atheros AR7161 680MHz
Memory	256MB DDR SDRAM onboard memory
Boot loader	RouterBOOT
Data storage	NAND memory chip and microSD slot for expansion
Ethernet	Three 10/100/1000 Gigabit Ethernet ports with Auto-MDI/X
miniPCI	Five miniPCI Type IIIA/IIIB slots
Expansion	Two USB 2.0 ports with powering (5V 1A supply)
Extras	Reset switch, beeper, temperature, voltage and current monitors
Serial port	One DB9 RS232C asynchronous serial port
LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC
Dimensions	105 mm x 154 mm, Weight: 153g
Power consumption	~4.5W without extension cards
Output to cards	19W without any cooling, up to 40W with active cooling
Operating System	MikroTik RouterOS, L5 license





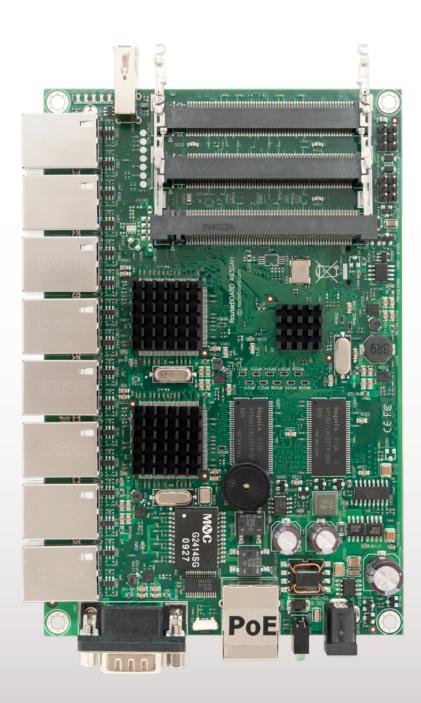
The RB450G is a five port Gigabit ethernet router. Comparing to the RB450, the RB450G not only adds Gigabit speed capability, but also 256Mb of RAM, a faster CPU and a microSD card slot for file storage.

The device is powered by a fast AR7161 680MHz Atheros CPU, and also includes a temperature sensor and voltage monitor.

RB450G includes RouterOS - the operating system, which will turn this powerful system into a highly sophisticated router, firewall or bandwidth manager.

One small device - with all the power of RouterOS. At a very special price.

	RB450	RB450G
CPU	AR7130 300MHz	AR7161 680MHz
Memory	32MB DDR SDRAM	256MB DDR SDRAM
Data storage	NAND memory chip	NAND memory chip, microSD slot on back side
Ethernet	Five 10/100 Mbit/s Ethernet ports with Auto-MDI/X, Hardware switch chip and port mirror support	Five 10/100/1000 Mbit/s <u>Gigabit</u> ports with Auto-MDI/X, Hardware switch chip and port mirror support
Extras	Reset switch, beeper, voltage and temperature monitors	Reset switch, beeper, voltage and temperature monitors
Serial port	One DB9 RS232C asynchronous serial port	One DB9 RS232C asynchronous serial port
LEDs	Power, NAND activity, 5 user LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC
Dimensions	90mm x 115mm, 105 g	90mm x 115mm, 105 g
RouterOS License	Level5	Level5



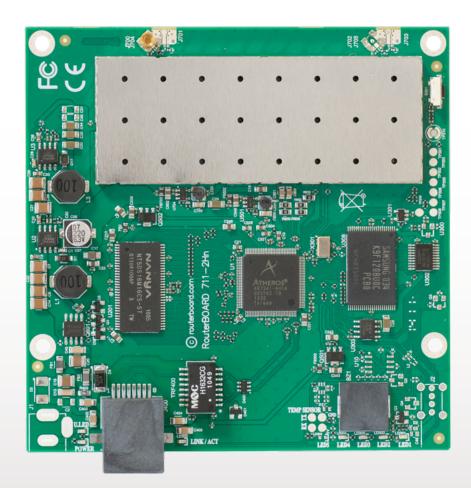
The RB493 has nine ethernet ports and three miniPCI slots, it also has a switch chip, so the ethernet ports of your choice can be grouped together to make it act as a switch.

RB493 includes RouterOS - the operating system, which will turn this powerful system into a highly sophisticated router, firewall or bandwidth manager.

With nine Ethernet ports, and three miniPCI slots, this is our most versatile RouterBOARD model.

The RB493AH model includes the higher speed Atheros 680MHz CPU, more memory, and a Level5 license for more simultaneous tunnel interfaces and hotspot users and RB493G adds a Gigabit port and a USB port.

	RB493	RB493AH	RB493G	
CPU	AR7130 300MHz	AR7161 680MHz	AR7161 680MHz	
RAM	64MB	128MB	128MB	
External storage	-	-	microSD	
Ethernet	Nine 10/100 Mbit/s	Nine 10/100 Mbit/s	Nine 10/100/1000 Gbit/s	
miniPCI	Three miniPCI slots	Three miniPCI slots	Three miniPCI slots	
Extras	Reset switch, Beeper	Reset switch, Beeper	1x unpowered USB 2.0 port, beeper, temperature and voltage sensors	
Serial port	One DB9 RS232C asyn- chronous serial port	One DB9 RS232C asynchronous serial port	One DB9 RS232C asynchronous serial port	
LEDs	Power, NAND activity, 5 user LEDs	Power, NAND activity, 5 user LEDs	Power, NAND activity, 5 user LEDs	
Power options	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC	PoE: 8-28V DC on Ether1 (Non 802.3af). Jack: 8-30V DC	
Dimensions	105mm x 160mm, 189 grams	105mm x 160mm, 189 grams	105mm x 160mm, 189 grams	
Consumption	~3W without extension cards, maximum – 16 W	~3W without extension cards, maximum – 16 W	~3W without extension cards, maximum – 16 W	
OS	MikroTik RouterOS, Level4 license	MikroTik RouterOS, Level5 license	MikroTik RouterOS, Level5 license	



RB711-2

Perfect for building CPE devices

The RB711 is a small CPE type RouterBOARD 2GHz wireless router with an integrated wireless card. There are many variatons depending on the features you need - choose the best model from the below tab

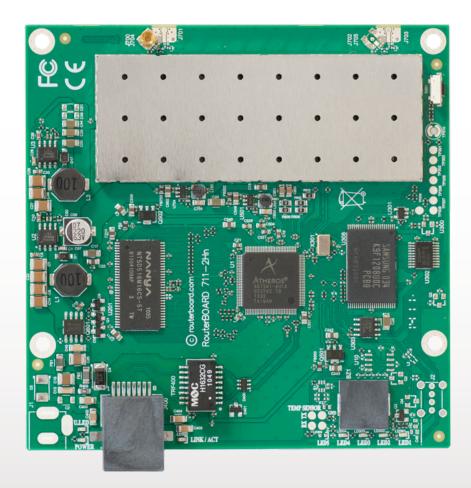
RB711 includes RouterOS - the operating system, which can be a router, firewall, bandwidth manager, a CPE and more - all at the same time.

The integrated 2GHz 802.11b/g/n wireless card is capable of up to 27dBm transmit power output (30dBm for the D models!). It has built in 16kV ESD protection on the RF port.

Feature / Model	RB711-2Hn	RB711-2HnD	RB711UA-2HnD
Wireless chains	1	2	2
USB	-	-	Yes
License	CPE	CPE	AP
RAM	32MB	32MB	64MB
Powering	PoE	PoE	Poe / Jack

CPU	Atheros AR7241 400MHz network processor
Memory	DDR SDRAM onboard memory
Data storage	onboard NAND memory chip
Ethernet	One 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X
Wireless	Built in 2GHz AR9283 802.11b/g/n card 1 or 2 MMCX connectors
Extras	Reset switch, Beeper
LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af).
Dimensions	10.5 cm x 10.5 cm (4.13 in x 4.13 in) Weight: 67g
Power consumption	Up to 4.5W at 18V full load (0.245A)
Operating System	MikroTik RouterOS, Level3 or Level4 license

RX sensitivity	802.11b/g: -92 dBm @ 6Mbps to -75 dBm @ 54 Mbps 802.11n: -92 dBm @ MCS0 to -71 dBm @ MCS7 40MHz
TX power (+3dBm for D models)	802.11b/g: 27dBm @ 6Mbps to 24dBm @ 54 Mbps 802.11n: 27dBm @ MCS0 to 20dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



RB711-5

Perfect for building CPE devices

The RB711 is a small CPE type RouterBOARD 5GHz wireless router with an integrated wireless card. There are many variatons depending on the features you need - choose the best model from the below tab

The integrated 5GHz 802.11a/n wireless card is capable of up to 22dBm transmit power output (25dBm for the D models!). It has built in 16kV ESD protection on the RF port.

Feature / Model	711-5Hn	711-5HnD	711UA-5HnD	711G-5HnD	711GA-5HnD
Wireless chains	1	2	2	2	2
USB	-	-	Yes	-	Yes
License	CPE	CPE	AP	CPE	AP
RAM	32MB	32MB	64MB	32MB	64MB
Gigabit port	-	-	-	Yes	Yes
Powering	PoE	PoE	PoE / Jack	PoE	PoE / Jack
Connector	uFl or MMCX	MMCX	MMCX	MMCX	MMCX

CPU	Atheros AR7241 400MHz network processor
Memory	DDR SDRAM onboard memory
Data storage	onboard NAND memory chip
Ethernet	One Fast Ethernet or Gigabit port with Auto-MDI/X
Wireless	Built in 5GHz AR9283 802.11a/n card 1 or 2 MMCX connectors
Extras	Reset switch, Beeper
LEDs	Power, NAND activity, 5 user LEDs
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af).
Dimensions	10.5 cm x 10.5 cm (4.13 in x 4.13 in) Weight: 67g
Power consumption	Up to 4.5W at 18V full load (0.245A)
Operating System	MikroTik RouterOS, Level3 or Level4 license

RX sensitivity	802.11a: -92 dBm @ 6Mbps to -76 dBm @ 54 Mbps 802.11n: -92 dBm @ MCS0 to -73 dBm @ MCS7 40MHz
TX power (+3dBm for D models)	802.11a: 22dBm @ 6Mbps to 19dBm @ 54 Mbps 802.11n: 22dBm @ MCS0 to 15dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



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.

Combined with RouterOS - RB800 is the most powerful and sophisticated wireless router, firewall and bandwidth manager. With many expansion options. Our top of the line wireless device.

CPU	MPC8544 800MHz
Memory	256MB DDR2 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	PCI daughterboard port
Extras	Reset switch, beeper, 4x fan headers, voltage and temperature sensors
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, Level6 license





OmniTIK

OmniTIK is a weatherproof outdoor AP with dual-polarized omni antennas - the perfect companion for our SXT, or for any other 5GHz 802.11a/n standard device.

Weatherproof, durable and ready to use. It has five 10/100 Ethernet ports, PoE support and a built-in 400mW 802.11a/n wireless radio. It supports Nv2 TDMA technology with up to 200Mbit aggregate throughput.

LED signal indicators on it's back are fully customisable, show Ethernet activity or wireless signal - or any other information from RouterOS. The USB port gives the ability to connect a 3G modem or a storage drive.

The OmniTIK UPA also features power output on it's ethernet ports. Ports 2-5 can power other PoE capable devices with the same voltage as applied to the unit. Less power adapters to worry about.

	OmniTIK U-5HnD and OmniTIK UPA-5HnD
CPU	Atheros AR7241 400MHz network processor
Memory	32MB DDR SDRAM onboard memory
Boot loader	RouterBOOT
Data storage	onboard NAND memory chip
Ethernet	Five 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X, L2MTU frame size up to 2030
Wireless	Wireless Built-in 5GHz 802.11a/n 2x2 MIMO
Antenna	Two 7.5dBi (+/-1dBi) omni with different polarities (ch0 horizontal, ch1 vertical)
Extras	Reset switch, Beeper, USB 2.0 port, Voltage monitor, Temperature monitor
LEDs	5 programmable LEDs (Ethernetactivity by default), one power LED
Power options	Passive 9-30V PoE only. 16KV ESD protection on RF port
Dimensions	177x44x44mm, 518g
Operating temp.	-30C to +70C
Operating system	MikroTik RouterOS v5, Level4 license
Package contains	OmniTIK unit, mounting bracket, hose clamp, PoE injector, 24V 2.5A power adapter
	OmniTIK UPA-5HnD
Power Output	Supports PoE output on ports 2-5. Max current 500mA per port
DV	200 44 - 00 ID - 0 0M - 1 - 00 ID - 0 54 M - 1
RX sensitivity	802.11a: -96 dBm @ 6Mbps to -80 dBm @ 54 Mbps 802.11n: -96 dBm @ MCS0 to -77 dBm @ MCS7
TX power	802.11a: 26dBm @ 6Mbps to 22dBm @ 54 Mbps
	802.11n: 25dBm @ MCS0 to 19dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK
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SXT

SXT is a low cost, high speed 5GHz outdoor wireless device, now also available with a Gigabit port, to fully utilize the capacity of 802.11n. SXT can be used for point to point links or as a CPE for point to multipoint installations.

Complete with a ready to mount enclosure and built-in 16dBi antenna, the package contains everything you need to make a point to point link, or connect to an AP.

Model	SXT 5HnD	SXT G-5HnD
CPU	Atheros AR7241 400MHz CPU	
Memory	32MB DDR SDRAM onboard memory	
Ethernet	One 10/100 Ethernet port, L2MTU frame size up to 4076	One 10/100/1000 Gigabit port, L2MTU frame size up to 4076
Wireless cards	Onboard dual chain 5GHz 802.11a/n 10kV ESD protection on each RF por	
Extras	Reset switch, beeper, USB 2.0 port, voltage and temperature monitors	
LEDs	Power LED, Ethernet LED, 5 wireless	signal LED
Power options	Power over Ethernet: 8-30V DC Packaged with 24V DC 0.8A power adapter and passive PoE injector	
Dimensions	140x140x56mm. Weight without pack	kaging, adapters and cables: 265g
Power consumption	Up to 7W	
Operating Temp	-30C +80C	
OS	MikroTik RouterOS, Level3 license	
Package contains	SXT wireless device with integrated a mounting ring, PoE injector, power ac	
Certifications	FCC, CE, ROHS	

Antennas	Dual polarization 5GHz antenna, 16 ±2 dBi, - 35 dB port to port isolation
TX power	802.11g: 26dBm @ 6Mbps to 22 dBm @ 54 Mbps 802.11n: 25dBm @ MCS0 to 18dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



Frequencies	5.17 - 5.825 GHz
Gain	18dBi
VSWR	1.6:1
3 dB Beam-Width, H-Plane	16.8 °
3 dB Beam-Width, E-Plane, typ.	22.8 °
Polarization	Linear, Vertical and Horizontal
Port to Port Isolation	- 35 dB

SEXTANT Outdoor point to point solution

The SEXTANT is a 18dBi 5GHz antenna with a built in RB711 router. It has two polarizations to give you all benefits of 2x2 MIMO in 802.11n.

The new SEXTANT is very similar to the popular SXT unit, just slightly bigger. Inside is the brand new RB711-5HnD dual chain wireless device, with high performance, high output power, and low power requirements.

Easy to use and quick to deploy, SEXTANT is ideal for point to point links.

CPU	Atheros AR7241 400MHz network processor
Memory	32MB DDR SDRAM onboard memory
Data storage	Onboard NAND memory chip
Ethernet	One 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X
Wireless	5GHz AR9280 802.11a/n, 2x2 MIMO, 2x MMCX
LEDs	Power, NAND activity, 5 user LEDs
Power	Power over Ethernet: 1028V DC (except power over datalines). No power jack. Up to 4.5W consumption.
OS	MikroTik RouterOS v4, Level3 license
Dimensions	Ø250mm, height 90mm, 830g

RX sensitivity	802.11a: -96 dBm @ 6Mbps to -80 dBm @ 54 Mbps
	802.11n: -96 dBm @ MCS0 to -77 dBm @ MCS7
TX power	802.11a: 25dBm @ 6Mbps to 22dBm @ 54 Mbps
	802.11n: 25dBm @ MCS0 to 19dBm @ MCS7



Groove 5Hn

Our smallest outdoor series model - a fully featured 5Ghz 802.11a/n wireless RouterBOARD powered by RouterOS. Weatherproof, durable and ready to use. It has one 10/100 Ethernet port with PoE support and a builtin 200mW 802.11a/n wireless radio.

With the Nv2 TDMA technology, up to 125Mbit aggregate throughput is possible! It has a built-in N-male connector, and pole attachment points, so you can attach it to an antenna directly, or use a standard antenna cable. LED signal indicators make it easy to install and align.

Two versions are available: 5Hn and A-5Hn. Both of them can be used as clients or for point-to-point links, but Groove A-5Hn can also be used as an Access Point. Groove runs RouterOS with all it's features.

CPU	Atheros AR7241 400MHz network processor
Memory	32MB DDR SDRAM onboard memory
Boot loader	RouterBOOT
Data storage	onboard NAND memory chip
Ethernet	One 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X, L2MTU up to 2030
Wireless	Wireless Built-in 5GHz 802.11a/n 1x1 MIMO, N-male connector
Extras	Reset switch, Beeper, Voltage monitor, Temperature monitor
LEDs	5 wireless signal LEDs, ethernet activity LED (configurable)
Power options	Passive 9-30V PoE only. 16KV ESD protection on RF port
Consumption	Up to 0,19A at 24V (4.56W)
Dimensions	177x44x44mm, 193g. Must be mounted with ethernet pointing down
Operating temperature	-30C to +70C
Operating system	5Hn: RouterOS v5, Level3 license (station or point-to-point) A-5Hn: RouterOS v5, Level4 license (AP, station or point-to-point)
Package contains	Groove 5Hn unit, mounting loops, PoE injector, 24V power adapter
RX sensitivity	802.11a: -93 dBm @ 6Mbps to -77 dBm @ 54 Mbps 802.11n: -93 dBm @ MCS0 to -71 dBm @ MCS7
TX power	802.11a: 23dBm @ 6Mbps to 19dBm @ 54 Mbps 802.11n: 22dBm @ MCS0 to 15dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



Groove 2Hn

The Groove is our smallest outdoor series model - a fully featured RouterBOARD powered by RouterOS. Weatherproof, durable and ready to use. It has one 10/100 Ethernet port with PoE support and a built-in 500mW 802.11b/g/n wireless radio. With the Nv2 TDMA technology, 125Mbit aggregate throughput is possible, limited only by the ethernet port!

The Groove 2Hn has a RouterOS Level3 license, so you can use it as a wireless client or for point to point links.

It has a built-in N-male connector, so you can attach it to an antenna directly, or use a standard antenna cable. LED signal indicators make it easy to install and align. The Groove runs RouterOS with all it's features.

CPU	Atheros AR7241 400MHz network processor
Memory	32MB DDR SDRAM onboard memory
Data storage	Onboard NAND memory chip
Ethernet	One 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X, L2MTU up to 2030
Wireless	Wireless Built-in 2GHz 802.11b/g/n 1x1 MIMO, N-male connector
Extras	Reset switch, Beeper, Voltage monitor, Temperature monitor
LEDs	5 wireless signal LEDs, ethernet activity LED (configurable)
Power options	Passive 9-30V PoE only. 16KV ESD protection on RF port
Consumption	Up to 0,19A at 24V (4.56W)
Dimensions	177x44x44mm, 193g. Must be mounted with ethernet pointing down
Operating temperature	-30C to +70C
Operating system	2Hn: RouterOS v5, Level3 license (station or point-to-point)
	A-2Hn: RouterOS v5, Level4 license (AP, station or point-to-point)
Package contains	Groove 2Hn unit, mounting loops, PoE injector, 24V power adapter
RX sensitivity	802.11b/g: -92 dBm @ 6Mbps to -75 dBm @ 54 Mbps
	802.11n: -92 dBm @ MCS0 to -71 dBm @ MCS7 40MHz
TX power	802.11b/g: 27dBm @ 6Mbps to 24dBm @ 54 Mbps
	802.11n: 27dBm @ MCS0 to 20dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM
	DSSS: DBPSK, DQPSK, CCK



Metal 5SHPn

The new, completely waterproof, rugged, and super high powered RouterBOARD Metal. The serious outdoor wireless device.

Fully sealed, industrial design metal case, powered by RouterBOARD and RouterOS. 1.3 WATT of output power - to reach the last mile, in any conditions.

It has a built-in N-male connector, and pole attachment points, so you can attach it to an antenna directly, or use a standard antenna cable. LED signal indicators make it easy to install and align.

Shipped complete with power injector, adapter and mounting kit.

CPU	Atheros AR7241 400MHz network processor
Memory	64MB DDR SDRAM onboard memory
Ethernet	One 10/100 Mbit/s Fast Ethernet port with Auto-MDI/X, L2MTU up to 2030
Wireless	Wireless Built-in 5GHz 802.11a/n 1x1 MIMO, N-male connector, Up to 1.3W output power
Extras	Reset switch, Beeper, Voltage monitor, Temperature monitor
LEDs	5 wireless signal LEDs, ethernet activity LED (configurable)
Power options	Passive 8-30V PoE only. 16KV ESD protection on RF port
Consumption	Up to ~0,5A at 24V (11.5W)
Dimensions	177x44x44mm, 193g. Must be mounted with ethernet pointing down
Operating temperature	-30C to +70C
Operating system	MikroTik RouterOS v5, Level4 license (station, point-to-point or AP modes)
Package contains	Metal 5SHPn unit, mounting loops, PoE injector, 24V power adapter
RX sensitivity	802.11a: -93 dBm @ 6Mbps to -77 dBm @ 54 Mbps 802.11n: -93 dBm @ MCS0 to -71 dBm @ MCS7
TX power	802.11a: 31dBm @ 6Mbps to 27dBm @ 54 Mbps 802.11n: 30dBm @ MCS0 to 26dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



RB250GS

The RB250GS is a small SOHO <u>switch</u> in a plastic case. It has five Gigabit Ethernet ports powered by an Atheros Switch Chip.

It is powered by a new operating system designed specifically for MikroTik Switch products - SwOS.

SwOS is configurable from your web browser. It gives you all the basic functionality for a managed switch, plus more: Allows to manage port-to-port forwarding, apply MAC filter, configure VLANs, mirror traffic, apply bandwidth limitation and even adjust some MAC and IP header fields.

- Smart switch
- Small and compact
- Plastic case
- Five Gigabit ports
- Web interface controlled
- Smarter than smart

CPU	Taifatech TF470
Memory	Embedded 96K SRAM
Ethernet	Five 10/100/1000 Ethernet ports, Atheros switch AR8316
Serial port	No serial port
LEDs	Power, NAND activity, 5 Ethernet activity LEDs
Extras	Hardware watchdog
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af). Jack: 8-30V DC
Dimensions	113x89x28mm. Weight without packaging and cables: 142g
Power consumption	Up to 6W
Operating Temperature	-25C +65C
Operating System	MikroTik SwOS



The RB750 is a small five port ethernet router in a nice plastic case. Not only is this an attractive looking tiny SOHO unit, it's price is lower than the RouterOS license alone - there simply is no choice when it comes to managing your wired home network, the RB750 has it all. Small, powerful, affordable and fully featured. There are three models available: RB750, RB750GL which has Gigabit ports, and RB750UP which has PoE power output. RB750UP ports 2-5 can power other PoE capable devices with the same voltage as applied to the unit. Less power adapters to worry about.

Model	RB750, RB750GL, RB750UP
CPU	AR7241 400MHz CPU
Data storage	NAND memory chip
Ethernet	Five Ethernet ports with Auto-MDI/X. Hardware switch chip and port mirror support
LEDs	Power, NAND activity, 5 Ethernet LEDs
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af). Jack: 8-30V DC
Dimensions	113x89x28mm. Weight without packaging and cables: 130g
Power consumption	Up to 3W
Operating System	MikroTik RouterOS, Level4 license
Package contains	RouterBOARD in a plastic case, power adapter

Feature / Model	750	750GL	750UP
CPU MHz	400Mhz	400Mhz	400MHz
RAM MB	32MB	64MB	32MB
PoE output	-	-	Yes
USB	-	-	Yes
Voltage monitor	-	-	Yes
Gigabit LAN	-	Yes	-
RouterOS License	L4	L4	L4



The RB751 is the wireless SOHO AP you have been waiting for.

RB751U has five Ethernet ports, one USB 2.0 port and a high power 802.11b/g/n wireless AP with antennas built in. RB751G has Gigabit ports, to fully utilize the 802.11n speed capability.

It's also possible to connect an external MMCX antenna to replace one of the built in antennas. The device is very small and will look good in any home or office, wall mounting anchor holes are provided.

Features	RB751U-2HnD (USB, 2GHz, 802.11n, dual chain) RB751G-2HnD (Gigabit, USB, 2GHz, 802.11n, dual chain)		
CPU	Atheros AR7241 400MHz CPU		
Memory	32MB DDR SDRAM onboard memory (64MB for RB751G)		
Ethernet	Five independent 10/100 Ethernet ports (Gigabit ports on RB751G)		
LEDs	Power, NAND activity, 5 Ethernet LEDs, wireless activity LED		
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af). Jack: 8-30V DC		
Dimensions	113x138x29mm. Weight without packaging and cables: 230g		
Power consumption	Up to 7W		
Operating Temp	-20C +50C		
Operating System	MikroTik RouterOS, Level4 license		
Package contains	RouterBOARD in a plastic case, power adapter		

Antennas	2x2 MIMO PIF antennas, max gain 2.5dBi; external MMCX option
RX sensitivity	802.11g: -96dBm @ 6Mbit/s to -81dBm @ 54Mbit/s 802.11n: -96 dBm @ MCS0 to -78 dBm @ MCS7
TX power	802.11g: 30dBm @ 6Mbps to 27dBm @ 54 Mbps 802.11n: 30dBm @ MCS0 to 26dBm @ MCS7
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK



RB951-2n

The RB951-2n is the home wireless AP you have been waiting for. It has five Ethernet ports and a 802.11b/g/n wireless AP with an antenna built in.

This model is much smaller than the more powerful 2HnD model, the RB951-2n looks exactly like our popular RB750 series.

The device is very small and will look good in any home or office, wall mounting anchor holes are provided.

CPU	Atheros AR9331 300MHz CPU		
Memory	32MB DDR SDRAM onboard memory		
Ethernet	Five independent 10/100 Ethernet ports		
LEDs	Power, NAND activity, 5 Ethernet LEDs		
Power options	PoE: 8-30V DC on Ether1 (Non 802.3af). Jack: 8-30V DC		
Dimensions	113x89x28mm. Weight without packaging and cables: 142g		
Power consumption	Up to 4W		
Operating Temp	-20C +50C		
Operating System	MikroTik RouterOS, Level4 license		
Package contains	RouterBOARD in a plastic case, power adapter		

Antennas	1x1 MIMO with two onboard PIF antennas, max gain 1.5dBi	
TX power	802.11b: 17dBm @ 11Mbps 802.11g: 15dBm @ 6Mbps to 11 dBm @ 54 Mbps	
	802.11n: 15dBm @ MCS0 to 9dBm @ MCS7 40MHz	
RX sensitivity	802.11g: -92dBm @ 6Mbit/s to -73dBm @ 54Mbit/s 802.11n: -92 dBm @ MCS0 to -67 dBm @ MCS7	
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK	





The new and affordable rackmount router.

It has ten individual gigabit Ethernet ports, five of them can be connected together in one 5-port switch group.

RB1200 has a SODIMM slot with bundled 512MB of RAM, a beeper and a serial port.

It has no moving parts and it's operation is completely silent, optional fan header is available.

The RB1200 comes in a 1U aluminium rackmount case.

CPU	PowerPC PPC460GT		
Memory	SODIMM DDR Slot, 512MB RAM		
Boot loader	RouterBOOT, 1Mbit Flash chip		
Ethernet	Ten 10/100/1000 Mbit/s Gigabit Ethernet with Auto-MDI/X		
miniPCI	none		
Storage	Onboard NAND chip		
Serial port	One DB9 RS232C asynchronous serial port		
Extras	Reset switch, Beeper		
Power options	IEC C14 standard connector 110/220V		
Fan	default none, header for optional fan available		
Dimensions	1U case: 44 x 176 x 442 mm, 1200g. Board only: 365g		
Operating System	MikroTik RouterOS, Level 6 license		





RB1100AH

This device is a high performance 1U rackmount Gigabit Ethernet router.

It has thirteen individual gigabit Ethernet ports, two 5-port switch groups, and includes Ethernet bypass capability.

RB1100AH also has a SODIMM slot with bundled 2GB of RAM, one microSD card slot, a beeper and a serial port.

The RB1100AH comes preinstalled in a 1U aluminium rackmount case, assembled and ready to deploy.

CPU	PowerPC 1066MHz network CPU		
Memory	SODIMM DDR Slot, 2GB installed (RouterOS supports up to 1.5GB)		
Boot loader	RouterBOOT, 1Mbit Flash chip		
Data storage	Onboard NAND memory chip		
Ethernet	Thirteen 10/100/1000 Mbit/s Gigabit Ethernet with Auto-MDI/X		
Ethernet	Includes switch to enable Ethernet bypass mode in two ports		
miniPCI	none		
Storage	Onboard NAND, one microSD slot		
Serial port	One DB9 RS232C asynchronous serial port		
Extras	Reset switch, beeper, voltage and temperature sensors		
Power options	IEC C14 standard connector 110/220V		
Fan	Dual fan with failover support mounted at case back		
Dimensions	1U case: 44 x 176 x 442 mm, 1275g. Board only: 365g		
Operating System	MikroTik RouterOS, Level 6 license		





RB1100AHx2

The top of the line core router which now has dual core CPU which allows almost double the performance!

It has thirteen individual gigabit Ethernet ports, two 5-port switch groups, and includes Ethernet bypass capability.

This device has a SODIMM slot with bundled 2GB of RAM, one microSD card slot, a beeper and a serial port. It has built-in voltage and health monitoring capabilities.

The RB1100AHx2 comes in a 1U aluminium rackmount case.

Dimensions Operating System	1U case: 44 x 176 x 442 mm, 1275g. Board only: 365g MikroTik RouterOS, Level 6 license		
Fan	Dual fan with failover support mounted at case back		
Power options	IEC C14 standard connector 110/220V		
Extras	Reset switch, beeper, voltage and temperature sensors		
Serial port	One DB9 RS232C asynchronous serial port		
Storage	Onboard NAND, one microSD slot		
miniPCI	none		
Ethernet	Includes switch to enable Ethernet bypass mode in two ports		
Ethernet	Thirteen 10/100/1000 Mbit/s Gigabit Ethernet with Auto-MDI/X		
Data storage	Onboard NAND memory chip		
Boot loader	RouterBOOT, 1Mbit Flash chip		
Memory	SODIMM DDR Slot, 2GB installed (RouterOS supports up to 1.5GB)		
CPU	PowerPC 1066MHz Dual Core CPU with hardware encryption		





RB2011L

The RB2011 is a low cost multi port device series. Designed for indoor use, and available in many different cases, with a multitude of options.

The RB2011L series includes five models, RB2011L, RB2011L-IN (Desktop case) and RB2011L-RM (rackmount case), RB2011LS (adds SFP port) and RB2011LS-IN (LS in desktop case).

It's powered by the new Atheros 600MHz 74K MIPS network processor and has 64MB of RAM and a Level4 RouterOS license.

CPU	Atheros AR9344 600MHz		
Memory	64MB DDR SDRAM onboard memory		
Ethernet	Five 10/100 Mbit Fast Ethernet ports with Auto-MDI/X Five 10/100/1000 Mbit Gigabit Ethernet ports with Auto-MDI/X		
Expansion	RB2011LS model: SFP port		
Extras	Reset button, Reset jumper		
LEDs	Power, User, Ethernet activity		
Power options	Jack 8-28V DC; PoE: 8-28V DC on Ether1 (Non 802.3af).		
Dimensions	214 mm x 86 mm, Weight: 146g		
Power consumption	8W max		
Operating System	MikroTik RouterOS, L4 license		
Package includes	RB2011, indoor case and power supply		

Feature / Model	2011L	2011L-IN	2011L-RM	2011LS	2011LS-IN
Enclosure	-	Desktop	Rackmount	-	Desktop
SFP port	-	-	-	Yes	Yes
Serial port	-	-	-	-	-
USB	-	-	-	-	-
Wireless	-	-	-	-	-





RB2011US

The RB2011 is a low cost multi port device series. Designed for indoor use, and available in many different cases, with a multitude of options. The RB2011 is a small form factor ethernet router with 5 Gigabit Ethernet ports and 5 Fast Ethernet ports.

The RB2011US series includes three models RB2011US-IN (USB, SFP, indoor case), RB2011US-2HnD (also includes wireless functionality and indoor antennas) and RB2011US-2HnD-IN (with an indoor case).

It's powered by the new Atheros 600MHz 74K MIPS network processor and has 64MB of RAM and a Level4 RouterOS license.

CPU	Atheros AR9344 600MHz		
Memory	64MB DDR SDRAM onboard memory		
Ethernet	Five 10/100 Mbit Fast Ethernet ports with Auto-MDI/X Five 10/100/1000 Mbit Gigabit Ethernet ports with Auto-MDI/X		
Expansion	SFP port		
Extras	Reset button, Reset jumper		
LEDs	Power, User, Ethernet activity		
Power options	Jack 8-28V DC; PoE: 8-28V DC on Ether1 (Non 802.3af).		
Dimensions	214 mm x 86 mm, Weight: 146g		
Power consumption	15W max		
Operating System	MikroTik RouterOS, L4 license		
Package includes	RB2011, power supply, (depends on model: enclosure)		

Feature / Model	2011US-IN	2011US-2HnD-IN	2011US-2HnD
Enclosure	Desktop	Desktop	-
SFP port	Yes	Yes	Yes
Serial port	Yes	Yes	Yes
USB	Yes	Yes	Yes
Wireless	-	Yes	Yes



R52

Your universal wireless card.

R52 is a 65mW 802.11abg wireless card and uses the reliable Atheros AR5414 chipset. It is the logical choice for use in combination with RouterOS and RouterBOARD because of it's high compatibility and reliability.

To further increase the range and speed of your wireless links, use it together with the MikroTik proprietary NStreme protocol, making your MikroTik RouterBOARD system complete.

Chipset:	Atheros AR5414
Standards:	IEEE802.11a, IEEE802.11b, IEEE802.11g
Media Access:	CSMA/CA with ACK architecture 32-bit MAC
Security:	Hardware 64/128 bit WEP, TKIP and AES-CCM encryption, WPA, WPA2, 802.1x
Modulation:	802.11b+g: DSSS, OFDM for data rate >30Mbps
	802.11a: OFDM
Connectors:	Two U.fl connectors
Certifications:	FCC, EC
Powering:	3.3V +/- 10% DC; 800mA max (600mA typ.)
Frequencies: 802.11b/g	2.192 – 2.507 (5 MHz step); 2.224 – 2.539 (5MHz step)
Frequencies: 802.11a	4.920 – 6.100 (5 MHz step)
Operating temperature	-20 +70 C
Standard	Output power / Receive Sensitivity
802.11a	17dBm/-88dBm @ 6Mbps
	13dBm/-71dBm @ 54Mbps
802.11b	19dBm/-95dBm @ 1Mbps
	19dBm/-90dBm @ 11Mbps
802.11g	18dBm/-90dBm @ 6Mbps
	15dBm/-73dBm @ 54Mbps



R52H

Your universal high power wireless card.

R52 is a 350mW 802.11abg wireless card and uses the same reliable Atheros AR5414 chipset as the regular R52. It is the logical choice for use in combination with RouterOS and RouterBOARD because of it's high compatibility and reliability.

To further increase the range and speed of your wireless links, use it together with the MikroTik proprietary NStreme protocol, making your MikroTik RouterBOARD system complete.

Chipset:	Atheros AR5414
Standards:	IEEE802.11a, IEEE802.11b, IEEE802.11g
Media Access:	CSMA/CA with ACK architecture 32-bit MAC
Security:	Hardware 64/128 bit WEP, TKIP and AES-CCM encryption, WPA, WPA2, 802.1x
Modulation:	802.11b+g: DSSS, OFDM for data rate >30Mbps
	802.11a: OFDM
Connectors:	Two U.fl connectors
Certifications:	FCC, EC
Powering:	3.3V +/- 10% DC; 800mA max (600mA typ.)
Frequencies: 802.11b/g	2.192 – 2.507 (5 MHz step); 2.224 – 2.539 (5MHz step)
Frequencies: 802.11a	4.920 - 6.100 (5 MHz step)
Operating temperature	-20 +70 C
Standard	Output power / Receive Sensitivity
802.11a	24dBm / -90dBm @ 6Mbps
	19dBm / -70dBm @ 54Mbps
802.11b	25dBm / -92dBm @ 1Mbps
	25dBm / -87dBm @ 11Mbps
802.11g	25dBm / -90dBm @ 6Mbps
	20dBm / -70dBm @ 54Mbps



R52Hn

Leading 802.11a/b/g/n performance in both 2GHz and 5GHz bands, supporting up to 300Mbps physical data rates and up to 200Mbps of actual user throughput on both the uplink and downlink. 802.11n in your Wireless device provides higher efficiency for everyday activities such as local network file transfers, Internet browsing, and media streaming. R52Hn has a high power transmitter, bringing you even more range.

- Dual band IEEE 802.11a/b/g/n standard
- Output Power of up to 25dBm @ a/g/n Band
- Support for up to 2x2 MIMO with spatial multiplexing
- Four times the throughput of 802.11a/g
- Atheros AR9220, chipset
- High Performance (up to 300Mbps physical data rates and 200Mbps of actual user throughput) with Low Power Consumption
- 2 X MMCX Antenna Connector
- Modulations:
 - OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK
- Operating temperatures: -50°C to +60°C
- Idle power consumption 0.4W
- Max power consumption 7W
- MiniPCI IIIA+ design (3mm longer than MiniPCI IIIA)
- 1.5mm heatsink, 3mm RF shield thickness
- ±10KV ESD protection on RF ports

802.11b	RX Sensitivity	TX Power
1Mbit	-93	24
11Mbit	-93	24
802.11g		
6Mbit	-94	25
54Mbit	-81	22
802.11n 2.4GHz		
MCS0 20MHz	-94	25
MCS0 40MHz	-92	24
MCS7 20MHz	-78	21
MCS7 40MHz	-75	20

802.11a	RX Sensitivity	TX Power
6Mbit	-97	25
54Mbit	-80	21
802.11n 5GHz		
MCS0 20MHz	-97	24
MCS0 40MHz	-92	22
MCS7 20MHz	-77	18
MCS7 40MHz	-74	17



- Dual band IEEE 802.11a/b/g/n standard
- Output Power of up to 25dBm
- Support for up to 2x2 MIMO with spatial multiplexing
- Four times the throughput of 802.11a/g
- Atheros AR9220 chipset
- High Performance (up to 300Mbps physical data rates and 200Mbps of actual user throughput) with Low Power Consumption
- 2 X MMCX Antenna Connector
- Modulations:
 OFDM: BPSK, QPSK, 16 QAM, 64QAM
 DSSS: DBPSK, DQPSK, CCK
- Operating temperatures: -20°C to +60°C
- Power consumption MAX 2.4W

R52N-m

The RouterBOARD R52n miniPCI network adapter provides leading 802.11a/b/g/n performance in both 2GHz and 5GHz bands, supporting up to 300Mbps physical data rates and up to 200Mbps of actual user throughput on both the uplink and downlink. Adding Wireless N to your Wireless device, it provides higher efficiency for everyday activities such as local network file transfers, Internet browsing, and media streaming.

802.11b	RX Sensitivity	TX Power
1Mbit	-95/-94	23
11Mbit	-92	23
802.11g		
6Mbit	-95/-94	25
54Mbit	-80	21
802.11n 2.4GHz		
MCS0 20MHz	-95/-94	23
MCS0 40MHz	-91	21
MCS7 20MHz	-77	20
MCS7 40MHz	-74	20

802.11a	RX Sensitivity	TX Power
6Mbit	-97/-95	21
54Mbit	-80/-79	19
802.11n 5GHz		
MCS0 20MHz	-97/-95	21/19
MCS0 40MHz	-93/-91	19
MCS7 20MHz	-78/-76	16
MCS7 40MHz	-75/-73	13

Data Rates

802.11b	
	11Mbps; 5.5Mbps; 2Mbps; 1Mbps
802.11a/g	
	54Mbps; 48Mbps; 36Mbps; 24Mbps; 18Mbps; 12Mbps; 9Mbps; 6Mbps
802.11n	
20MHz	1Nss: 65Mbps @ 800Gl, 72.2Mbps @ 400Gl (Max.) 2Nss: 130Mbps @ 800Gl, 144.4Mbps @ 400Gl (Max.)
40MHz	1Nss: 135Mbps @ 800Gl, 150Mbps @ 400Gl (Max.) 2Nss: 270Mbps @ 800Gl, 300Mbps @ 400Gl (Max.)



802.11a	RX Sensitivity	TX Power
6Mbit	-93	29dBm
24Mbit	-77	27dBm
36Mbit	-77	27dBm
48Mbit	-77	27dBm
54Mbit	-77	25dBm
802.11n		
MCS0 20MHz	-93	28dBm
MCS0 40MHz	-89	29dBm
MCS7 20MHz	-74	24dBm
MCS7 40MHz	-71	24dBm

R5SHPn

The ultimate long distance wireless

The new 5GHz super high power wireless card for long range links and powerful access points. This is the professional choice for reaching the last mile. 800mW transmit power will give you the ability to reach even further than before. Up to 125Mbit throughput is possible with this device!

The card features built-in LED indicators for wireless mode, connection status (connected, searching, disabled), TX and RX activity and wireless signal strength - just looking at the card will help with installation and alignment.

The card comes with a preinstalled industrial grade heatsink, one MMCX connector and nine LED indicator lights.

Specifications	
Chipset	AR9220
Frequency range	4800-6075Mhz
Standards	802.11a/n
Max output power	800mW
Format	miniPCI
Dimensions	60x60x19mm (incl. heatsink)
Connectors	1x MMCX (single chain)
Features	9 LED indicators,
	ESD protection
Temperature	Starting -5C to +65C (23 to 149F)
	Operating -30C to +65C (-22 to 149F)
Power consumption	Up to 10W at maximum power



A8V Passive PoE Telecom PoE 802.3af 802.3at

RouterBOARD POE-CON-HP 48 to 24V PoE Converter

This device lets you use any 48V PoE source (including Passive PoE, Telecom PoE, 802.3af and 802.3at) to power RouterBOARD devices.

Simply plug any 48V PoE powered ethernet cable into one port, and any 8-30V capable RouterBOARD device into the other. This device is capable to provide high power output - up to 24W (up to 1A at 24V).

You can power it with virtually any 42-57V PoE solutions available on market today (Passive, Telecom, 802.3af and 802.3at PoE plus supported)

The device is a rugged metallic design, with high capacity components and integrated heatsink design. The case also has mounting holes so you can attach it to a wall.

Ethernet shield pins are inside the Ethernet connectors, so that shielded ethernet can be used, to ground either at the converter itself, or at the devices at both ends.

Name	RouterBOARD POE-CON-HP
Ethernet	Two Ethernet ports with grounding pins (Works also with Gigabit devices, but only at 10/100 speed)
Dimensions	107x66x24mm
Power Input	42-57V (Passive, Telecom, 802.3af and 802.3at PoE plus supported)
Power Output	24V 1A
Output pins	4,5 "+"; 7,8 "-"