2.4/5GHz 802.11a+b+g High Power Wireless Mini-PCI Card (R52H)
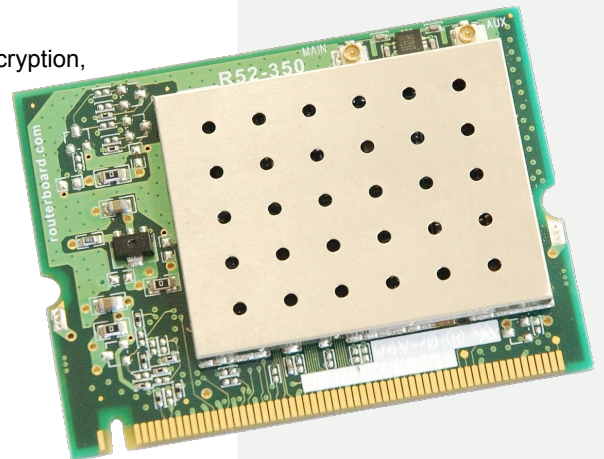
➔ **Turbo, 802.11a, 802.11b and 802.11g IN ONE**
➔ **Operates in both 2.4 GHz and 5 GHz wireless bands**
➔ **Support MikroTik Nstreme**
➔ **Extended distances and higher speeds due to better output signal power**
➔ **FCC and CE approval**

MikroTik introduces the R52H wireless 802.11a+b+g miniPCI card for multiband high speed applications, with up to 350mW output power. It works on 2.192-2.539 and 4.920-6.100GHz frequency range and supports Turbo mode for faster transfers. The card performs best when coupled with the MikroTik RouterOS.

R52H is optimized to work with MikroTik Nstreme protocol to reach extra long distances at a great speed. The Nstreme protocol is MikroTik proprietary wireless protocol created to overcome speed and distance limitations of IEEE 802.11 standards and to extend point-to-point and point-to-multi point wireless link performance. The new Nstreme-dual protocol designed to provide real full-duplex communications over wireless with a pair of wireless cards – one for transmitting data and one for receiving.

Specifications

Chipset:	Atheros AR5414
Standards:	IEEE802.11a, IEEE802.11b, IEEE802.11g
Media Access:	CSMA/CA with ACK architecture 32-bit MAC
Security:	Hardware-based 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
Host Interface:	Mini-PCI form factor; Mini-PCI Version 1.0 type 3B suggested only for motherboards that are produced after 2004
Connectors:	Two U.fl connectors
Wi-Fi:	WECA Compliant
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)
802.11a	4.920 – 6.100 (5 MHz step)
Transfer Data Rate:	802.11b:11,5.5,2,1 Mbps, auto-fallback 802.11g(Normal mode):54,48,36,24,18,12,9,6 Mbps, auto-fallback 802.11g(Turbo mode):108,96,72,48,36,24,18,12 Mbps, auto-fallback 802.11a(Normal mode):54,48,36,24,18,12,9,6 Mbps, auto-fallback 802.11a(Turbo mode):108,96,72,48,36,24,18,12 Mbps, auto-fallback

Output Power / Receive Sensitivity:

IEEE 802.11a:	24dBm / -90dBm @ 6Mbps 19dBm / -70dBm @ 54Mbps
IEEE 802.11b:	25dBm / -92dBm @ 1Mbps 25dBm / -87dBm @ 11Mbps
IEEE 802.11g:	25dBm / -90dBm @ 6Mbps 20dBm / -70dBm @ 54Mbps
	* with RouterOS v2.9 and newer, tested to comply with IEEE802.11 BER specs

Supported OS:	MikroTik RouterOS, Windows XP, GNU/Linux
Operation Temp.:	-20°C to 70°C
Storage Temp.:	-65°C to 100°C
Humidity range:	Operating 5% to 95% (non-condensing)
Dimensions:	6.0cm x 4.5 cm
Weight:	20 grams

Warning: it is always advised to keep an antenna connected during high power tx to avoid damage to the amplifier circuit.

Contact support@routerboard.com for support questions.