MikroTik introduces the R52 wireless 802.11a+b+g miniPCI card for multiband high speed applications, it has new Atheros AR5414 chipset with Turbo/Super G (air rate 108Mbps on 802.11g 2.4GHz). R52 works on 2.312-2.499 and 4.920-6.100GHz frequency range.

R52 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. Nstreme2 works with a pair of wireless cards – one for transmitting data and one for receiving.

Specifications:

Frequencies:
- 802.11b/g: 2.312 – 2.497 (5 MHz step);
- 802.11a: 4.920 – 6.100 (5 MHz step)

Chipset: Atheros AR5414

Security: Hardware 64 and 128 bit WEP; Hardware TKIP and AES-CCM encryption; 802.1x WPA authentication

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

Power requirements: 3.3V +/- 10% DC; 400mA max (300mA typ.)

Output Power / Receive Sensitivity:
- IEEE 802.11a: 17dBm/-88dBm @ 6Mbps
- 13dBm/-71dBm @ 54Mbps
- 19dBm/-95dBm @ 1Mbps
- 19dBm/-90dBm @ 11Mbps
- 18dBm/-90dBm @ 6Mbps
- 15dBm/-73dBm @ 54Mbps

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

Supported OS: MikroTik RouterOS, Windows XP

Operation Temp.: 0°C to 50°C

Storage Temp.: -40°C to 70°C

Humidity range: Operating 5% to 95% (non-condensing)

Wi-FiR: WECA Compliant

Media Access Protocol: CSMA/CA with ACK architecture 32-bit MAC

Connectors: Two U.fl connectors

Dimensions: 6.0cm x 4.5 cm

Weight: 20 grams

Contact support@routerboard.com for support questions