

## R5H (5GHz 802.11a High Power Wireless miniPCI Card)

- Operates in 5 GHz wireless band
- Supports MikroTik NStreme
- Extended distances and higher speeds due to better output signal power
- FCC and CE approval
- Improved commercial grade AR5414A chipset

MikroTik introduces the R5H wireless 802.11a miniPCI card for high speed applications, with up to 320mW output power. It works on 4.920-6.100GHz frequency range and supports Turbo mode for faster transfers. The card performs best when used with the MikroTik RouterOS.

R5H 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. Nstreme-dual protocol, however is designed to provide real full-duplex communications over wireless with a pair of wireless cards – one for transmitting data and one for receiving.

### Specifications

<b>Chipset:</b>	Atheros AR5414A	
<b>Standards:</b>	IEEE802.11a	
<b>Media Access:</b>	CSMA/CA with ACK architecture 32-bit MAC	
<b>Security:</b>	Hardware-based 64/128 bit WEP, TKIP and AES-CCM encryption, WPA, WPA2, 802.1x	
<b>Modulation:</b>	802.11a: OFDM	
<b>Host Interface:</b>	Mini-PCI form factor; Mini-PCI Version 1.0 type 3B	
<b>Connectors:</b>	MMCX	
<b>Wi-Fi:</b>	WECA Compliant	
<b>Certifications:</b>	FCC, EC	
<b>Powering:</b>	3.3VDC; 1.6A max (1.1A typ.)	
<b>Frequencies:</b>	4.920 – 6.100 (5 MHz step)	
<b>802.11a</b>	4.920 – 6.100 (5 MHz step)	
<b>Transfer Data Rate:</b>	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	
<b>Receive Sensitivity:</b>		
IEEE 802.11a:	-93dBm @ 6Mbps	20MHz channel
	-75dBm @ 54Mbps	
	-99dBm @ 6Mbps/4	5MHz channel
	-82dBm @ 54Mbps/4	
<b>Output Power</b>	Up to 25dB (320mW)	
<b>Supported OS:</b>	MikroTik RouterOS, Windows XP, GNU/Linux	
<b>Operation Temp.:</b>	-20°C to 70°C	
<b>Storage Temp.:</b>	-65°C to 100°C	
<b>Humidity range:</b>	Operating 5% to 95% (non-condensing)	
<b>Dimensions:</b>	59.6mmx50.6mmx4.95mm(heatsink, with connector 7.7mm)	
<b>Weight:</b>	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](mailto:support@routerboard.com) for support questions.