

# RouterBOARD R52n-M



## 802.11a/b/g/n dual band miniPCI card

### Key Features and Benefits

- Dual band IEEE 802.11a/b/g/n standard
- Output Power of up to **23dBm**
- 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
- Two MMCX antenna connectors
- Modulations: **OFDM**: BPSK, QPSK, 16 QAM, 64QAM  
**DSSS**: DBPSK, DQPSK, CCK
- Operating temperatures: -50°C to 60°C
- Power consumption MAX 1.95W
- ESD protection +/- 12kV

The RouterBOARD R52n-M 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. This card features the sturdy MMCX connectors for higher durability. 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	Composite TX Power	802.11a	RX Sensitivity	Composite TX Power
1Mbit	-95	20	6Mbit	-95	21
11Mbit	-91	21	54Mbit	-80	17
<b>802.11g</b>			<b>802.11n 5GHz</b>		
6Mbit	-95	23	MCS0 20MHz	-95	21
54Mbit	-81	19	MCS0 40MHz	-92	19
<b>802.11n 2.4GHz</b>			MCS7 20MHz	-77	16
MCS0 20MHz	-95	21	MCS7 40MHz	-74	13
MCS0 40MHz	-90	21			
MCS7 20MHz	-78	17			
MCS7 40MHz	-75	16			

### Data Rates

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