

# RouterBOARD R52n

## 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 25dBm @ b/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 U.FL Antenna Connector
- Modulations:  
**OFDM:** BPSK, QPSK, 16 QAM, 64QAM  
**DSSS:** DBPSK, DQPSK, CCK
- Operating temperatures: 0°C to 60°C
- Power consumption MAX 2.4W
- ESD protection against +/-10kV ESD discharge on Antenna port

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 @ 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.)