# RouterBOARD R2n




## 802.11b/g/n miniPCI card

Key Features and Benefits

- 2.4GHz IEEE 802.11b/g/n standard
- Output Power of up to 24dBm @ b/g/n Band
- Support for up to 2x2 MIMO with spatial multiplexing
- Four times the throughput of 802.11g
- Atheros AR9223 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: -20ºC to 70ºC
- Power consumption MAX 2.4W
- ESD protection agaist +/-10kV ESD discharge on Antenna port

The RouterBOARD R2n miniPCI network adapter provides leading 802.11b/g/n performance, 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.

Average RX Sensitivity dBm

| 802.11b | |
|---|---|
| 1Mbit | -95/-94 |
| 11Mbit | -92 |
| 802.11g | |
| 6Mbit | -95/-94 |
| 54Mbit | -80 |
| 802.11n | |
| MCS0 20MHz | -95/-94 |
| MCS0 40MHz | -91 |
| MCS7 20MHz | -77 |
| MCS7 40MHz | -74 |

Average TX Power dBm

| 802.11b | |
|---|---|
| 1Mbit | 23 |
| 11Mbit | 23 |
| 802.11g | |
| 6Mbit | 24 |
| 54Mbit | 21 |
| 802.11n | |
| MCS0 20MHz | 22 |
| MCS0 40MHz | 20 |
| MCS7/15 20MHz | 19 |
| MCS7/15 40MHz | 19 |

Data Rates

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

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