

This information provided here is of a generic nature for this card and actual features/results may differ. This depends on configurations, antennas, driver/firmware, and OS. New GPL firmware and drivers are available for free software operating systems such as Linux and Linux-libre. The new drivers and firmware add features and may improve results in some cases. Antennas are required and may need to be purchased separately.

| CARD INFORMATION                     |          |         |           |   |                          |          |             |           |
|--------------------------------------|----------|---------|-----------|---|--------------------------|----------|-------------|-----------|
| Wireless Chipset                     |          |         |           | Atheros AR9170 with DFS SUPPORT                                   |                          |          |             |           |
| Radio Operation                      |          |         |           | IEEE 802.11a/b/g/n  |                          |          |             |           |
| Interface                            |          |         |           | USB 2.0   |                          |          |             |           |
| Operation Voltage                    |          |         |           | 5.0VDC  |                          |          |             |           |
| Antenna Ports                        |          |         |           | (2) MMCX for 2x2 MIMO Operation                                   |                          |          |             |           |
| Temperature Range                    |          |         |           | -20C to +70C  |                          |          |             |           |
| Security                             |          |         |           | 802.11i with AES-CCM & TKIP Encryption, 802.1x, 64/128/152bit WEP |                          |          |             |           |
| Data Rates                           |          |         |           | Legacy 802.11a/b/g (1-54Mbps), 802.11n (up to 300Mbps)            |                          |          |             |           |
| RoHS Compliance                      |          |         |           | YES   |                          |          |             |           |
| REGULATORY INFORMATION               |          |         |           |   |                          |          |             |           |
| Wireless Modular Approvals           |          |         |           | FCC , Industry Canada, CE (100mW limited)                         |                          |          |             |           |
| OPERATING FREQUENCY 2412MHz-2462MHz  |          |         |           |   |                          |          |             |           |
| 2.4GHz TX POWER SPECIFICATIONS       |          |         |           |   | 2.4GHz RX SPECIFICATIONS |          |             |           |
| 11b/g                                | DataRate | Avg. TX | Tolerance |   | 11b/g                    | DataRate | Sensitivity | Tolerance |
|                                      | 1-24Mbps | 24 dBm  | +/-2dB    |   |                          | 1-24Mbps | -97 dBm     | +/-3dB    |
|                                      | 36Mbps   | 22 dBm  | +/-2dB    |   |                          | 36Mbps   | -90 dBm     | +/-3dB    |
|                                      | 48Mbps   | 20 dBm  | +/-2dB    |   |                          | 48Mbps   | -86 dBm     | +/-3dB    |
|                                      | 54Mbps   | 19 dBm  | +/-2dB    |   |                          | 54Mbps   | -84 dBm     | +/-3dB    |
| 2.4GHz 11n HT20                      | MCS0     | 24 dBm  | +/-2dB    |   | 2.4GHz 11n HT20          | MCS0     | -97 dBm     | +/-3dB    |
|                                      | MCS1     | 24 dBm  | +/-2dB    |   |                          | MCS1     | -96 dBm     | +/-3dB    |
|                                      | MCS2     | 24 dBm  | +/-2dB    |   |                          | MCS2     | -93 dBm     | +/-3dB    |
|                                      | MCS3     | 22 dBm  | +/-2dB    |   |                          | MCS3     | -91 dBm     | +/-3dB    |
|                                      | MCS4     | 22 dBm  | +/-2dB    |   |                          | MCS4     | -87 dBm     | +/-3dB    |
|                                      | MCS5     | 22 dBm  | +/-2dB    |   |                          | MCS5     | -84 dBm     | +/-3dB    |
|                                      | MCS6     | 18 dBm  | +/-2dB    |   |                          | MCS6     | -78 dBm     | +/-3dB    |
|                                      | MCS7     | 15 dBm  | +/-2dB    |   |                          | MCS7     | -75 dBm     | +/-3dB    |
|                                      | MCS8     | 24 dBm  | +/-2dB    |   |                          | MCS8     | -96 dBm     | +/-3dB    |
|                                      | MCS9     | 24 dBm  | +/-2dB    |   |                          | MCS9     | -94 dBm     | +/-3dB    |
|                                      | MCS10    | 22 dBm  | +/-2dB    |   |                          | MCS10    | -91 dBm     | +/-3dB    |
|                                      | MCS11    | 20 dBm  | +/-2dB    |   |                          | MCS11    | -88 dBm     | +/-3dB    |
|                                      | MCS12    | 20 dBm  | +/-2dB    |   |                          | MCS12    | -85 dBm     | +/-3dB    |
|                                      | MCS13    | 17 dBm  | +/-2dB    |   |                          | MCS13    | -80 dBm     | +/-3dB    |
|                                      | MCS14    | 17 dBm  | +/-2dB    | MCS14   |                          | -79 dBm  | +/-3dB      |           |
| MCS15                                | 15 dBm   | +/-2dB  | MCS15     | -76 dBm   | +/-3dB                   |          |             |           |
| OPERATING FREQUENCY 5745MHz-5825MHz  |          |         |           |   |                          |          |             |           |
| 5GHz TX POWER SPECIFICATIONS         |          |         |           |   | 5GHz RX SPECIFICATIONS   |          |             |           |
| 11a                                  | DataRate | Avg. TX | Tolerance |   | 11a                      | DataRate | Sensitivity | Tolerance |
|                                      | 1-24Mbps | 20 dBm  | +/-2dB    |   |                          | 1-24Mbps | -96 dBm     | +/-3dB    |
|                                      | 36Mbps   | 18 dBm  | +/-2dB    |   |                          | 36Mbps   | -95 dBm     | +/-3dB    |
|                                      | 48Mbps   | 16 dBm  | +/-2dB    |   |                          | 48Mbps   | -94 dBm     | +/-3dB    |
|                                      | 54Mbps   | 15 dBm  | +/-2dB    |   |                          | 54Mbps   | -91 dBm     | +/-3dB    |
| 5GHz 11n                             | MCS0     | 20 dBm  | +/-2dB    |   | 5GHz 11n                 | MCS0     | -96 dBm     | +/-3dB    |
|                                      | MCS1     | 20 dBm  | +/-2dB    |   |                          | MCS1     | -95 dBm     | +/-3dB    |
|                                      | MCS2     | 20 dBm  | +/-2dB    |   |                          | MCS2     | -92 dBm     | +/-3dB    |
|                                      | MCS3     | 18 dBm  | +/-2dB    |   |                          | MCS3     | -90 dBm     | +/-3dB    |
|                                      | MCS4     | 18 dBm  | +/-2dB    |   |                          | MCS4     | -86 dBm     | +/-3dB    |
|                                      | MCS5     | 18 dBm  | +/-2dB    |   |                          | MCS5     | -83 dBm     | +/-3dB    |
|                                      | MCS6     | 13 dBm  | +/-2dB    |   |                          | MCS6     | -77 dBm     | +/-3dB    |
|                                      | MCS7     | 11 dBm  | +/-2dB    |   |                          | MCS7     | -74 dBm     | +/-3dB    |
|                                      | MCS8     | 20 dBm  | +/-2dB    |   |                          | MCS8     | -95 dBm     | +/-3dB    |
|                                      | MCS9     | 20 dBm  | +/-2dB    |   |                          | MCS9     | -93 dBm     | +/-3dB    |
|                                      | MCS10    | 18 dBm  | +/-2dB    |   |                          | MCS10    | -90 dBm     | +/-3dB    |
|                                      | MCS11    | 16 dBm  | +/-2dB    |   |                          | MCS11    | -87 dBm     | +/-3dB    |
|                                      | MCS12    | 16 dBm  | +/-2dB    |   |                          | MCS12    | -84 dBm     | +/-3dB    |
|                                      | MCS13    | 13 dBm  | +/-2dB    |   |                          | MCS13    | -79 dBm     | +/-3dB    |
|                                      | MCS14    | 13 dBm  | +/-2dB    | MCS14   |                          | -78 dBm  | +/-3dB      |           |
| MCS15                                | 11 dBm   | +/-2dB  | MCS15     | -75 dBm   | +/-3dB                   |          |             |           |
| AVG. CURRENT CONSUMPTION INFORMATION |          |         |           |   |                          |          |             |           |
| MODE                                 | 6Mbps    | MCS0    | MCS15     |   | MODE                     | 6Mbps    | MCS0        | MCS15     |
| 100% TX                              | 0.75A    | 0.75A   | 0.75A     |   | 100% TX                  | 0.75A    | 0.75A       | 0.75A     |
| Real-World*                          | 0.55A    | 0.60A   | 0.35A     |   | Strength                 | 0.55A    | 0.60A       | 0.40A     |
| Idle                                 | 0.25A    | 0.25A   | 0.25A     |   | Idle                     | 0.25A    | 0.25A       | 0.25A     |
| ANTENNA INFORMATION                  |          |         |           |   |                          |          |             |           |
| Antenna 1                            |          |         |           | 5dBi MMCX Omni with laptop mount and 12cm cable                   |                          |          |             |           |
| Antenna 2                            |          |         |           | 5dBi MMCX Omni with laptop mount and 18cm cable                   |                          |          |             |           |
| RANGE PERFORMANCE                    |          |         |           |   |                          |          |             |           |
| Indoor (Antenna Dependent):          |          |         |           | Up to 300meters   |                          |          |             |           |
| Outdoor (Antenna Dependent):         |          |         |           | Over 10km   |                          |          |             |           |