

PRODUCT DATASHEET

Atheros 6th G Mini-PCI Adapter

NMP-8602

2.4 / 5.0 GHz

802.11a/b/g

54 Mbps

NMP-8602 is a mini-PCI type III B High-Power card supporting dual-band (2.4GHz & 5GHz) radio operation. It provides high-speed wireless connection with data rate up to 54Mbps. The shirking dimension and light weight can easily integrate into a wide range of AP/Bridge device.

The 802.11g standard is backwards compatible with 802.11b products. This means that you do not need to change your entire network to maintain connectivity. You may sacrifice some of 802.11g speed when you mix 802.11b and 802.11g devices, but you will not lose the ability to communicate when you incorporate the 802.11g standard into your 802.11b network.



Features	Benefits
High Speed Data Rate up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
High Output Power up to 26 dBm & 20 dBm	More high power can advance the distance.
Advanced Power Management	Low power consumption in power saving mode.
Support eXtended Range technology	eXtended Range technology give Wi-Fi products twice the range of existing designs
802.11i security specifications, provides WPA/WPA2 and WEP 64/128 bit encryption	Enhances authentication and security.
Site Survey Utility	Allows users to browser the available active access points which users can connect
802.11e Standard Support	Wireless Multimedia Enhancements Quality of Service support (QoS)
Seamless roaming	Full mobility for users in any scenario

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

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Technical Specifications

Data Rates

- 802.11a:** 6, 9, 12, 18, 24, 36, 48, 54Mbps
802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
802.11b: 1, 2, 5.5, 11Mbps

Standards / Compliance

WECA (Wi-Fi & Wi-Fi5 compliance), IEEE802.11, IEEE802.11a, IEEE802.11g, IEEE802.11b

Regulation Certifications

FCC Part 15, IC, RoHS and WEEE compliant

Operating Voltage

3.3V±0.15V

Current consumption

NMP-8602 PLUS (FCC)

Tx Current ≤ 1.3A
 Rx Current ≤ 400mA
 Sleep Current ≤ 100mA

NMP-8602 (ETSI)

Tx Current ≤ 600mA
 Rx Current ≤ 350mA
 Card on Current ≤ 350mA
 Sleep Current ≤ 50mA

RF Information

Frequency Band

802.11a:
 5.15~5.35GHz,
 5.47~5.725GHz,
 5.725~5.825GHz

802.11b/g:

U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

Modulation Technology

802.11a/g:
 OFDM (64-QAM, 16-QAM, QPSK, BPSK)

802.11b:
 DSSS (DBPSK, DQPSK, CCK)

Operating Channels

802.11b/g

11 for North America, 14 for Japan, 13 for Europe

802.11a

US/Canada:12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz)
 Europe:19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz)
 Japan:4 non-overlapping channel (5.15~5.25GHz)
 China:5 non-overlapping channel (5.725~5.85GHz)

Receive Sensitivity (Typical)

802.11a:

-88dBm @ 6Mbps,
 -70dBm @ 54Mbps

802.11g:

-90 dBm @ 6Mbps,
 -74 dBm @ 54Mbps

802.11b:

-95 dBm @ 1Mbps
 -90 dBm @ 11Mbps

Available transmit power (Typical)

NMP-8602 (ETSI)

- 5.18~5.32 GHz
 18 dBm @6~24Mbps
 16 dBm @36Mbps
 14 dBm @48Mbps
 13 dBm @54Mbps
- 5.5~5.70 GHz
 16 dBm @6~24Mbps
 15 dBm @36Mbps
 13 dBm @48Mbps
 12 dBm @54Mbps
- 5.745~5.85 GHz
 16 dBm @6~24Mbps
 15 dBm @36Mbps
 13 dBm @48Mbps
 12 dBm @54Mbps
- 2.412~2.472 GHz (IEEE802.11g)
 20 dBm @6~36Mbps
 19 dBm @48Mbps
 18 dBm @54Mbps
- 2.412~2.472 GHz (IEEE802.11b)
 20 dBm @1~11Mbps

NMP-8602 PLUS (FCC)

- 4.92~5.08 GHz
 17 dBm @6~36Mbps

16 dBm @48Mbps

15 dBm @54Mbps

- 5.18~5.24 GHz
 17 dBm @6~36Mbps
 16 dBm @48Mbps
 15 dBm @54Mbps

- 5.26~5.32 GHz
 20 dBm @6~24Mbps
 18 dBm @36Mbps
 16 dBm @48Mbps
 15 dBm @54Mbps

- 5.745~5.825GHz
 18 dBm @6~24Mbps
 16 dBm @36Mbps
 14 dBm @48Mbps
 13 dBm @54Mbps

- 2.412~2.462 GHz (IEEE802.11g)

25 dBm @6~24Mbps

23 dBm @36Mbps

22 dBm @48Mbps

21 dBm @54Mbps

- 2.412~2.462 GHz (IEEE802.11b)
 25 dBm @1~11Mbps

NMP-8602 PLUS (ETSI)

- 4.92~5.08 GHz
 20 dBm @6~36Mbps
 16 dBm @48Mbps
 15 dBm @54Mbps

- 5.18~5.32 GHz
 20 dBm @6~36Mbps
 16 dBm @48Mbps
 15 dBm @54Mbps

- 5.52~5.70 GHz
 19 dBm @6~24Mbps
 17 dBm @36Mbps
 15 dBm @48Mbps
 14 dBm @54Mbps

- 5.745~5.825GHz
 18 dBm @6~24Mbps
 16 dBm @36Mbps
 14 dBm @48Mbps
 13 dBm @54Mbps

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- 2.412~2.472 GHz (IEEE802.11g)
 - 25 dBm @6~24Mbps
 - 23 dBm @36Mbps
 - 22 dBm @48Mbps
 - 21 dBm @54Mbps
- 2.412~2.472 GHz (IEEE802.11b)
 - 25 dBm @1~11Mbps

Antenna

Two antenna connectors (IPEX)

Form Factor

Mini-PCI type III B

Dimensions (LxWxH)

59.60mm X 44.45mm

Weight

15g (0.53 oz)

Environmental**Temperature Range**

Operating: -20°C to 85°C
Storage: -30°C to 90°C

Humidity (non-condensing)

5% ~ 95% typical

Related Product(s)

NMP-8601 (802.11a/b/g)
NMP-3601/NMP-3602 (802.11b/g)
NL-2511MP+ (802.11b)

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