



EnGenius® DATASHEET

Atheros 6thG Mini-PCI Adapter

NMP-8602 PLUS-S

2.4 / 5.0 GHz

802.11a/b/g

54 Mbps

NMP-8602 PLUS-S 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 small dimension and light weight can easily integrate into a wide range of AP/Bridge devices using the miniPCI form factor.

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 28dBm in 11b/g mode, 22dBm in 11a mode	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

* 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.

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/UL

Operating Voltage

3.3V±0.15V

Current consumption

Tx Current ≤ 1A

Rx Current ≤ 400mA

Card on Current ≤ 400mA

Sleep Current ≤ 100mA

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:

5.15~5.35GHz, 5.725~5.825GHz

Europe:

5.15~5.35GHz, 5.47~5.825GHz

Japan

4.90~5.00GHz, 5.03~5.091GHz,

5.15~5.25GHz

China:

5.725~5.85GHz

Receive Sensitivity (Typical)

802.11a:

-90dBm @ 6Mbps,

-72dBm @ 54Mbps

802.11g:

-91 dBm @ 6Mbps,

-74 dBm @ 54Mbps

802.11b:

-95 dBm @ 1Mbps

-90 dBm @ 11Mbps

Available Transmit Power (Typical)

- 4920~5108 GHz & 5.150~5.250 GHz(IEEE802.11a)
22dBm @6 ~ 24Mbps
20dBm @36Mbps
18dBm @48Mbps
17dBm @54Mbps
- 5.250~5.350GHz(IEEE802.11a)
20dBm @6 ~ 24Mbps
18dBm @36Mbps
16dBm @48Mbps
15dBm @54Mbps
- 5.470~5.725GHz(IEEE802.11a)
21dBm @6 ~ 24Mbps
19dBm @36Mbps
17dBm @48Mbps
16dBm @54Mbps
- 5.745~5.85GHz (IEEE802.11a)
20dBm @6 ~ 24Mbps
18dBm @36Mbps
16dBm @48Mbps
15dBm @54Mbps
- 2.412~2.472G(IEEE802.11g)
27dBm @6 ~ 24Mbps
25dBm@36Mbps
24 dBm@48Mbps
23dBm@54Mbps
- 2.412~2.472G(IEEE802.11b)
28dBm. @1, 2, 5.5 and 11Mbps

RF Connector

Two antenna connectors (U.FL)

Form Factor

Mini-PCI type III B

Dimensions (LxWxH)

59.60mm X 44.45mm

Weight

15g (0.53 oz)

Environmental

Temperature Range

Operating: 0°C to 70°C

Storage: -20°C to 80°C

Humidity (non-condensing)

5% ~ 95% typical

* 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.

8/24/2007