

# PRODUCT DATASHEET

Atheros 5<sup>th</sup> G Mini-PCI Adapter

NMP-3601

**2.4 GHz**

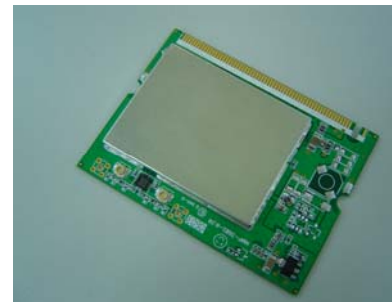
**802.11b/g**

**108 Mbps**

NMP-3601 is a mini-PCI type III B High-Power card supporting 2.4GHz radio operation. It provides high-speed wireless connection with data rate up to 108Mbps and high output power up to 25dBm. The shirking dimension, light weight & lower power consumption design can easily integrate into a wide range of AP/Bridge device.

It uses Atheros 5<sup>th</sup> generation AR5005G chipsets which combines the MAC, baseband processor and 2.4G radio. It is a flexible and cost effective choice for embedded system.

For more security application, NMP-3601 supports WPA-TKIP and WPA2-AES and IEEE802.11i.



Features	Benefits
2.4GHz IEEE802.11b/g standard	Fully interoperable with IEEE802.11b/g compliant products.
High Speed Data Rate up to 108Mbps	Capable of handling heavy data payloads such as MPEG video streaming
802.11i security specifications, provides Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP), IEEE802.1x client	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
High Output Power 25 dBm PLUS (FCC) & 20dBm (ETSI) spec	More high power can advance the distance.
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 802.11b/g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

\*\* All specifications are subject to change without notice.

6/6/2006

## Technical Specifications

### Data Rates

- 802.11g:** 6, 9, 12, 18, 24, 36, 48, 54 and 108Mbps in Super G mode  
**802.11b:** 1, 2, 5.5, 11Mbps

### Standards / Compliance

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

### Regulation Certifications

FCC Part 15, RoHS and WEEE compliant

### Operating Voltage

3.3V±0.15V

### Current consumption

#### NMP-3601 PLUS (FCC)

Tx Current ≤ 900mA  
Rx Current ≤ 400mA  
Card on Current ≤ 400mA

#### NMP-3601 (ETSI)

Tx Current ≤ 550mA  
Rx Current ≤ 300mA  
Card on Current ≤ 300mA

### RF Information

#### Frequency Band

**802.11b/g:**  
U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

#### Modulation Technology

**802.11g:**  
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

#### Receive Sensitivity (Typical)

**802.11g:**  
-91 dBm @ 6Mbps,  
-73 dBm @ 54Mbps  
**802.11b:**  
-96 dBm @ 1Mbps  
-89 dBm @ 11Mbps

#### Available transmit power (Typical)

##### NMP-3601 (ETSI)

- 2.412~2.472 GHz (IEEE802.11g)  
Up to 20 dBm @6~48Mbps  
19dBm @ 54Mbps

- 2.412~2.472 GHz (IEEE802.11b)  
Up to 20 dBm @1~11Mbps

##### NMP-3601 PLUS (FCC)

- 25 dBm @6, 9, 12, 18, 24Mbps  
23 dBm @36Mbps  
22 dBm @48Mbps  
21 dBm @54Mbps
- 2.412~2.462 GHz (IEEE802.11b)  
25 dBm @1, 2, 5.5 and 11Mbps

### Antenna

Two antenna connectors  
(IPEX or MMCX)(Optional)

### 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-8602 / NMP-8601 (802.11a/b/g)  
NMP-3602 (802.11b/g)  
5354MP PLUS ARIES2 (F) (802.11a/b/g)  
3054MP PLUS ARIES2 (F) (802.11b/g)  
NL-2511MP+ (802.11b)

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