

2.4 GHz

802.11 b/g

108 Mbps

EMP-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 23dBm. The shrinking dimension, light weight & lower power consumption design can easily integrate into a wide range of AP/Bridge device.

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

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



Features	Benefits
2.4GHz IEEE802.11b/g standard	Fully interoperable with IEEE802.11/b/g compliant products.
High Speed Data Rate up to 54Mbps	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 up to 22dBm (FCC) & 20dBm (ETSI)	More high power can advance the distance.
Support eXtended Range technology	eXtended Range technology give Wi-Fi products twice the range of existing designs

*** Subject to change without prior notice

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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

Operating Voltage

3.3V±0.15V

Current consumption

Tx Current ≤ 550mA

Rx Current ≤ 300mA

Card on Current ≤ 300mA

Sleep Current ≤ 30mA

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)

EMP-3601 (FCC)

- 2.412~2.462 GHz (IEEE802.11g)

22 dBm @6~24Mbps

21 @ 36Mbps

20 @ 48Mbps

19 @ 54Mbps

- 2.412~2.462 GHz (IEEE802.11b)

22 dBm @1~11Mbps

EMP-3601 (ETSI)

- 2.412~2.472 GHz (IEEE802.11g)

20 dBm @6~48Mbps

19dBm @ 54Mbps

- 2.412~2.472 GHz (IEEE802.11b)

20 dBm @1~11Mbps

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)

EMP-8602/EMP-8601 (802.11a/b/g)

EMP-3602 (802.11b/g)

5354MP PLUS ARIES2 (F) (802.11a/b/g)

3054MP PLUS ARIES2 (F) (802.11b/g)

EL-2511MP+ (802.11b)

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