

2.4 GHz

802.11 b/g

54 Mbps

EMP-3602 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 54Mbps and high output power up to 23dBm. 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, EMP-3602 supports 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 22 dBm  | 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

## Technical Specifications

### Data Rates

**802.11g:** 6, 9, 12, 18, 24, 36, 48, 54

**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/SMP-3602 (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/SMP-3602 (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

### 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)

SL-2511MP+ (802.11b)

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