

**Dual-Band Wireless USB 2.0 Adapter**

**SUB-8301**

**2.4 / 5 GHz**

**802.11 a/b/g**

**54 Mbps**

The USB 2.0 wireless card supporting 802.11b/g (2.4GHz) radio operation. It provides high-speed wireless connection with data rate up to 54Mbps. The shirking dimension, light weight & lower power consumption design can easily integrate into a wide range of computer and Laptop devices.

To protect your wireless connectivity, the high-speed wireless USB adapter can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA and WPA2(AES)



Features	Benefits
High Speed Data Rate up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming.
WPA/WPA2 (IEEE 802.11i), WEP 64/128 Support	Powerful data security.
IEEE802.1x Client Support (TLS, TTLS, LEAP)	Enhances authentication and security.
WMM (IEEE 802.11e) standard support	Wireless Multimedia Enhancements Quality of Service support (QoS) / enhanced power saving for Dynamic Networking
USB 2.0/1.1	USB 2.0 interface and compatible with USB 1.1

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

### Standards / Compliance

IEEE802.11, IEEE802.11a, IEEE802.11g, IEEE802.11b, IEEE802.1h, IEEE802.1x

### Regulation Certifications

FCC Part 15/UL, ETSI 300/328/CE

### Operating Voltage

3.3V

### Status LEDs

RF link activity

### Drivers

Windows 98SE/ME/2000/XP

### RF Information

#### Frequency Band

- 802.11a:** 5.15~5.25GHz, 5.25~5.35GHz, 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

#### Media Access Protocol

Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

#### Modulation Technology

- 802.11a/g:** OFDM (64-QAM, 16-QAM, QPSK, BPSK)
- 802.11b:** DSSS (DBPSK, DQPSK, CCK)

#### Operating Channels

11 for North America, 14 for Japan, 13 for Europe, 2 for Spain, 4 for France

#### Receive Sensitivity (Typical)

- 5.15~5.35GHz  
6Mbps@ -90dBm;  
54Mbps@ -72dBm
- 5.47~5.725GHz  
6Mbps@ -90dBm;  
54Mbps@ -72dBm
- 5.725~5.825GHz  
6Mbps@ -89dBm;  
54Mbps@ -72dBm

- 2.412~2.472G(IEEE802.11g)  
6Mbps@ -90dBm;  
54Mbps@ -73dBm
- 2.412~2.472G(IEEE802.11b)  
11Mbps@ -87dBm;  
1Mbps@ -94dBm

#### Available Transmit Power

- 5.15~5.35 GHz  
15± 2dBm @6Mbps  
12 ± 2dBm @54Mbps
- 5.725 ~ 5.825GHz  
15 ± 2dBm @6Mbps  
12 ± 2dBm @54Mbps
- 2.412~2.483G (IEEE802.11g)  
17 ± 2dBm @6Mbps  
15 ± 2dBm @54Mbps
- 2.412~2.472G(IEEE802.11b)  
18 ± 2dBm @1~11Mbps

#### Antenna

Integrated with built-in diversity

#### Networking

##### Topology

Ad-Hoc, Infrastructure

##### Security

IEEE802.1x support for LEAP/PEAP  
WPA – Wi-Fi Protected Access (AES, 64,128,152-WEP with shared-key authentication)

#### Physical

##### Form Factor

USB 2.0 / 1.1 dongle

##### Dimensions (HxWxD)

79.5(L) mm x 26(W) mm x 10.4(H) mm

##### Weight

40 g/ 1.6oz

#### Environmental

##### Temperature Range

Operating: -0°C to 55°C  
Storage: -20°C to 75°C

##### Humidity (non-condensing)

5%~95% Typical

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