

PRODUCT DATASHEET

Atheros Wireless USB 2.0 Adapter

NUB-862

2.4 GHz/5GHz

802.11 a/b/g

108 Mbps

The USB 2.0 wireless card supporting dual-band 802.11a/b/g (2.4GHz & 5GHz) radio operation. It provides high-speed wireless connection with data rate up to 108Mbps.

NUB-862 has high power and high sensitivity. It can advance your distance and performance.

To protect your wireless connectivity, the high-speed wireless USB adapter can encrypt all wireless transmissions through 64/128/152-bit WEP data encryption and also supports WPA. Dynamic Frequency Selection (DFS) puts your network on the cleanest channel in your location. With the High-Speed Wireless USB Adapter, you will experience the best wireless connectivity available.



| Features | Benefits |
|---|---|
| High Speed Data Rate up to 108Mbps in Super A/G mode | Capable of handling heavy data payloads such as MPEG video streaming. |
| High Output Power up to 23 dBm | More high power can advance the distance. |
| Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP) and Wired Equivalent Private (WEP) | Powerful data security. |
| IEEE802.1x Client Support | Enhances authentication and security. |
| Support for draft IEEE 802.11h and j standard | Extended tuning range (2.300-2.500 & 4.900-5.850 GHz) for worldwide use Dynamic Frequency Selection/Transmit Power Control (DFS/TPC) for international operation |
| Support for 802.11e standard | Wireless Multimedia Enhancements Quality of Service support (QoS) |
| Advanced Power Management | Low power consumption in power saving mode up to 98%. |
| Support eXtended Range technology | eXtended Range technology give Wi-Fi products twice the range of existing designs |

Te

* 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.

9/19/2005

Technical Specifications

Data Rates

- 802.11a:** 6, 9, 12, 18, 24, 36, 48, 54, up to 108 Mbps
802.11g: 6, 9, 12, 18, 24, 36, 48, 54, up to 108 Mbps
802.11b: 1, 2, 5.5, 11Mbps

Standards / Compliance

IEEE802.11, IEEE802.11a, IEEE802.11g, IEEE802.11b, draft IEEE 802.11e, f, and h standards, IEEE802.1x

Regulation Certifications

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

Operating Voltage

5 V \pm 0.25V

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, 5.47~5.725GHz, 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

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

802.11b/g

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

802.11a

US/Canada:12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz)

Europe:19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz)

Japan: 4 non-overlapping channel (5.15~5.25GHz)

China: 5 non-overlapping channel (5.725~5.85GHz)

Receive Sensitivity (Typical)

- 5.15~5.35GHz
6Mbps@ -90dBm;
54Mbps@ -74dBm
- 5.47~5.725GHz
6Mbps@ -90dBm;
54Mbps@ -73dBm
- 5.75~5.85GHz
6Mbps@ -89dBm;
54Mbps@ -72dBm
- 2.412~2.472G(IEEE802.11g)
6Mbps@ -91dBm;
54Mbps@ -76dBm
- 2.412~2.472G(IEEE802.11b)
11Mbps@ -91dBm;
1Mbps@ -96dBm

Available transmit power

FCC (Typical)

- 5.15~5.24 GHz
17 dBm @6Mbps
17 dBm @54Mbps
- 5.26~5.35 GHz
20 dBm @6Mbps
17 dBm @54Mbps
- 5.725 ~ 5.825GHz
18 dBm @6Mbps
15 dBm @54Mbps

- 2.412~2.472G(IEEE802.11g)
22 dBm @ 6 ~ 24 Mbps
21 dBm @ 36 Mbps
20 dBm @ 48 Mbps
19 dBm @ 54 Mbps
- 2.412~2.472G(IEEE802.11b)
22 dBm @1~11Mbps

ETSI (Typical)

- 5.15~5.35 GHz
20 dBm @6Mbps
17 dBm @54Mbps
- 5.47 ~ 5.725GHz
19 dBm @6Mbps
16 dBm @54Mbps
- 5.725 ~ 5.825GHz
18 dBm @6Mbps
15 dBm @54Mbps
- 2.412~2.472G(IEEE802.11g)
20 dBm @ 6 ~ 24 Mbps
20 dBm @ 36 Mbps
20 dBm @ 48 Mbps
19 dBm @ 54 Mbps
- 2.412~2.472G(IEEE802.11b)
20 dBm @1~11Mbps

Antenna

11g: Dipole antenna (2dBi antenna gain)
11a: printed antenna (2dBi antenna gain)

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

Dimensions (HxWxD)

75.2(L) mm x 53.9(W) mm x 14(H) mm

Weight

* 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.

9/19/2005

40 g/ 1.5oz

Environmental

Temperature Range

Operating: -0°C to 55°C

Storage: -20°C to 75°C

Humidity (non-condensing)

5%~95% Typical

Package Contents

One CD-ROM with User's Manual and Drivers

One USB dongle

Related Product(s)

11 b/g High-power Wireless USB 2.0 Adapter
NUB-362 / NUB-362(EXT)

11 a/b/g Wireless USB 2.0 Adapter
NUB-8301

* 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.

9/19/2005