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

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* 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.

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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 ± 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

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40 g/ 1.5oz

Environmental

Temperature Range

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

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