

PRODUCT DATASHEET

Zydas USB 2.0 Adapter

NUB-8301

2.4 GHz/5GHz

802.11 a/b/g

54 Mbps

NUB-8301 is a USB 2.0 pen-size wireless adapter supporting dual-band 802.11a/b/g (2.4GHz & 5GHz) radio operation. It provides high-speed wireless connection with data rate up to 54Mbps.

NUB-8301 is based on the 802.11g standard backwards compatible with 802.11b products. This means that you do not need to change your entire network to maintain connectivity. You may sacrifice some of 802.11g speed when you mix 802.11b and 802.11g devices, but you will not lose the ability to communicate when you incorporate the 802.11g standard into your 802.11b network. You may choose to slowly change your network by gradually replacing the 802.11b devices with 802.11g devices.

For more security application, NUB-8301 can support 802.1x, WPA and WPA2.



Features	Benefits
WEP64/128, WPA(HW TKIP support) and AES128-CCMP	High level security
IEEE802.1x Client Support	Enhances authentication and security
Advanced Power Management	Low power consumption in power saving mode.
USB 2.0	USB 2.0 interface and compatible with USB 1.1
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming

* 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, IEEE802.11h, IEEE802.1x

Regulation Certifications

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

Operating Voltage

5V±0.25V

Status LEDs

RF link activity

Drivers

Windows 98SE/ME/2000/XP

RF Information

Frequency Band

- 802.11a:** 5.15~5.35GHz, 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@ -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
- 2.412~2.472G(IEEE802.11g)
17±2dBm @6Mbps
13±2dBm @54Mbps
- 2.412~2.472G(IEEE802.11b)
17±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 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

Package Contents

One Quick Start Guide
One CD-ROM with User's Manual and Drivers

Related Product(s)

11 b/g High-power
Wireless USB 2.0 Adapter
NUB-362
11 a/b/g High-power
Wireless USB 2.0 Adapter
NUB-862

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