



BiPAC 3011N

Wireless-N USB Adapter

Boost your high-speed wireless network at home or office!

The Billion BiPAC 3011N is ideal for home and office users to upgrade their wireless capability of notebook, handheld or desktop PC to a wireless-N network at blazing-fast Wireless-N speeds, with 6 times data rate and 3 times wireless coverage of an 802.11g network device. It integrates one transmit channel and two concurrent receive channels. Thus, it supports up to 150Mbps upload and 300Mbps download data rate, making it ideal for bandwidth-heavy applications such as streaming HD (High Definition) video, voice and music downloads, file sharing and other multimedia applications.

Optimal and Secure Traffic

The BiPAC 3011N supports both 64/128-bit WEP (Wired Equivalent Privacy) and Wi-Fi Protected Access (WPA/WPA2) for secure wireless LAN connections. It also supports WMM (Wi-Fi Multimedia) which ensures stable transmission quality for multimedia applications by granting the optimal priority of the traffic.

Ease of Use

The BiPAC 3011N also includes a convenient utility for users to scan available networks and secure preferred networks. It supports two operating modes – infrastructure and ad-hoc mode. In the infrastructure mode, the BiPAC 3011N allows you to connect with the Internet through a wireless AP to access the network resources. It can also operate in Ad-Hoc mode without an AP, so that you can run peer-to-peer gaming and share files with your friends without the need of a wireless router. Ad-hoc networks also work well as a temporary fallback mechanism if the access points or routers stop functioning.

- Compliant with draft 802.11n, 802.11g, and 802.11b network devices
- Two Internal antennas with one TX and two RX
- Supports up to 300Mbps download and 150Mbps upload data rate
- Supports WEP, WPA, WPA2, and 802.1x for WLAN security
- WPS (Wi-Fi Protected Setup) for easy setup
- QoS enhancement for multimedia applications*
- Comply with IEEE 802.11h for spectrum and transmit power management
- Supports Infrastructure / Ad-Hoc mode.
- USB 2.0 attached interface
- Universal Plug and Play (UPnP)
- Supports auto-installation and diagnostic utilities
- Supports the most common Windows and Mac operating systems
- Ideal for home, SOHO and office users

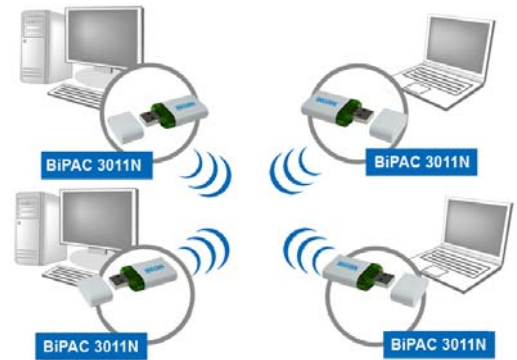
Application Diagrams



Infrastructure Mode

Applications:

1. Internet Access
2. File sharing
3. On-line gaming
4. On-line video conferencing



Ad-Hoc Mode

Applications:

1. Peer-to-peer gaming
2. File sharing
3. Internal conferencing

Features & Specifications

Standards

- IEEE 802.11g / b
- IEEE 802.11n draft 2.0
- IEEE 802.11h

Interface

- Complies with USB 2.0 A-Type
- Supports full-speed (12Mbps) and high-speed (480Mbps)

Frequency Band

- 2.400GHz ~ 2.4835GH

Modulations

- IEEE 802.11b: DSSS (CCK / DQPSK / DBPSK)
- IEEE 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
- IEEE802.11n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)

Data Rates

- IEEE 802.11b: 11, 5.5, 2 and 1Mbps; Auto-fallback
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9 & 6Mbps; Auto-fallback
- IEEE 802.11n (20MHz): 75 Mbps (T) / 150 Mbps (R)
- IEEE 802.11n (40MHz): 150 Mbps (T) / 300 Mbps (R)

Access Protocol

- CSMA/CA

Wireless Security

- 64/128bit WEP
- WPA (TKIP with IEEE 802.1x)
- WPA2 (AES with IEEE 802.1x)
- WPS (Wi-Fi Protected Setup) for easy setup

Transmitting Power

- 802.11b : up to 17 ± 1 dBm
- 802.11g : up to 15 ± 1 dBm
- 802.11n : up to 14 ± 1 dBm

* Notes:

1. The connecting AP and the application must support WMM as well.
2. Specifications in this datasheet are subject to change without prior notice.

V. 0801009

Operating Mode

- Ad-hoc mode / infrastructure mode

Number of Operational channels

- U.S. 1-11
- Japan 1-13, 14
- Elsewhere Worldwide 1-13

Quality of Service (QoS) Enhancement

- WMM (Wi-Fi Multimedia) function for multi-media data bandwidth requirement.

Supported Operating Systems

- Mac 10.4/10.5
- Linux
- Windows 2000, XP 32/64, Vista 32/64

Receiver Sensitivity

- 802.11b -85dBm
- 802.11g -78dBm
- 802.11n -70dBm

Antenna

- Internal two antennas with one TX and two RX

Dimensions

- 49 (L) x 26 (W) x 10.4 (H) mm

LED Display

- Link/ Act

Temperature Range

- Operating temperature: 0°C ~ 60°C

Humidity

- 20 - 90% (non-condensing)

Weight (Main Body)

- 10g