



WLAN Adapter Card

Model # WN7111B

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Table of Contents

Wireless USB Network Adapter¹

Introduction	1
Features and Benefits	2
Hardware Description	2

Product Specifications 3

Compliance 7

Federal Communication Commission Interference Statement	7
CE	8

Wireless USB Network Adapter

Introduction

The Wireless USB Network Adapter (WN7111B) is another cutting edge introduction in 2.4GHz wireless communication for SOHO environment. Designed for both your home entertainment with blu-ray DVD player and your small office, this wireless network adapter provides the speed, coverage and security expected by today's wireless users.

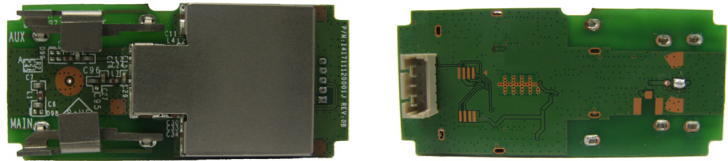
WN7111B is IEEE 802.11n compliant while maintaining full backwards compatibility with the IEEE 802.11b and 802.11g standards. It utilizes advanced SISO - Single Input Single Output technology to deliver incredible speed and range. The Wireless USB Network Adapter provides better performance than existing 802.11g technology. Upgrading to wireless 11n network provides an excellent solution for sharing an Internet connection and files such as video, music, photos, and documents.

Features and Benefits

- IEEE802.11n,g,b compliant
- Wireless speeds up to 150 Mbps
- Increased speed and coverage - up to 2.7 times the speed of IEEE 802.11g
- Fully backwards compatible with 802.11b/g wireless networks
- Replaces wired LANs at dramatically lower cost than wired alternatives
- Orthogonal Frequency Division Multiplexing (OFDM) and advanced SISO (Single Input Single Output)
- technology provides high speed connection

Hardware Description

The WN7111B adapter provides 150 Mbps connections. It is fully compliant with the specification of the IEEE 802.11b/g/n standards.



Refer to the user's manual of your media device for configuration details.

Product Specifications

Wireless Network

IEEE802.11b: up to 11 Mbps

IEEE 802.11g: up to 54 Mbps

IEEE802.11n: up to 150 Mbps

Operating Range

Outdoor: Up to 300 m (984 ft)

Indoor: Up to 100 m (328 ft)

Wireless Mode Supported

AP, access point, (Infrastructure) Client mode

Security

AP (Infrastructure) mode supports

Static WEP that support both 64 and 128 bit keys.

WPA, WPA-PSK, WPA2, WPA2-PSK

Ad-hoc mode supports

None (plaintext)

Static WEP that supports both 64 and 128 bit keys.

Radio Signal

Signal Type

Direct Sequence Spread-Spectrum (DSSS)

DBPSK: 1 Mbps

DQPSK: 2 Mbps

CCK: 5.5/11 Mbps

BPSK: 6/9 Mbps

QPSK: 12/18 Mbps

16-QAM: 24 Mbps

64-QAM: 48/54 Mbps and above, RX up to 150Mbps

Operating Frequency

USA (FCC) and Canada (IC): 2.412 ~ 2.462 GHz

Europe (ETSI): 2.412 ~ 2.472 GHz

Spain: 2.457 ~ 2.462 GHz

France: 2.457 ~ 2.472 GHz

Japan (STD-T66/STD-33): 2.412 ~ 2.484 GHz

Operating Channels

USA (FCC) and Canada (IC): 11 channels

Europe (ETSI): 13 channels

Spain: 2 channels

Japan (STD-T66/STD-33): 14 channels

Sensitivity

85 dBm @ 11 Mbps

69 dBm @ 54 Mbps

66 dBm @ 64-QAM, 20MHz channel spacing

63 dBm @ 64-QAM, 40MHz channel spacing

RF Output Power

802.11b: 17 (± 2) dBm (2.4GHz, 11Mbps, CCK)

802.11g: 14 (± 2) dBm (2.4GHz, 54Mbps, OFDM)

802.11n: 14 (± 2) dBm (2.4GHz, HT20), 13 (± 2) dBm (2.4GHz, HT40)

Physical Characteristics

USB Pin Assignment

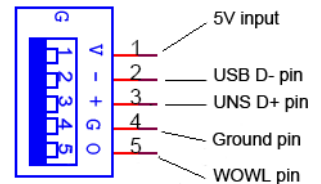
Pin 1: Vcc (Positive Input Supply Voltage: +5V)

Pin 2: USB D-

Pin 3: UNS D+

Pin 4: GND (Ground)

Pin 5: WOWL



Dimensions

45 (L) x 20 (W) mm

Weight

4.2 g (0.0093 lb)

Antenna

Two PIFA antennas on PCB board

Power Voltage

DC5V +/- 10%

Power Consumption

Full load: 430 mA

Standards Conformance

Wireless Standard

IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

Environmental

Temperature

Operating: 0 to 50 °C (32 to 122 °F) ambient

Storage: -10 to 70 °C (14 to 158 °F) ambient

Humidity: 5% - 90% (non-condensing)

Certification/Regulation

WHQL

ETSI/CE

ESD: EN61000-4-2, which specifies 4kV contact and 8kV air discharge.

CE

FCC

Wi-Fi Certificate

Software Drivers

Windows 2000

Windows XP

Windows Vista

Linux

Compliance

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2.4GHz operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

This module is intended for OEM integrator. The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

The device must contain the following permanent labeling on the exterior of the device as follows:
Contains FCC ID: BEJ9QK-WN7111B, IC: 2703H-WN7111B

CE

This device can be operated in the EU without restrictions indoor.

However, operated outdoors in France is restricted to 2400 ~ 2454 MHz

(Channel 1 ~ 7).

本產品符合低功率電波輻射性電機管理辦法 第十二條、第十四條等條文規定:

1. 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
2. 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信。
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。