AboCom

802.11a/n/b/g/ac WLAN Module AM7221

User's Manual

FCC Certification

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. 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.

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



CAUTION

This device complies with Part 15 of the FCC Rules. 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.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures.

Refering to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without C2P.

IMPORTANT NOTE:

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated.

Additional testing and certification may be necessary when multiple modules are used.

20cm minimum distance has to be able to be maintained between the antenna and the users for the host this module is integrated into. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

USERS MANUAL OF THE END PRODUCT:

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. If the size of the end product is smaller than 8x10cm, then additional FCC part 15.19 statement is required to be available in the users manual: This device complies with Part 15 of FCC rules. 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.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: MQ4AM7221". If the size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of FCC rules. 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.

Antenna list:

| Ant. | Brand | Model No. | Туре | Connector | Gain (dBi) | | |
|------|-------|-----------|------|-----------|------------|-------------|-------------|
| Ant. | Branu | Woder No. | туре | Connector | 2.4GHz | 5GHz Band 1 | 5GHz Band 4 |
| 1 | - | - | PCB | N/A | 3.00 | 1.03 | 2.03 |
| 2 | - | - | PCB | N/A | 2.42 | 1.66 | 1.08 |

Note: The EUT has two antennas.

IC Certification:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with IC multi-transmitter product procedures.

Refering to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without reassessment permissive change.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une

utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

This module is intended for OEM integrator. The OEM integrator is still responsible for the IC 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.

USERS MANUAL OF THE END PRODUCT:

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the IC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. 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.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX IC : 2826B-AM7221 ".

Chapter 1: Introduction

Description

The AM7221 is an 802.11ac/b/g/n 2.4G+5G USB module and supports 2T2R technology, which runs up to 866Mbps. Optimized RF architecture and baseband algorithms provide superb performance and low power consumption.

AM7221 is ideal for high throughput networking and multimedia application that requires better Wi-Fi performance.

Features

- Standard: 802.11ac/b/g/n
- ■USB2.0 support for date rates up to 12Mbps full speed and 480Mbps high speed
- ■Enterprise level security supporting: WEP, WPA, WPA2
- ■Support Wi-Fi Direct
- ■Wake on WLAN
- Conforms to EN300328 V1.8.1(2012.08)

Chapter 2: Installation

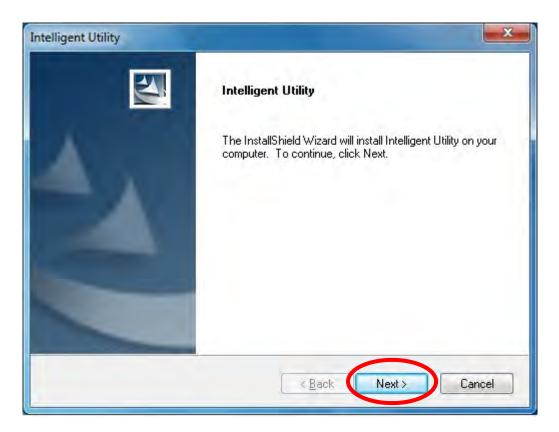
For Windows 7

Install Software

Note:

Do not insert the Wireless USB Adapter into the computer until the InstallShield Wizard finished installing.

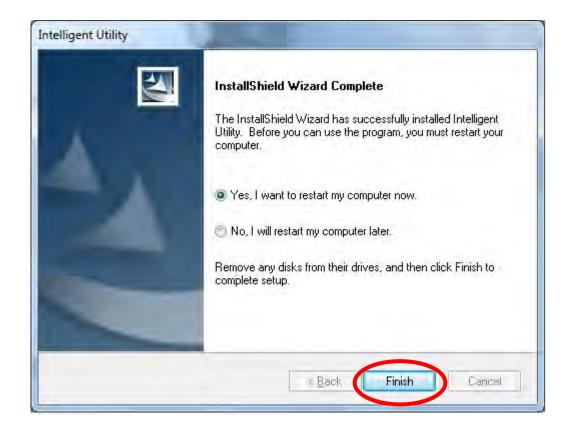
1. Exit all Windows programs. Insert the included Installation CD into the computer. The CD-ROM will run automatically. Please click **Next** to process the installation.



2. When prompt to the following message, please click **Install** to begin the installation

| telligent Utility | × |
|------------------------------------------------------|-----------------------------------------------------------------|
| Intelligent Utility | |
| Click Install to begin the installation. | |
| If you want to review or change any o the wizard. | of your installation settings, click Back. Click Cancel to exit |
| | |
| | |
| | |
| | |
| | |
| stall ^g meld | |

3. When the following screen appears, click **Finish** to restart the computer to complete the software installation.



Install Hardware

Note:

Insert the Wireless USB Adapter when finished software installation.

Insert the Wireless USB Adapter into the USB Port of the computer. The system will automatically detect the new hardware.

Verification

To verify the device is active in the computer. Go to **Start > Control Panel > Device Manager**.

Expand the Network adapters category. If the 802.11a/n/b/g/ac 2cm Wireless LAN USB2.0

Adapter is listed here, it means that the device is properly installed and enabled.

