# AW-NE106 IEEE 802.11b/g/n PCI-E wireless Module

**User's Manual** 

# I. Introduction

#### i. Overview

AzureWave AW-NE106 PCI-E Wireless Module is a highly integrated wireless local area network (WLAN) solution to let users enjoy the digital content through the latest wireless technology without using extra cables and cords. It provides easy-to-use, high performance, cost effective and low power solution. Moreover, AW-NE106 enables compatible high-speed wireless connectivity within home, business and public access wireless networks.

Compliant with the IEEE 802.11n/g/b standard, AW-NE106 uses Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM), BPSK, QPSK, CCK and QAM baseband modulation technologies. When you are using AW-NE106, a high level of integration and full implementation of the power management functions specified in the IEEE 802.11 standard can minimize system power requirements.

The AW-NE106 802.11n/g/b Wireless PCI-E Module provides up to 128-bit level of WEP security to your wireless data transfers. It is able to run in the operating systems of Windows XP/Vista in either Infrastructure mode or Ad-Hoc mode. Comparing to previous wireless technology, AW-NE106 got great improvements on speed and range.

#### ii. Features

- ◎ PCI-E Wireless Module
- © Compliant with IEEE 802.11n/g/b standard
- ◎ High speed wireless connection up to 150Mbps
- () High performance and low power consumption
- ©Enhanced wireless security with 128-bit WEP encryption an WPA

#### iii. Product Review

When the PCI-E wireless module is transmitting data through connection,

#### 1. Connection Mode

#### ◎Infrastructure Mode

Infrastructure mode needs an access point to establish the network, which can provide wireless accesses within valid range for users to communicate with others or transmit data with a wired network. There are several benefits of Infrastructure networking:

 $\sqrt{\text{Roaming: a wireless LAN enabled computer can physically move from the operating range of one access point to the other without losing connection. There is a quick association made between new access point and wireless device as the computer traverses from the coverage of one access point to another.$ 

 $\sqrt{\text{Range Extension: each wireless LAN enabled computer within the range of access point can communicate with other wireless LAN enabled computers within the effective range from the access point.$ 

 $\sqrt{\text{Wired to wireless LAN connection: the access point will establish a bridge between wireless LAN and other wired counterparts.}$ 

| Internet | 4 | ADSL or Cable Mo<br>(If any) | odem     | Access Point |
|----------|---|------------------------------|----------|--------------|
|          |   |                              |          | ( ( -        |
|          |   |                              |          |              |
|          |   |                              |          |              |
|          |   |                              | AW-NE106 |              |
|          |   | gara di                      |          | Desktop PC   |

# Infrastructure Mode

#### ◎Ad-hoc Mode

The difference between Ad-hoc mode and Infrastructure mode is that Ad-hoc mode does not need the access point or router. When you use this mode, your computer will act as a server within the valid range and connect directly to others in the same LAN workgroup.



Ad-hoc Mode

It is recommended to choose this mode when there is no access point showed on your wireless network.

# **II. Installation**

#### i. System Requirements

Before you install AW-NE106, please make sure your system meets the following requirements.

\*Desktop or Laptop with PCI-E port \*Minimum of 64MB system memory \*Operating system: XP/Vista \*An optical drive/CD-ROM for utilities and driver installation

#### ii. Hardware Installation

- 1. Find an available PCI-E port on your desktop or laptop.
- 2. Plug AW-NE106Wireless PCI-E Module into PCI-E port of desktop or laptop.

#### iii. Operation Range

The operating range of AW-NE106 varies from the working environment. However, this device made improvement on speed and range, which also reduced dead spots in coverage area. AW-NE106 is two times wider than previous wireless products.

By default, this PCI-E wireless adapter will automatically adjust the data rate. The transmission speed may vary according to the environment. The closer the wireless stations are the better the signal and transmission speed they will receive.

#### iv. Setup: Windows XP OS

If your computer is running a Windows operating system, it will automatically detect the AW-NE106 after the system boots up and displays a "Found New Hardware Wizard" window. Please click [Cancel] and proceed with the following steps.

| Found New Hardware Wiz | ard  |  |  |
|------------------------|--|--|--|
|                        | Welcome to the Found New<br>Hardware Wizard<br>Windows will search for current and updated software by<br>looking on your computer, on the hardware installation CD, or on<br>the Windows Update Web site (with your permission).<br>Read our privacy policy |  |  |
|                        | Can Windows connect to Windows Update to search for<br>software?   |  |  |
|                        | <ul> <li>Yes, this time only</li> <li>Yes, now and every time I connect a device</li> <li>No, not this time</li> </ul>   |  |  |
|                        | < <u>B</u> ack <u>N</u> ext > Cancel   |  |  |

1. Find out the Driver, and launch the Setup Wizard



# 2. Please wait few seconds for wizard to prepare installation

| Azurewave Wireless LAN -                           | InstallShield Wizard  |        |
|--|---|--------|
| Preparing Setup<br>Please wait while the InstallSI | nield Wizard prepares the setup.  |        |
|  | Azurewave Wireless LAN Setup is preparing the InstallShield Wizard, which will guide<br>through the rest of the setup process. Please wait. | you    |
|  |   |        |
| InstallShield                                      |   | Cancel |

# 3. Please select click [Install] to proceed

| Azurewave Wireless LAN - Ins                                       | tallShield Wizard  | $\mathbf{X}$ |
|--|--|--------------|
| Ready to Install the Program<br>The wizard is ready to begin insta | lation.  |              |
|  | Click Install to begin the installation.<br>If you want to review or change any of your installation settings, click Back. Click Cancel to exit the<br>wizard. |              |
| InstallShield  | < Back Install Cancel  | ]            |

# 4. The Wizard is running installation

| Azurewave Wireless LAN - | InstallShield Wizard   | X |
|--------------------------|--|---|
| Setup Status             |  |   |
|                          |  |   |
|                          | The InstallShield Wizard is repairing Azurewave Wireless LAN |   |
|                          |  |   |
| InstallShield            | Cancel   |   |

# 5. Please wait few seconds for Wizard to setup



#### 6. When it is completed, please click [Finish]

| Azurewave Wireless LAN - In | nstallShield Wizard  |
|-----------------------------|--|
|                             |  |
|                             | InstallShield Wizard Complete  |
|                             | The InstallShield Wizard has successfully installed Azurewave Wireless LAN. Click Finish to exit the wizard. |
| InstallShield               | K Back Finish Cancel   |

9. When the process is finished, the system will show a message of "Found New Hardware"



#### v. Setup: Windows Vista OS

Please follow the steps to complete installation.

#### 1. Launch the setup driver

| And the cost of the content                                  |   | 20120 0 31210  | 141.01  | 120  | _ |
|--|---|--|---|--|---|
| cuments<br>tures<br>isic<br>cently Changed<br>irches<br>blic | <ul> <li>_setup.dll</li> <li>data1</li> <li>data1.hdr</li> <li>data2</li> <li>ISSetup.dll</li> <li>layout.bin</li> <li>setup</li> <li>setup</li> <li>setup</li> </ul> | 5/18/2006 12:21 AM<br>7/10/2007 5:14 PM<br>7/10/2007 5:14 PM<br>7/10/2007 5:14 PM<br>7/10/2007 5:14 PM<br>7/10/2007 5:14 PM<br>5/25/2006 1:10 AM<br>7/9/2007 5:28 PM | Application Extens<br>Cabinet File<br>HDR File<br>Cabinet File<br>Application Extens<br>BIN File<br>Application<br>Configuration Sett | 365 KB<br>1,059 KB<br>31 KB<br>31,009 KB<br>540 KB<br>1 KB<br>445 KB<br>1 KB |   |
|  | etup.isn  | 5/17/2006 3:44 AM  | ISN File  | 52 KB  |   |
| s ^  |   |  |   |  |   |

2. When you see the permission dialogue box, please click [Continue]



# 3. Now the Wizard is preparing installation

| Azurewave Wireless LAN - InstallShi                      | eld Wizard   |        |
|--|--|--------|
| Preparing Setup<br>Please wait while the InstallShield V | Wizard prepares the setup.   |        |
|  | Azurewave Wireless LAN Setup is preparing the InstallShield Wizard, which will guin<br>through the rest of the setup process. Please wait. | de you |
| InstallShield  |  | Cancel |

# 4. Please click [Install] to proceed

| Azurewave Wireless LAN - Instal                                  | Shield Wizard   |
|--|---|
| Ready to Install the Program<br>The wizard is ready to begin ins | tallation.  |
|  | Click Install to begin the installation.<br>If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard. |
| InstallShield  | < Back Install Cancel   |

### 5. The system is process installation

| Azurewave Wireless LAN - InstallSh | ield Wizard   | X    |
|------------------------------------|---|------|
| Setup Status                       |   |      |
|                                    | The InstallShield Wizard is installing Azurewave Wireless LAN |      |
| InstallShield                      | Car   | icel |

# 8. When the setup is completed, please click [Finish]

| Azurewave Wireless LAN - Install | Shield Wizard  |
|----------------------------------|--|
|                                  |  |
|                                  | InstallShield Wizard Complete  |
|                                  | The InstallShield Wizard has successfully installed Azurewave Wireless LAN. Click Finish to exit the wizard. |
| InstallShield                    | < Back   |

#### III. Network Connection

#### i. For Windows XP OS

Please see the following steps to setup network connection for Windows XP.

1. Find the network icon on the desktop shortcut and right-click on it. Choose "View Available Wireless networks"



2. You will see several options, please select one and click [Connect]



3. Please wait for few seconds to let system connecting to selected wireless network



4. You may need to type the network key when it is required



5. Now the selected wireless network is connected

| tion 6   |  |
|--|--|
| Choose a wireless network  |  |
| Click an item in the list below to connect to a wireless networ information. | k in range or to get more  |
| ((Q)) AzureWave  | Connected 👷  |
| Security-enabled wireless network  | 1000   |
| ((Q)) SWRDG  |  |
| Security-enabled wireless network  | 0000   |
| ((Q)) IAPO-G54   |  |
| Security-enabled wireless network  | Düüse  |
| ((Q)) default  |  |
| Unsecured wireless network   | Düüe   |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Connect  |
|  | Choose a wireless network<br>Cick an item in the list below to connect to a wireless network<br>formation.<br>AzureWave<br>Security-enabled wireless network<br>(m)<br>Security-enabled wireless network<br>(m)<br>APO-GS4<br>Security-enabled wireless network<br>default<br>Unsecured wireless network |

6. You can check the connection status by clicking [Status] in the pop-up dialogue



7. Here is the wireless network connection status

| neral Support    |                               |
|------------------|-------------------------------|
| Connection       |                               |
| Status:          | Acquiring network address     |
| Network:         | AzureWave                     |
| Duration:        | 00:01:54                      |
| Speed:           | 54.0 Mbps                     |
| Signal Strength: | 888a -                        |
| Activity         | 24                            |
|                  | Sent — Wind — Received        |
| Packets:         | 9   0                         |
| Properties D     | isable View Wireless Networks |

#### ii. For Windows Vista OS

Following are the instructions to setup wireless connection for Windows Vista.

1. Right-click on the network icon located on desktop shortcut. When you see the dialogue, please click [Connect to a network]



2. Choose wireless network within your range and click [Connect]

| Select a network to                                  | connect to               | <b>4</b> <del>9</del> |
|--|--------------------------|-----------------------|
| SWRDG  | Security-enabled network | Utre                  |
| bu bu  | Unsecured network        | - Illee               |
| 1APO-654   | Security-enabled network | [[[]]                 |
| Set up a connection or ne<br>Open Network and Sharin | twork<br>ig Center       |                       |

- \* If selected network is not secure, please choose [Connect anyway]
- 3. You may need to wait for few seconds when Windows connects to wireless network

| Connect to a network                  |        |
|---------------------------------------|--------|
| Connecting to AzureWave               |        |
| i i i i i i i i i i i i i i i i i i i | 2      |
|                                       |        |
|                                       |        |
|                                       |        |
|                                       |        |
|                                       | Cancel |

4. Now the selected wireless network is connected



5. If you want to see the connection status, please right-click on the network you choose and select [Status]

| LAN or High-Speed Internet (1)  Wireless Network Connection  AcureWave Disable Connect / Disconnect Status |  |
|--|--|
| AzureWave Disable<br>Connect / Disconnect  |  |
| Status   |  |
|  |  |
| Diagnose <sup>Lut</sup>  |  |
| Bridge Connections   |  |
| Create Shortcut  |  |
| Delete   |  |
| Rename   |  |
| Properties   |  |
|  |  |
|  |  |
|  |  |
|  |  |

#### 6. This is the information of network status

| Connection      |                     |           |
|-----------------|---------------------|-----------|
| IPv4 Connectiv  | ity:                | Internet  |
| IPv6 Connectiv  | ity:                | Limited   |
| Media State:    |                     | Enabled   |
| SSID:           |                     | AzureWave |
| Duration:       |                     | 00:03:42  |
| Speed:          |                     | 48.0 Mbps |
| Signal Quality: |                     | llter     |
| Details         | Wireless Properties |           |
| Activity        | -                   |           |
|                 | Sent — 🌉            | Received  |
| Bytes:          | 60,071              | 2,286,765 |
| Properties      | Pisable Diag        | gnöse     |

#### IV. Setup for Ad-hoc Mode

#### i. For Windows XP OS

If you want to choose Ad-hoc mode, please right-click network icon on desktop shortcut and choose "Open Network Connections", or go to [Control Panel] and double-click "Network Connection" icon.

| Disable<br><b>Status</b><br>Repair |                          |                      | 2014            |  |                      |                              |                           |    |
|------------------------------------|--------------------------|----------------------|-----------------|--|----------------------|------------------------------|---------------------------|----|
| View Available Wireless Netwo      | rks                      |                      |                 |  |                      |                              |                           |    |
| Change Windows Firewall setti      | ngs                      |                      | a she was       |  |                      |                              |                           |    |
| Open Network Connections           | A -126                   | 17 () <mark>(</mark> | 4:52 PM         |  |                      |                              |                           |    |
| Control Panel                      |                          |                      |                 |  |                      |                              |                           |    |
| Back • 🕥 - 🎓 🔎 s                   | Help<br>learch 🌔 Fol     | ders .               | 1               |  |                      |                              |                           |    |
| ress 🕞 Control Panel               |                          | -                    | 1000            | Part of the second seco | 124                  |                              | Xear                      | 90 |
| Control Panel 🛞                    | G                        | ×                    |                 | 40   | -                    | $\sim$                       |                           |    |
| Switch to Category View            | Accessibility<br>Options | Add Hardware         | Add or<br>Remov | Administrative<br>Tools  | Automatic<br>Updates | Avira Antivir<br>PersonalEdi | CMI Audio<br>Config       |    |
|                                    | -9                       | R                    | (J)             |  | and a                | <b>P</b>                     | -                         |    |
| See Also                           | Date and Time            | Display              | Folder Options  | Fonts  | Game                 | Internet                     | Keyboard                  |    |
| Help and Support                   | 92                       | 0                    | -               | ta .   |                      | i a                          | -                         |    |
|                                    | Mouse                    | Network              | Network Setup   | Phone and  | Power Options        | Printers and                 | Bertional and             |    |
|                                    | 1 TONARO                 | Connections          | Wizard          | Modem  | Tonici Optiono       | Paxes                        | Language                  |    |
|                                    | 9                        | 1                    | ۲               | O,   | 2º                   |                              |                           |    |
|                                    | Scanners and<br>Cameras  | Scheduled<br>Tasks   | Security        | Sounds and<br>Audio Devices  | Speech               | System                       | Taskbar and<br>Start Menu |    |
|                                    | 69                       | 3                    |                 | 00)  | 50                   |                              |                           |    |
|                                    | User Accounts            | Windows              | Windows         | Wireless   | 郵件                   |                              |                           |    |
|                                    | Jacob Proventia          | CardSpace            | Firewall        | Network Set  | JAPE 1               |                              |                           |    |
|                                    |                          |                      |                 |  |                      |                              |                           |    |
|                                    |                          |                      |                 |  |                      |                              |                           |    |
|                                    |                          |                      |                 |  |                      |                              |                           |    |

When you see the "Network Connections" screen, please follow the steps below to setup Ad-hoc mode.

1. Double-click "Wireless Network PCI-E Adapter" icon to enter its properties



2. Click "General" tab and double-click the "Internet Protocol (TCP/IP)" item



3. Choose "Use the following IP address:" and type the IP address; then click [OK]

| Internet Protocol (TCP/IP)  | Properties 🛛 🛛 🔀  |
|---|---|
| General   |   |
| You can get IP settings assign<br>this capability. Otherwise, you<br>the appropriate IP settings. | ed automatically if your network supports<br>need to ask your network administrator for |
| Obtain an IP address aut  | omatically  |
| Use the following IP addr   | ess:  |
| IP address:   | 192.168.0.10  |
| Subnet mask:  | 255 . 255 . 255 . 0   |
| Default gateway:  |   |
| O Obtain DNS server addre   | ter automatically   |
| OUse the following DNS se   | erver addresses:  |
| Preferred DNS server.   | E 27 - 27 - 27  |
| Alternate DNS server.   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
|   | Advanced  |
|   | OK Cancel   |

\*Note: the IP address of the other wireless card should be set with the same subnet mask

4. Right-click the "Wireless Network Connection" icon and choose "properties"

| S Network Connections   |        |
|---|--------|
| File Edit View Favorites Tools Advanced Help  | 10     |
| 🔘 Back - 🔘 - 🎓 🖉 🔎 Search 😢 Folders 🛄 •   |        |
| Address S Network Connections   | 🛩 🄁 Go |
| Network Tasks     Create a new correction   Set up a home or smal office network   Change Windows Firewall settings   Frewall settings   Wi View available wireless network device   Disable this network device   Disable this network device   Pepair this connection   Rename this connection   Rename this connection   New status of this connection   Change settings of this connection   Properties   Change settings of this connection   Properties   Properties | ► 60   |
| S My Computer   |        |
|   |        |
| Wew or change settings for this connection, such as adapter, protocol, or modem configuration settings.   | ai.    |

5. Select "Wireless Network" tab and choose [Add]

|   | ction 6 Properties 🛛 🛛 🤶   |
|---|--|
| aneral Wireless Networks A                                      | dvanced  |
| Use Windows to configure n                                      | ny wireless network settings   |
| Available networks  |  |
| To connect to, disconnect fro<br>about wireless networks in ran | m, or lind out more information<br>ige, click the button below.  |
|   | View Wireless Networks   |
| 1   | Move up  |
| Add Remove  | Properties   |
|   | and a second sec |

6. Type "Network name (SSID)" and choose "Data encryption" if you want to protect the network security

|                            | connection           |   |
|----------------------------|----------------------|---|
| Network name (SSID):       | test                 |   |
| Wireless network key       |                      |   |
| This network requires a ke | y for the following: |   |
| Network Authentication:    | Open                 | ~ |
| Data encryption:           | Disabled             | ~ |
| Network.kep                |                      |   |
| Continn network key        |                      | - |
| Key ridex (advanced)       | 1 0                  |   |
| The key is provided for    | me automatically     |   |

7. When you see the dialogue showing your network is unsecured, please click [Continue Anyway]

#### 8. Now your network is in Ad-hoc mode

| Wireles            | s Network Connection 6 Properties 👘 👔  |
|--------------------|--|
| General            | Wireless Networks Advanced   |
| 🗹 Use V            | /indows to configure my wireless network settings  |
| Availab            | le networks.   |
| To con<br>about v  | nect to, disconnect from, or find out more information<br>wreless networks in range, click the button below. |
|                    | View Wireless Networks   |
| Automa<br>below    | tically connect to available networks in the order listed  (Automatic)  Mover up  Move down                  |
| Learn a<br>configu | Id Remove Properties<br>bout setting up wireless network Advanced  |
|                    | OK Cancel  |

#### ii. For Windows Vista OS

Please follow the steps to setup Ad-hoc mode for Windows Vista.

1. Right-click the Network neighbor to choose "properties," or you can right-click network icon on desktop shortcut and choose "Network and Sharing Center"





2. When you see the "Network and Sharing Center" windows, please select "Manage network connection" bar



3. Right-click the connected network icon and choose "Properties"



4. When you see the warning message, please click [Continue]



5. Choose "Networking" tab and double-click the "Internet Protocol Version 4 (TCP/IPv4)" item



6. Choose "Use the following IP address:" and type the IP address; then click [OK]

| ieneral   |   |                  |                         |                  |
|---|---|------------------|-------------------------|------------------|
| You can get IP settings assigned<br>this capability. Otherwise, you n<br>for the appropriate IP settings. | l automatically if<br>eed to ask your i | your n<br>networ | etwork su<br>k administ | pports<br>trator |
| Obtain an IP address autor  | natically                               |                  |                         |                  |
| Use the following IP address  | 15:                                     |                  |                         |                  |
| IP address:   | 192.1                                   | 68.0             | . 10                    |                  |
| Subnet mask:  | 255 . 2                                 | 55 . 25          | 5.0                     |                  |
| Default gateway:  |   |                  | (6)                     |                  |
| Cobtain DNS server address  | automatically                           |                  |                         |                  |
| Use the following DNS serv  | er addresses:                           |                  |                         |                  |
| Preferred DNS server:   | 2                                       | *                | 36                      |                  |
| Alternate DNS server:   |   | ÷.               | *                       |                  |
|   |   |                  |                         |                  |
|   |   |                  | Advan                   | ced              |
|   |   |                  |                         |                  |

\*Note: the IP address of the other wireless card should be set with the same subnet mask

7. Choose "Manage wireless networks" bar



#### 8. Select [Add]

| 00                   | aff « Network and Int  | ternet 🕨 Manage  | Wireless Networks                                       | •                              | Search .         | م                        |
|----------------------|--|--|---|--------------------------------|------------------|--------------------------|
| Mar<br>Wind<br>can a | nage wireless netwo<br>lows tries to connect to th<br>also add or remove netwo | orks that use (V<br>lese networks in the<br>rk profiles. | Vireless Network Conr<br>e order listed below. To chang | nection 2)<br>ge the order, di | rag a network up | or down in the list. You |
| 💠 Add                | 🕐 Adapter properties   | 8 Profile types  | 💱 Network and Sharing Ca                                | enter                          |                  | 0                        |
| Networks             | s you can view and modify  | y (1)  |   |                                |                  | ^                        |
|                      | AzureWave  | Security: WEP  | Туре  | e: Any support                 | ed               | Automatically con        |
|                      |  |  |   |                                |                  |                          |
| all                  | 1 item   |  |   |                                |                  | A                        |

9. Choose "Create ad-hoc network"

| low d | o you want to add a network?  |
|-------|---|
| 1     | Add a network that is in range of this computer<br>This shows you a list of networks that are currently available and lets you connect<br>to one. Once you connect, a profile for the network is saved on your computer.                      |
| -     | Manually create a network profile<br>This creates a new network profile or locates an existing network and saves a profile<br>for the network on your computer. You need to know the network name (SSID) and<br>security key (if applicable). |
| 4     | Create an ad hoc network<br>This creates a temporary network for sharing files or an Internet connection  |

10. Please click [Next]

| -           |   | 00     |  |  |  |  |
|-------------|---|--------|--|--|--|--|
| 9           | Manually connect to a wireless network  |        |  |  |  |  |
| 5           | Set up a wireless ad hoc network  |        |  |  |  |  |
| A<br>n<br>c | in ad hoc network (sometimes called a computer-to-computer network) is a temporary<br>network used for sharing files, presentations, or an Internet connection among multiple<br>computers and devices. |        |  |  |  |  |
| c           | Computers and devices in ad hoc networks must be within 30 feet of each other.  |        |  |  |  |  |
| H           | If you're currently connected to a wireless network, you might be disconnected when you<br>set up this network.   |        |  |  |  |  |
|             |   |        |  |  |  |  |
|             | Next  | Cancel |  |  |  |  |

11. Enter "Network name" and if you want to protect the network security, please choose in "security type"; then click [Next]

| Give your network        | a name and choose security | options            |
|--------------------------|----------------------------|--------------------|
| Network name:            | test                       |                    |
| Security type:           | No authentication (Open)   | Help me choose     |
| Security key/Passphrase: |                            | Display characters |
| V Save this networ       | k                          |                    |
|                          |                            |                    |

12. Now your network is in Ad-hoc mode

| The te                         | st network is ready to use  |  |
|--------------------------------|---|--|
| This net<br>disconn<br>to conn | work will appear in the list of wireless networks and will stay active until everyone<br>ects from it. Give the network name and security key (if any) to people you want<br>ect to this network. |  |
|                                | Wireless network name: test<br>Network security key: unsecured  |  |
| To share                       | files, open Network and Sharing Center in Control Panel and turn on file sharing.   |  |
|                                |   |  |

#### Europe - EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

#### - EN 60950-1: 2006

Safety of Information Technology Equipment

#### - EN50392 : (2004-01)

- Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz - 300 GHz)

#### - EN 300 328 V1.7.1: (2006-10)

- Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

#### EN 301 489-1 V1.6.1: (2005-09)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

#### - EN 301 489-17 V1.2.1 (2002-08)

 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 - 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

# **CE**()

| ⊡Česky             | [Jméno výrobce] tímto prohlašuje, že tento [typ zařízení] je ve shodě se základními              |
|--------------------|--|
| [Czech]            | požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.                                 |
| da Dansk           | Undertegnede [fabrikantens navn] erklærer herved, at følgende udstyr [udstyrets                  |
| [Danish]           | typebetegnelse] overholder de væsentlige krav og øvrige relevante krav i direktiv                |
|                    | 1999/5/EF.   |
| deDeutsch          | Hiermit erklärt [Name des Herstellers], dass sich das Gerät [Gerätetyp] in                       |
| [German]           | Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen                |
|                    | Bestimmungen der Richtlinie 1999/5/EG befindet.  |
| EtEesti            | Käesolevaga kinnitab [tootja nimi = name of manufacturer] seadme [seadme tüüp = type             |
| [Estonian]         | of equipment] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist              |
|                    | tulenevatele teistele asjakohastele sätetele.  |
| enEnglish          | Hereby, [name of manufacturer], declares that this [type of equipment] is in compliance          |
|                    | with the essential requirements and other relevant provisions of Directive 1999/5/EC.            |
| Español            | Por medio de la presente [nombre del fabricante] declara que el [clase de equipo]                |
| [Spanish]          | cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o             |
|                    | exigibles de la Directiva 1999/5/CE.   |
| <b>Ε</b> ΙΕλληνική | ME THN ΠΑΡΟΥΣΑ [name of manufacturer] $\Delta$ ΗΛΩΝΕΙ ΟΤΙ [type of equipment]                    |
| [Greek]            | ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ                                       |
|                    | ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.  |
| français           | Par la présente [nom du fabricant] déclare que l'appareil [type d'appareil] est conforme         |
| [French]           | aux exigences essentielles et aux autres dispositions pertinentes de la directive                |
|                    | 1999/5/CE.   |
| itltaliano         | Con la presente [nome del costruttore] dichiara che questo [tipo di apparecchio] è               |
| [Italian]          | conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva |
|                    | 1999/5/CE.   |
| Latviski           | Ar šo [name of manufacturer / izgatavotāja nosaukums] deklarē, ka [type of equipment /           |
| [Latvian]          | iekārtas tips] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to                  |
|                    | saistītajiem noteikumiem.  |
| Lietuvių           | Šiuo [manufacturer name] deklaruoja, kad šis [equipment type] atitinka esminius                  |
| [Lithuanian]       | reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.  |
| Nederlands         | Hierbij verklaart [naam van de fabrikant] dat het toestel [type van toestel] in                  |
| [Dutch]            | overeenstemming is met de essentiële eisen en de andere relevante bepalingen van                 |
|                    | richtlijn 1999/5/EG.   |
| [mt]Malti          | Hawnhekk, [isem tal-manifattur], jiddikjara li dan [il-mudel tal-prodott] jikkonforma            |
| [Maltese]          | mal-ħtiģijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva              |
|                    | 1999/5/EC.   |
| huMagyar           | Alulírott, [gyártó neve] nyilatkozom, hogy a [ típus] megfelel a vonatkozó alapvetõ              |
| [Hungarian]        | követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.                                    |

| Polski              | Niniejszym [nazwa producenta] oświadcza, że [nazwa wyrobu] jest zgodny z                 |
|---------------------|--|
| [Polish]            | zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy              |
|                     | 1999/5/EC.   |
| <b>P</b> tPortuguês | [Nome do fabricante] declara que este [tipo de equipamento] está conforme com os         |
| [Portuguese]        | requisitos essenciais e outras disposições da Directiva 1999/5/CE.                       |
| Slovensko           | [Ime proizvajalca] izjavlja, da je ta [tip opreme] v skladu z bistvenimi zahtevami in    |
| [Slovenian]         | ostalimi relevantnimi določili direktive 1999/5/ES.                                      |
| Slovensky           | [Meno výrobcu] týmto vyhlasuje, že [typ zariadenia] spĺňa základné požiadavky a všetky   |
| [Slovak]            | príslušné ustanovenia Smernice 1999/5/ES.  |
| filSuomi            | [Valmistaja = manufacturer] vakuuttaa täten että [type of equipment = laitteen           |
| [Finnish]           | tyyppimerkintä] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä |
|                     | koskevien direktiivin muiden ehtojen mukainen.   |
| <b>國</b> Svenska    | Härmed intygar [företag] att denna [utrustningstyp] står I överensstämmelse med de       |
| [Swedish]           | väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv       |
|                     | 1999/5/EG.   |

| Notified Countries: | Austria, Belgium, Cyprus, Denmark, Estonia, Finland,      |
|---------------------|---|
|                     | France, Germany, Greece, Hungary, Iceland, Ireland,       |
|                     | Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, |
|                     | Norway, Poland, Portugal, Romania, Slovenia, Slovak,      |
|                     | Spain, Sweden & UK  |

#### 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.

**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 20cm between the radiator & your body.

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

#### This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna,
- For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change.

As long as 3 conditions above are met, further <u>transmitter</u> test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

**IMPORTANT NOTE:** In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

#### End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: TLZ-NE106".

#### Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

For Taiwan 警語:

★ 第十二條

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。

★ 第十四條

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。

#### Note:

- 1. 本模組於取得認證後將依規定於模組本體標示審驗合格標籤
- 2. 系統廠商應於平台上標示「本產品內含射頻模組: ₩CCXXXXYYyyyZzW」字樣