

Embedded Works

**2T2R 802.11b/g/n/ac  
Module  
EW5270UM**

User's Manual

**FCC Statement:**

**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.

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.

**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 & your body.

**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.

**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 20 cm 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 labelling area is small than the palm of the hand, 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: Z9E-EW5270UM ".

If the labelling area is larger than the palm of the hand, 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 Information:**

Ant.	Brand	Model Name (Part Number)	Antenna Type	Connector	Gain (dBi)		Cable loss	True Gain (dBi)	
					2.4GHz	5GHz		2.4GHz	5GHz
1	AIR802	ANRD245X05	Dipole Antenna	RP-SMA	5	5	0.4 (Black cable)	4.6	4.6
2	taoglas	GW.71.5153	Dipole Antenna	RP-SMA	3.8	5.5	0.4 (Rose gold cable)	3.4	5.1

Note: The Printed Antenna of the EUT wasn't used.

Chain 1 connect to Ant.1 or Ant. 2, Chain 2 connect to Ant.1 or Ant. 2.

When module is put into the host , the host complying with FCC part 15 B with all function operated should be verified by host manufacturers.

Host manufacturers should test fundamental and spurious to make sure spurious with radio operated still comply with FCC regulation rule in FCC part 15 C & 15E.

All functions should be operated simultaneously including radio in the host to make sure radio module does not affect other functions.

The host manufacture must evaluate the installed module for coupling when nearby traces use clocks above 2500 MHz.

The host manufacture, when testing for 15B emissions, should install the module and operate it normally, then observe for any signals over the 15B limits that are not associated with the fundamental of the module or its harmonics to check for coupling.

# Chapter 1:

# Introduction

## Description

The EW5270UM 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.

EW5270UM 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

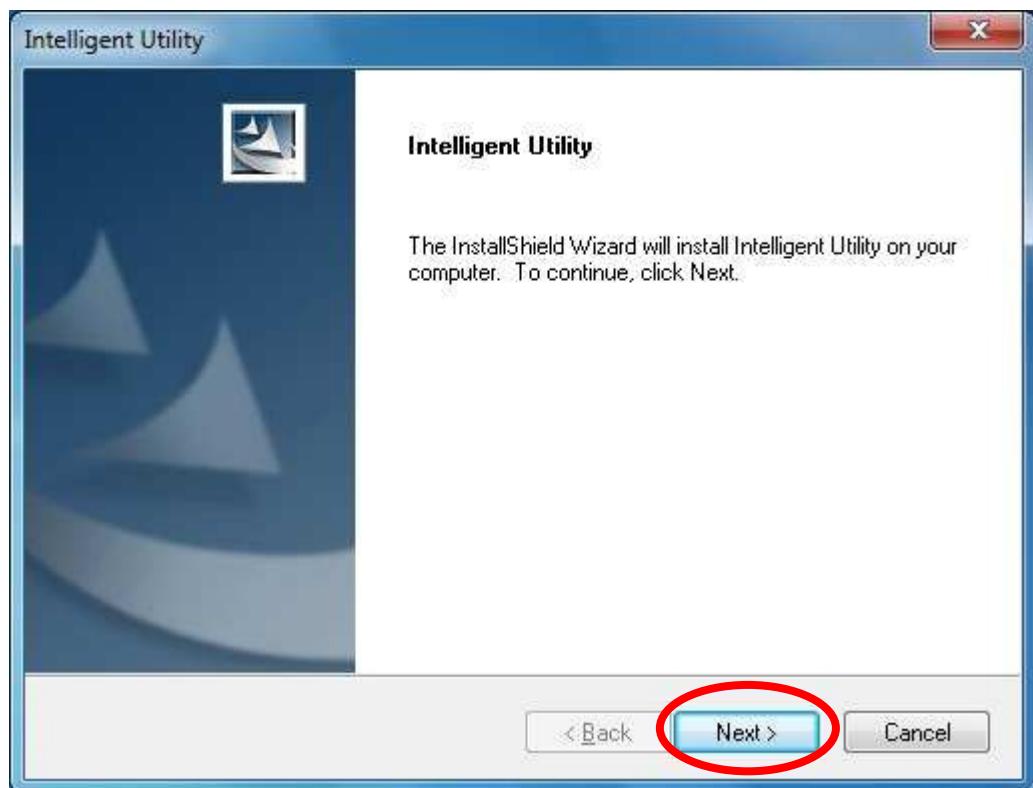
# For Windows 7

## Install Software

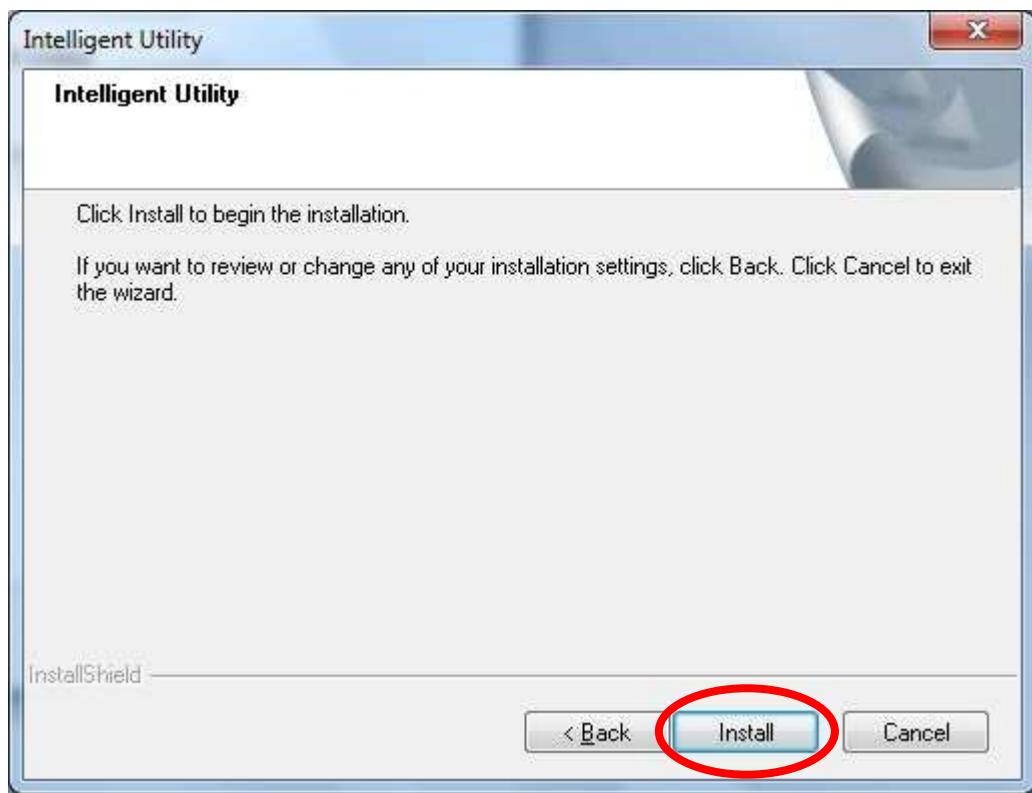
### Note:

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

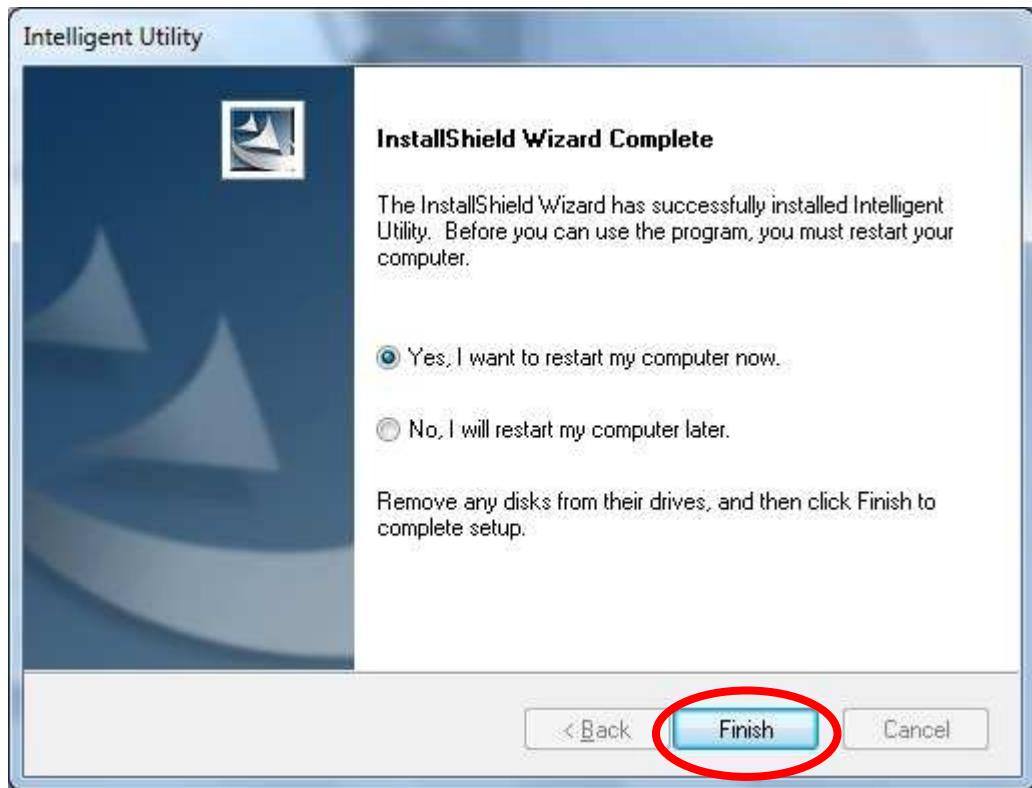
1. Exit all Windows programs. Insert the included Installation CD into the computer. The CD-ROM will run automatically. Please click **Next** to process the installation.



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



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



## Install Hardware

### Note:

**Insert the Wireless USB module when finished software installation.**

Insert the Wireless USB module 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 module** category. If the **802.11a/n/b/g/ac 2cm Wireless LAN USB2.0 module** is listed here, it means that the device is properly installed and enabled.

