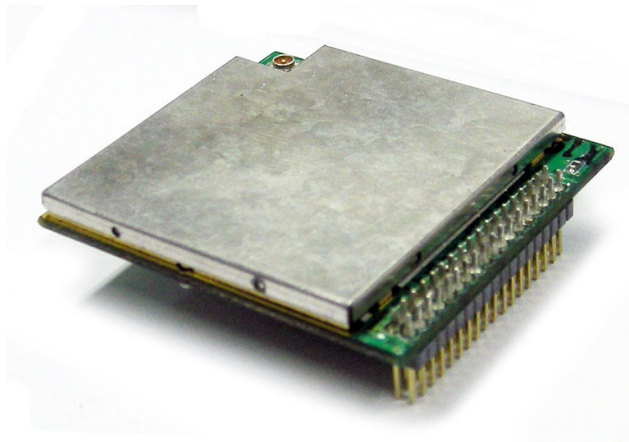


# WIZ610WI Quick Installation Guide

(Version 1.0)



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For more information, please visit our website at <http://www.wiznet.co.kr>

## WIZnet's Online Technical Support

If you have any questions about our products, please visit our website and post your questions on the [Q&A Board](#). We will reply your questions as soon as possible

The screenshot shows the WIZnet website interface. At the top, there is a navigation bar with links for HOME, LOGIN, JOIN, CONTACT US, and language options (ENGLISH, CHINESE, JAPANESE, KOREAN), along with an On-line Mail button. A main navigation menu on the left includes PRODUCTS, TECHNOLOGY, TECHNICAL Q&A (highlighted with a 'CLICK' button), LIBRARY, DISTRIBUTOR, PARTNERSHIP, BLOG, and ABOUT US. The central banner features a large image of the WIZnet W5300 chip with the text 'Stable 70Mbps Guaranteed (in DMA!) W5300'. To the right, a box titled 'WIZnet website Renewal Open with web 2.0 concepts!' lists several updates: Easy-to-check new or amended info, Support RSS, Enhanced Search function, Open Blog & Community menu, Built Technical forum as well as Q&A, Easy-to-find local distributors, WIZnet own innovation spirit visualized, Chinese version Grand Open, and Japanese version Coming Soon! Below the banner, there are sections for 'RoHS Semiconductor Production Line Control System', 'NEWS | NEWS LETTER' with a list of recent updates, 'NEW PRODUCT W5300' with its specifications (Over 50 Mbps, 16/8 bit data bus width, 8 independent sockets, and support for SWTCP/IP), and 'WHAT'S UPDATED' with a list of recent changes. At the bottom, there are links for 'COMPANY OVERVIEW', 'DISTRIBUTOR', and various partner announcements like 'WIZnet 3rd Party e-market place', 'WIZnet e-sale International', 'WIZnet Ethernet 2007 Winners Announcement', 'IIC Taiwan Sep. 9-11, 2008 Booth #: 2L06', and 'Download Sales Materials'.



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## 1. Hardware Setting

### Step 1.Connecting Ethernet Cable

Connect WIZ610Wi evaluation board to PC by using the UTP Cable.

You can use any types of UTP cable (direct or crossover cable).

### Step 2.Connecting Serial Cable

Connect WIZ610Wi evaluation board to your PC by using the DB9 female serial cable.

### Step 3.Connecting Wireless LAN Antenna

Connect the wireless LAN antenna to the U.FL antenna connector of WIZ610wi.

The antenna should have pigtail.

## 2. Software Setting

### 2-1. The Configurations WEB Page

#### Step 1.Setting up the IP address of the PC

The default IP address and Subnet Mask of WIZ610Wi are 192.168.1.254 and 255.255.255.0 Please configure the IP address of your PC as 192.168.1.XXX and Subnet Mask as 255.255.255.0.

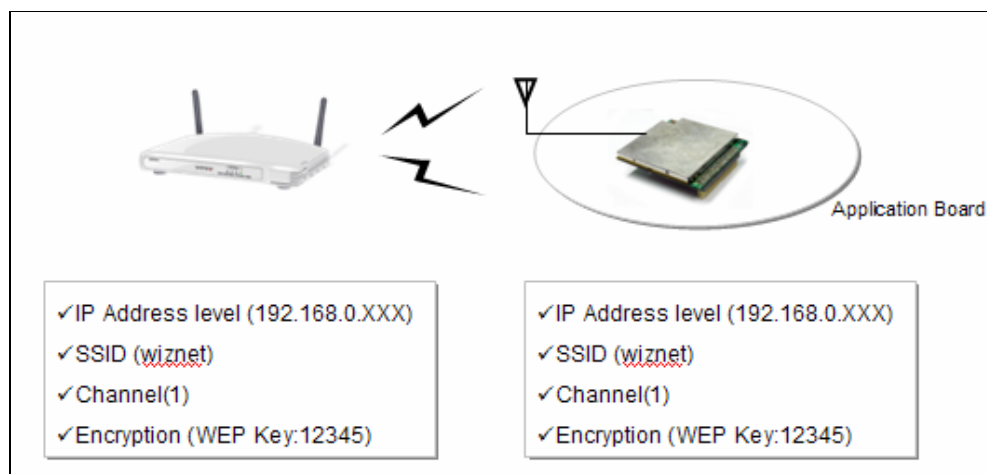
#### Step 2.Connecting Configuration Page

Open the web browser on your PC and input the IP address as “192.168.1.254” to connect to the configuration page. Please enter the ID and Password

(Default ID: [admin/](#) Password: [admin](#))

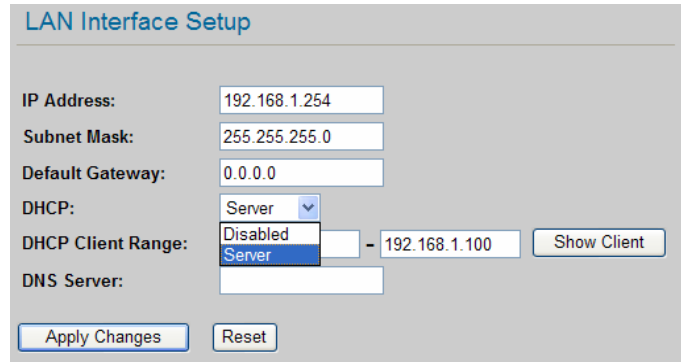
### 2-2. Network Setting

To establish a Wi-Fi communication, the devices in the same network must have same values in the parameters of IP address level, SSID, Channel, Encryption. For the detail, refer to below figure. If you setup WIZ610wi as Static IP, you have to know IP address level of Access Point.



### Step 1. Wired Network Setting

Please set your IP address, Subnet Mask and Gateway of your WIZ610Wi. The default IP address is “192.168.1.254”.



The screenshot shows the 'LAN Interface Setup' web interface. It contains the following fields and controls:

- IP Address:** Text input field containing '192.168.1.254'.
- Subnet Mask:** Text input field containing '255.255.255.0'.
- Default Gateway:** Text input field containing '0.0.0.0'.
- DHCP:** A dropdown menu with 'Server' selected.
- DHCP Client Range:** A dropdown menu with 'Disabled' selected, followed by a text input field containing '192.168.1.100' and a 'Show Client' button.
- DNS Server:** An empty text input field.
- Buttons:** 'Apply Changes' and 'Reset' buttons at the bottom.

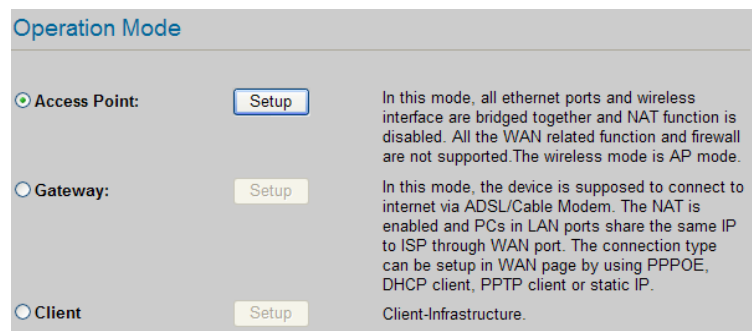
### Step 2. DHCP Settings

Select if you use DHCP function or not, and configure the ‘DHCP Client Range’. When WIZ610Wi is set as DHCP server, it operates as below according to the operation mode.

- **Access Point Mode :** If there is another DHCP server operating at the upper level in the network, it assigns IP address to the client, but does not to WIZ610Wi. If there is not any other DHCP server, WIZ610Wi assigns IP address.
- **Gateway Mode :** In this mode, WIZ610Wi is a bridge for Ethernet to the MII interface. Regardless of DHCP server operating at the upper level, WIZ610Wi assigns IP address to the client.
- **Client Mode :** If WIZ610Wi is set as Client mode, it does not operate as DHCP Client. The application board directly acquires IP address from DHCP server.

## 2-3. Wireless Setting

**Step 1.** Please configure the operation mode of WIZ610Wi. You can select one of modes (Access Point, Gateway, and Client)

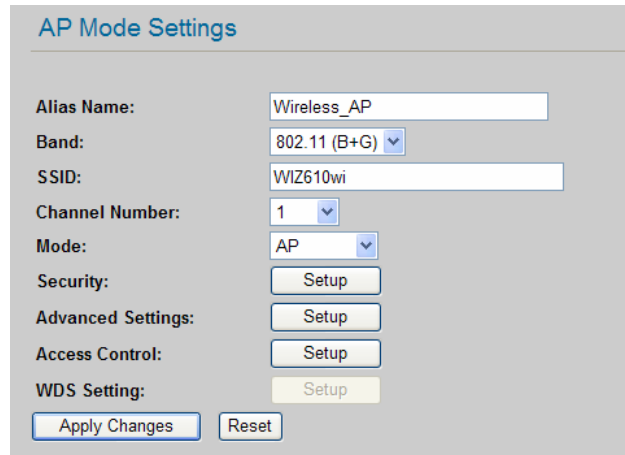


The screenshot shows the 'Operation Mode' web interface with three radio button options:

- Access Point:** Selected with a radio button. Includes a 'Setup' button and a description: "In this mode, all ethernet ports and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported. The wireless mode is AP mode."
- Gateway:** Unselected with a radio button. Includes a 'Setup' button and a description: "In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPoE, DHCP client, PPTP client or static IP."
- Client:** Unselected with a radio button. Includes a 'Setup' button and a description: "Client-Infrastructure."

**Step 2.** Please setup the following parameters: SSID / Channel Number/ Data Rate / Security /

Access Control / Advanced  
/ WDS Setting



**AP Mode Settings**

Alias Name:

Band:  ▼

SSID:

Channel Number:  ▼

Mode:  ▼

Security:

Advanced Settings:

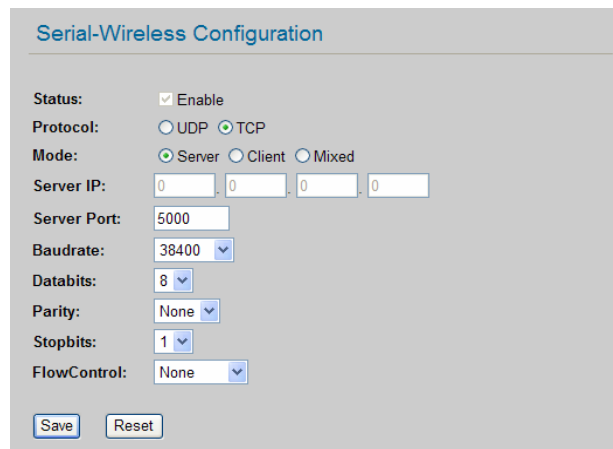
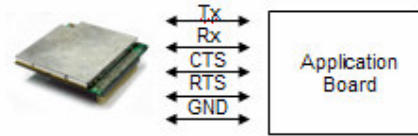
Access Control:

WDS Setting:

- **SSID:** SSID should be configured for the wireless communication. The default SSID is “WIZ610Wi”. You can rename your SSID to a name of your choice
- **Channel:** A different channel should be selected when your device experienced interferences from other wireless network. The default channel is set as “1”.
- **Security :** The default security setting is set as “Open System or Shared Key/NONE Encryption”.
- **Access Control :** The default Access Control is “Disable”.
- **WDS :** The default WDS is set as “AP” mode

## 2-4. Serial-Wireless Configuration

### Step 1. Serial Parameter Setting



The screenshot shows the 'Serial-Wireless Configuration' web interface. The configuration is as follows:

Parameter	Value
Status	<input checked="" type="checkbox"/> Enable
Protocol	<input type="radio"/> UDP <input checked="" type="radio"/> TCP
Mode	<input checked="" type="radio"/> Server <input type="radio"/> Client <input type="radio"/> Mixed
Server IP	0 . 0 . 0 . 0
Server Port	5000
Baudrate	38400
Databits	8
Parity	None
Stopbits	1
FlowControl	None

Buttons: Save, Reset

Enable the status of “Serial to Wireless LAN” configuration

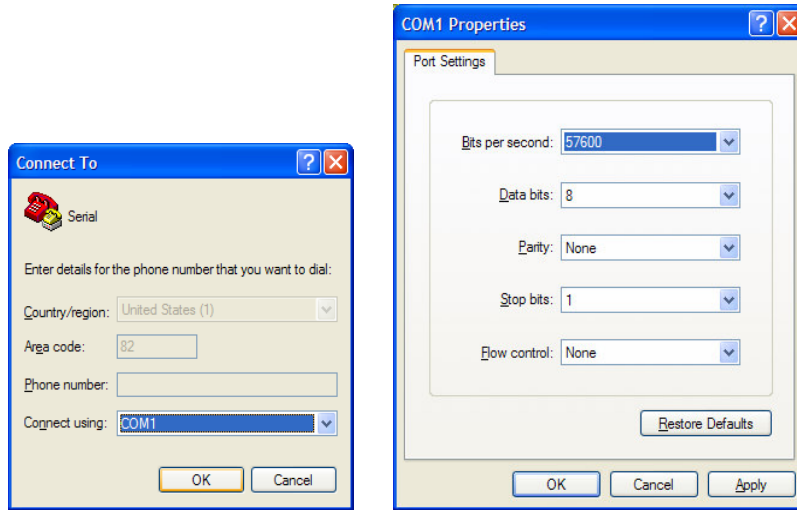
Input the serial parameters to communicate with the serial device.

- Protocol: Select UDP or TCP
- Mode : Select a mode (Server, Client, Mixed)
- Server IP/Port : At the Client or Mixed mode, you should set the server IP address. WIZ610Wi will try to connect to this server IP address.
- Configure Baud rate, Databits, Parity, Stopbits, Flow Control.

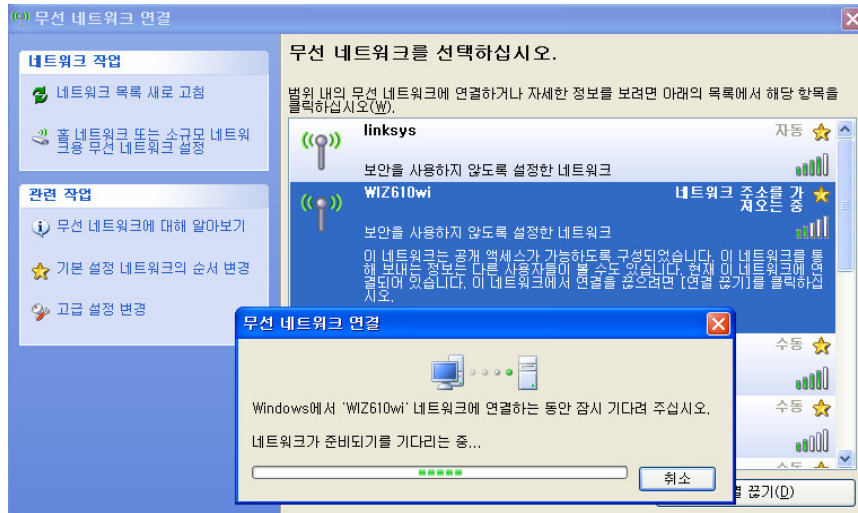
## 2-5. Testing

### Step 1. Serial to Wireless Gateway Test

- Open a terminal program of your choice on your PC (ex: Hyper Terminal). Please set the same baud rate as the WIZ610Wi.

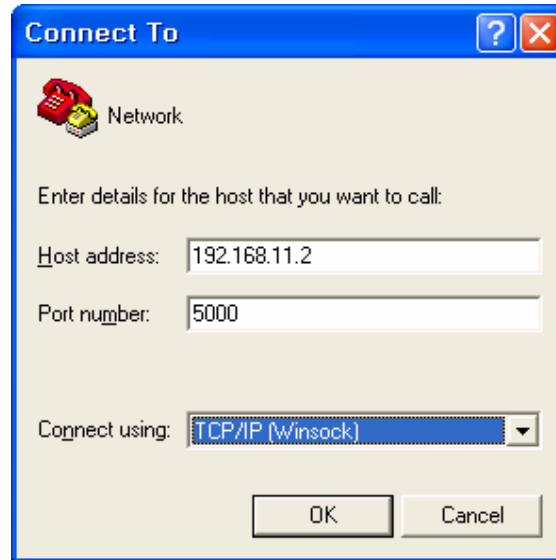


➤ Connect to “WIZ610Wi” in the Wireless Network Setting of your PC

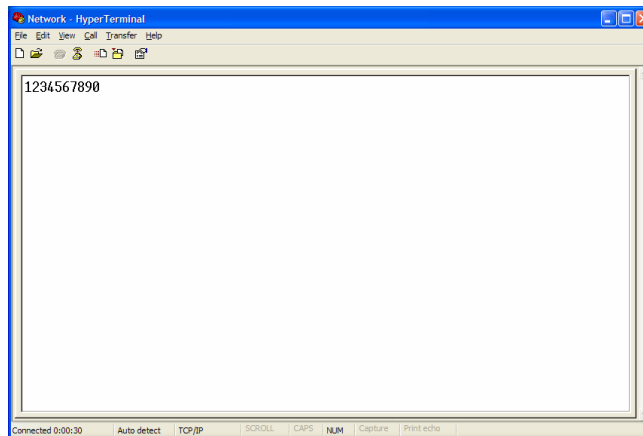


➤ Open another Terminal program and input IP address and Port Number of WIZ610Wi.

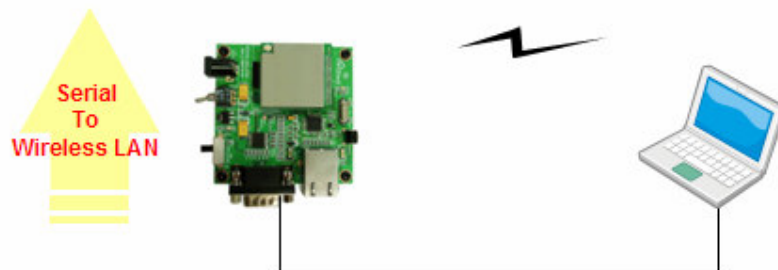




➤ Input any characters in the Hyper Terminal for Serial. (In the example below, “01234567890” is input). The same characters are outputted in the Hyper Terminal for Network. A Serial to Wireless LAN test was performed.



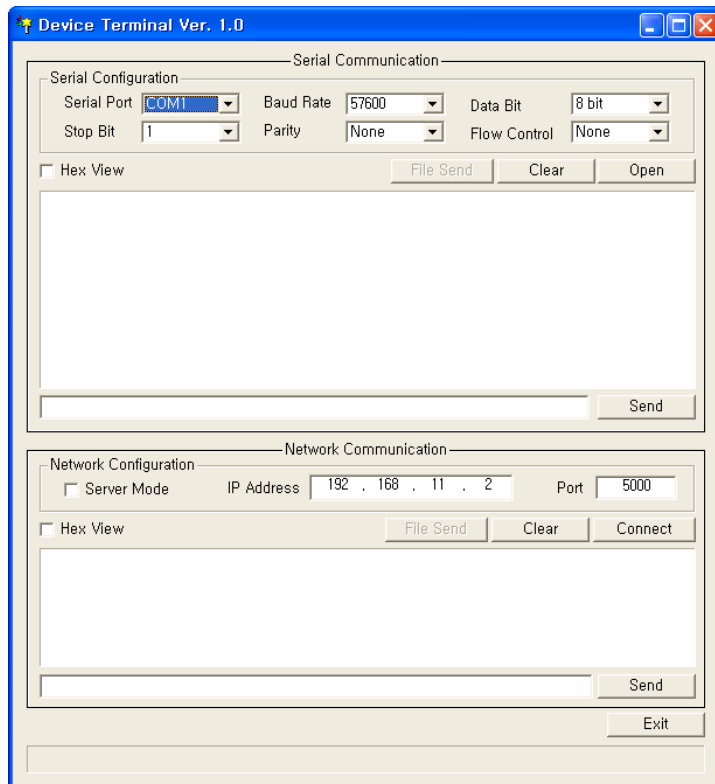
Received Data by Network Terminal Program



A serial to Ethernet test can also be performed by using the hyper terminal.

In the same way, input any character in the screen of terminal program for network, and check if same character is displayed in the screen for serial (Ethernet to Serial)

※ The above test can also be performed in a program called, “Device Terminal program”, which is easy and simple to use.



Device Terminal Program

Device Terminal is a program which integrates both serial and network communications into one user interface so that you can test your WIZnet gateway module easily.

As shown in above Figure, the upper part of the program allows you to configure your serial setting of WIZ610Wi. By clicking the “Open” button, serial communication is enabled.

The lower part of the program allows you to configure the network settings. You can test both TCP Client and TCP Server modes at the same time. If the Server Mode is enabled, Device Terminal will operate as server mode, and the WIZ610Wi module will work as client mode. The PC where the Device Terminal is operating will work as a server, the IP address of the PC should be set as Server IP of the module. If Server mode is not checked, Device Terminal will operate as client mode, and the module as server. For the IP address and port, please input your IP address and port number of WIZ610Wi and click the “Connect” button to start a network communication.



When serial and network terminals are connected, input any character in the Data Input window and click “Send” button. You can check the data is transferred into the another window.