

# **ZyXEL G-2000 Plus v2**

4-port Wireless Router

## **Quick Start Guide**

Version 3.6  
Edition 1  
2/2006



## Overview

The ZyXEL G-2000 Plus v2 (the ZyXEL device) is a router with a built-in wireless LAN access point that makes it easy for people to set up a small home/office network and share Internet access via a (cable/DSL) modem or router.

This Quick Start Guide introduces the ZyXEL device and shows you how to use the web configurator wizard. See your User's Guide for configuration details and background information on all ZyXEL device features using the SMT (System Management Terminal) and web configurator.

## 1 Hardware Installation

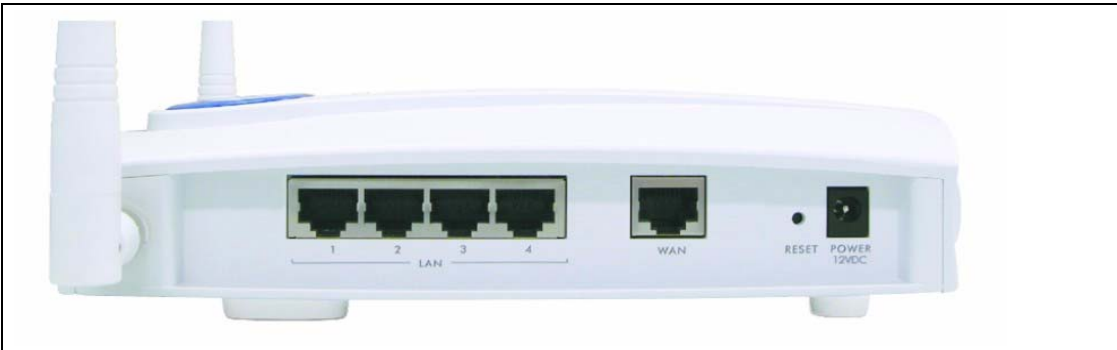
Follow the steps below to connect the supplied antennas.

- 1 Locate the antenna connectors on the sides of your ZyXEL device.
- 2 Screw the antennas clockwise onto the antenna connectors. The antennas should be perpendicular to the ground and parallel to each other.

**Note:** Make sure the antennas are securely screwed onto the antenna connectors.



## 2 Hardware Connections



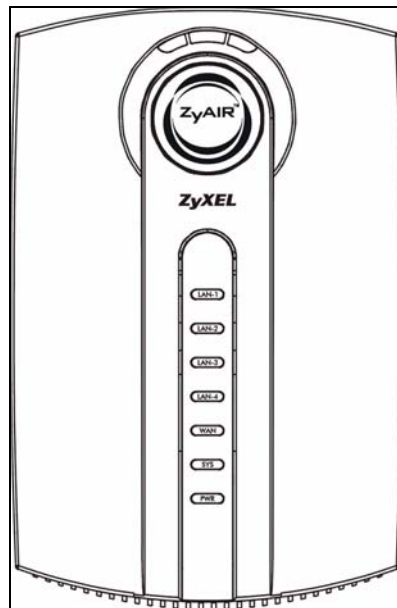
- 1 **LAN:** Use an Ethernet cable to connect at least one computer for initial ZyXEL device configuration. These ports are auto-negotiating (can connect at 10 or 100Mbps) and auto-crossover (automatically adjust to the type of Ethernet cable you use (straight-through or crossover)).
- 2 **WAN:** Connect your modem or router to this port with an Ethernet cable.

**3 RESET:** You only need to use this button if you've forgotten the ZyXEL device's password. It returns the ZyXEL device to the factory defaults (password is 1234 and LAN IP address 192.168.1.1). Refer to the User's Guide for more information.

**4 POWER:** Use the included power adaptor to connect the **POWER** socket to an appropriate power source.

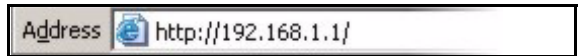
After you've made the connections look at the front panel lights. .

- The **PWR** light turns steady on when the power adaptor is connected.
- The **SYS** light blinks while performing system testing and then turns steady on if the testing is successful.
- The **ZyAIR (breathing)** light turns steady on while the wireless card on the ZyXEL device is working.
- The **LAN** and **WAN** lights turn on, if the corresponding ports are properly connected. If the lights are not on, check your connections and inspect your cables for damage. If you still have problems, contact your local vendor.



### 3 Accessing the Web Configurator.

1 In your browser, go to <http://192.168.1.1>



2 Enter the password **1234**. Then, click **Login**.

 A screenshot of the login page for the ZyXEL G-2000PLUS v2. The background is blue. At the top, it says 'G-2000PLUS v2'. Below that, it says 'Enter Password and click Login.' There is a 'Password:' label followed by a text input field containing '1234'. At the bottom, there are two buttons: 'Login' and 'Reset'.

3 Enter a new password, retype it to confirm and click **Apply**.

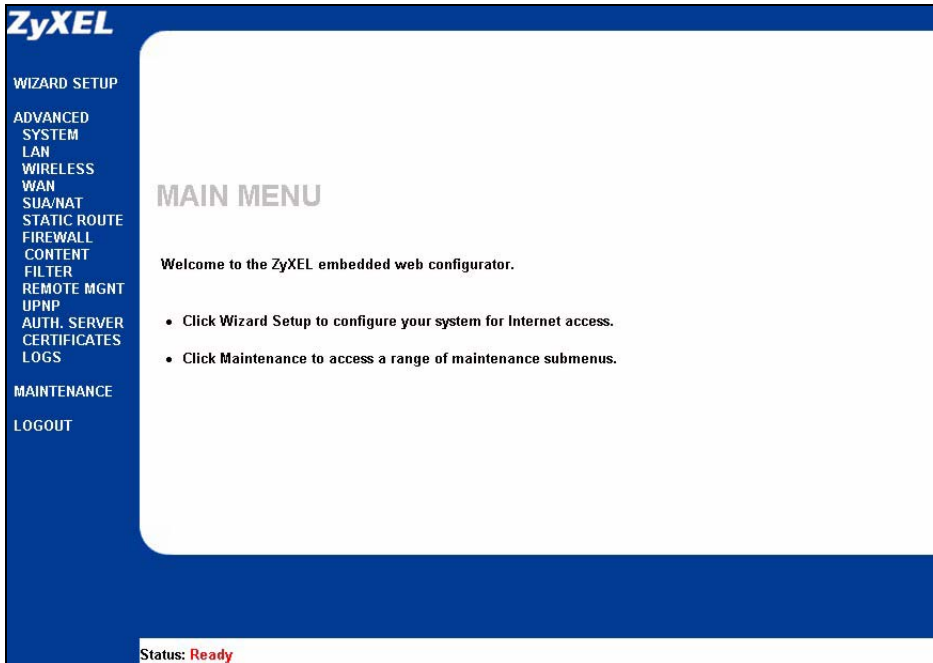
 A screenshot of the password change page. The background is blue. At the top, it says 'Use this screen to change the password.' Below that, there are two labels: 'New Password:' and 'Retype to Confirm:'. Each label is followed by a text input field. At the bottom, there are two buttons: 'Apply' and 'Ignore'.

4 Click **Apply** to replace the factory default certificate.

 A screenshot of the 'Replace Factory Default Certificate' screen. The background is blue. At the top, it says 'Replace Factory Default Certificate'. Below that, it says 'The factory default certificate is common to all ZyAIR models. Click Apply to create a certificate using your ZyAIR's MAC address that will be specific to this device.' There is a horizontal line below the text. At the bottom, there are two buttons: 'Apply' and 'Ignore'.

**Note:** If you do not change the password or choose not to replace your factory default certificate, you will be prompted to do so every time you login to your ZyXEL device.

**5** You should now see the web configurator **Main Menu** screen. Click **WIZARD SETUP**.



## 4 Wizard Setup

The wizard is divided into two parts. First configure your wireless LAN and security and then set up your connection to the Internet.

### 4.1 Wireless LAN

The wizard consists of a series of screens to help you configure your ZyAIR for wireless stations to access your wired LAN.

**Note:** Refer to your User's Guide for more background information on each field.

**1** The first wizard screen helps you with the **General Setup** of your ZyXEL device.

**System Name** is a unique name to identify the ZyXEL device in an Ethernet network. Enter a descriptive name.

Enter a **Domain Name** if your ISP requires a domain name for authentication; otherwise leave it blank. Click **Next** to continue.

**WIZARD SETUP**

**General Setup:**  
 This information is optional, but may be helpful in accessing services of your Internet Service Provider, such as mail and news servers and customer support web pages.

Enter a descriptive name for identification purposes. We recommend using your computer's name.

**System Name:**

The ISP's domain name is often sent automatically by the ISP to the router. If you are having difficulty accessing ISP services, you may need to enter the Domain Name manually in the field below.

**Domain Name:**

## 2 Use the second wizard screen to set up the wireless LAN.

**Name(SSID)** is a unique name to identify the ZyXEL device in a wireless LAN. Enter a descriptive name.

The range of radio frequencies used by IEEE 802.11b/g wireless devices is called a channel. Use the **Choose Channel ID** drop-down list box to select a channel that is not already in use by a neighboring device.

In the **Security** list box:

- Choose **None** to have no wireless LAN security configured.
- Choose **Basic(WEP)** security if you want to configure WEP Encryption parameters.
- Choose **Extend(WPA-PSK with customized key)** or **Extend(WPA2-PSK with customized key)** security to configure a pre-shared key.

**Wireless LAN Setup**

**Name(SSID)**

**Choose Channel ID**

**Security**

**Note:** If you do not enable any wireless security on your ZyXEL device, your network is accessible to any wireless networking device that is within range.

### 3 If you chose **Basic(WEP)** security in the previous screen to setup WEP encryption parameters:

Enter a **Passphrase** (up to 32 printable characters) and click **Generate** and the ZyXEL device automatically generates a WEP key.

Or

Enter a manual key in a **Key** field and select **ASCII** or **Hex** WEP key input method.

Select **64-bit WEP** or **128-bit WEP** from the **WEP Encryption** drop-down list and click **Next** to continue or **Back** to go back to the previous screen.

**Wireless LAN Setup**

Passphrase

WEP Encryption **64-bit WEP**

64-bit WEP: Enter 5 characters or 10 digit ("0-9", "A-F") for each Key(1-4).  
128-bit WEP: Enter 13 characters or 26 digit ("0-9", "A-F") for each Key(1-4).  
(Select one WEP key as an active key to encrypt wireless data transmission.)

☒ ASCII ☐ Hex

☒ Key 1

☐ Key 2

☐ Key 3

☐ Key 4

### 4 If you chose **Extend(WPA-PSK with customized key)** or **Extend(WPA2-PSK with customized key)**, you will need to set up a pre-shared key.

Type from 8 to 63 case-sensitive ASCII characters.

**Wireless LAN Setup**

Pre-Shared Key

### 5 The next screen allows you to confirm your wireless LAN settings.

Check your settings and click **Next** if you want to configure your ZyXEL device for internet access. If your network already has Internet access through another router, you can just click **Finish** to exit the wizard without configuring your Internet access.

**Wireless LAN Setup**

The security is WPA-PSK mode on WLAN now.

You have finished WLAN setup.

Please press Finish to complete Wizard Setup or press Next to config WAN.

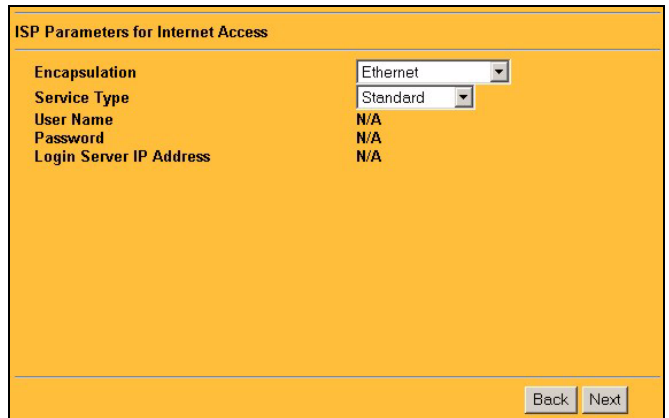
## 4.2 Internet Access

You need your Internet access settings from your ISP to configure the ZyXEL device in this step. The wizard screens vary depending on the **Encapsulation** and **Service Type** you choose in the first wizard screen.

**1** Enter the Internet access information given to you by your ISP exactly in each wizard screen.

The first screen allows you to select your encapsulation details.

**Note:** If no information is given for a field, leave the field set to the default.

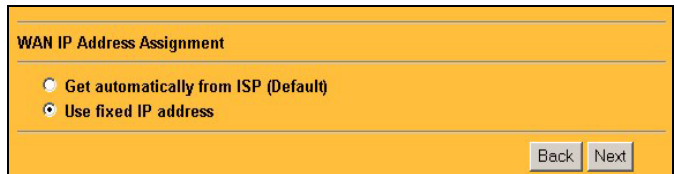


ISP Parameters for Internet Access

|                         |          |
|-------------------------|----------|
| Encapsulation           | Ethernet |
| Service Type            | Standard |
| User Name               | N/A      |
| Password                | N/A      |
| Login Server IP Address | N/A      |

Back Next

**2** Depending on your encapsulation type, you may see the following screen. Select **Get automatically from ISP** if your ISP did not assign you a fixed IP address.

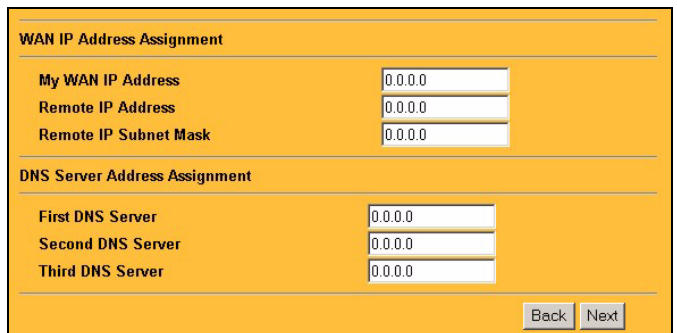


WAN IP Address Assignment

☐ Get automatically from ISP (Default)  
☒ Use fixed IP address

Back Next

**3** If your ISP provided you with a fixed IP address, select **Use fixed IP address** and fill in the information in the following screen.



WAN IP Address Assignment

|                       |         |
|-----------------------|---------|
| My WAN IP Address     | 0.0.0.0 |
| Remote IP Address     | 0.0.0.0 |
| Remote IP Subnet Mask | 0.0.0.0 |

DNS Server Address Assignment

|                   |         |
|-------------------|---------|
| First DNS Server  | 0.0.0.0 |
| Second DNS Server | 0.0.0.0 |
| Third DNS Server  | 0.0.0.0 |

Back Next

**4** Just click **Next** unless you know that you need to have your ZyXEL device use the same MAC address as a computer that was previously connected to the Internet.

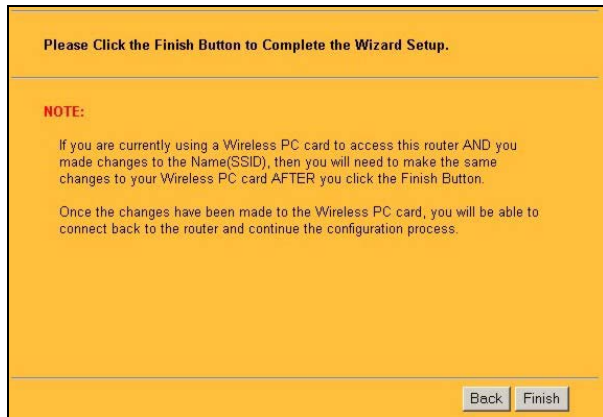


WAN MAC Address

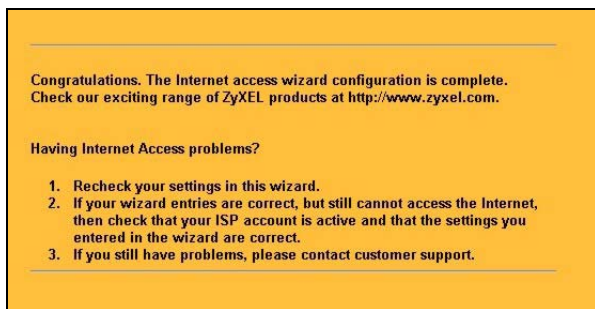
☒ Factory default  
☐ Spoof this computer's MAC Address - IP Address 192.168.1.33

Back Next

- 5 Click **Finish** to save and complete the wizard setup.



- 6 Congratulations, you have finished the basic setup of your ZyXEL device. This is the final wizard screen. You may return to the **Main Menu** and continue to configure other features of your ZyXEL device.



## 5 Hardware Mounting

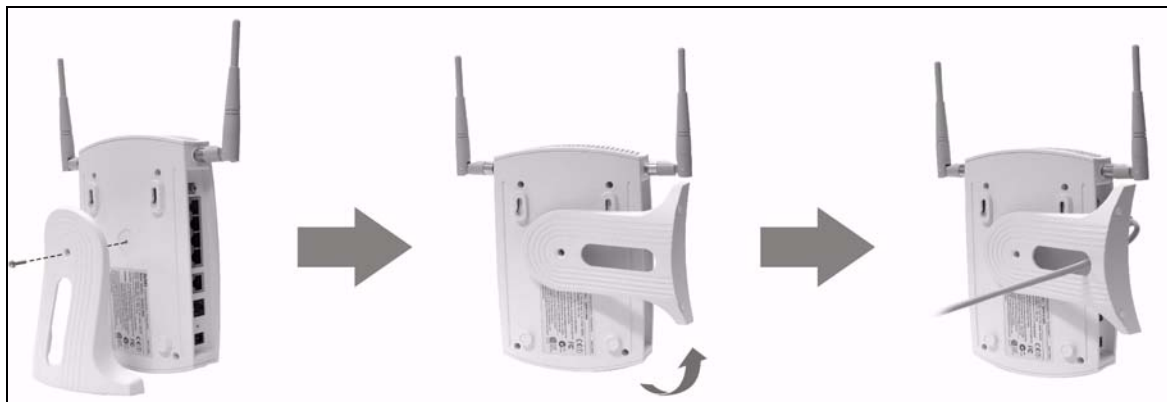
In general, the best location for the access point is at the center of your intended wireless coverage area. For better performance, mount the ZyXEL device high up free of obstructions.

### 5.1 Free-standing

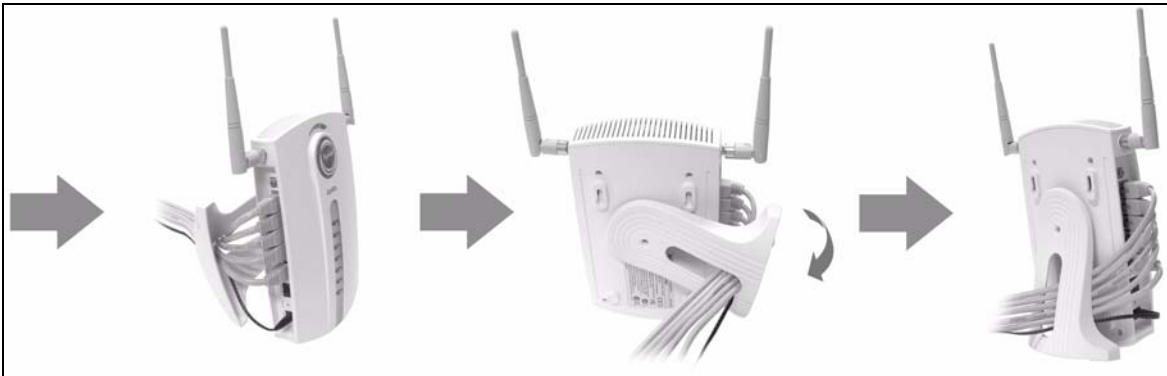
Place your ZyXEL device on a flat, level surface (on a desk or shelf) that is strong enough to support the weight of the ZyXEL device with connection cables.

- 1 Follow the steps to position your ZyXEL device on a level surface. You can use the diagrams below for instructions on how to do this.
- 2 Connect the screw (included) to the support holder.
- 3 Connect the support holder to the ZyXEL device but do not tighten the screw.
- 4 Twist the support holder to the side.

**5** Run the connection wires through the gap in the support holder



**6** Twist the support holder back to the vertical position and tighten the screw that connects the support holder to the ZyXEL device.



## 5.2 Wall-mounted

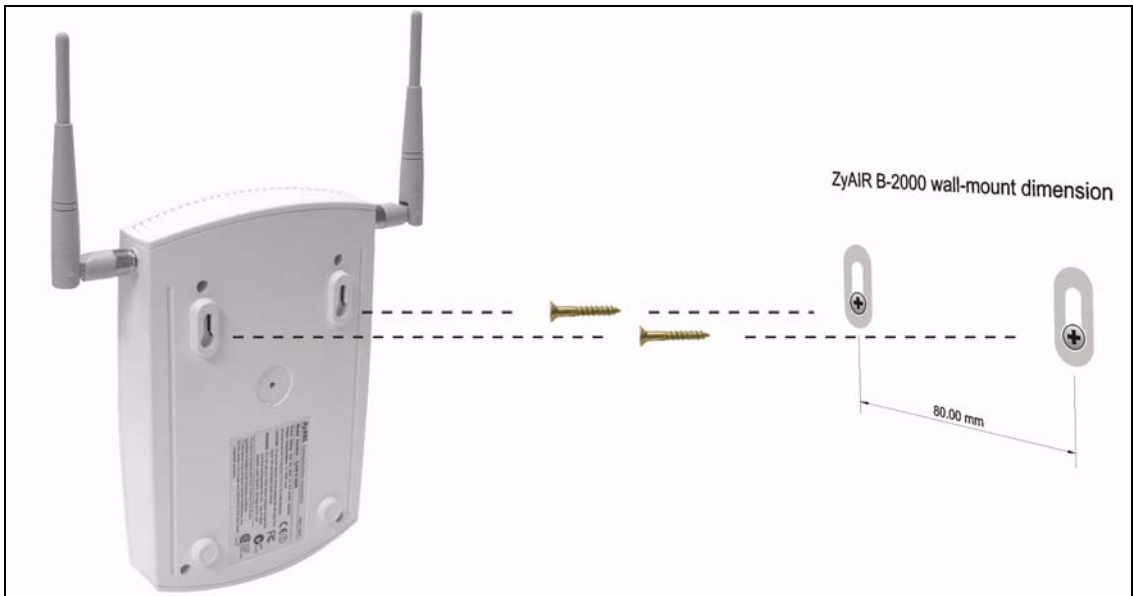
Follow the steps to attach your ZyXEL device to a wall.

- 1 Locate a high position on the wall that is free of obstructions.
- 2 Connect two screws (not included) in the wall 80mm apart. You can use the diagram at the end of this guide to help you mark the screw holes correctly. Use screws with 6mm ~ 8mm (0.24" ~ 0.31") wide heads. Do not screw the screws all the way into the wall. Leave a small gap between the head of the screws and the wall.

**Note:** Make sure the screws are securely fixed to the wall and strong enough to hold the weight of the ZyXEL device with the connection cables.

- 3 Adjust the cables.

- 4 Align the holes on the back of the ZyXEL device with the screws on the wall. Hang the ZyXEL device on the screws.



## 6 Troubleshooting

| PROBLEM                                                               | CORRECTIVE ACTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| None of the lights turn on when you connect the ZyXEL device's power. | <p>Make sure that you have the correct power adaptor connected to the ZyXEL device and it is plugged into an appropriate power source.</p> <p>Check all cable connections. If the lights still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Cannot access the ZyXEL device from my computer.                      | <p>Check the cable connection from your computer to the ZyXEL device.</p> <p>Make sure your computer's IP address is in the same subnet as the ZyXEL device's IP address. Refer to your User's Guide for more details on setting up your IP address.</p> <p>If the ZyXEL device's IP address has changed, then enter the new one as the URL.</p> <p>Use Internet Explorer 6.0 and later or Netscape Navigator 7.0 and later with JavaScript enabled.</p> <p>Make sure you enter the password correctly (the field is case sensitive).</p> <p>If you've forgotten the ZyXEL device's password, use the <b>RESET</b> button. Press the button in for about 10 seconds (or until the <b>PWR/SYS</b> light starts to blink), then release it. It returns the ZyXEL device to the factory defaults (password is 1234, LAN IP address 192.168.1.1 etc.; see your User's Guide for details).</p> |
| Cannot access the Internet.                                           | <p>Verify the Internet connection settings in the wizard. Make sure you entered the correct user name and password if you are using <b>PPPoE</b> or <b>PPPoA</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Viewing Your Product's Certifications

- 1 Go to [www.zyxel.com](http://www.zyxel.com).
- 2 Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
- 3 Select the certification you wish to view from this page.