



# Quick Start Guide



## Cisco CVR328W Wireless-N 3G VPN Router

### Package Contents

- CVR328W Wireless-N 3G VPN Router
- Power Adapter and Power Cord
- Quick Start Guide
- Ethernet Cable
- Product Warranty
- Pointer Card with China RoHS

# Welcome

Thank you for choosing the Cisco CVR328W Wireless-N 3G VPN Router. The CVR328W provides routing, switching, security, wireless, 3G, Virtual Private Network (VPN), quality of service (QoS), and flow control capabilities for small businesses.

This guide describes how to physically install your CVR328W and launch web-based Configuration Utility to configure and manage your CVR328W.

## 1 Before You Begin

### Installation Requirements

Before you begin the installation, make sure that you have the following:

- An active Internet account.
- RJ-45 Ethernet cables (Category 5E or higher) for connecting computers, WAN and LAN interfaces, or other devices.
- PC with Microsoft Internet Explorer 6.0 (or higher) or Mozilla Firefox 3.0 (or higher) for using web-based Configuration Utility.
- (Optional) Tools for attaching the CVR328W to the wall. Instructions are provided for wall-mounting, but the wall-mounting hardware is user-supplied.

### Default Settings

These are the default settings used when configuring your CVR328W for the first time:

Parameter	Default Value
Username	cisco
Password	cisco
LAN IP	192.168.1.1
DHCP Range	192.168.1.100 to 192.168.1.200

**NOTE** Press and hold the **RESET** button for more than 5 seconds with a paper clip or a pencil clip to reboot the unit and restore the factory defaults. Changes that you have previously made to the CVR328W settings are lost.

## 2

## CVR328W Features

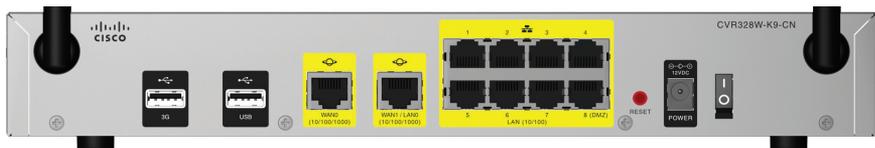
## Front Panel



<b>POWER</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the router is powered on and is operating normally.</li> <li>▪ Off when the router is powered off or the power has problems.</li> </ul>
<b>SYS</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to the Internet through your cable or DSL modem.</li> <li>▪ Flashes green when the router is attempting to connect to the Internet, the router cannot connect to the Internet, or the system is upgrading the firmware.</li> <li>▪ Solid amber when the system has problems.</li> <li>▪ Flashes amber when the system is overloaded, such as the CPU utilization or the memory utilization exceeds the limitation.</li> <li>▪ Off when there is no Internet connection.</li> </ul>
<b>WAN0</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to the Internet through the WAN0 port, but there is no traffic over this port.</li> <li>▪ Flashes green when the router is sending or receiving data over the WAN0 port.</li> <li>▪ Off when the WAN0 port has no connection.</li> </ul>
<b>WAN1</b>	<p>If the WAN1/LAN0 port on the back panel is set to a secondary WAN interface (WAN1):</p> <ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to the Internet through the WAN1 port, but there is no traffic over this port.</li> <li>▪ Flashes green when the router is sending or receiving data over the WAN1 port.</li> <li>▪ Off when the WAN1 port has no connection.</li> </ul>

<b>LAN0</b>	<p>If the WAN1/LAN0 port is set to an additional LAN interface (LAN0):</p> <ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to a device through the LAN0 port, but there is no traffic over this port.</li> <li>▪ Flashes green when the router is sending or receiving data over the LAN0 port.</li> <li>▪ Off when the LAN0 port has no connection.</li> </ul>
<b>LAN1-8</b>	<p>The numbered lights correspond to the LAN ports on the back panel.</p> <ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to a device through the corresponding LAN port, but there is no traffic over that port.</li> <li>▪ Flashes green when the router is sending or receiving data over the corresponding LAN port.</li> <li>▪ Off when the corresponding LAN port has no connection.</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>▪ Solid green when a USB device is detected, but has no read and write operations.</li> <li>▪ Flashes green when a USB device is detected and has read and write operations.</li> <li>▪ Off when the unit does not detect a USB device.</li> </ul>
<b>3G</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to a 3G wireless network, but there is no traffic over the 3G USB port.</li> <li>▪ Flashes green when the router is sending or receiving data over the 3G USB port.</li> <li>▪ Off when the unit does not connect to a 3G wireless network.</li> </ul>
<b>WLAN</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the wireless module is enabled, but there is no traffic over the wireless network.</li> <li>▪ Flashes green when the router is sending or receiving data on the wireless module.</li> <li>▪ Off when the wireless module is disabled.</li> </ul>
<b>VPN</b>	<ul style="list-style-type: none"> <li>▪ Solid green when there are active VPN tunnels.</li> <li>▪ Flashes green once per two seconds when the router is attempting to establish a VPN tunnel, or the attempt of establishing a new VPN tunnel fails.</li> <li>▪ Off when there is no VPN connection.</li> </ul>
<b>NMS</b>	<ul style="list-style-type: none"> <li>▪ Solid green when the router is connected to an upper-level Network Management System (NMS) but has no operations.</li> <li>▪ Flashes green when the router is connected to an upper-level NMS and has operations.</li> <li>▪ Off when the router does not connect to an upper-level NMS.</li> </ul>

## Back Panel



<b>3G USB Port</b>	Insert a 3G USB device into this port to connect your CVR328W to a 3G wireless network.  To get the list of 3G USB dongle models supported by the CVR328W, go to <a href="http://www.cisco.com/go/cn/cvr328w">www.cisco.com/go/cn/cvr328w</a> .
<b>USB Port</b>	Insert a USB storage device into this port to save syslog messages.
<b>WAN0 Port</b>	The WAN0 (Internet) port is connected to your Internet device, such as a cable or DSL modem.
<b>WAN1/LAN0 Port</b>	The WAN1/LAN0 port can be set to a secondary WAN interface (WAN1) or an additional LAN interface (LAN0).
<b>LAN1-8 Ports</b>	These ports provide a LAN connection to network devices, such as PCs, print servers, or switches.
<b>RESET</b>	The <b>RESET</b> button has two functions: <ul style="list-style-type: none"><li>▪ <b>Reboot:</b> Press the <b>RESET</b> button for at least 1, but no more than 5 seconds with a paper clip or a pencil clip to reboot the unit.</li><li>▪ <b>Restore to Factory Defaults:</b> Press and hold the <b>RESET</b> button for more than 5 seconds to reboot the unit and restore to factory defaults. Changes that you have previously made to the CVR328W settings are lost.</li></ul>
<b>POWER (12VDC)</b>	The POWER port is where you connect the supplied power adapter (12 V/3 A).
<b>Power Switch</b>	Powers the unit on or off.

## 3 Mounting the CVR328W

You can place your CVR328W on a desktop or mount it on a wall.

### Placement Tips

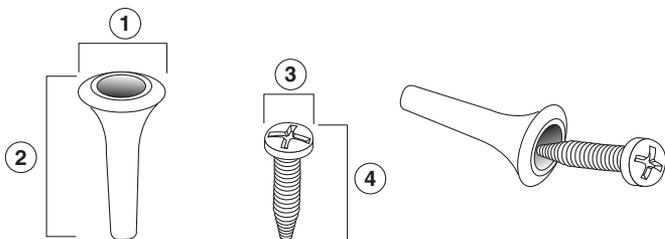
- **Ambient Temperature**—To prevent the CVR328W from overheating, do not operate it in an area that exceeds an ambient temperature of 104°F (40°C).
- **Air Flow**—Be sure that there is adequate air flow around the CVR328W.

- **Mechanical Loading**—Be sure that the CVR328W is level and stable to avoid any hazardous conditions.

Place the CVR328W horizontally on a flat surface so that it sits on its four rubber feet.

## Wall Mounting

The CVR328W can be wall-mounted. The wall-mounting hardware is user-supplied. The ports on the back panel must face either upward or downward when mounting the unit to the wall. The recommended dimensions for the mount kit are as follows:



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1 8 mm/0.31 in    2 25 mm/0.98 in    3 6.5 mm/0.26 in    4 17.9 mm/0.7 in



**WARNING** Insecure mounting might damage the device or cause injury. Cisco is not responsible for damages incurred by insecure wall-mounting.

To mount the CVR328W to the wall:

- STEP 1** Determine where you want to mount the CVR328W. Verify that the surface is smooth, flat, dry, and sturdy.
- STEP 2** Drill two pilot holes into the surface 5.9 inches (150 mm) apart.
- STEP 3** Insert a screw into each hole, leaving a gap between the surface and the base of the screw head of at least 0.1 inches (3 mm).
- STEP 4** Place the CVR328W wall-mount slots over the screws and slide the CVR328W down until the screws fit snugly into the wall-mount slots.

# 4

## Connecting the CVR328W

**NOTE** The wireless module of the CVR328W is enabled by default. You can connect one PC with an Ethernet cable or through a wireless connection to perform the initial configuration. Use the default wireless network name (SSID) and pre-shared key that are provided on the product label at the bottom of the CVR328W to connect the PC to your wireless network for the first time.

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**STEP 1** Power off all equipment, including the cable or DSL modem, the PC that you will use to connect to the CVR328W, and the CVR328W.

**STEP 2** Connect one end of an Ethernet cable to your cable or DSL modem. Connect the other end to the WAN0 port on the back panel of the CVR328W.

**STEP 3** Connect one end of a different Ethernet cable to one of the LAN ports on the back panel. Connect the other end to an Ethernet port on the PC that you will use to run the web-based Device Manager.

**NOTE** Skip this step if you want to connect the PC to the CVR328W through a wireless connection.

**STEP 4** Connect the supplied power adapter to the **POWER** port on the back panel. Plug the other end of the power adapter into an electrical outlet. Make sure that the power switch is turned off.



**CAUTION**

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Use only the power adapter that is supplied with the unit. Using a different power adapter could damage the unit.

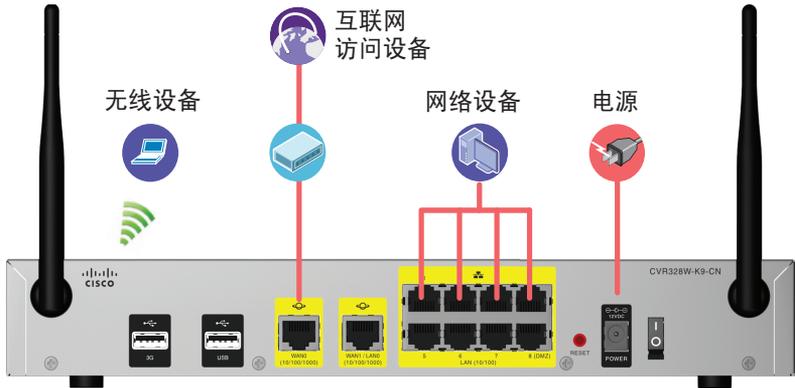
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**STEP 5** Power on all connected devices including the cable or DSL modem and the PC and wait until the connections are active.

**STEP 6** Power on the CVR328W.

**STEP 7** To connect the PC to your wireless network for the first time, you can configure the wireless connection using the default SSID name and pre-shared key.

A sample configuration is illustrated here.



## 5

## Getting Started with the Configuration

Before you begin to use web-based Configuration Utility, make sure that you have a PC with Internet Explorer 6.0 (or later) or Firefox 3.0 (or later).

To log in to the utility and launch the Setup Wizard to complete the initial configuration:

- STEP 1** Connect a PC to an available LAN port of the CVR328W. After you power on the PC, your PC will become a DHCP client of the CVR328W and will receive an IP address in the 192.168.1.xxx range.
- STEP 2** Start a web browser. In the address bar, enter the default IP address of the CVR328W: **192.168.1.1**.
- STEP 3** When the login page appears, enter the username and password. The default username is **cisco**. The default password is **cisco**. Both username and passwords are case sensitive.
- STEP 4** Click **Login**. The Change Password page opens. For security purposes, change the password from its default settings at your first login to prevent unauthorized access.
- STEP 5** Enter the old password.
- STEP 6** Enter the new password. Passwords should contain at least three of these character classes: uppercase letters, lowercase letters, digits, and special characters. Passwords must be at least eight characters in length.

**STEP 7** Enter the new password again to confirm and click **Save**. You are required to log in to the utility again with the new password.

**STEP 8** Go to the **Setup Wizard** page and follow the on-screen prompts to complete the initial configuration.

After the initial configuration is complete, you can configure other advanced features. See the help pages or the *Cisco CVR328W Wireless-N 3G VPN Router Administration Guide* for more information.

## 6

## Where to Go From Here

CVR328W Resources	<a href="http://www.cisco.com/go/cn/cvr328w">www.cisco.com/go/cn/cvr328w</a>
Customer Support Central	<a href="http://www.cisco.com/web/CN/smallbusiness">www.cisco.com/web/CN/smallbusiness</a>
Cisco Partner Central (Partner Login Required)	<a href="http://www.cisco.com/web/CN/partners/smb_kr/index.html">www.cisco.com/web/CN/partners/smb_kr/index.html</a>
Firmware Downloads	<a href="http://www.cisco.com/web/CN/solutions/industry/segment_sol/small/index.html#small_down">www.cisco.com/web/CN/solutions/industry/segment_sol/small/index.html#small_down</a>
Open Source Used in CVR328W	<a href="http://www.cisco.com/go/cn/cvr328w">www.cisco.com/go/cn/cvr328w</a>
Regulatory Compliance and Safety Information	<a href="http://www.cisco.com/go/cn/cvr328w">www.cisco.com/go/cn/cvr328w</a>
Product Warranty Information	<a href="http://www.cisco.com/web/CN/solutions/industry/segment_sol/small/index.html#~service">www.cisco.com/web/CN/solutions/industry/segment_sol/small/index.html#~service</a>
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