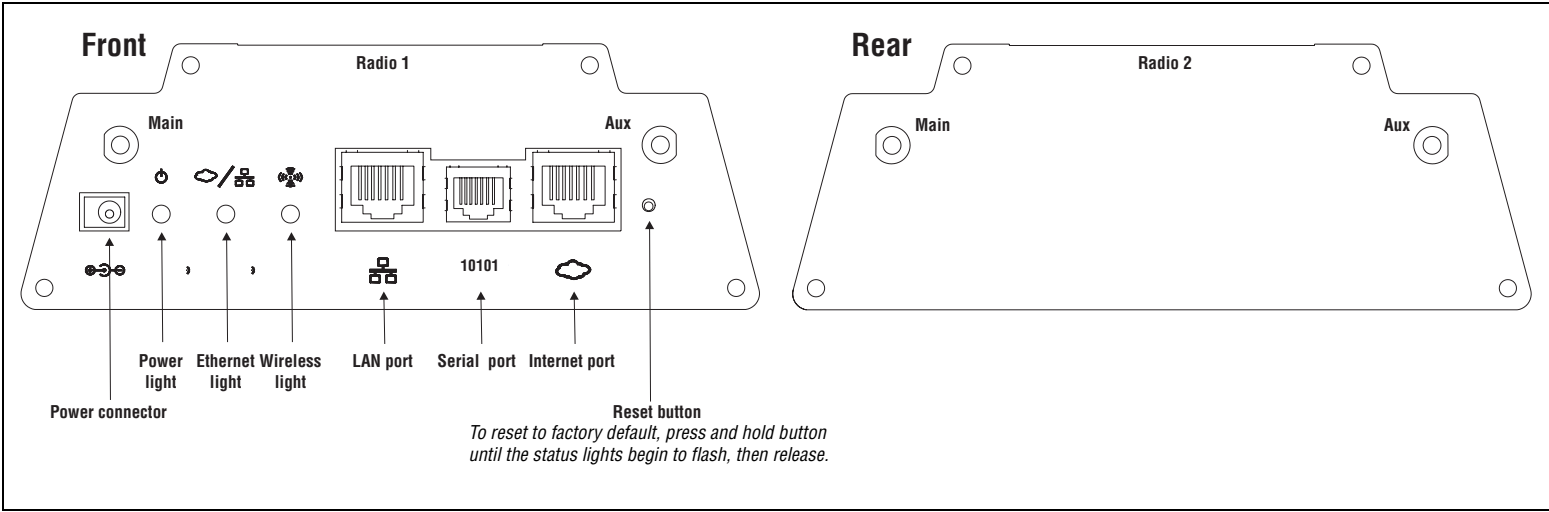


This guide explains how to install and start the CN3300, connect it to the Internet, and test the public access interface. For detailed configuration and operating information download the *CN3300 Administrator's Guide* and the *Public Access Interface Administrator's Guide* from the Colubris Networks web site at: register.colubris.com

Anatomy



An important note about wireless security

For easy access to the management interface via a wireless connection, the CN3300 ships with all wireless security options disabled. Once the unit is installed, it is strongly recommended that you enable a wireless security option to properly safeguard the wireless network from intruders. See the CN3300 Administrator's Guide for more information.

Installation

- Important:** Installation must be performed by a professional installer familiar with local regulations governing wireless devices.
- Important:** Unless shielded cables are used, a full-loop ferrite must be placed on the internet port cable (Fair-Rite PN: 0443164151 or equivalent).
- Important:** Do not connect the LAN or Internet port directly to a metropolitan area network (MAN) or wide area network (WAN).
- Important:** CH 36, 40, 44, 48 for Indoor use only (5.15-5.25GHz)

When mounting the CN3300 on a wall, ceiling or other surface, make sure that:

- the surface you attach the CN3300 to and the fasteners you use are able to support at least 5.1 kg (11.25 pounds)
- cable pull (accidental or otherwise), must not make the unit exceed the 5.1 kg (11.25 pound) limit

Plenum installations

Plenum rated cables and attachment hardware must be used if the CN3300 is installed in a plenum. Since the CN3300 power adapter (optional) is not rated for plenum installations, only the CN3300 and appropriate cabling can be located in the plenum.

Note: Colubris Networks supplied PoE injectors (available separately) cannot be installed inside the plenum.

Configuration

To configure the CN3300, you use the Web-based management tool built into the CN3300. You access this tool by establishing a Web browser connection to the CN3300. You must use a JavaScript-enabled Web browser (Netscape 7.1 or higher, or Microsoft Internet Explorer 6.0 or higher with all applicable updates), to do this.

1 Connect the antennas.

Use the following antennas (sold separately):

Radio	Antenna type	Colubris Networks part number
802.11b/g	2.4 Ghz.	71-05-0100
802.11a	5 Ghz.	71-05-0200
802.11a or b/g	2.4/5 Ghz.	71-05-0300

Note: By default, the CN3300 has radio 1 set to B/G mode, and radio 2 set to Monitor mode (scanning only).

Both the Main and Aux antennas are used to transmit and receive. If a single antenna is used, it must be attached to the Main connector.

The connectors are reverse-polarity SMA male jacks. This means antennas or cable connectors must be SMA female connectors with reverse polarity. Antennas can be either directly attached or attached via a coax cable.

2 Connect your computer

- Use a cross-over cable (not supplied) to connect the LAN port on your computer to the LAN port on the CN3300.
- Configure your computer with the static IP address 192.168.1.2.

3 Power-on the CN3300.

Connect the power supply (sold separately) or use PoE (802.3af) to power-up the CN3300. PoE is only supported on the LAN port.

The CN3300 is fully operational when the power light stops flashing.

4 Start the management tool.

- Start your Web browser and specify the following in the address box: **HTTPS://192.168.1.1** and press **Enter**.
- You will be prompted to accept a Colubris Networks security certificate. Do so to continue.
- The CN3300 login page opens. Login with username **admin** and password **admin**.
- If this is the first time you are logging in, you will be prompted to change the default administrator password. Specify a new password and click **Save**.
- If you are using the CN3300 outside of the USA, set the country that the CN3300 is operating in on the **Management > Country** page.

5 Configure the wireless network.

By default the CN3300 is configured to:

- automatically choose the best operating channel (frequency)
 - automatically choose the optimum power level
 - create a wireless network named "Colubris Networks"

There is no need to change these settings for most installations.

6 Configure the Internet connection

- Connect the Internet port to your Internet connection.
- Open the **Network > Ports > Internet** port page.
- Select the addressing option supported by your ISP, click **Configure**, and define all settings as required by your ISP.

7 Enable local mode

This will let you test the CN3300 without using a RADIUS server to authenticate customers. Authentication is handled by the CN3300.

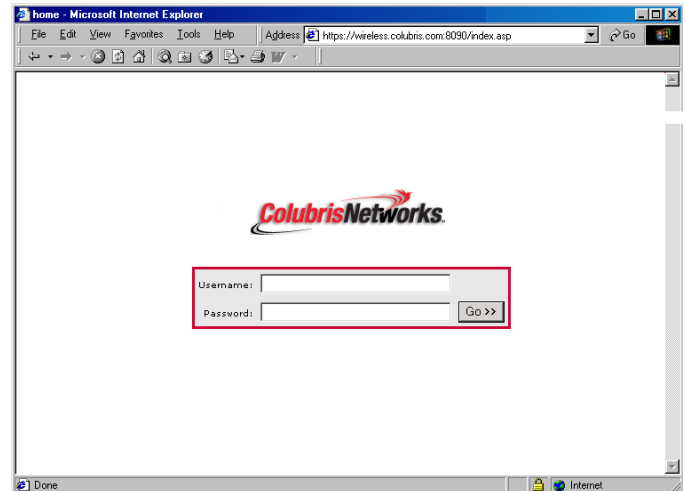
- Open the **Security > Authentication** page.
- Disable **CN3300 RADIUS authentication**.
- Open the **Security > Users** page.
- Add usernames and passwords for one or more test customers.

8 Test the public access interface

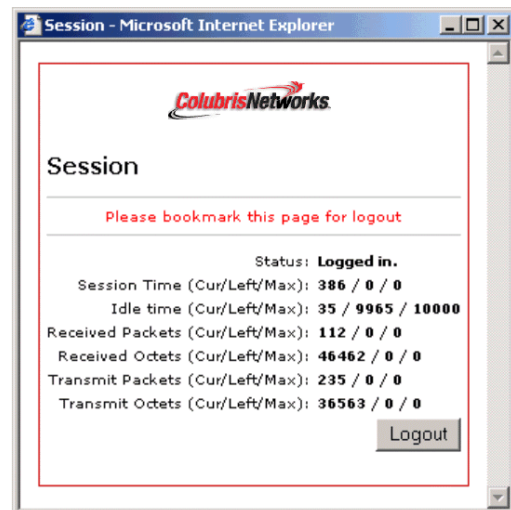
To test your installation, use a wireless client station to log onto the public access interface. (For this to work, the CN3300 must be configured as the client's default gateway. This is done by default if the wireless client is using DHCP.)

Note: By default, the CN3300 has radio 1 set to B/G mode, and radio 2 set to Monitor mode (scanning only), therefore the wireless client station must have either a B or G radio.

- Start the client station's web browser and enter the IP address (or domain name) of a web site on the Internet.
- The CN3300 should intercept the URL and display the Login page. (Depending on the type of certificate that is installed on the CN3300, you may see a security warning first.)



- Specify a valid customer name and password to login.
- The Session page will open.



- Next, you are automatically redirected to the web site you originally requested.

The CN3300 is now ready for operation.

Refer to the *CN3300 Administrator's Guide* and the *Public Access Interface Administrator's Guide* for additional configuration information.

Regulatory information

The CN3300 complies with the following radio frequency and safety standards.

Canada - Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 et CNR 210 d'Industrie Canada.

Europe - EU Declaration of Conformity

This device is for indoor use only.

Important: *Users must select the proper country of operation in the management tool to ensure wireless operational settings conform to local regulations.*

Important: *If more than one unit is deployed users must ensure that the operating frequencies are spread among different channels (according to channel availability).*

USA - Federal Communications Commission (FCC)

The CN3300 complies with Part 15 of FCC Rules. Operation of the CN3300 in a system is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may cause undesired operation.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the CN3300 is far below the FCC radio frequency exposure limits. Nevertheless, the CN3300 should be used in such a manner as to minimize the potential for human contact during normal operation. When using this device in combination with Colubris Networks antenna products, a certain separation distance between the antenna and nearby persons has to be kept to ensure FR exposure compliance.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

When an external antenna is connected to the CN3300 it shall be placed in such a manner as to minimize the potential for human contact during normal operation. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

When no external antenna is connected, the RF output power of the CN3300 is far below the FCC radio frequency exposure limits. Nevertheless, it is advised to use the CN3300 in such a manner that human contact during normal operation is minimized.

Interference Statement

The CN3300 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.

The CN3300 generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If the CN3300 causes harmful interference to radio or television reception, which can be determined by turning the CN3300 on and off, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the CN3300 and the receiver.
- Connect the CN3300 to an outlet on a circuit different from that which the receiver is connected.
- Consult your dealer or an experienced radio/TV technician for help.

Colubris Networks Inc. is not responsible for any radio or television interference caused by unauthorized modification of the CN3300, or the substitution or attachment of connecting cables and equipment other than that specified by Colubris Networks Inc.

The correction of interference caused by such unauthorized modification, substitution or attachment is the responsibility of the user.

Health Information

The CN3300, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by the CN3300 is much less than the electromagnetic energy emitted by other wireless devices, such as mobile phones.

Because the CN3300 operates within the guidelines found in radio frequency safety standards and recommendations, Colubris Networks believes that the CN3300 is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of the CN3300 may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may, for example, include:

- Using the CN3300 on board airplanes or,
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the CN3300 prior to turning it on.

This device requires professional installation. CAUTION: Changes or modifications not expressly approved by Colubris Networks for compliance could void the user's authority to operate the equipment. The installation and operating configurations of this transmitter, including the antenna gain and cable loss, must satisfy MPE Categorical Exclusion Limits of 2.1091. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Installers and end users must be provided with operating instructions and antenna installation conditions for satisfying RF exposure compliance requirements.