AER3100 Series
ALL-IN-ONE, CLOUD-MANAGED NETWORKING SOLUTION

THANK YOU FOR CHOOSING CRADLEPOINT

Cradlepoint is the leading provider of secure cloud-managed 3G/4G/LTE networking solutions for the Distributed Enterprise with hundreds or thousands of locations. Our broad family of high-performance routers are designed for deployment in mission-critical applications that require 24x7 connectivity.

Always Connected. Always Protected.

AER3100 Key Features:

- Cloud-managed
- Dual-band, dual concurrent WiFi (802.11 a/b/g/n/ac)
- Dual modem / Multi-Carrier Support
- Ports: 1 GigE WAN/12 GigE LAN (switchable)
- WWAN analytics
- Industry-leading 4G failover
- Unified Threat Management
- Software-defined radio (supports multiple carriers)
- Purpose-built for PCI Compliance 3.1

Go to cradlepoint.com/aer3100 to learn more.
WHAT'S INCLUDED:

- Integrated MC400 3G/4G Modem
- Modem & WiFi Antennas
- 54V 2.25A AC/DC Power Adapter
- Ethernet Cable
- Rack Mounting Brackets
  + Rubber Feet for Desk Mount

HARDWARE

- 3G/4G Antenna Connectors (SMA)
- GPS Connector (SMA)
- Internal Modem Power LED
- External USB Modem
- Signal Strength
- Modem Port 1 USB 3.0 (modem cover removed)
- Modem Port 2 USB 3.0 (modem cover removed)
- WiFi Broadcast (AER3100 only)
- WiFi Antenna Connector (Reverse SMA)
- WAN/LAN Ethernet Port (Default WAN)
- USB 2.0 Port
- WiFi Antenna Connector (Reverse SMA)
- Power Port
- Power Switch
- Lock Slot
- Ground Screw
- Console Port
- WAN/LAN Ethernet Ports (Default LAN)
**LED Indicators**

**Power:** The Cradlepoint AER3100/AER3150 must be powered using an approved 54V DC power source.
- Green = Powered ON
- No Light = Not receiving power. Check the power switch and the power source connection.
- Flashing Amber = Attention. Open the administration pages (see page 4) and check the router status.

**Ethernet WAN:** Indicates information about a data source connected to the Ethernet WAN port.
- Blue = Connected to an active Ethernet WAN interface

**VPN:** Indicates information about a VPN data source.
- Green = Active VPN tunnel

**WiFi Broadcast:** (only on AER3100) These two LEDs indicate activity on the WiFi broadcast for both the 2.4 GHz and 5 GHz bands.
- 2.4GHz (green) = 2.4 GHz WiFi is on and operating normally.
- 5GHz (blue) = 5 GHz WiFi is on and operating normally.

**Signal Strength:** Blue LED bars indicate the active modem’s signal strength.
- 4 Solid Bars = Strongest signal
- 1 Blinking Bar = Weakest signal. (A blinking bar indicates half of a bar.)

**Internal Modem:** Indicates the status of internal modems.

**External USB Modem:** Indicates the status of external USB modems. Both internal and external USB modems have the following LED indicators:
- Green = Modem has established an active connection.
- Blinking Green = Modem is connecting.
- Amber = Modem is not active.
- Blinking Amber = Data connection error. No modem connection possible.
- Blinking Red = Modem is in the process of resetting.

**Additional LED Indications**

Several different LEDs flash when the factory reset button is detected.

**AER3100 MODEM DETAILS**

**Accessories:**
- Additional MC400 4G LTE modem*
- Replacement power adapters and international power cords
- External modem antennas and cabling

**Model Numbers:**
- AER3100
- AER3150
- S4A525A
- S4A530A

*A Cradlepoint MC400 4G LTE modem comes standard with the AER3100/AER3150. Add a second integrated MC400 modem for a complete “Cut-the-Wire” 4G LTE solution, fusing enterprise reliability with unparalleled agility.

**Enterprise Support**

For enhanced services including enterprise-level support, extended warranties, site surveys, and expert installation, learn more about Cradlepoint’s CradleCare suite of services at cradlepoint.com/cradlecare.

**GETTING STARTED**

**Setting up the router**

+ Purchase a data plan. Insert the SIM as shown in the following step.
+ Connect modem antennas (finger tight only).
+ Plug the power supply into an electrical outlet.
+ Ensure power is switched on. O = OFF I = ON
Antennas

When connecting the provided antennas, review the connection points.

- WiFi antennas (only included on AER3100) have flat circular bases (RSMA).
- Modem antennas have protruding pins (SMA).

SIM Card Setup

A wireless broadband data plan must be added to your Cradlepoint AER3100/AER3150. Wireless broadband data plans are available from wireless carriers such as Verizon, AT&T, Sprint, EE, and Vodafone. The SIM must be provisioned with the carrier. Contact your carrier for details about selecting a data plan and about the process for provisioning your SIM.

Once you have an activated 2FF SIM, insert it into the integrated modem. Insert the SIM card into the slot marked SIM 1 (use the other slot, SIM 2, for a secondary/backup SIM). Be sure to insert the card with the notch-end first and the gold contacts facing down—it will click into place.

Attach the Internal Modem

Follow these steps to attach the internal modem:

1. On front of router, press two tabs on modem cover together and pull cover straight out. Remove Main, Aux, and GPS plugs.
2. Slide modem(s) into USB port(s).
3. Reattach the modem cover. If desired, use a Phillips screwdriver to secure modem door screws to bottom side of the router near the front.

Deploy and Manage the Intelligent Network with Cradlepoint Enterprise Cloud Manager (ECM)

Cradlepoint’s network management and application platform, Enterprise Cloud Manager, integrates cloud management with your Cradlepoint devices to improve productivity, increase reliability, reduce costs, and enhance the intelligence of your network and business operations.

To learn more and begin a free 30-day trial:
services@cradlepoint.com
cradlepoint.com/ecm
Activate Real-time Clock Battery

Pull the tab on bottom of router to activate the real-time clock battery.

Attach the WiFi* & Modem Antennas

Attach the three included WiFi antennas and two included modem antennas to the connectors. Antennas are jointed, which enables you to position them for optimal signal. To attach, hold the antenna straight and twist the base of the antenna to connect, folding the joint if needed.

Care should be taken to ensure that the router antennas are not near metal or other RF reflective surfaces. Do not mount router on a wall.

*AER3100 only

Connect the Power Source

Plug the provided power supply (54V DC wall adapter) into an electrical outlet. Then connect the power supply to the router. Ensure power is switched on.

When you set the power switch to the ‘On’ position, watch for the power LED to illuminate.

Access the Administration Pages

To make configuration changes to your router, open the AER3100’s GUI-based administration pages.

1. Connect to the router via Ethernet or WiFi. For WiFi, the default SSID is found on the product label on the bottom of the router.

2. Open a browser window and type “cp/” or “192.168.0.1” in the address bar and press return/enter.

3. When prompted for the Administrator password, type the default eight character password found on the product.

4. Upon login for the first time, you are automatically directed to the First Time Setup Wizard to configure Admin Password, Time Zone, WiFi Security, APN and WAN failure check.

FIRST TIME SETUP WIZARD

When you log in to the local administration pages for the first time, you will be automatically directed to the First Time Setup Wizard, which will walk you through basic steps to customize your Cradlepoint AER3100. You have the ability to configure any of the following:

- Administrator Password
- Time Zone
- WiFi Network Name*
- Security Mode
- Access Point Name (APN)
- Modem Authentication
- Failure Check

If you are currently using the router’s WiFi network, you will need to reconnect your devices to the network using the newly established wireless network name and password.

To return to the First Time Setup Wizard after your initial login, select ‘Getting Started’ on the top navigation bar and First Time Setup in the drop-down menu.

To restore the router to its factory default settings, press and hold the RESET button on the side of the device for ten seconds. Reset returns the login password to the default password and resets all configuration changes.

*AER3100 only
CONNECTING TO ENTERPRISE CLOUD MANAGER

Depending on your ordering process, your devices may have already been bulk-loaded into Enterprise Cloud Manager. Simply log in at cradlepointecm.com using your ECM credentials and begin managing your devices seamlessly from the cloud.

If your device has not yet been loaded into your ECM account, you need to register. Log into the local administration pages (see page 5) and go to ‘System > Setup Wizards > ECM Registration’. Enter your ECM username and password, and click ‘Register’.

Once you are logged into cradlepointecm.com, begin managing your devices individually or by group. For example:

+ View the ‘Dashboard’ for a visual analytics overview of your devices, including a data usage chart.
+ Make a configuration change and apply it to all the devices in a ‘Group’.

For more information about how to use Cradlepoint Enterprise Cloud Manager, see the following Knowledge Base articles:

+ knowledgebase.cradlepoint.com/articles/Support/CradlePoint-Enterprise-Cloud-Manager
+ knowledgebase.cradlepoint.com/articles/Support/Getting-Started-with-Enterprise-Cloud-Manager

UPDATING FIRMWARE

Cradlepoint regularly creates new firmware packages. You may need to update firmware to use the AER3100 with new modems and to access our latest features.

1. Log into the administration pages. You may have changed the Administrator Password when you used the First Time Setup Wizard.
2. Select ‘System > System Control’ on the left navigation bar, then ‘System Firmware’ in the dropdown menu.
3. Find the ‘Firmware Upgrade’ section. This displays the current firmware version that is installed and indicates if updated firmware is available.
4. Click ‘Automatic (Internet)’ if new firmware is available. The AER3100 will download and install the firmware and automatically reboot itself. A status monitor will appear and indicate when this process is complete. This process may take several minutes depending on your Internet connection speed.

If your device does not have an active Internet connection, you need to download the latest firmware from cradlepoint.com/firmware to your desktop. Then use the ‘Manual Firmware Upload’ option.
SETTING THE APN

Depending on your modem, you may need to specify the APN (Access Point Name). Cradlepoint devices attempt to auto-detect the correct APN. In most cases, the APN will be correctly detected and your device will connect. If your device does not connect within approximately 5-10 minutes, follow the steps below to manually enter the APN.

Select the APN

1. Log into the administration pages (see page 4).
2. Select ‘Connection Manager’.
3. Select the modem you would like to manage. Click ‘Edit’ to open the WAN Configuration editor.
4. Select the ‘SIM/APN/AUTH Settings’ tab. In the ‘Access Point Configuration’ field, select ‘Default Override’ and manually enter the desired APN.
5. Input the username and password for authentication if required by your carrier.
6. Click ‘Submit’.

ROUTER COMMUNICATION / DATA USAGE

The factory default configuration of the router is set to communicate with Cradlepoint and other resources at regular intervals to access the latest firmware and modem updates, clock synchronization (NTP), and Enterprise Cloud Manager (ECM) membership. Such communication may result in data usage and applicable charges regardless of whether the router uses a wired or wireless Internet connection. To avoid such data usage and potential charges, consult the following Knowledge Base article:

knowledgebase.cradlepoint.com/articles/support/router-communication-data-usage