

Ruckus Wireless R550

Ruckus R550 Indoor Wireless Access Point (901-R550-US01) Instruction Manual

INTRODUCTION

The Ruckus R550 is an indoor wireless access point designed to provide high-performance Wi-Fi connectivity. This device supports the latest Wi-Fi 6 (802.11ax) standard, offering enhanced capacity, coverage, and performance for a wide range of indoor environments. It operates on dual-band frequencies (2.4 GHz and 5 GHz) to accommodate various client devices and network demands. This manual provides essential information for the proper installation, configuration, and maintenance of your Ruckus R550 access point.



Figure 1: Front view of the Ruckus R550 Indoor Wireless Access Point.

KEY FEATURES

- **Model:** 901-R550-US01
- **Wireless Standard:** 802.11ax (Wi-Fi 6)
- **Frequency Bands:** Dual-Band (2.4 GHz and 5 GHz)
- **Connectivity:** Wireless
- **Antenna Type:** Internal
- **Recommended Use:** Business environments
- **Compatible Devices:** Laptops, Personal Computers, Smartphones, Tablets
- **Operating System:** ZyNOS

PHYSICAL OVERVIEW

Back View with Ports



Figure 2: The back panel of the Ruckus R550, featuring Ethernet ports (including PoE) and the power input.

Side View



Figure 3: Side view of the Ruckus R550, showing its slim profile.

Top View with LED Indicators



Figure 4: Top view of the Ruckus R550, highlighting the status LED indicators.

SETUP

Initial Setup Steps

1. **Unpack the Device:** Carefully remove the Ruckus R550 access point from its packaging. Ensure all components are present.
2. **Mounting:** Choose an optimal location for installation, typically a central location to maximize Wi-Fi coverage. The R550 can be mounted on a wall or ceiling. Use the appropriate mounting hardware (not always included) to secure the device.
3. **Power Connection:** The Ruckus R550 supports Power over Ethernet (PoE). Connect an Ethernet cable from a PoE-enabled switch or a PoE injector to the PoE port on the access point. Alternatively, connect a 12VDC power adapter (if available and purchased separately) to the DC power input.
4. **Network Connection:** Connect an Ethernet cable from your network infrastructure (e.g., router or switch) to one of the Ethernet ports on the R550. If using PoE, this cable will also provide power.
5. **Controller License: IMPORTANT:** A Cloud Controller license is REQUIRED to manage this hardware in the cloud. Ensure you have an existing license or acquire one separately. Provide your company information on the Ruckus Cloud account for proper management.
6. **Configuration:** Access the Ruckus management interface (e.g., Ruckus Cloud, SmartZone, or Unleashed) to

configure the access point. Follow the on-screen instructions to set up Wi-Fi networks (SSIDs), security settings, and other network parameters.

OPERATING INSTRUCTIONS

Connecting Devices

Once the Ruckus R550 is powered on and configured, client devices (laptops, smartphones, tablets) can connect to the Wi-Fi networks you have created. The R550's dual-band capability allows devices to connect to either the 2.4 GHz or 5 GHz frequency band, depending on their capabilities and network conditions. The 5 GHz band generally offers higher speeds and lower latency, while the 2.4 GHz band provides broader coverage.

LED Indicators

The Ruckus R550 features several LED indicators on its top panel to provide visual status information. Refer to the table below for a general understanding of their meanings. Specific behavior may vary based on firmware and controller configuration.

LED Label	Description
PWR	Power status (e.g., solid green for normal operation)
CTL	Controller connectivity status
AIR	Wireless activity indicator
2.4G	2.4 GHz radio status
5G	5 GHz radio status

MAINTENANCE

- **Firmware Updates:** Regularly check for and apply firmware updates provided by Ruckus Wireless. Firmware updates often include performance improvements, security patches, and new features.
- **Physical Cleaning:** Keep the access point clean and free from dust. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or aerosols.
- **Environmental Conditions:** Ensure the access point is operating within its specified environmental conditions (temperature, humidity) to prevent overheating and ensure longevity.
- **Network Monitoring:** Utilize your Ruckus controller to monitor network performance, client connectivity, and potential issues.

TROUBLESHOOTING

- **No Power:** If the Power LED is off, check the power source (PoE switch/injector or DC adapter) and cable connections.
- **No Network Connectivity:** If devices cannot connect or have no internet access, verify the Ethernet cable connection to your network, check the status of your router/switch, and ensure the R550 has obtained an IP address.
- **Poor Wi-Fi Performance:** This can be caused by interference, distance from the access point, or too many devices

on one channel. Consider adjusting the R550's placement, checking for interference sources, or optimizing channel selection through the controller.

- **Controller Connectivity Issues:** If the CTL LED indicates a problem, verify the network connection to the controller and ensure the R550 is properly registered and licensed with your Ruckus Cloud or on-premise controller.
- **Resetting the Device:** If experiencing persistent issues, a factory reset may be necessary. Locate the reset button (often recessed) and press it for a specified duration (refer to the Ruckus R550 official documentation for exact timing) to restore default settings.

SPECIFICATIONS

Feature	Detail
Brand	Ruckus Wireless
Model Name	R550
Item Model Number	901-R550-US01
Item Weight	1.79 pounds
Special Feature	Wireless
Frequency Band Class	Dual-Band
Wireless Communication Standard	2.4 GHz Radio Frequency, 5 GHz Radio Frequency, 802.11ax
Compatible Devices	Laptop, Personal Computer, Smartphone, Tablet
Recommended Uses For Product	Business
Connectivity Technology	Wireless
Antenna Type	Internal
Operating System	ZyNOS
Manufacturer	Ruckus Wireless
Date First Available	August 24, 2020

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Ruckus Wireless website or contact their customer service. Ensure you have your product model number (901-R550-US01) and any purchase details available when seeking support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question