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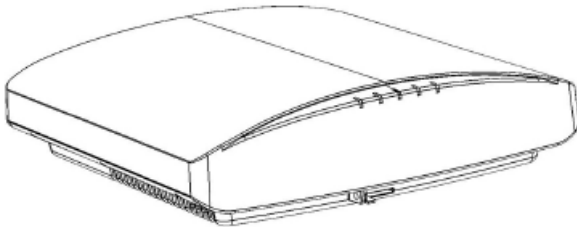
R850 Access Point Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to install and begin using your Ruckus R850 Dual-Band 802.11ax Multimedia Wi-Fi Access Point (AP). After completing the steps described in this guide, you will be able to place the R850 at your site and begin providing wireless access to users.

NOTE: AP R850 is supported in the following releases:

- SmartZone (SZ) release 5.2 using New AP Model Patch
- ZoneDirector (ZD) release 10.4.1 Native Support

FIGURE 1 R850 - top



This Guide in Other Languages

- 请从以下网站获得该指南的简体中文版 <https://support.ruckuswireless.com>
- Vous trouverez la version française de ce guide à l'adresse suivante <https://support.ruckuswireless.com>
- このガイドの日本語版は <https://support.ruckuswireless.com> でご覧ください。
- 이 가이드의 한국어 버전은 웹 사이트 (<https://support.ruckuswireless.com>) 에서 확인하시기 바랍니다.
- Veja a versão em português (Brasil) deste guia em <https://support.ruckuswireless.com>
- Puede ver la versión en español (América Latina) de esta guía en <https://support.ruckuswireless.com>

Before You Begin

Before deploying Ruckus products, please check for the latest software and the release documentation.

- Release Notes and other user documentation are available at <http://support.ruckuswireless.com/documents>.
- Software upgrades are available at <http://support.ruckuswireless.com/software>.

- Software license and limited warranty information are available at <http://support.ruckuswireless.com/warranty>.

Package Contents

A complete R850 installation package includes all of the items listed below:

- R850 Access Point
- One wall-mount anchor kit, including two 1-in. No. 8 steel pan head Phillips sheet metal screws and wall-mount anchors
- One external T-bar bracket (two unassembled parts)
- Service Level Agreement/Limited Warranty Statement
- Declaration of Conformity
- Regulatory Statement
- Ruckus Access Point Getting Started Guide
- AP Cloud Management Insert
- This *Quick Setup Guide*

Step 1: Collecting Setup Requirements, Hardware and Tools

- Admin PC (computer with an Ethernet port and Wi-Fi adapter)
- Cat 5e (or better) Ethernet cable
- Ruckus Wireless 48VDC power adapter (sold separately) or 802.3at-compliant Power over Ethernet (PoE) switch or PoE injector

NOTE: The PoE switch port must run link layer discovery protocol (LLDP) power over Ethernet/MDI (PoE+) in order for the R850 to operate in full-power mode. This may require enabling both LLDP and Power via MDI (dot3) on the switch, if available.

NOTE: If powered by 802.3at PoE, note that the feature set is reduced, as follows:

- 4x4 (2.4GHz) + 4x4 (5GHz) chain operation mode (reduced from 4x4 (2.4GHz) + 8x8 (5GHz) under full power)

NOTE: The recommended PoE injector for the R850 is GRT-480125A (60W power rating and 1 Gbps link speed). If using the recommended PoE injector, you must 1) manually select AT+ mode as the power mode in the SmartZone/ZoneDirector GUI, and 2) force 1Gbps link speed on the switch.

Optional hardware and tools:

- Customer-supplied small padlock with a 3.5-mm (0.14-in.) or smaller shackle diameter, used to fasten the AP to the secure mounting bracket or the T-bar bracket.
- Customer-ordered Ruckus Wireless 902-0120-0000 secure mounting bracket kit:
 - If you are mounting the AP on a flat surface using the secure mounting bracket kit, then you need an electric drill with 4.75-mm (3/16-in.) drill bits.
 - If you are mounting the AP on a pipe or pole using the secure mounting bracket kit, then you will also need a 38.1-mm to 63.5-mm (1.5-in. to 2.5-in.) pipe or pole, two pole clamps, and hand tools to tighten the clamps.

Step 2: Connecting Your Computer to the AP

1. Using an Ethernet cable, connect your computer's network port to the **5G ETH PoE** port on the AP (1 in the Figure below).

2. Using a DC power adapter (sold separately), connect the AP's 48 VDC port (2 in the Figure below) to a convenient and protected power source.

NOTE: Alternatively, connect the **5G ETH PoE** port to a PoE injector or switch for both power and network connectivity.

FIGURE 2 AP Ports

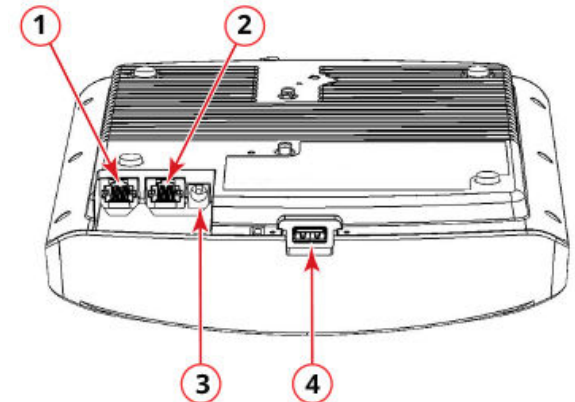


TABLE 1 R850 bottom panel elements

No.	Label	Description
1	5G ETH PoE	100/1000/5000 Mbps PoE In Port: RJ-45 Ethernet port (supports 802.3at/at+ PoE in)
2	1G ETH	10/100/1000 Mbps port: RJ-45 Ethernet port (non-PoE)
3	48 VDC	48 VDC input
4	USB	USB Port • Max Dimensions: 6 cm x 2 cm x 1.1 cm • Interface: USB 2.0 • Connector: USB – Type-A plug

3. Verify that the PWR LED on the AP is a steady green.

Step 3: Preparing Your Computer for AP Setup

NOTE: The following procedures assume Windows as the operating system. Procedures for other operating systems are similar.

1. On your Windows PC, configure your network adapter from the Local Area Connection settings as follows:
Start >> Control Panel > Network and Sharing Center > Change Adapter Settings
2. Edit the TCP/IPv4 address settings as follows:

Local Area Connection > Properties > Internet Protocol Version 4 (TCP/IPv4) > Properties

The Internet Protocol Version 4 (TCP/IPv4) Properties dialog box appears.

IMPORTANT-QSG: Write down all of the currently active settings so you can restore your computer to its current configuration later (when this process is complete).

3. Select **Use the following IP address** (if it is not already selected) and then make the following entries:
 - **IP address:** 192.168.0.22 (or any available address in the 192.168.0.x network, except 192.168.0.1)
 - **Subnet mask:** 255.255.255.0
 - **Default gateway:** 192.168.0.1Leave the DNS server fields empty.
4. Click **OK** to save your changes. Your changes are put into effect immediately.

Step 4: Logging Into the AP

1. As specified in Step 3, the admin PC should be directly connected to the AP through one of the Ethernet ports and powered on, ready for setup.
2. On your admin PC, open a web browser window.
3. In the browser, enter the following URL in the browser navigation bar: `https://192.168.0.1`
4. Press **Enter** to initiate the connection. When the security alert dialog box appears, click **OK/Yes** to proceed.
5. When the **Ruckus Admin** login page appears, enter the following:
 - **Username:** super
 - **Password:** sp-admin
6. Click **Login**. On your first login, you will be prompted to change the default password.
7. When the **Change Password** dialog box displays, enter the following:
 - **New Password:** Enter a new password.
 - **Confirm Password:** Re-enter the new password.
8. Click **Submit**.
9. Log in using the new password.

Step 5: Customizing the Wireless Settings

TABLE 2 Default AP Settings (for your reference)

Network Names (SSIDs)	Wireless1—Wireless8 (2.4GHz radio) Wireless9—Wireless16 (5GHz radio)
Security (Encryption method)	Disabled for each wireless interface
Default Management IP Address	192.168.0.1

1. On the web interface menu, click **Configuration > Radio 2.4G** or **Configuration > Radio 5G**. The **Configure > Wireless > Common** page appears.
2. Verify that the following options are active:
Channel : SmartSelect
Country Code: If you are not located in the United States of America, select your current country.
3. Click **Update Settings** if you made any changes.
4. Click any of the **Wireless #** (Wireless LAN Number) tabs at the top of the page.
5. In **Wireless Availability**, click **Enabled**.
6. Delete the text in the **SSID** field, then type a name for your network that will help your users identify this AP in their wireless network application.
7. Click **Update Settings** to save your changes.
8. Repeat for each **Wireless #** (Wireless LAN Number) interface that you want to enable.
9. Click **Logout** to exit the web interface.
10. When the **Ruckus Admin** login page reappears, you can exit your browser.
11. Disconnect the AP from the computer and from the power source, and then restore your computer to its original network connection configuration settings.

Step 6: Placing the AP in Your Site

1. Move the AP to its permanent location (accessible to both power and network connections). Refer to the *Mounting Instructions* section for physical installation.
2. Use an Ethernet cable to connect the **5G ETH PoE** port to an appropriate device:
 - The ISP's or carrier's network device.
 - An Ethernet switch that is connected to the ISP's or carrier's network device.
3. Connect the AP power adapter (or PoE power supply) to the AP, and then to a convenient power source.

NOTE: If you will be using PoE, then you will need a Cat 5e (or better) Ethernet cable to connect the AP to the PoE switch or PoE injector.

NOTE: The power draw will identify as a Class 4 device with a max draw of 25.5W if it is powered by an 802.3at PoE switch.

NOTE: The R850 supports 802.3at and 802.3at+ PoE modes only, and does **not** support 802.3af PoE mode.

4. Verify that the 5Gbps port LED is lit.
After a short pause to re-establish the Internet connection, you can test the AP.

Step 7: Verifying the Installation

1. Using any wireless-enabled computer or mobile device, search for and select the wireless network you previously configured.
2. When connected, open a browser and connect to any public website. Congratulations! Your wireless network is active and ready for use.

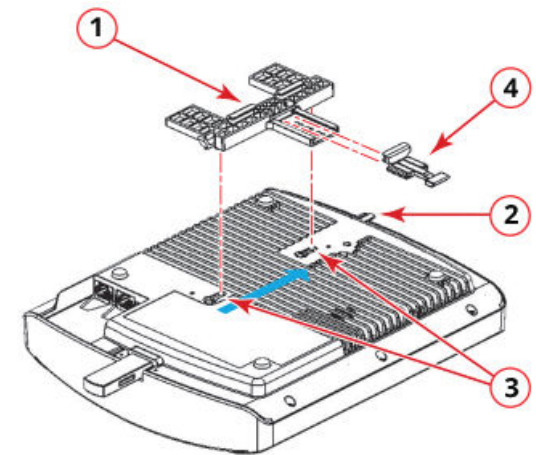
Mounting Instructions

Mounting on a Drop-Ceiling T-Bar

The factory-supplied T-bar mounting assembly kit allows you to attach the AP to recessed and flush drop-ceiling T-bars.

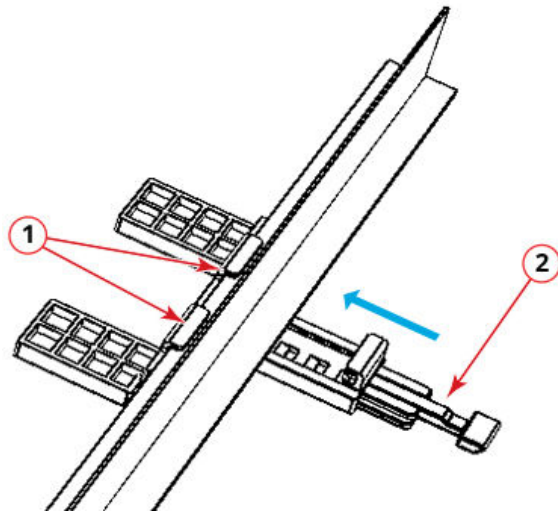
1. Position the studs on the bottom of the T-bar bracket (1 in the following Figure) in the keyholes on the AP enclosure.
2. Slide the T-bar bracket away from the Ethernet ports on the bottom of the AP until the AP retainer tab (2) snaps into place, trapping the T-bar bracket studs in the keyholes (3).

FIGURE 3 Attaching the T-bar bracket to the AP



3. Insert the locking tab (4) so it is in the first position on the T-bar bracket (1).
4. Gently push the ceiling tiles, if present, up and out of the way.
5. Position the T-bar bracket so its two clasps grip one edge of the T-bar (1 in the Figure below). Make sure that both clasps are gripping the T-bar.
6. Hold the AP in place and gently push the locking tab (2) until its clasp grips the other edge of the T-bar. Make sure that all three clasps are gripping the T-bar.

FIGURE 4 Attaching the T-bar bracket to the T-bar



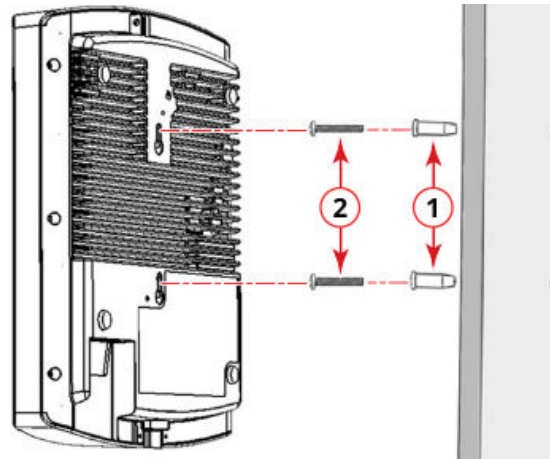
7. (Optional) Attach a customer-supplied padlock through the bracket AP retainer tab (2) to lock the AP to the T-bar bracket studs.

Mounting on a Flat Surface

The factory-supplied mounting screws and plastic wall anchors allow you to attach the AP to a wall or other flat surface.

1. Use the Mounting Template on the last page of this Quick Setup Guide to mark the locations for two drill holes on the mounting surface.
2. Use a 4.75-mm (3/16-in.) drill bit to drill holes approximately 25-mm (1-in.) deep into the mounting surface.
3. Insert the factory-supplied anchors (1 in the Figure below) and mounting screws (2) into the mounting surface, leaving approximately 6-mm (1/4-in.) of the screw heads protruding for the AP enclosure.

FIGURE 5 Flat surface mounting



4. Place the AP onto the mounting screws so the screw heads enter the keyholes on the AP enclosure, and push the AP down until the AP retainer tab snaps into place.
5. (Optional) Attach a customer-supplied padlock through the integral AP retainer tab to lock the AP to the mounting screw heads.

For More Information

For information on how to configure and manage the AP, refer to the *Ruckus Wireless Indoor Access Point User Guide*, available from <https://support.ruckuswireless.com>.

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