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Unleashed T350SE Access Point Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to field-install the RUCKUS Unleashed T350SE access point (AP).

WARNING! Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

WARNING! Installation of this equipment must comply with local and national electrical codes.

CAUTION! Make sure that you form a 80mm - 130mm (3”-5”) drip loop in any cable that is attached to the AP or the building. This will prevent water from running along the cable and entering the AP or the building where the cable terminates.

CAUTION! Be sure that grounding is available and that it meets local and national electrical codes. For additional lightning protection, use lightning rods and lightning arrestors.

CAUTION! Make sure that proper lightning surge protection precautions are taken according to local electrical code.

WARNING! RUCKUS strongly recommends that you wear eye protection before mounting the T350SE.

This Guide in Other Languages

- 请从以下网站获得该指南的简体中文版 http://docs.commscope.com/?docs-box.
- Vous trouverez la version française de ce guide à l'adresse suivante http://docs.commscope.com/?docs-box.
- このガイドの日本語版は http://docs.commscope.com/?docs-box でご覧ください。
- 이 가이드의 한국어 버전은 웹 사이트 (http://docs.commscope.com/?docs-box) 에서 확인하시기 바랍니다.
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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.

  Before deploying your RUCKUS Access Point, verify that all items listed in *Package Contents* are included in the package. If any item is damaged or missing, notify your authorized RUCKUS sales representative. Also, make sure that you have the required hardware and tools.

Required Hardware and Tools

- 1/2” (13 mm) flat-blade screwdriver or equivalent
- No. 2 Phillips screwdriver
- Small flat-blade screwdriver
- Torque wrench or torque screwdriver with sockets
- Long-nose pliers
- Electrical wire stripping and terminal crimping pliers
- Pipe, pole or a sturdy flat surface
- Electric drill with drill bits and customer-supplied wall anchors, flat washers, and hex nuts for flat-surface mount

Package Contents

A complete T350SE field installation package includes all of the items listed below :

- T350se Access Point
- M25 data cable gland
- Ground wire with lug
- Poll/Wall Mount Bracket Kit
- Declaration of Conformity/Regulatory Statement
- This Quick Setup Guide

Unleashed Network Configuration

Setup Using the Unleashed Mobile App

To perform setup using the Unleashed Mobile App, download the iOS or Android app from the app store.

1. As soon as the Unleashed AP is powered on and connected to the local network, it boots up and begins broadcasting a temporary unencrypted WLAN named “Configure.Me-[xxxxxx]” from both radios.
2. Using your client’s Wi-Fi connection settings, select and associate to the “Configure.Me-[xxxxxx]” WLAN.
3. Launch the app, and follow the on-screen instructions to configure your Unleashed network(s).

FIGURE 1 Unleashed Mobile App for iOS and Android

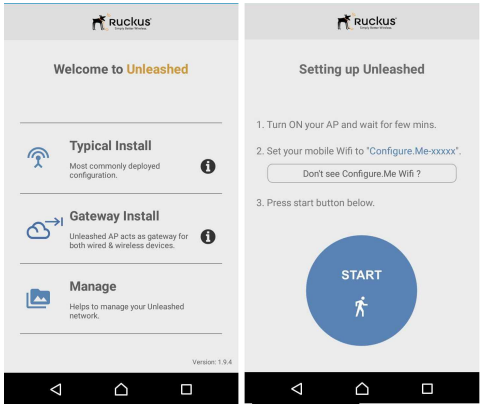
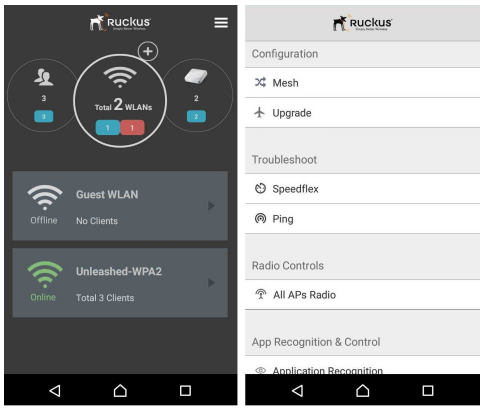


FIGURE 2 Configuring Unleashed from the Mobile App

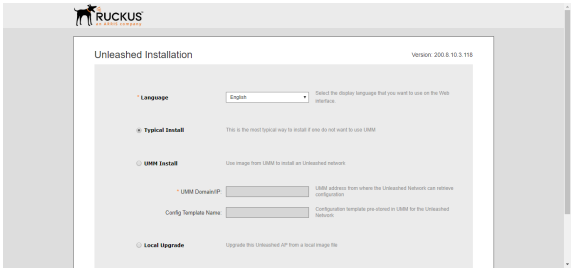


Setup Using a Web Browser

1. As soon as the Unleashed AP is powered on and connected to the local network, it boots up and begins broadcasting a temporary unencrypted WLAN named “Configure.Me-[xxxxxx]” from both radios.
2. Using your client’s Wi-Fi connection settings, select and associate to the “Configure.Me-[xxxxxx]” WLAN.
3. Launch a web browser and enter the following into the browser’s URL bar: *unleashed.ruckuswireless.com*, and press **Enter**.
4. You will be redirected to the Setup Wizard. Complete the steps in the Setup Wizard and click **Finish**.

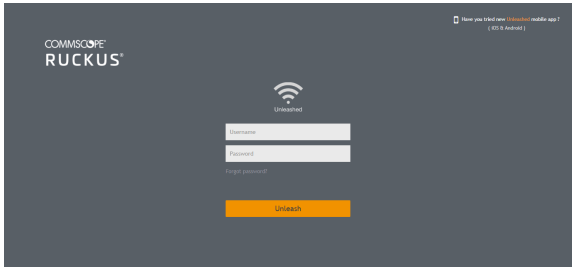
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FIGURE 3 Complete the Setup Wizard to set up your Unleashed network



5. Once the Setup Wizard is finished, a "Configuring system settings and rebooting" progress screen appears. Wait until the process is complete.
6. Connect to the WLAN that you configured in the Setup Wizard, and click OK to reconnect. You will be redirected to the Unleashed login screen.
7. Enter your Admin Name and Password to login.

FIGURE 4 The Login page



8. Upon successful login you will be presented with the Unleashed Dashboard, which displays an overview of your Ruckus Unleashed network.

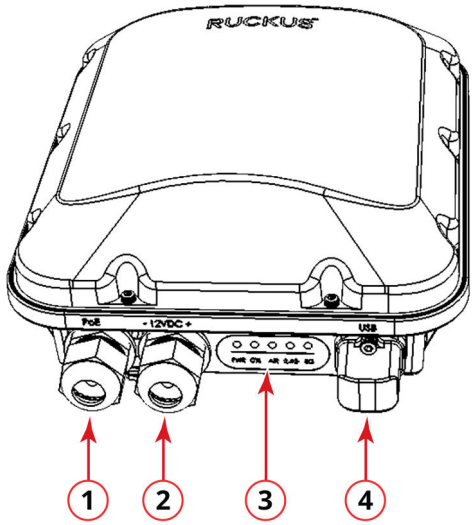
Mounting Instructions

Connecting and Sealing the RJ-45 Cables

Connect and seal the RJ-45 cables using the M25 data cable glands shown in the Figure below.

WARNING! Do not use any PoE injector not tested and approved by RUCKUS to power the T350se Access Point.

FIGURE 5 T350se LEDs and Ports

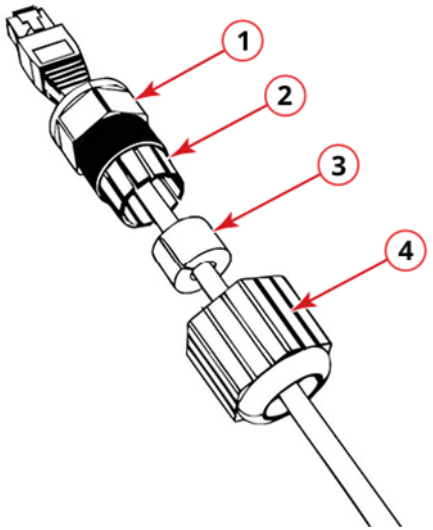


1. PoE
2. 12V DC
3. LED
4. USB

1. Feed the end of the cable through the sealing nut, rubber O-ring, clamping ring assembly, and cable gland base, as shown in Figure 6.

NOTE: Do not seat the clamping ring and rubber O-ring into the gland body until the gland body has been torqued to specifications.

FIGURE 6 RJ-45 Cable and Gland Assembly



1. Cable gland base
2. Clamping ring
3. Rubber O-ring
4. Sealing nut

2. Use a wide flat-blade screwdriver to remove the required (PoE IN) blanking cap from the AP.
3. Connect the cable to the Ethernet port on the AP.
4. Tighten the cable gland base into the AP chassis to 7 N.m or 62 in-lbs.
5. Wrap the clamping ring assembly around the rubber O-ring. Make sure that the clamping ring assembly fully encloses the rubber O-ring.
6. Seat the clamping ring assembly and rubber O-ring in the cable gland base.
7. Hand-tighten the sealing nut.

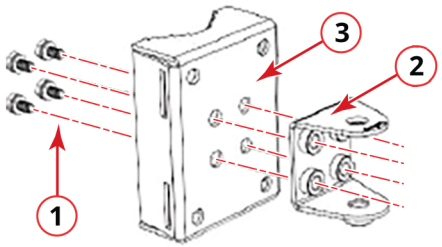
Attaching the U-Joint Bracket to the Mounting Bracket

1. Position the U-joint bracket on the mounting bracket.

NOTE: Mount the U-joint bracket in any direction on the mounting bracket, preferably to allow AP azimuth adjustments. If mounted properly, the AP bracket allows AP elevation adjustments.

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FIGURE 7 U-Joint Bracket Attached Horizontally to the Mounting Bracket



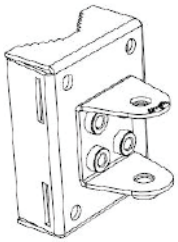
1. Bolt and washer sets
2. U-joint bracket
3. Mounting bracket

2. Use four 1/4-28 bolt and washer sets to mount the U-joint bracket to the mounting bracket. Tighten the bolts to 9.5 N.m (7 ft-lbs).
3. Continue with Attaching the Mounting Bracket to a Flat Surface on page 3 or Attaching the Mounting Bracket to a Pole on page 3.

Attaching the Mounting Bracket to a Flat Surface

1. Place the mounting bracket at the location on the flat surface where you want to mount the AP. Use the holes on the mounting bracket as a template to mark the locations of the mounting holes.

FIGURE 8 Attaching the Mounting Bracket to a Flat Surface



2. Remove the mounting bracket from the flat surface.
3. Drill holes required for the mounting hardware.

> **NOTE:** The mounting hardware required for mounting to a wall is not included in the mounting kit.

4. Attach the mounting bracket to the flat surface using the mounting hardware.
5. Using the mounting hardware instructions, tighten the hardware to secure the mounting bracket.
6. Continue with Mounting the Linkage Bracket to the U-Joint Bracket on page 3.

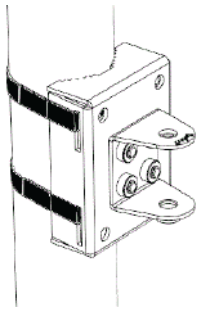
Attaching the Mounting Bracket to a Pole

1. Insert the open end of one steel clamp into the upper two slots on the mounting bracket.
2. Take the other steel clamp and insert it into the lower two slots on the mounting bracket.

> **NOTE:** The clamps can be daisy-chained together to accommodate larger poles.

3. Use the clamps to attach the mounting bracket to the pole. Tighten the clamps to 3 N.m or 27 in-lbs, or per manufacturer's specifications.

FIGURE 9 Attaching the Mounting Bracket to a Vertical Pole



4. Continue with Mounting the Linkage Bracket to the U-Joint Bracket on page 3.

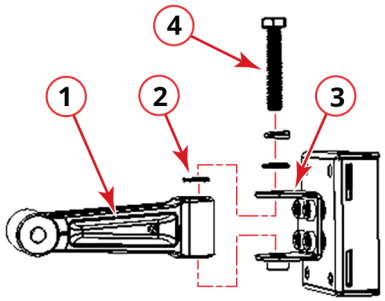
Mounting the Linkage Bracket to the U-Joint Bracket

The linkage bracket attaches to the U-joint bracket using an M8 bolt and washer set. The linkage bracket is symmetrical, and either end can be attached to the U-joint bracket.

> **NOTE:** Make sure that the linkage bracket is installed with its serrated external-tooth lock washer on the *inside* of the U-joint bracket flanges. This ensures that the azimuth adjustment does not change.

1. Loosely assemble the linkage bracket, the U-joint bracket, one serrated external-tooth lock washer, and one M8 bolt and washer set.

FIGURE 10 Attaching the Linkage Bracket to the U-Joint Bracket



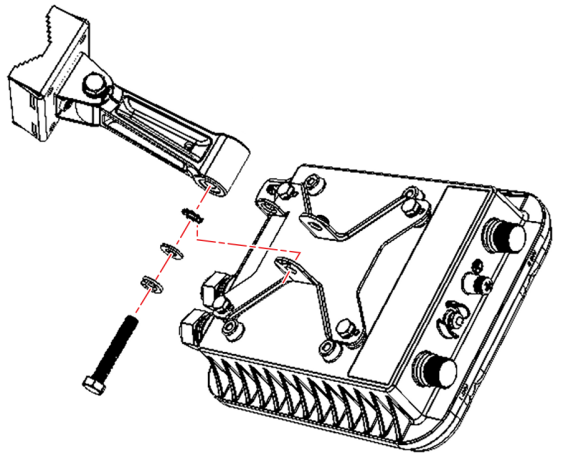
1. Linkage bracket
2. Serrated external-tooth lock washer
3. M8 bolt and washer set
4. U-joint bracket

2. Set the azimuth required by the AP.
3. Tighten the M8 bolt to 13.6 N-m (120 in-lbs).
4. Continue with Attaching the AP Bracket to the Linkage Bracket on page 3.

Attaching the AP Bracket to the Linkage Bracket

1. Attach the AP bracket to the linkage bracket using the included bolt, lock washer, flat washer, serrated external-tooth washer and nut, as shown in Figure 11.

FIGURE 11 Attaching the Linkage Bracket to the AP Bracket



2. The linkage bracket is symmetrical, and either end can be attached to the AP bracket.

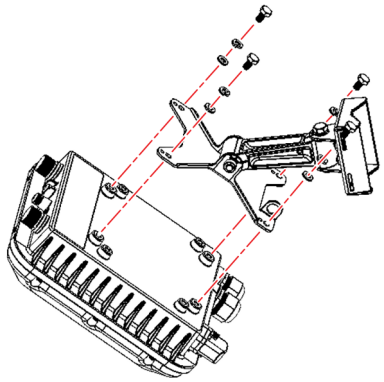
> **NOTE:** Make sure that the linkage bracket is installed with its serrated external-tooth lock washer on the *inside* of the AP bracket flanges. This ensures that the elevation adjustment does not change.

Attaching the AP Bracket to the Access Point

1. Place the AP bracket onto the back side of the AP so that the four larger screw holes on the bracket align with the four screw holes on the AP.

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FIGURE 12 Attaching the AP Bracket to the AP



2. Use four 0.5-inch x 0.250-28 hex bolts with split lock and flat washer sets to mount the AP bracket to the AP. Tighten the bolts to 2.5-3.0 N.m or 22-27 in-lbs.

   CAUTION! Make sure that the screws are no longer than 0.5 inch. If a screw is longer than 0.5 inch, it can damage the AP chassis.

   NOTE: This kit may include extra screws, nuts, and washers. You may use the extras where required.

3. Continue with Setting the Elevation and Tightening the Elevation Bolt on page 4.

Setting the Elevation and Tightening the Elevation Bolt

1. Set the elevation required by the AP.
2. Tighten the M8 bolt to 13.6 N-m (120 in-lbs).
3. Continue with Powering the AP with DC Power on page 4.

Powering the AP with DC Power

The AP can draw power from the Ethernet input as a Class 4 device, providing a maximum of 22W to the system. Alternately, power can be supplied through a customer-provided 12V DC power supply (12V DC preferred, 7-20V DC acceptable) that will connect to a two-pin terminal block. The terminal block is accessible through a water-tight gland on one end of the unit. The terminal block connection has surge and polarity protection to protect against inserting the wrong polarity leads into the terminal block.

NOTE: If both the PoE and DC ports are used, separate cable glands must be used for each port. Additional cable gland (Part Number 902-0183-0000) can be be purchased.

NOTE: When both the 12V DC and the 48V PoE power are active, the AP will prioritize the 12V DC power.

CAUTION! Ensure that the DC power source does not exceed 20V DC.

1. Install the DC power supply as described in the *DC Power Supply Installation Guide*.
2. Connect the DC cord to a DC power source.
3. Verify that the PWR LED is a steady green.

Earth Grounding the AP

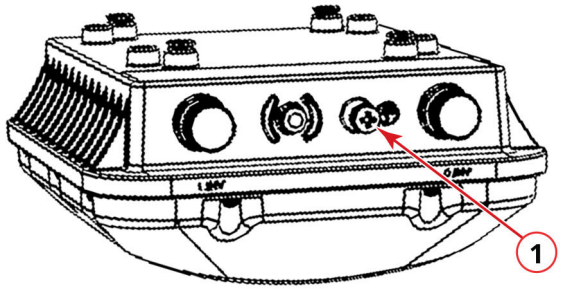
CAUTION! Make sure that earth grounding is available and that it meets local and national electrical codes. For additional lightning protection, use lightning rods and lightning arrestors.

NOTE: The color coding of ground wires varies by region. Before completing this step, check your local wiring standards for guidance.

Using the factory-supplied ground wire and ground screw and washer set, connect a good earth ground to the AP chassis ground point.

CAUTION! The T350se AP includes one 9-mm stainless steel M6x1 earth ground screw with split lock and flat washers. Make sure that any replacement screw is no longer than 9-mm. If a screw is longer than 9-mm, it can damage the AP chassis.

FIGURE 13 Connecting a Good Earth Ground to the AP



1. Earth grounding

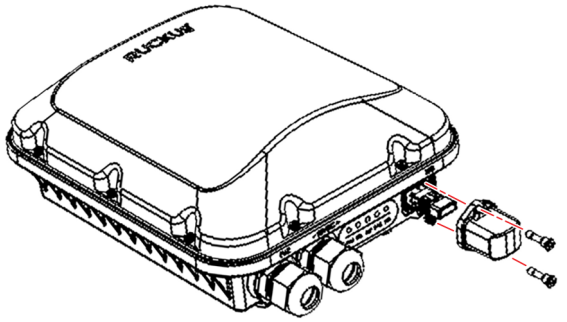
Installing a USB Dongle

To install a USB dongle (for example, an IoT radio device such as BLE, 802.15.4, Z-wave, or similar), remove the two 3-mm hex screws, remove the cap, and insert the dongle into the USB port.

Once installed, replace the cap and the hex screws, and tighten the screws to 0.79 N.m or 7 in-lbs.

NOTE: If required, a larger USB dongle cap can be purchased separately. The maximum dimensions of the USB dongle that can be inserted (with the large USB dongle cap, part # 902-0127-000) are 6 cm x 2 cm x 1.1 cm. The USB port supports 2.5W.

FIGURE 14 Installing a USB Dongle



Troubleshooting

CAUTION! If required, you can reset the AP to its factory default settings by pressing the reset button located inside the PoE IN port. Use the tip of a pen or a 3-mm flat-blade screwdriver to press the reset button. Press and hold the reset button for 4 seconds or longer to restore to factory defaults. DO NOT RESET THE AP TO FACTORY DEFAULT SETTINGS UNLESS SO INSTRUCTED. (Doing this resets the AP IP address to 192.168.0.1.)

NOTE: After a reset, you can access the internal AP web interface using https://192.168.0.1. Your device must use any other address from 192.168.0.2 through 192.168.0.254, with subnet mask 255.255.255.0. The username is **super**, and the password is **sp-admin**.

For More Information

For information on how to configure and manage your Unleashed deployment, refer to the *RUCKUS Unleashed User Guide*, available at https://docs.commscope.com/bundle/unleashed-200.12-onlinehelp.

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