Unleashed T610s Access Point
Quick Setup Guide

This *Quick Setup Guide* provides step-by-step instructions on how to field-install the Ruckus Wireless Unleashed T610s access point (AP). For detailed information on planning the installation, performing a site survey, and operating the T610s, refer to the *Unleashed Online Help*, available at https://docs.ruckuswireless.com/unleashed/200.4/index.html.

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 Wireless strongly recommends that you wear eye protection before mounting the T610s.*

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 your Ruckus Wireless Unleashed T610s, verify that all items listed in Package Contents are included in the package. If any item is damaged or missing, notify your authorized Ruckus Wireless sales representative. Also, make sure that you have the required hardware and tools.

Required Hardware and Tools

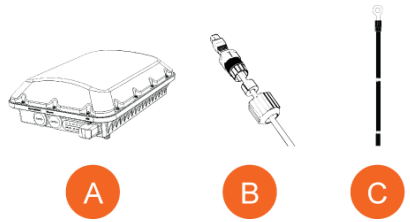
- Customer-supplied outdoor-rated three-wire (1-2mm^2 or 14-18AWG) AC cable
- 1/2" (13mm) flat-blade screwdriver or equivalent
- No. 2 Phillips screwdriver
- Small flat-blade screwdriver
- Torque wrench or torque screwdriver with sockets
- Long-nose pliers
- Electrical wire stripping and terminal crimping pliers
- Pipe or 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
- Four factory-supplied 1/2" (12.7mm) wide stainless steel adjustable clamps, 2.5" (63.5mm) diameter, for main mounting bracket on smaller poles
- Ruler

Package Contents

A complete Unleashed T610s field installation package includes all of the items listed below (see Figure 1for illustrations):

- Unleashed T610s Access Point (A)
- Two M25 data cable glands (B)
- Ground wire with lug (C)
- Service Level Agreement/Limited Warranty Statement
- Declaration of Conformity
- Regulatory Statement
- Ruckus Wireless AP Getting Started Guide
- This Quick Setup Guide

Figure 1: Package Contents



NOTE: *The outdoor AP Mounting Bracket and security cable are optional accessories that must be purchased separately.*

T610s Sector Antenna Coverage

The T610s 120-Degree Sector AP is best deployed where internal-antenna beamforming can provide extended reach and throughput to a 120-degree coverage area. See Figure 2 for the azimuth coverage pattern, and see Figure 3 for the elevation coverage pattern.

Figure 2: Typical AP sector azimuth plane coverage, top view

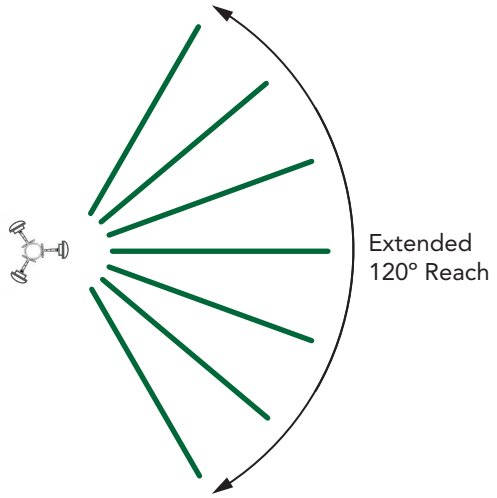
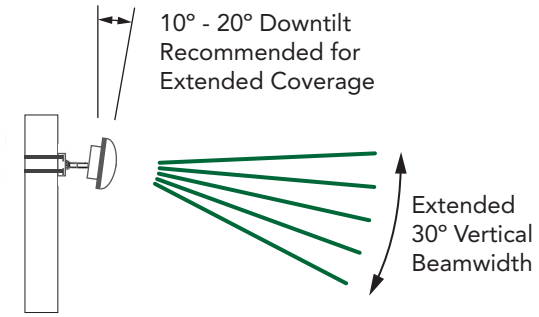


Figure 3: Typical AP sector elevation plane coverage, side view



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Configuring the AP

If you will be installing the AP before configuring, then skip to Physical Installation. If you will be configuring the AP first before physical installation, then continue with this section.

Step 1: Configure Your Unleashed Network

Unleashed can be deployed using either a Mobile App, available for both iOS and Android, or using your PC's web browser. Refer to the relevant section depending on which method you prefer to use:

- Step 2a: Setup Using the Unleashed Mobile App
- Step 2b: Setup Using a Web Browser

Step 2a: Setup Using the Unleashed Mobile App

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

A 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.

B Using your client's Wi-Fi connection settings, select and associate to the "Configure.Me-[xxxxxx]" WLAN.

C Launch the app, and follow the on-screen instructions to configure your Unleashed network(s).

Figure 1. Unleashed Mobile App for iOS and Android

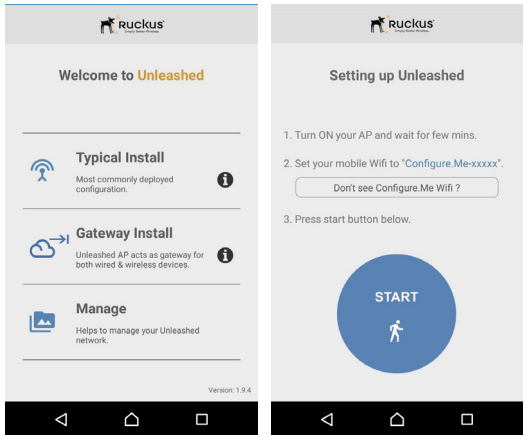
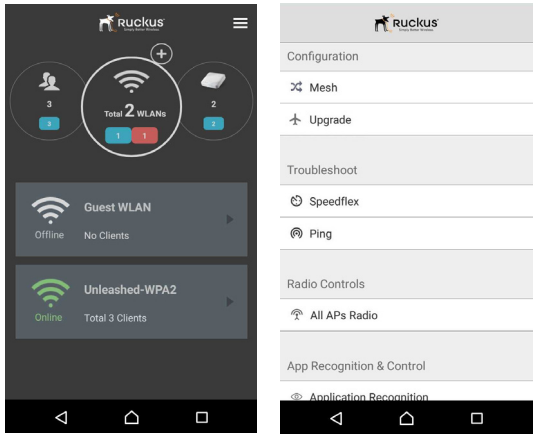


Figure 2. Configuring Unleashed from the Mobile App



Step 2b: Setup Using a Web Browser

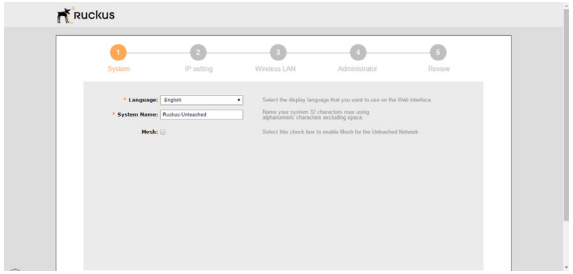
A As soon as the Unleashed AP is powered on and connected to the local network, it boots up and begins broadcasting a temporary unencrypted WLAN named "Configure.Me-[xxxxxx]" from both radios.

B Using your client's Wi-Fi connection settings, select and associate to the "Configure.Me-[xxxxxx]" WLAN.

C Launch a web browser and enter the following into the browser's URL bar: unleashed.ruckuswireless.com, and press **Enter**.

D You will be redirected to the Setup Wizard. Complete the steps in the Setup Wizard and click **Finish**.

Figure 3. Complete the Setup Wizard to set up your Unleashed network

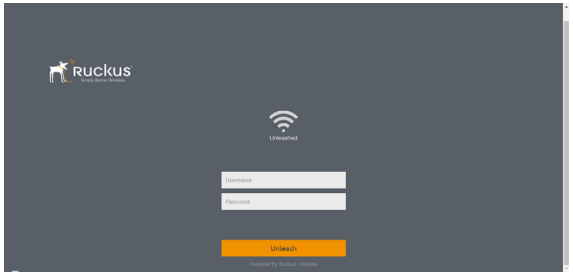


E Once the Setup Wizard is finished, a "Configuring system settings and rebooting" progress screen appears. Wait until the process is complete.

F 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.

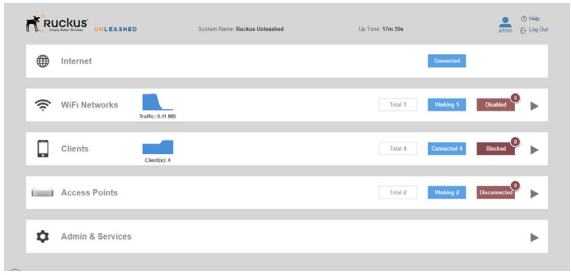
G Enter your **Admin Name** and **Password** to login.

Figure 4. The Login page



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

Figure 5. The Unleashed Dashboard



I Click **OK** to save your changes.

Your changes are put into effect immediately. Continue with Step 3: Customize Your Wireless LANs.

Step 3: Customize Your Wireless LANs

Once the Unleashed Master AP has been initialized, you can fine-tune the settings of your first WLAN (that you created during the setup wizard), and create any additional WLANs needed prior to attaching additional Unleashed member APs. Then, when you deploy additional member APs in whatever order you prefer, they will automatically retrieve all WLAN configuration settings (and any other settings you have configured) from the Unleashed Master AP.

1 From the Dashboard, click anywhere in the WiFi Networks section to expand the display of your deployed WLANs.

2 On the left side of the screen, select the WLAN box for the WLAN you would like to configure, and click the Edit button to edit the configuration; or click Create to create a new WLAN.

3 If you made any changes to the original WLAN, you will be disconnected and will need to reconnect once the changes have been deployed on the AP radios.

Congratulations! Your Unleashed network is now configured and ready for use. You may now proceed to Step 4: Deploy Additional Unleashed Access Points.

Step 4: Deploy Additional Unleashed Access Points

Deploying additional Unleashed member APs is simply a matter of connecting them to the same Layer 2 network (subnet) and providing power. They will discover the Unleashed Master and join automatically. No additional steps are necessary.

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Physical Installation

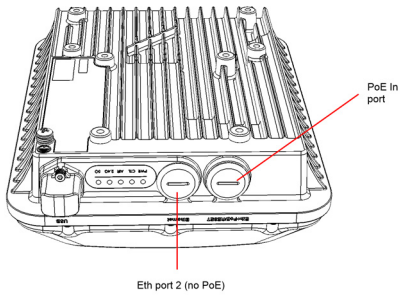
Step 1: Connecting and Sealing the RJ-45 Cables

Connect and seal the RJ-45 cable(s) using the M25 data cable gland as shown in Figure 5.

WARNING: *Do not use any PoE injector not tested and approved by Ruckus Wireless to power the T610s Access Point.*

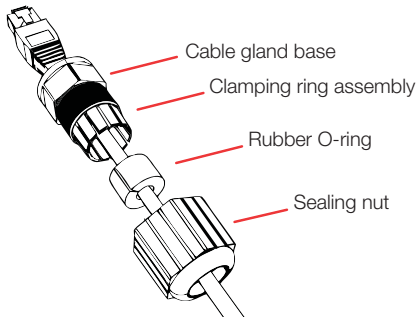
WARNING*: Do NOT plug PoE in power into the non-PoE Port (see Figure 4).*

Figure 4: T610s bottom view



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 5.

Figure 5: RJ-45 cable and cable gland assembly



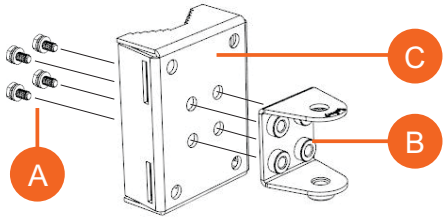
2. Use a wide flat-blade screwdriver to remove the required (PoE IN) blanking cap from the T610s.
3. Connect the cable to the Ethernet port on the T610s.
4. Tighten the cable gland base into the T610s chassis to 7 N.m or 62 in-lbs.
5. Wrap the clamping ring assembly around the rubber O-ring. Make sure 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.

Step 2: Attaching the U-Joint Bracket to the Mounting Bracket

NOTE: *The following mounting instructions require purchase of optional accessories that are not included in the standard T610s package. The outdoor AP Mounting Bracket and safety cable are optional accessories that must be purchased separately.*

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

Figure 6: U-joint bracket attached horizontally to the mounting bracket



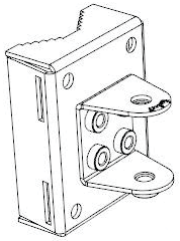
NOTE: *Mount the U-joint bracket in any direction on the mounting bracket, preferably to allow AP azimuth adjustments. Then the AP bracket allows AP elevation adjustments.*

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

Step 3a: 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 7: Mounting bracket flat surface holes



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

NOTE: *The hardware required for mounting to a wall are 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 Step 4: Mounting the Linkage Bracket to the U-Joint Bracket.

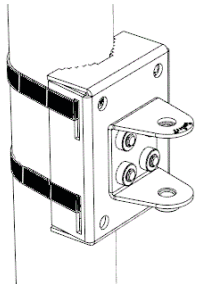
Step 3b: Attaching the Mounting Bracket to a Metal Pole

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 8: Attaching the mounting bracket to a vertical pole



4. Continue with Step 4: Mounting the Linkage Bracket to the U-Joint Bracket.

Step 4: Mounting the Linkage Bracket to the U-Joint Bracket

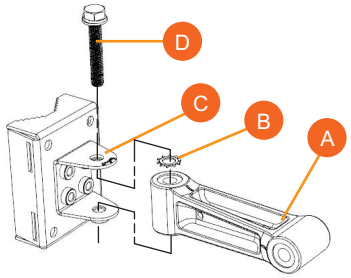
The linkage bracket attaches to the U-joint bracket using an M8 bolt and washer set. The linkage bracket is symmetrical, and either end can be attached to the U-joint bracket.

NOTE: *Make sure that 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 (A), the U-joint bracket (C), one serrated external-tooth lock washer (B), and one M8 bolt and washer set (D).

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Figure 9: Attaching the linkage bracket to the U-joint bracket



2 Set the azimuth required by the AP.
3 Tighten the M8 bolt to 13.6 N-m (10 ft-lbs).
4 Continue with Step 5: Attach the AP bracket to the linkage bracket.

Step 5: Attach the AP bracket to the linkage bracket

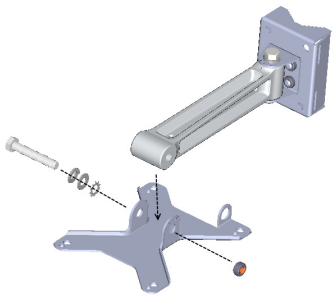
Attach the AP bracket to the linkage bracket using the included bolt, nut, lock washer, flat washer, serrated external-tooth washer shown in Figure 10.

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

NOTE: *Make sure that 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.*

1 As described in Step 4: Mounting the Linkage Bracket to the U-Joint Bracket, loosely assemble the AP bracket (shown in Figure 11), the linkage bracket (A in Figure 9), the second serrated external-tooth lock washer (B in Figure 9), and the second M8 bolt and washer set (D in Figure 9).

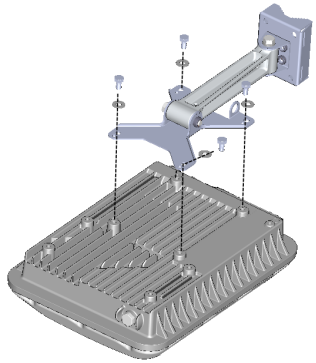
Figure 10: Attach the linkage bracket to the AP bracket



Step 6: 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. Make sure that the end of the AP bracket with the hoisting loop is on the same side as the AP **PoE IN** port.

Figure 11: 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.*

3 If required, suspend the AP by attaching a carabiner to the hoisting loop on the AP bracket.

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

Step 7: Set the Elevation and Tighten Elevation Bolt

1 Set the elevation required by the AP.
2 Tighten the M8 bolt to 13.6 N-m (10 ft-lbs).

Step 8: Earth Grounding the AP

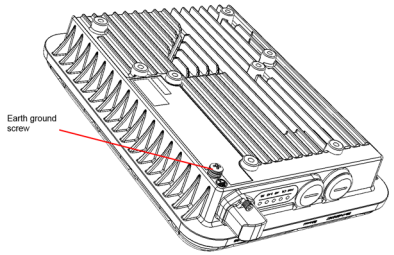
CAUTION: *Make sure that earth grounding is available and that it meets local and national electrical codes. For additional lightning protection, use lightning rods and lightning arrestors.*

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/ washer set, connect a good earth ground to the AP chassis ground point (Figure 12).

CAUTION: *The T610s AP includes one 12mm stainless steel M6x1 earth ground screw with split lock and flat washers. Make sure that any replacement screw is no longer than 12mm. If a screw is longer than 12mm, it can damage the AP chassis.*

Figure 12: Connect good earth ground to AP here

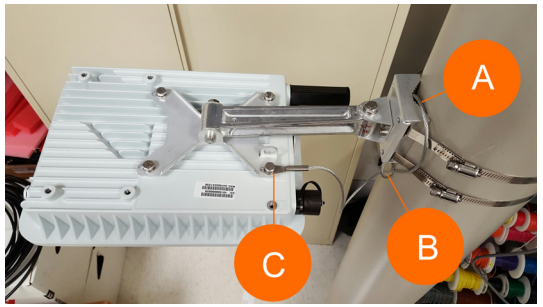


Step 9: Installing the Security Cable

NOTE: *The security cable is an optional accessory that must be purchased separately.*

1 Thread the security cable through the mounting bracket (A) and through the eye on the cable itself (B), as shown in Figure 13.
2 Attach the safety cable to the AP (C) in Figure 13.

Figure 13: Attaching the security cable

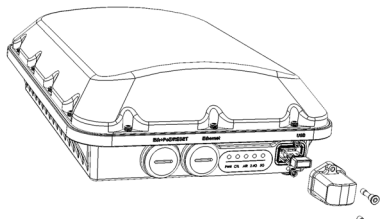


Congratulations! You have mounted your T610s access point.

Installing a USB Dongle

To install a USB dongle, which could be an IoT radio like BLE, 802.15.4, Z-wave or the like, remove the two 3mm hex screws, remove the cap, and insert the dongle into the USB port. Once installed, replace the cap and the hex screws, and torque the screws to 7 in-lbs.

Figure 14: Installing a USB dongle



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