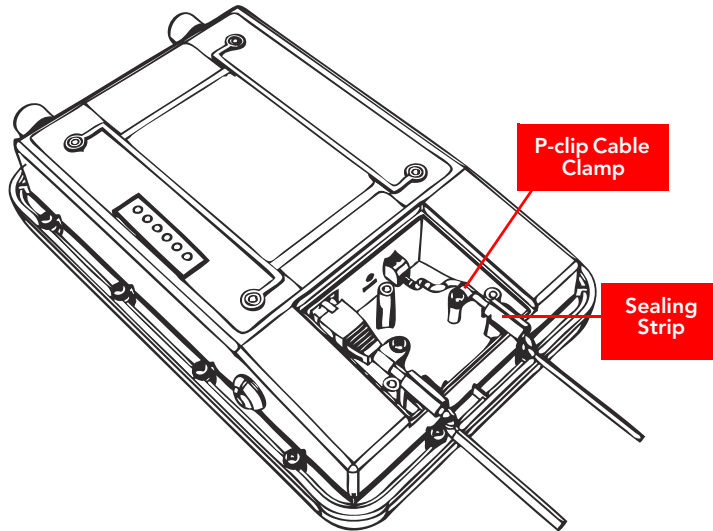




**WARNING:** Do not apply power to the Wireless Bridge at this point. You should connect the Wireless Bridge to a power source only after you finish connecting all other components in ["Step 3: Connect the Wireless Bridge to the Network"](#) on [page 44](#).

---

Figure 37. Install the white P-clip cable clamp



**CAUTION:** If you are not connecting the DC cable to the DC terminal block, make sure you cover the right cable groove with the supplied sealing plug.

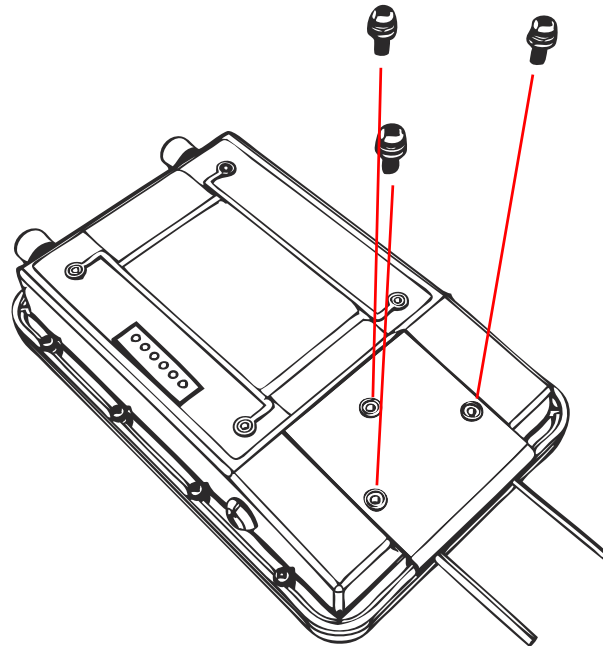
---

You have completed setting up the DC power connection.

## Step 2: Install the Back Panel Cover

1. Make sure that the perimeter rubber gasket on the underside of the bottom cover is in place and is clear of debris.
2. Place the bottom cover of the Wireless Bridge onto the bottom section.
3. Using the three gasketed machine screws that are supplied with the Wireless Bridge, fasten the bottom cover to the chassis. Screw torque value must be  $6.9 \pm 0.2$  kgf-cm ( $6.2 \pm 0.2$  lbf-in) to obtain a proper seal.

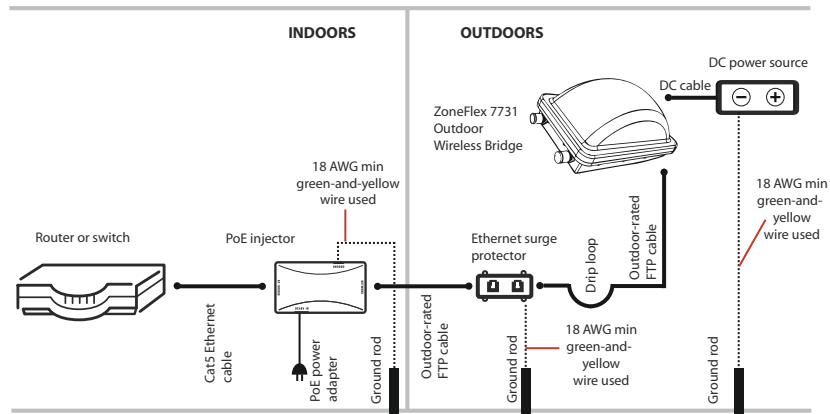
Figure 38. Fasten the bottom cover using three machine screws



## Step 3: Connect the Wireless Bridge to the Network

In this step, you will connect the Wireless Bridge from its mounting location to the network. Follow the steps below for a typical installation that uses both PoE and DC power as power sources. [Figure 39](#) shows an example of the connections required for a typical installation that uses both PoE and DC power.

Figure 39. Typical installation components using both PoE and DC power sources



**WARNING:** Do not apply power to the Wireless Bridge until you finish connecting all other components.

1. Take the *root bridge* to its mounting location.
2. Verify that the Cat5e FTP cable (outdoor-rated) from the Wireless Bridge is long enough to reach the PoE injector that is installed indoors.
3. Create a drip loop in any cable installed outdoors. This will prevent water from running along the cable and entering the Wireless Bridge or the building where the cable terminates.
4. Verify that the **RJ45** port on the Wireless Bridge is connected to the **AP/BRIDGE** port on the PoE injector.
5. Connect the Ethernet cable from the **NETWORK** port on the PoE injector to your network router or switch.
6. Apply power to the Wireless Bridge.
  - If you are using PoE, plug the power adapter in to an AC power source.
  - If you are using DC power, connect the DC cable to a DC power source.
7. Verify that the **PWR** LED on the back of the Wireless Bridge is steady green.
8. Repeat steps 1-7 for the non-root bridge.
9. Continue to ["Attaching the Mounting Brackets"](#).

## Attaching the Mounting Brackets

### What You Will Need

To complete this procedure, you will need the following items:

- Static bracket
- Dynamic bracket
- Wall anchors
- Flat washers
- Hex nuts
- 10mm ratchet wrench

If you are mounting the Wireless Bridge on a flat surface, you will also need an electric drill with an 8mm drill bit.

If you are mounting the Wireless Bridge on a pipe or pole, you will also need the following:

- A 30mm to 60 mm (1.18 in. to 2.36 in.) pipe or pole
- Steel clamp
- 10mm flathead screwdriver

### Step 1: Attach the Static Bracket to the Mounting Surface

The procedure for attaching the bracket to the mounting surface depends on whether you are mounting the Wireless Bridge to a flat surface or a pole.

- [Attaching the Bracket to a Flat Surface](#)
- [Attaching the Bracket to a Pole](#)

#### ***Attaching the Bracket to a Flat Surface***

---



**WARNING:** Ruckus Wireless strongly recommends that you wear eye protection before drilling holes on the mounting surface.

---

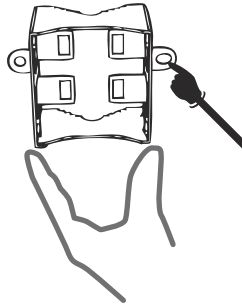


**NOTE:** The wall anchors that are supplied with the Wireless Bridge are for mounting on *solid masonry walls* only. If you are mounting the Wireless Bridge on other materials (for example, drywall, wood, or hollow cinder block), you will need the appropriate types of wall anchors. Check your local hardware store for options.

---

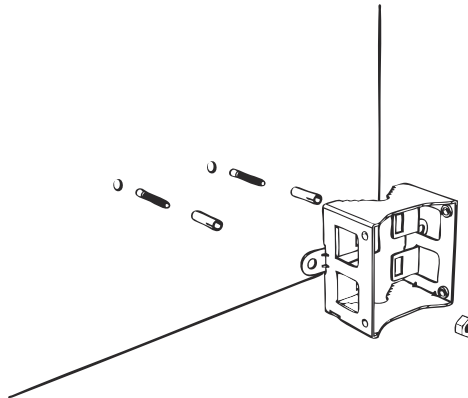
1. Place the static bracket at the exact location on the mounting surface where you want to mount it.
2. Use the static bracket as a template to mark the locations of the mounting holes on the two mounting tabs.

Figure 40. Mark the locations of the mounting holes



3. Remove the static bracket from the mounting surface.
4. Drill an 8mm-diameter hole with a depth of 36mm-38mm into each of the markings that you made on the mounting surface.
5. Insert a wall anchor (with the unthreaded part first) into each of the holes that you drilled.
6. Place a metal cone on each wall anchor, and then place a flat washer on top of the metal cone.

Figure 41. Insert a wall anchor into each hole that you drilled, and then place a metal cone and a flat washer on top

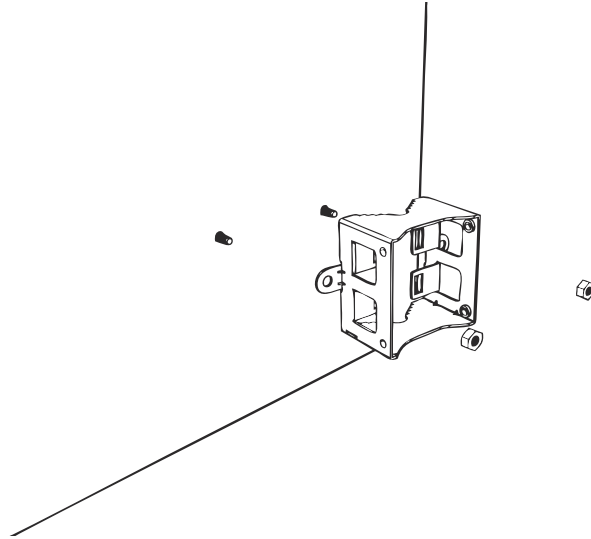


## Physical Installation

### Attaching the Mounting Brackets

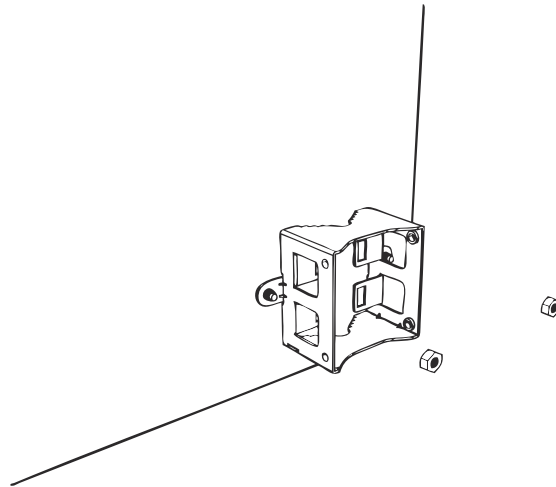
7. Align the two screw holes on the bracket with the wall anchors that you inserted earlier.

Figure 42. Align the screw holes on the bracket with the wall anchors



8. Use two hex nuts to attach the bracket to the mounting surface.

Figure 43. Use two hex nuts to attach the bracket to the surface



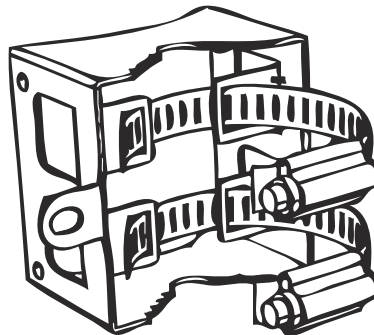
9. Using a 10mm open-end wrench, tighten the nuts to secure the bracket to the mounting surface. Screw torque value must be 4kg-5kg. As you tighten the nuts, the metal cones that are built into the wall anchors will expand and lock the wall anchors into place.
10. Continue to ["Step 2: Attach the Dynamic Bracket to the Wireless Bridge"](#).

### **Attaching the Bracket to a Pole**

The Wireless Bridge can be mounted vertically on a 30mm to 60mm (1.18 in. to 2.36 in.) pole.

1. Insert the open end of the steel clamps into the two tabs on the bracket.

*Figure 44. Insert the steel clamps into the two tabs on the bracket*

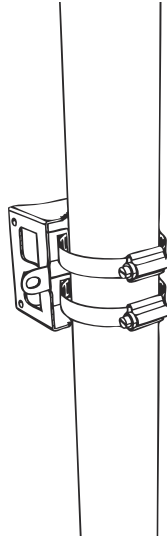


## Physical Installation

### Attaching the Mounting Brackets

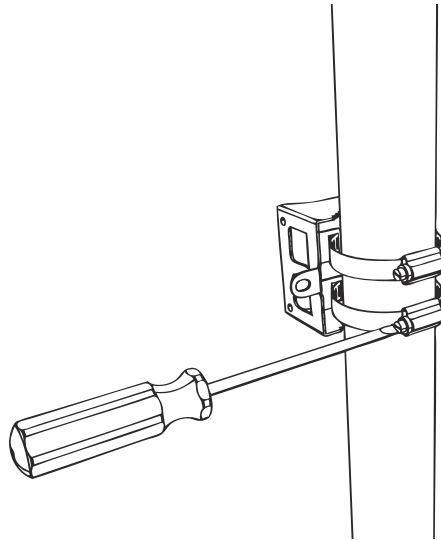
2. Use the clamps to attach the bracket to the pole.

Figure 45. Use the clamps to attach the bracket to the pole



3. Using a 10mm flathead screwdriver, tighten the clamp locks to secure the bracket to the pole. Screw torque value must be  $1.1 \text{ N-m} \pm 0.1 \text{ N-m}$ .

Figure 46. Tighten the clamp locks to secure the bracket



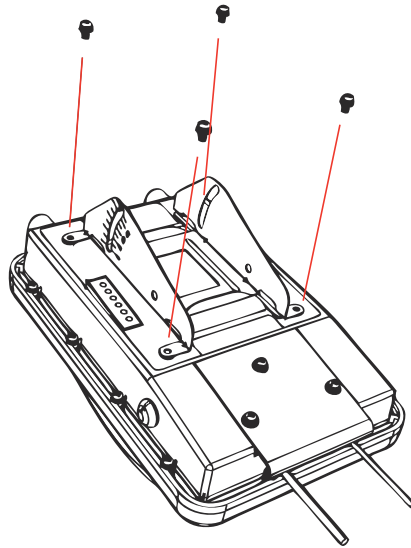
4. Continue to [“Step 2: Attach the Dynamic Bracket to the Wireless Bridge”](#).



## Step 2: Attach the Dynamic Bracket to the Wireless Bridge

1. Place the dynamic bracket onto the flat side of the Wireless Bridge so that the four screw holes on the bracket align with the four screw holes on the Wireless Bridge. Make sure that the shorter end of the mounting bracket is on the same side as the antenna connector.
2. Insert four machine screws (supplied with mounting kit) into the screw holes on the bracket.

Figure 47. Insert four machine screws into the screw holes

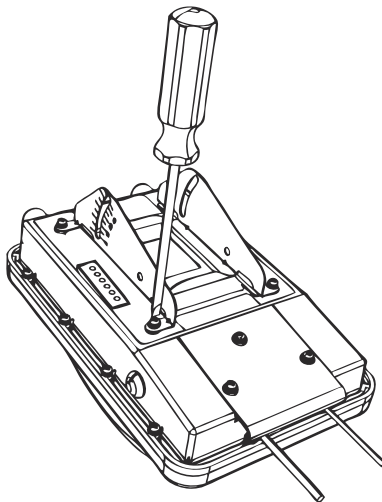


## Physical Installation

### Mounting the Wireless Bridge

3. Using a 6mm Phillips screwdriver, tighten the four machine screws to fasten the bracket to the Wireless Bridge. Screw torque value must be  $0.4 \text{ N-m} \pm 0.1 \text{ N-m}$ .

Figure 48. Fasten bracket to the Wireless Bridge



4. Continue to [“Mounting the Wireless Bridge”](#) in the next section.

## Mounting the Wireless Bridge

To mount the Wireless Bridge, you will need to join the two mounting brackets that you attached earlier to the device and the mounting surface. For this procedure, you will need the following items:

- Hex bolts
- Thumb screws
- 10mm ratchet wrench



---

**NOTE:** Figures in this section show mounting on a vertical pole. Procedures for mounting on a flat surface are similar.

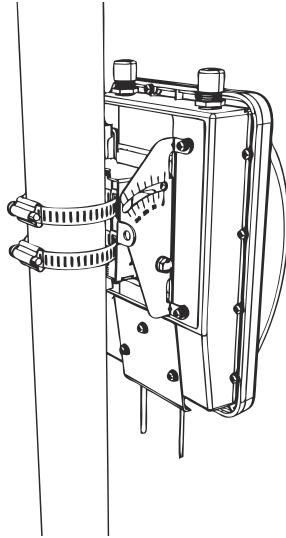
---

### To join the two mounting brackets together:

1. Join the two brackets as shown in [Figure 49](#). Make sure that:

- The dynamic bracket (attached to the Wireless Bridge) encloses the static bracket (attached to the mounting surface).
- *(For mounting on a vertical pole)* The side of the Wireless Bridge with the antenna connectors is at the top, especially if you are planning to install external antennas.

Figure 49. *Joining the two brackets in a vertical pole installation*

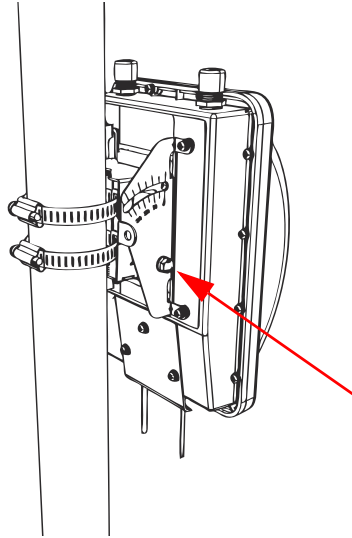


2. Align the mounting holes on the dynamic bracket with the mounting holes on the static bracket.
3. Place a split lock washer, and then a flat washer onto a hex bolt. Then insert the hex bolt into one of the lower mounting holes.

## Physical Installation

### Mounting the Wireless Bridge

Figure 50. Insert hex bolts into lower mounting holes



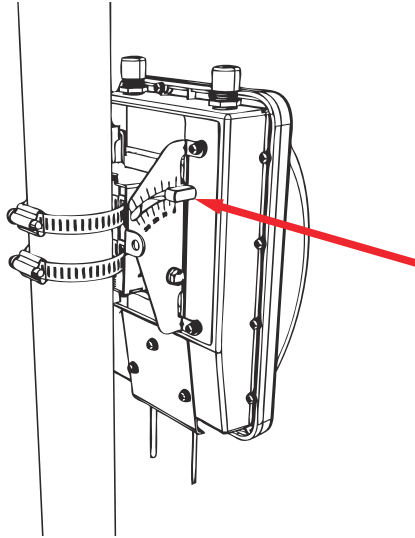
---

**NOTE:** Make sure the screw-washer assembly is in correct order. The split-lock washer should be in the middle and the flat washer should touch the bracket.

---

4. Repeat Step 3 for the lower mounting hole on the other side.
5. Finger tighten the hex bolts.
6. Insert the two thumb screws into the upper mounting holes as shown in [Figure 51](#).

Figure 51. Insert thumb screws into the upper mounting holes



7. Finger tighten the thumb screws.
8. Adjust the Wireless Bridge to your desired orientation.



---

**NOTE:** If you have not yet determined the optimal orientation for your Wireless Bridge, refer to [“Determine the Optimal Mounting Location and Orientation”](#) on [page 36](#) for orientation guidelines.

---

9. Using a 10mm ratchet wrench, tighten the hex bolts to fix the Wireless Bridge’s orientation. Screw torque value must be  $0.7 \text{ N-m} \pm 0.1 \text{ N-m}$ .

You have completed mounting the root bridge. Perform the same procedure for mounting the non-root bridge.

## Mounting and Connecting the External Antenna (Optional)

If you want to extend the range of your wireless bridge connection, you can connect an external patch antenna to the standard N-type female connectors on the Wireless Bridge.



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

---

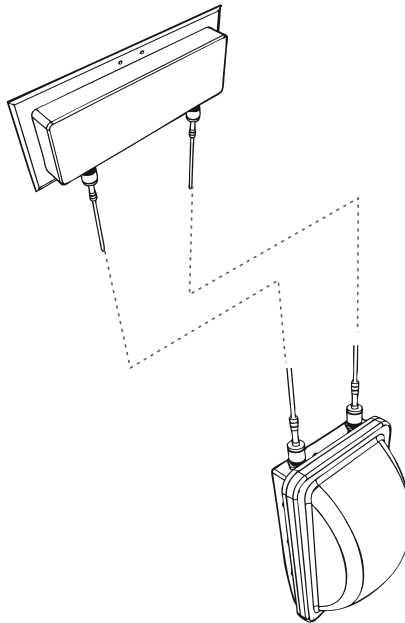


**WARNING:** Before connecting the antenna to the Wireless Bridge, make sure that you disconnect the Wireless Bridge from the power source.

---

1. Disconnect the Wireless Bridge from the power source.
2. Unscrew the metal caps that protect the antenna connectors. Place the metal caps in a safe place, in case you need them later.
3. Connect the antenna to the standard N-type female antenna connectors.

*Figure 52. Connect the external antenna to the standard N-type female connectors on the Wireless Bridge.*



4. Ensure that antenna connectors are firmly tightened, and apply weatherproofing tape to the antenna connectors to help prevent water from entering the connectors.
5. Reconnect the Wireless Bridge to the power source.



---

**CAUTION:** If you are not connecting external antennas to the Wireless Bridge, make sure that the metal caps remain installed and securely fastened to protect the interface from elements, such as water or dirt.

---

You have completed connecting the external antenna to the Wireless Bridge.

## 7 Aiming the Bridge Pair

Once both units are installed in their permanent locations, press the **Aiming Button** on the outside of either unit to begin aiming. Alternatively, you can start the aiming process via the Web browser, by clicking **Start Aiming** on the **Status > Wireless** page.

1. Press the blue button on the side of either bridge and hold it for 4 seconds.
  - The bottom LED turns yellow, indicating that the unit is in Aiming Mode.
  - If the unit is in Aiming mode but there is no association between the two bridge units, all LEDs will cycle yellow until the two ZoneFlex 7731 units have associated.
2. Adjust the azimuth and elevation of the first unit to maximize the Aiming LED indicators. RSSI (received signal strength indication) values are shown in [Table 6](#).

*Table 6. RSSI values of LED indicators*

LED	Status	RSSI (<=)
LED 6	Solid	35 (Max)
	Flashing	30
LED 5	Solid	28
	Flashing	25
LED 4	Solid	23
	Flashing	20
LED 3	Solid	18
	Flashing	15
LED 2	Solid	13
	Flashing	10
LED 1	Solid	8
	Flashing	5 (Min)

## Aiming the Bridge Pair

### Mounting and Connecting the External Antenna (Optional)

3. After one unit is at its maximum link level, adjust the second unit to increase the link performance.
4. If the unit's elevation adjustment needs to be reversed, remove the 4 bolts mating the two mounting bracket pieces together. Remove the 4 mounting screws attaching the bracket to the ZoneFlex 7731 enclosure, rotate the bracket 180° and reattach the bracket to the enclosure. Repeat steps 2 through 7. Adjust the ZoneFlex 7731 to your desired orientation.



---

**NOTE:** The cable end of the ZoneFlex 7731 should always be pointing down.

---

5. Once the ZoneFlex 7731 is in the proper orientation, tighten the thumb screws flush to the bracket.
6. Using a 10mm ratchet wrench, tighten the two hex bolts to fix the unit's orientation. The bolt torque value must be 0.6-0.8 Newton meter (Nm).
7. Verify that the ZoneFlex 7731 link performance has not changed.
8. Press the blue Aiming button once again to stop aiming.
9. Repeat steps 1-8 for the other bridge unit.



---

**NOTE:** If the unit is mounted in a position that does not allow the user to view the LEDs, the Web UI can be used for Aiming. On the **Status > Wireless** page, pressing the "Start Aiming" link is the same as pressing the blue Aiming button. The Signal Strength is shown on the Web page. More green bars indicate higher signal strength.

---

10. If using the Web interface for aiming, adjust the orientation of the units to maximize the green bars under "Signal Strength."
11. For more precise aiming, the value under "ACK RSSI" can also be used. A higher ACK RSSI indicates better signal strength. Both the green bars in the Web interface and the LEDs on the outside of the bridge units serve as indicators of ACK RSSI values.



---

**NOTE:** For best results, it is important to perform the aiming procedure for both units.

---



## 8 Verifying the Connection

Once you have completed the hardware installation and aiming procedure for both Wireless Bridges, verify the connection and signal integrity between the bridge pair using the following procedure:

1. Access the root bridge Web interface by entering its IP address into a Web browser on a computer connected to the same switch that the root bridge is connected to.
2. On the **Status > Wireless** page, check to make sure the non-root bridge is listed under the **Connected Device** section.

Figure 53. Viewing connected device from the Web interface

The screenshot shows the Ruckus Wireless 7731 Web interface. The main content area is titled "Status :: Wireless" and includes an "Enable Auto-update" button. The settings are as follows:

- Wireless Mode: 11na -- Operates with 802.11n and 802.11a devices in 5 GHz spectrum only
- Channel: Channel 165 [SmartSelect]
- Channel Width: 40 Mhz
- Country Code: US
- SSID: RKS-001301
- BSSID: 00:13:92:00:13:08
- Wireless Status: Up (green checkmark)
- Broadcast SSID?: Disabled (red exclamation mark)
- Encryption Mode: WPA
- Wireless Bridge Mode: Root Bridge
- Aiming Action: Start Aiming
- Site Survey: Last Survey, ReScan
- Link Status: Up

Below the settings is a "Connected Device" table:

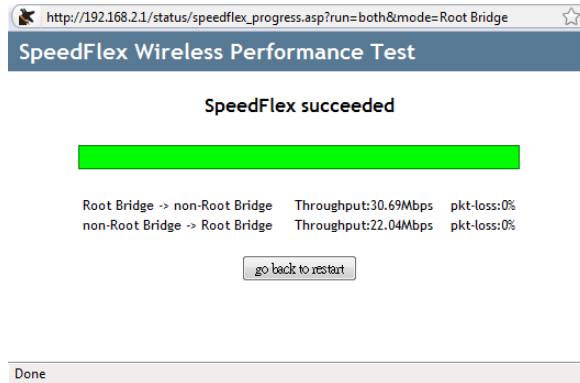
IP Address	MAC Address	SSID	Up/Down	Rx RSSI	SpeedFlex	Ack RSSI	Signal Strength
192.168.2.254	00:13:92:00:19:08	RKS-001301	1/0	44		40	

3. On the **Status > Wireless** page, click the SpeedFlex icon to launch the SpeedFlex Wireless Performance Test.
4. Click Start to begin testing
5. Once the test is completed, the following result page is displayed.

## What to Do Next

Change the Administrative Password

Figure 54. SpeedFlex Performance Test succeeded



## 9 What to Do Next

The following are some of the post-installation tasks that Ruckus Wireless recommends. Refer to the *ZoneFlex 7731 802.11n Point to Point Bridge User Guide* for more information on configuring and managing the Wireless Bridge.

### Change the Administrative Password

Management access to the Web interface of the Wireless Bridge is controlled through administrative user name and password. As soon as you complete the Wireless Bridge setup, make sure you log on to the Wireless Bridge's Web interface and change the default administrative user name and password. This will help prevent unauthorized users from logging in to the Wireless Bridge's Web interface and changing the Wireless Bridge settings to compromise your network.

### Using FlexMaster to Manage the Wireless Bridge

If you are planning to use Ruckus Wireless FlexMaster to manage the ZoneFlex 7731, this guide describes the required steps that will enable the Wireless Bridge to report to and communicate with FlexMaster successfully.

#### **(Optional) Set the FlexMaster Server Address**

If you have a FlexMaster server installed on the network and you intend to use FlexMaster to manage the Wireless Bridge, you can set the FlexMaster server address at this point. Before starting this procedure, make sure you obtain the correct FlexMaster server URL.



---

**NOTE:** In addition to setting the FlexMaster server URL manually on the Wireless Bridge, you can also use DHCP Option 43 or DNS to point the Wireless Bridge to the FlexMaster server. For more information, refer to the *FlexMaster User Guide*.

---

1. On the menu, click **Administration > Management**.
2. Scroll down the page to the **TR069 / SNMP Management Choice** section.
3. Verify that the **Auto** option is selected.
4. In **FlexMaster Server URL**, type the URL of the FlexMaster server on the network. You can use either `http` or `https` to connect to the URL and include either the host name or IP address of the FlexMaster server in the URL. The following are examples of valid FlexMaster server URLs:

```
http://flexmaster/intune/server
```

```
https://flexmaster/intune/server
```

```
http://192.168.20.1/intune/server
```

```
https://192.168.20.1/intune/server
```

5. Click **Update Settings** to save your changes.

You have completed setting the FlexMaster server address on the Wireless Bridge.

Figure 55. Type the FlexMaster server URL

The screenshot shows the configuration page for a Ruckus 7731 Wireless Bridge. The left sidebar contains navigation menus for Status, Configuration, Maintenance, and Administration. The main content area is titled "Ruckus 7731 Wireless Bridge" and includes sections for "HTTPS access?" (Enabled), "Certificate verification" (PASSED), and "TR069 / SNMP Management Choice" (Auto). The "DHCP Discovery:" section is expanded, showing the "FlexMaster Server URL:" field highlighted with a red border, containing the value "https://flexmaster/intune/server". Other fields include "Digest-authentication Username:" (001392-ZF10000088), "Digest-authentication Password:" (ZF10000088-001392), and "Periodic FlexMaster Inform Interval:" (15 minutes). Below this is a "TR069 Status" section with details on the last attempted and successful contacts, and a "Current Time" of Wed Aug 26 02:16:51 2009 (UTC). At the bottom of the configuration area are "Update Settings" and "Restore previous settings" buttons.

## Read Related Documentation

If you are using FlexMaster to manage the Wireless Bridge, make sure you read the accompanying documentation to learn how to configure and manage the Wireless Bridge from the FlexMaster Web interface.

The latest versions of Ruckus Wireless product documentation are available for download on the Ruckus Wireless Support Web site at:

<http://support.ruckuswireless.com/documents>

## Professional Installation Instruction

1. Installation personnel: This product is designed for specific application and needs to be installed by a qualified person who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.
2. Installation location: The product shall be installed at a location where the radiating antenna can be kept 20 cm from nearby person in normal operation condition to meet regulatory RF exposure requirement. Additionally, installation locations with 35km of Terminal Doppler Weather Radar locations shall follow instructions below.
3. External antenna: Use only the antennas which have been approved by Ruckus Wireless. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited.
4. Installation procedure: Please refer to user's manual for the detail.
5. Warning: Please carefully select the installation position and make sure that the final output power does not exceed the limit set forth in US Rule CFR 47 part 15 section 6.15.247 & 15.407. The violation of the rule could lead to serious federal penalty.

## Terminal Doppler Weather Radar Interference

Any installation of this product within 35km of a Terminal Doppler Weather Radar (TDWR) location must be separated by at least 30MHz (center-to-center) from the TDWR operating frequency. A database of TDWR locations and their center frequencies can be found at the following URL: <http://www.spectrumbridge.com/udia/home.aspx>. The installer is encouraged to register installations in the 5470-5725 frequency band at the same URL, where registration instructions are provided.

## Federal Communications Commission Notices

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This equipment shall not be collocated with any other transmitter.

### Harmful Interference Notice

This product has been tested and complies with the specifications for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment or devices
- Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

Changes or modifications to this equipment that have not been approved by Ruckus Wireless may void the user's authority to operate this equipment. For operation within 5.15 – 5.25GHz frequency range, it is restricted to indoor environment.

### External Antenna

This device has been designed to operate with a patch antenna, and having a maximum gain of 23 dBi. Other antenna types or having a gain greater than 23 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

## Industry Canada Statement

This device complies with Industry Canada ICES-003 and RSS210 rules. Operation is subject to the following two conditions:

1. This device may not cause interference and
  2. This device must accept any interference, including interference that may cause undesired operation of the device.
- Cet appareil est conforme aux normes NMB003 et RSS210 d'Industrie Canada. Le fonctionnement est soumis aux conditions suivantes :
1. Ce périphérique ne doit pas causer d'interférences;
  2. Ce périphérique doit accepter toutes les interférences reçues, y compris celles qui risquent d'entraîner un fonctionnement indésirable.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### Caution:

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems. High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

This device has been designed to operate with an antenna having a maximum gain of 23 dBm. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

## Australia Statement

This device complies with the ACMA requirements for a Wi-Fi device namely Radio Communications (Low Impact Potential Devices) Class Licence 2000 Amd. 1:2007 and Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2003. The equipment complies with the ACMA requirements for radiation exposure for a "general user/non-aware user". This equipment should be installed and operated with a minimum distance of 50 cm between the radiator and your body. This equipment complies with the Australian safety requirements if connected to an approved power supply. The frequency band 5150 – 5350 MHz is restricted to indoor use.

## European Union Notices

This product only supplied by Limited Power sources (sub-clause 2.5 of standard EN 60950-1).



### Compliance Information for 5-GHz Wireless Products

The following standards were applied during the assessment of the product against the requirements of the Directive 1999/5/EC:

- EN 301 893
- EMC: EN 301 489-1, EN 301 489-17
- Safety: EN 60950, EN 50385

The frequency band 5150 – 5350 MHz is restricted to indoor use.

### National Restrictions

This product may be used in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below: *Ce produit peut être utilisé dans tous les pays de l'UE (et dans tous les pays ayant transposés la directive 1999/5/CE) sans aucune limitation, excepté pour les pays mentionnés ci-dessous:*

*Questo prodotto è utilizzabile in tutte i paesi EU (ed in tutti gli altri paesi che seguono le direttive EU 1999/5/EC) senza nessuna limitazione, eccetto per i paesi menzionati di seguito:*

*Das Produkt kann in allen EU Staaten ohne Einschränkungen eingesetzt werden (sowie in anderen Staaten die der EU Direktive 1999/5/CE folgen) mit Ausnahme der folgenden aufgeführten Staaten:*

### Belgium

The Belgian Institute for Postal Services and Telecommunications (BIPT) must be notified of any outdoor wireless link having a range exceeding 300 meters. Please check <http://www.bipt.be> for more details.

*Draadloze verbindingen voor buitengebruik en met een reikwijdte van meer dan 300 meter dienen aangemeld te worden bij het Belgisch Instituut voor postdiensten en telecommunicatie (BIPT). Zie <http://www.bipt.be> voor meer gegevens.*

*Les liaisons sans fil pour une utilisation en extérieur d'une distance supérieure à 300 mètres doivent être notifiées à l'Institut Belge des services Postaux et des Télécommunications (IBPT). Visitez <http://www.ibpt.be> pour de plus amples détails.*

#### Taiwan Statement

This device has been designed to operate with a patch antenna, and having a maximum gain of 23 dBi, such as the ARC-ID5823B88 Other antenna types or having a gain greater than 23 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

#### Turkey Statement

Operation in the 5,475-5,725 Ghz band is not allowed.

Česky [Czech]	Ruckus Wireless tímto prohlašuje, že tento Radio LAN je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede Ruckus Wireless erklærer herved, at følgende udstyr Radio LAN overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt Ruckus Wireless, dass sich das Gerät Radio LAN in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab Ruckus Wireless seadme Radio LAN vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, Ruckus Wireless declares that this Radio LAN is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente Ruckus Wireless declara que el Radio LAN cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ruckus Wireless ΔΗΛΩΝΕΙ ΟΤΙ Radio LAN ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente Ruckus Wireless déclare que l'appareil Radio LAN est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente Ruckus Wireless dichiara che questo Radio LAN è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo Ruckus Wireless deklarē, ka Radio LAN atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo Ruckus Wireless deklaruojama, kad šis Radio LAN atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart Ruckus Wireless dat het toestel Radio LAN in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, Ruckus Wireless, jiddikjara li dan Radio LAN jikkonforma mal-ftigijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, Ruckus Wireless nyilatkozom, hogy a Radio LAN megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym Ruckus Wireless oświadcza, że Radio LAN jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	Ruckus Wireless declara que este Radio LAN está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	Ruckus Wireless izjavlja, da je ta Radio LAN v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	Ruckus Wireless týmto vyhlasuje, že Radio LAN spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	Ruckus Wireless vakuuttaa täten että Radio LAN tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar Ruckus Wireless att denna Radio LAN står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir Ruckus Wireless yfir því að Radio LAN er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	Ruckus Wireless erklærer herved at utstyret Radio LAN er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.