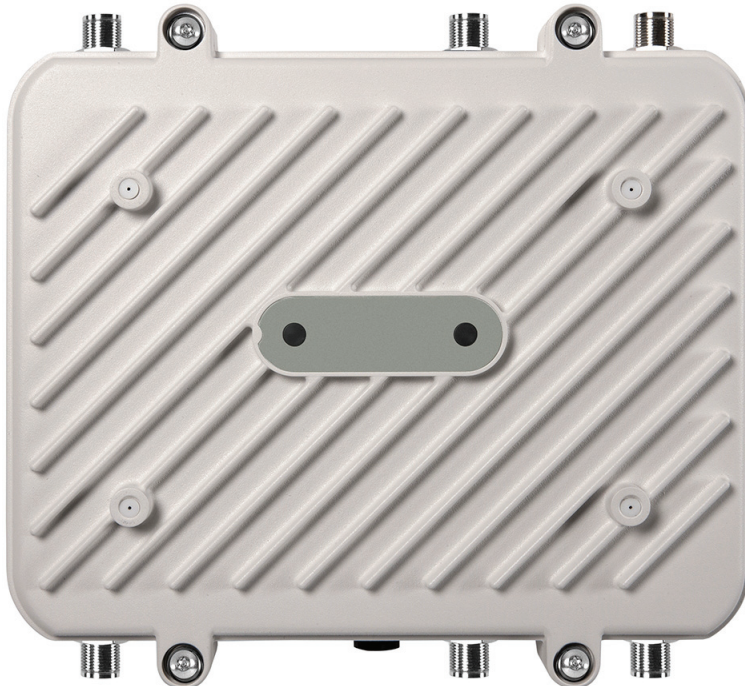


AP-7562 ACCESS POINT INSTALLATION GUIDE



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1 Introduction

Designed for extending network coverage to outside areas, the AP-7562 brings the latest 802.11ac 3x3:3 Multiple Input Multiple Output (MIMO) dual radio design together with rugged outdoor performance. The AP-7562 is a 3x3:3 802.11ac Access Point utilizing one 2.4 GHz 802.11n radio and one 5 GHz 802.11ac radio. The AP-7562 is optimized with WiNG intelligence, extending QoS, security, and mobility services to the Access Point to support better capacity and performance.

Deployments can be managed using WiNG architecture. WiNG architecture leverages the best aspects of independent and dependent architectures to create a smart network that meets the connectivity, quality, and security needs of each user and their applications based on the availability of network resources, including wired networks.

Once adopted by a WLAN or Integrated Services Controller running WiNG firmware, the AP-7562 is managed as an Adaptive AP, running the WiNG network management protocol. WiNG networks extend the current differentiation that Adaptive APs offered to the next level by now having the services and security available at every point in the network. The traffic flow is optimized to prevent wired congestion. Traffic flows dynamically, based on user and application, and finds alternate routes to work around any possible network choke points. Mixed-media application optimization is the hallmark of WiNG 5 networks.

1.1 Document Conventions

The following graphical alerts are used in this document to indicate notable situations:



NOTE Tips, hints, or special requirements that you should take note of.



CAUTION Care is required. Disregarding a caution can result in data loss or equipment malfunction.



WARNING! Indicates a condition or procedure that could result in personal injury or equipment damage.

1.2 AP-7562 Hardware

There are currently three AP-7562 Access Points:

Model Part Number	Description
AP-7562-67040-US	AP-7562 Access Point outdoor IP67 dual radio 3x3:3 802.11 a/b/g/n/ac radio SKU: US
AP-7562-67040-EU	AP-7562 Access Point outdoor IP67 dual radio 3x3:3 802.11 a/b/g/n/ac radio SKU: EU
AP-7562-67040-WR	AP-7562 Access Point outdoor IP67 dual radio 3x3:3 802.11 a/b/g/n/ac radio SKU: WR



NOTE All AP-7562 Access Points ship with one weatherized Ethernet adapter. AP-7562 Access Points do not ship with the Mounting Kit/Antenna and POE injector. These items must be ordered separately.

1.3 AP-7562 Antenna Accessories



NOTE Antennas must be ordered separately and are not included with the AP-7562.

The AP-7562 antenna suite includes the following optional antenna accessories. The antennas do not ship with the AP-7562 Access Points and must be ordered separately.

1.3.1 AP-7562 Dual Band 2.4 GHz / 5 GHz Antennas - US and Canada

Part Number	Antenna Type	2.4 GHz Peak Gain	5.2 GHz Peak Gain
ML-2452-HPAG4A6-01	Dipole	4.0	7.3
ML-2452-HPA6X6-036	Dipole	4.0	7.3
ML-2452-HPA6-01	Dipole	5.3	6.1
ML-2452-PNA5-01R	Panel	5.5	6.0
ML-2452-PNL3M3-1	Polarized Panel	9.7	9.2

1.3.2 AP-7562 Single Band 2.4 GHz Antennas - US and Canada

Part Number	Antenna Type	2.4 GHz Peak Gain
ML-2499-FHPA5-01R	Dipole	5.3
ML-2499-HPA4-01	Dipole	4.5
ML-2499-5PNL-72-N	Panel	6.5

1.3.3 AP-7562 Single Band 5 GHz Antenna - US and Canada

Part Number	Antenna Type	5.2 GHz Peak Gain
ML-5299-HPA5-01	Dipole	5.6

1.3.4 Outdoor Elevation Gain Configuration for US SKUs

Per FCC requirement, the use of the Access Point on UNII-1 band requires installers to input antenna elevation gain for dipole antennas during configuration. This information can be found in Zebra antenna guide document at www.zebra.com/support.

The applicable outdoor antennas on 5GHz band are shown below:

Index	Antenna Type	Part Number	Elevation Gain
1	Dipole	ML-5299-HPA5-01	-2.53
2	Dipole	ML-2452-HPAG4A6-01	5.7
3	Dipole	ML-2452-HPA6X6-036	3.9
4	Dipole	ML-2452-HPA6-01	4.09

1.3.5 AP-7562 Dual Band 2.4 GHz / 5 GHz Antennas - EU

Part Number	Antenna Type	2.4 GHz Peak Gain	5.2 GHz Peak Gain
ML-2452-HPAG5A8-01	Dipole	7.5	8.0
ML-2452-PNA7-01R	Panel	8.0	12.0
ML-2452-PNL3M3-1	Polarized Panel	9.7	9.2

1.3.6 AP-7562 Single Band 2.4 GHz Antennas - EU

Part Number	Antenna Type	2.4 GHz Peak Gain
ML-2499-FHPA9-01R	Dipole	10.5
ML-2499-HPA8-01	Dipole	8.0

1.3.7 AP-7562 Single Band 5 GHz Antenna - EU

Part Number	Antenna Type	5.2 GHz Peak Gain
ML-5299-HPA10-01	Dipole	10.5
ML-5299-HPA5-01	Dipole	5.6

1.4 Hardware and Mounting Accessories

The AP-7562 is a *Power over Ethernet* (PoE) device. When deployed, the use of an outdoor rated PoE power supply and mounting bracket may be required. The recommended PoE accessories are listed in the following table:

Part Number	Description
AP-PSBIAS-7161-US	Outdoor IP66 802.3AT gigabit Ethernet power injector, 100-240 VAC US
AP-PSBIAS-7161-WW	Outdoor IP66 802.3AT gigabit Ethernet power injector, 100-240 VAC International
KT-153143-01	Outdoor PoE mounting kit

1.5 AP-7562 Mounting Accessories

The AP-7562 has a flexible three piece mounting kit (KT-147407-01), together with an optional standoff extension arm (KT-150173-01) for pole mounting.

Part Number	Description
KT-147407-01	Hardware Mounting Kit
KT-150173-01	12 inch extension arm for mounting kit

1.6 AP-7562 Weatherized Ethernet Accessorys

One RJ45 weatherized connector plug is included with each AP-7562 Access Point. If additional plugs are required, they can be ordered using the part number listed in the following table:

Part Number	Description
KT-153676-01	RJ45 weatherized connector plug



CAUTION When connecting RJ45 cables, ensure that all cables are connected to the Access Point from the bottom, and include a drip loop to prevent moisture intrusion. Cover the Ethernet cable with self-healing weatherproofing tape.

Refer to the installation instructions included with the RJ45 weatherized connector plug for proper procedure to form a drip loop with the cable.

1.7 Package Contents

Carefully remove all protective packing material around the AP-7562 Access Point and save the container for storage. Refer to [AP-7562 Hardware on page 6](#) when verifying all AP-7562 hardware has been received. Record the serial numbers on the shipping cartons and AP-7562 for warranty claims and reference during software download procedures.



NOTE Record the serial numbers on the shipping cartons and AP-7562 Access Points for warranty claims and reference during software download procedures.

When opening the shipping cartons, inspect the equipment for damage. If you find any damaged equipment or any equipment is missing, contact Support immediately.

Each AP-7562 Access Point (see [AP-7562 Hardware on page 6](#)) includes the following parts:

- AP-7562 Access Point
- Weatherproof RJ45 plug kit
- *AP-7562 Access Point Installation Guide* (this document)

1.8 Hardware Installation Guidelines



CAUTION All device wiring must comply with the *National Electric Code* (NEC) or regulations and procedures defined by the regulatory bodies of the country or region where the devices are being deployed. All local building and structure codes must be observed.



WARNING! Strictly observe safety precautions and warnings when installing an AP-7562 Access Point.

1.8.1 Precautions

Before installing an AP-7562 Access Point, verify the following grounding and lightning protection guidelines:

- The installation professional should be familiar with all grounding requirements and regional codes and ensure the Access Point and mounting asset are properly grounded. The grounding cable for an AP-7562 **must** be at a minimum a #10 gauge wire cross section. The cable can be attached to the unit using one of the following methods:
 - Loosen the grounding screw, insert the grounding cable into the hole below it, and tighten the screw.
 - Loosen the grounding screw, wind the grounding cable around it, and tighten the screw.
 - Attach a ring lug to the grounding cable and secure it to the unit using the grounding screw.
- To properly attach the grounding cable to the Access Point, refer to [AP-7562 Grounding Post on page 16](#).
- For Ethernet and lightning protection, it is recommended that a commercially available off-the-shelf *Lightning Protection Unit* (LPU) be used on all shielded CAT5E Ethernet connections. The LPU should be rated for outdoor use.
 - For the best possible protection, each Access Point requires an LPU be installed adjacent to the Access Point. If there is a LAN connection to an indoor network, a second LPU is required at the cable entry point to the building.



CAUTION Lightning damage is not covered under the conditions of a standard product warranty. When installed correctly, *Lightning Protection Units* (LPUs) provide the best protection from the harmful effects of lightning. Observe all regional and national codes that apply for lightning protection.

- Verify the deployment environment has a continuous temperature range compatible with the operating temperature range of the device.

1.8.2 Warnings

- Read all installation instructions and site survey reports, and verify correct equipment installation before connecting the Access Point to its power source.
- Remove jewelry and watches before installing this equipment.
- Verify the unit is grounded before connecting it to the power source.
- Verify any device connected to this unit is properly wired and grounded.
- Connect all power cords to a properly wired and grounded electrical circuit. Verify the electrical circuits have appropriate overload protection.
- Attach only approved power cords to the device.
- Verify the power connector and socket are accessible at all times during the operation of the equipment.
- Do not hold any component containing a radio such that it is very close to or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not work with power circuits in dimly lit spaces.
- Do not install this equipment or work with its power circuits during thunderstorms or other weather conditions that could cause a power surge.
- Verify there is adequate ventilation around the device, and that ambient temperatures meet equipment operation specifications.
- Avoid contact with overhead power lines.
- Take precautions to avoid injury from falling tools and equipment. Crews should wear hard hats in and around the installation work site.
- Be aware of vehicular traffic in and around the installation work site.
- Do not operate a portable transmitter near unshielded blasting caps or in an environment where explosives are present unless the transmitter is especially certified for such use.
- Refer to your site survey and network analysis reports to determine specific requirements for each deployment.
- Assign installation responsibility to the appropriate personnel.
- Identify and document where all installed components are located.
- Identify and prepare Ethernet and console port connections.
- Verify cable lengths are within the maximum allowable distances for optimal signal transmission.



CAUTION The maximum length allowed for PoE cables is 100 meters.



CAUTION When connecting RJ45 cables, ensure that all cables are connected to the Access Point from the bottom, and include a drip loop to prevent moisture intrusion.

1.9 Access Point Placement

Observe the following recommended guidelines:

- Identify each piece of the mounting bracket and mounting extension arm hardware and ancillary hardware.
- Mount the device with the black gore vent down.



- Mounting height for network devices should not exceed 30 to 35 feet. Mounting height should vary to accommodate the topography of the deployment area, foliage, and other obstructions.
- Devices can be deployed using any of the recommended outdoor deployment procedures.
- *Line of Sight* (LoS) guidelines should be given special consideration when deploying devices.

1.10 AP-7562 Hardware Overview

The AP-7562 is a 3x3:3 802.11ac Access Point utilizing one 2.4 GHz 802.11n radio and one 5 GHz 802.11ac radio.

An AP-7562 must be installed by trained professionals familiar with RF planning and regulatory limits defined by the regulatory bodies of the country where the devices are being deployed. All common precautions for grounding and *Electrostatic Discharge* (ESD) protection should be observed during deployment and installation. AP-7562 Access Points must be installed such that no harmful interference results from device operation.

1.10.1 AP-7562 Ports and Connections

The AP-7562 Access Point has the following port designations:

- Antenna ports R1-A, B and C, R2-A, B and C
- Console port
- GE1/POE - LAN port
- GE2 - WAN port

1.10.2 AP-7562 Antenna Connectors

AP-7562 Access Points (AP-7562-67040-US, AP-7562-67040-EU and AP-7562-67040-WR) are configured with six N type connectors to support two active WLAN data radios.



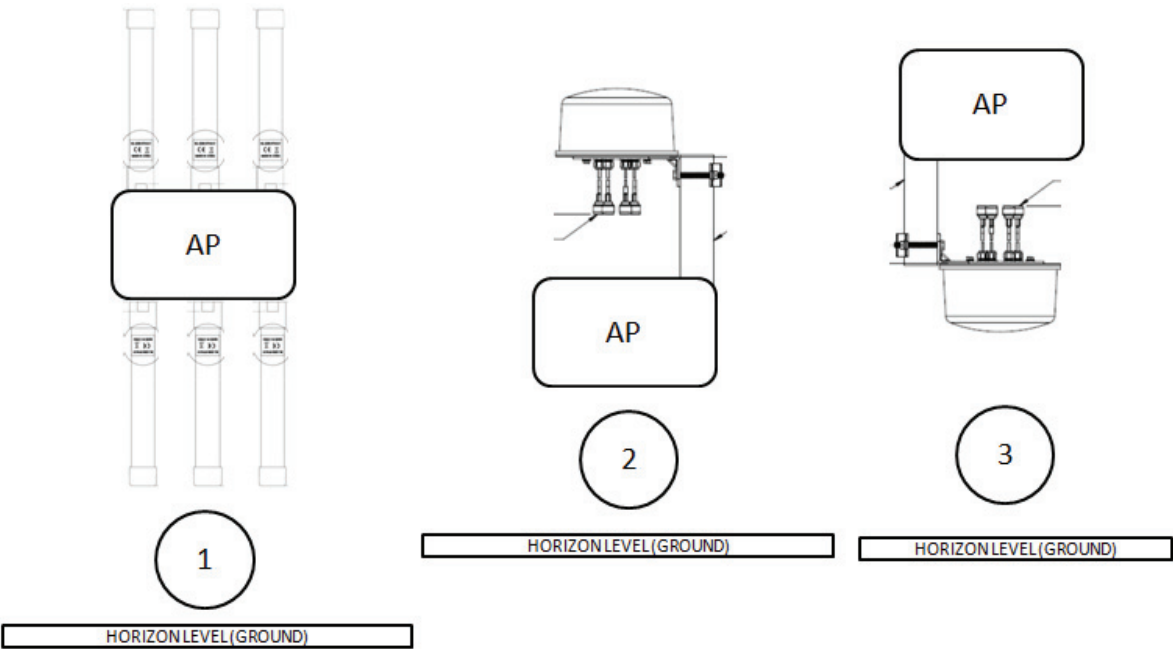
WARNING! Antenna ports where no antenna is mounted must be properly terminated using an approved IP67 terminator.



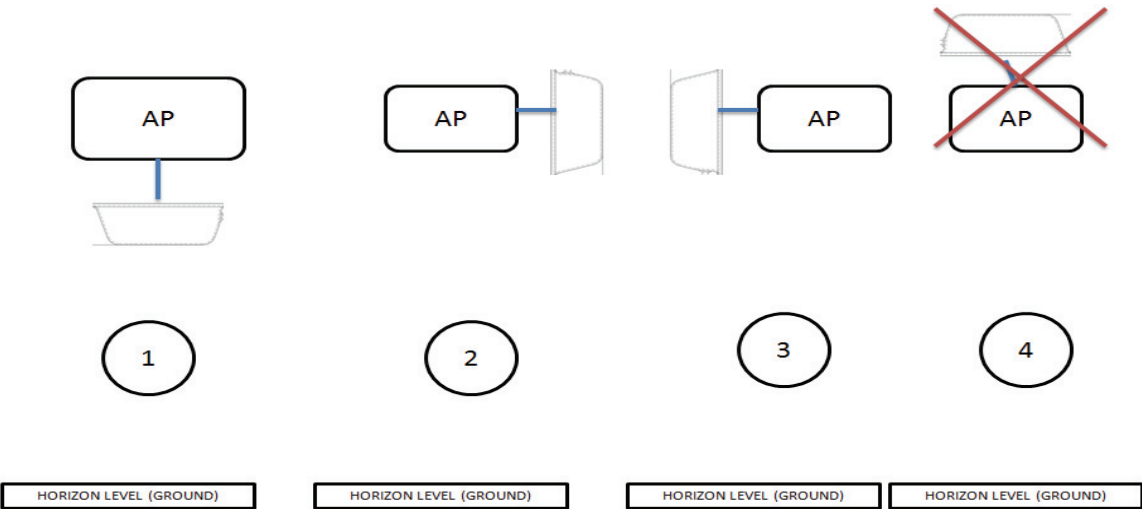
WARNING! All antenna connectors should be covered with weatherproofing tape.

1.10.3 Antenna Mounting Guidelines

The following are examples of acceptable mounting for dipole antenna deployments:



The following are examples of acceptable mounting methods for panel antenna deployments:



1.11 LED Indicators

AP-7562 Access Points have LED activity indicators on the front of the enclosure. The LEDs provide a status display indicating error conditions, transmission, and network activity for the 2.4 GHz radio (green) and the 5 GHz radio (amber).

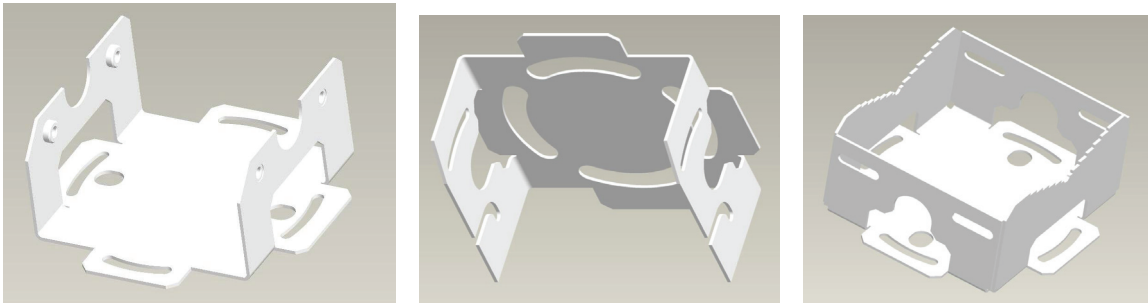
Task	2.4 GHz Activity LED (Green)	5 GHz Activity LED (Amber)
Unconfigured Radio	On	On
Normal Operation	• If this radio band is enabled: Blink at 5 second interval • If this radio band is disabled: Off • If there is activity on this band: Blink interval at 1 time per second	• If this radio band is enabled: Blink at 5 second interval • If this radio band is disabled: Off • If there is activity on this band: Blink interval at 1 time per second
Firmware Update	Off	On
Locate AP Mode	LEDs blink in an alternating green, red and amber pattern using an irregular blink rate. This LED state in no way resembles normal operating conditions	LEDs blink in an alternating green, red and amber pattern using an irregular blink rate. This LED state in no way resembles normal operating conditions.

2 AP-7562 Hardware Mounting and Installation

The AP-7562 mounting bracket kit (KT-147407-01) is recommended for most deployments.. When a standoff distance is required for a pole mounted or wall mounted installation, use the extension arm kit (KT-150173-01).

2.1 Mounting Bracket Kit

The AP-7562 mounting bracket kit (KT-147407-01) includes the Access Point bracket (left), angle adapter bracket (center), and pole mount bracket (right) sections:



The Access Point bracket and angle adapter bracket can be rotated (plus or minus 15 degrees) and tilted (up to 45 degrees) to orient the unit for optimal positioning.

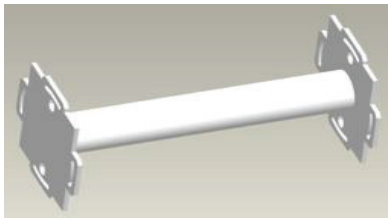
The following ancillary hardware to assemble the mounting bracket is included in the kit:

Description	Quantity
M6 serrated hex flanged screws	7
1/2 inch hex head nut	2
1/2 inch x 3/4 inch hex head bolt	2

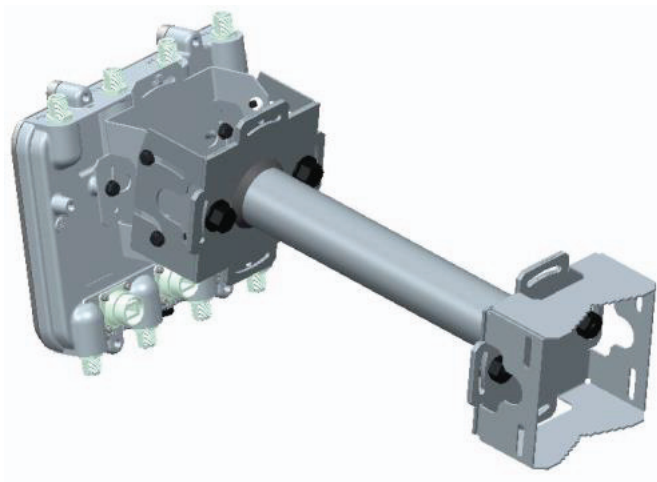
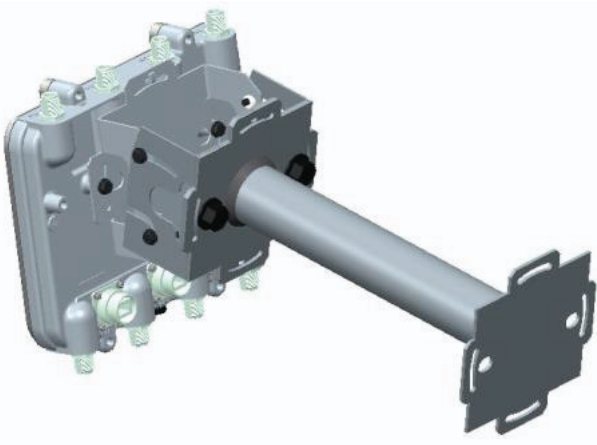
A torque wrench or ratchet with a 10mm adapter, or an adjustable wrench, can be used to assemble the mounting brackets.

2.1.1 Extension Arm Kit

When mounting an AP-7562 on poles more than 3 inches in diameter, use the extension arm kit (KT-150173-01) to provide a minimum standoff distance of twelve inches to avoid interference with the antennas.



The extension arm kit can also be used in combination with the any of the brackets from the mounting bracket kit.



The following ancillary hardware to attach the extension arm to the mounting bracket kit is included in the extension arm kit:

Description	Quantity
1/2 inch hex head nut	2
1/2 inch x 3/4 inch hex head bolt	2

2.2 Pole Mounted Installations

The mounting hardware kit and extension arm can be used in various combinations to properly install the AP-7562 on a pole. For poles of up to 3 inches in diameter, attach the pole mount bracket of the mounting hardware kit at the desired position on the pole using band clamps up to 3/4 inch width, or a 1/2 inch x 4 inch wide U-bolt and nuts. For poles greater than 3 inches in diameter, attach the pole mount bracket using band clamps.



CAUTION Always mount the AP-7562 with the black gore vent facing down.



NOTE The U-bolt and band clamps are not included in the mounting bracket kit.



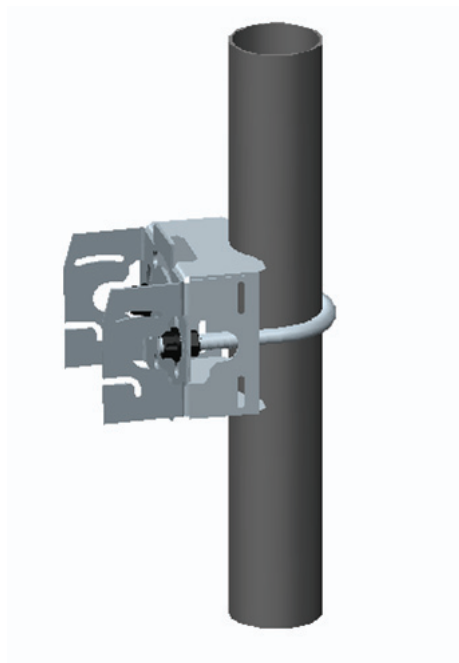
NOTE Use of the extension arm is recommended for installations on poles greater than 3 inches in diameter.

2.2.1 Vertical Pole Mount

Use the following procedure for vertical pole mount installations. The extension arm is recommended when mounting the Access Point to poles greater than 3 inches in diameter.

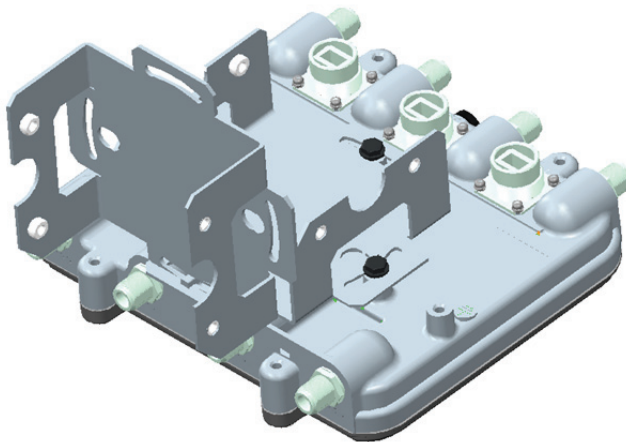
For poles up to 3 inches in diameter when using a U-bolt:

1. Thread two 1/2 inch nuts onto the U-bolt.
2. Position the U-bolt on the pole and place the pole mount bracket on the U bolt. Adjust the two 1/2 inch inner nuts until the pole mount bracket is against the pole and the U-bolt can be secured tightly to the pole at the desired mounting location.

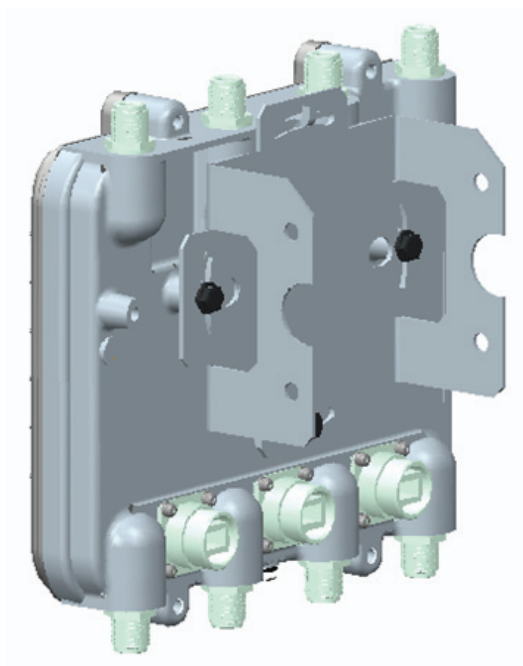


3. Place the angle adapter bracket on the U-bolt with the open slot connections on the bottom and align it with the pole mount. Attach with two 1/2 inch nuts. Tighten all nuts to 300 inch pounds (lbf-in).

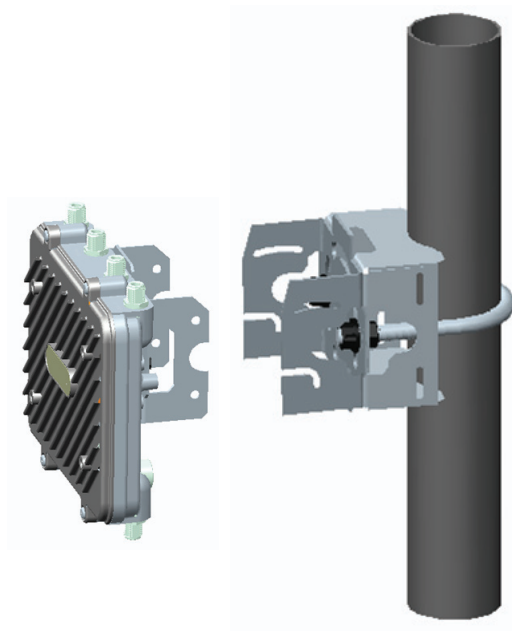
4. Position the Access Point bracket so the bottom of the section with the straight (not bevel cut) side is oriented toward the bottom side of the AP with the gore vent. Using a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, attach (but don't tighten) the Access Point bracket to the AP-7562 with the four M6 flange screw.



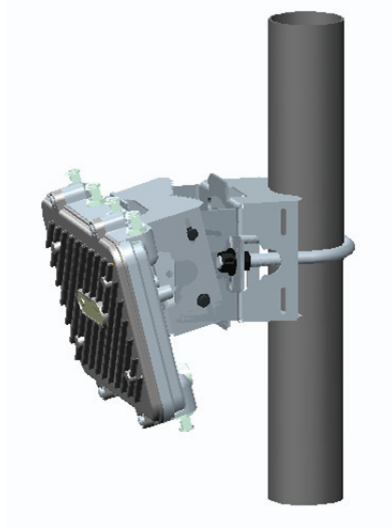
5. Insert two M6 hex flange screws into the bottom holes on the sides of the Access Point bracket.



6. With the Access Point positioned so the gore vent is facing down, insert the two M6 hex flange screws in the bottom holes on the sides of the Access Point bracket into the open slot connections on the bottom of the angle adapter bracket.



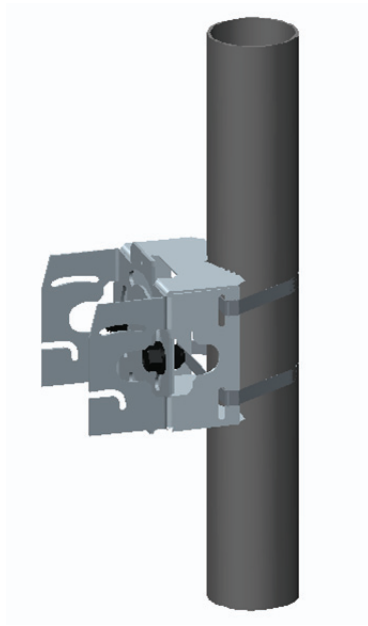
7. Rotate the Access Point bracket upward and align the top holes on the sides with the top holes on the angle adapter bracket. Insert two M6 hex flange screws into the top holes on the angle adapter bracket.



8. Use a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, to finish attaching the Access Point bracket to the angle adapter bracket with the M6 hex flange screws in the open slot connections and the top holes on the angle adapter bracket. Do not tighten the screws until all rotation and tilt adjustments are complete.
9. To adjust the position of the Access Point, rotate the Access Point bracket (plus or minus 15 degrees) and tilt the angle adapter bracket (up to 45 degrees).
10. Tighten all hex flange screws to 60 inch pounds (lbf-in).

For mounting with band clamps:

1. Attach the pole mount bracket at the desired mounting location using band clamps.

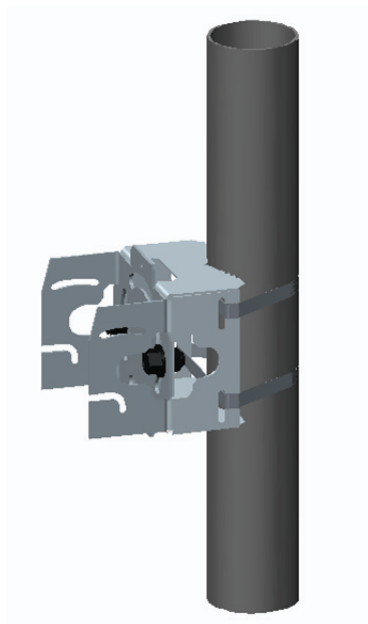


2. With the angle adapter bracket positioned so the open connector slots are on the bottom, attach the angle adapter bracket to the pole mount bracket using two 1/2 inch bolts and nuts. Tighten the nuts to 300 inch pounds (lbf-in).
3. Position the Access Point bracket so the bottom of the with the straight (not bevel cut) sides is oriented toward the bottom side of the AP with the gore vent. Using a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, attach (but don't tighten) the Access Point bracket to the AP-7562 with the four M6 hex flange screws.
4. Insert two M6 hex flange screws into the bottom holes on the sides of the Access Point bracket.
5. With the Access Point positioned so the gore vent is facing down, insert the two M6 hex flange screws in the bottom holes on the sides of the Access Point bracket into the open slot connections on the bottom of the angle adapter bracket.

6. Rotate the Access Point bracket upward and align the top holes on the sides with the top holes on the angle adapter bracket. Insert two M6 hex flange screws into the top holes on the angle adapter bracket. Use a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, to finish attaching the Access Point bracket to the angle adapter bracket with the M6 hex flange screws in the open slot connections and the top holes on the angle adapter bracket. Do not tighten the screws until all rotation and tilt adjustments are complete.
7. To adjust the position of the Access Point, rotate the Access Point bracket (plus or minus 15 degrees) and tilt the angle adapter bracket (up to 45 degrees).
8. Tighten all hex flange screws to 60 inch pounds (lbf-in).

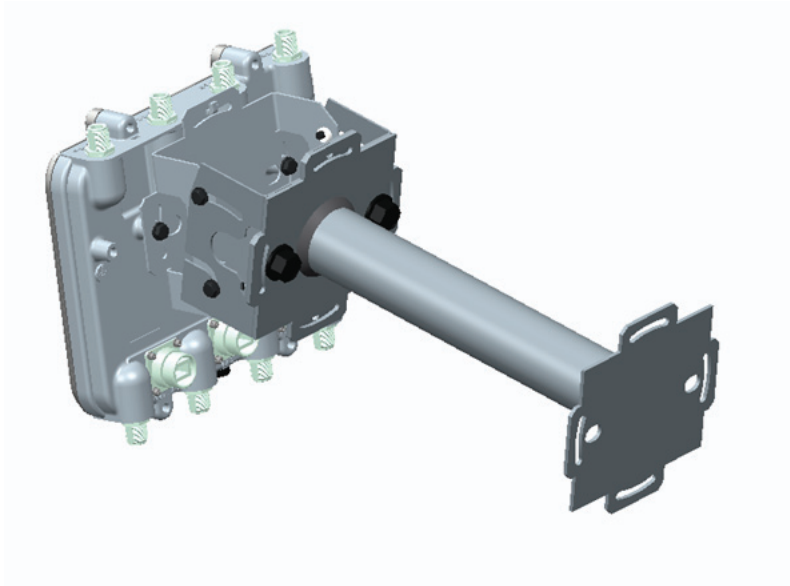
To use the extension arm with the mounting hardware kit:

1. Attach the pole mount at the desired mounting location using a U-bolt or band clamps.

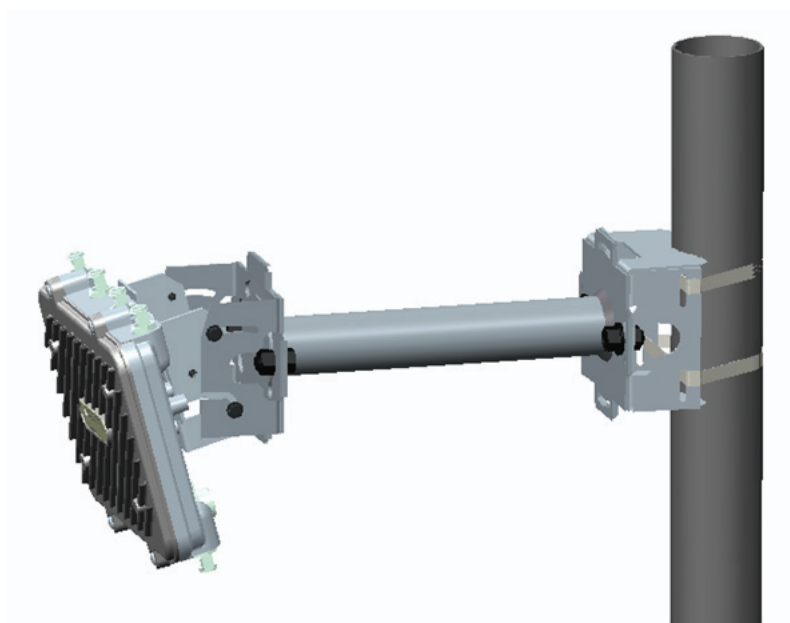


2. Complete the steps for assembling and positioning the mounting bracket sections for poles less than or greater than 3 inches. See [Vertical Pole Mount on page 21](#).

3. Using a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, attach the extension arm to the Access Point bracket with four M6 hex flange screws. The two oval holes must be positioned on the short sides of the Access Point. Tighten the hex flange screws to 60 inch pounds (lbf-in) the unit.



4. With the Access Point positioned so the gore vent is facing down, attach the extension arm to the Access Point bracket with two 1/2 inch bolts and nuts. Tighten the nuts to 300 inch pounds (lbf-in).



2.2.2 Wall Mounted Installations

For wall mounted installations, use only the Access Point bracket and angle adjust bracket if required.



CAUTION Always mount the AP-7562 with the black gore vent facing down.

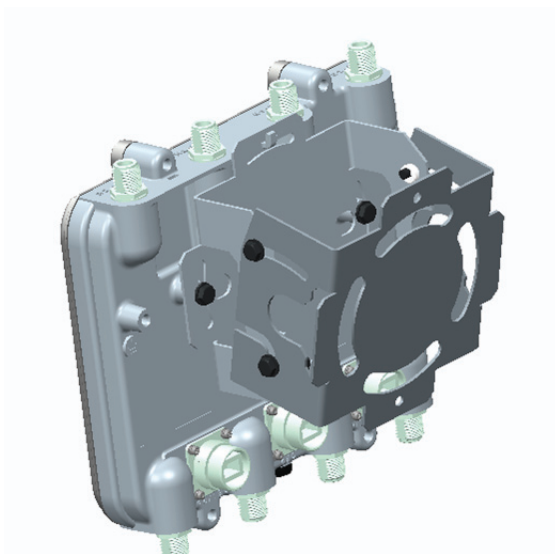


NOTE The U-bolt and band clamps are not included in the mounting bracket kit.



NOTE The lag bolts are not included in the mounting bracket kit.

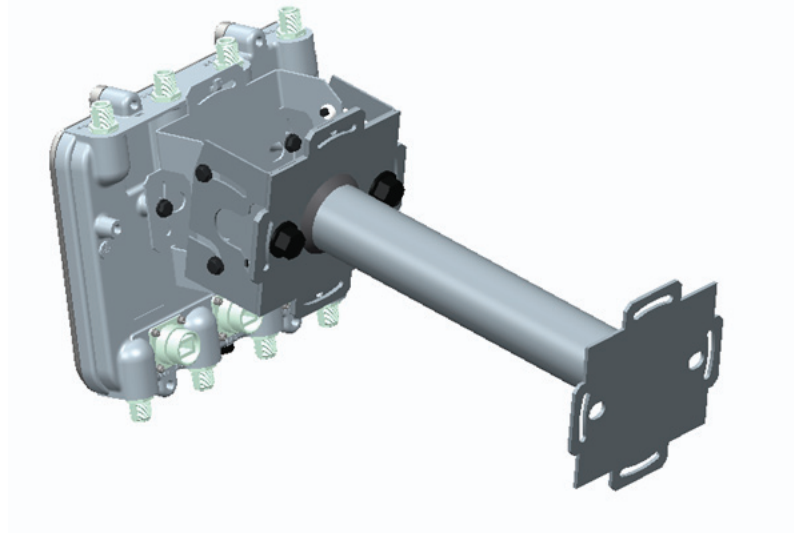
1. With the open slot connections facing down, attach the angle adjust bracket at the desired mounting location using four #10/32 lag bolts.
2. Using a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, attach (but don't tighten) the Access Point bracket to the AP-7562 with four M6 hex flange screws and insert two M6 hex flange screws into the bottom holes on the sides of the Access Point bracket.



3. With the Access Point positioned so the gore vent is facing down, insert the two M6 hex flange screws in the bottom holes on the sides of the Access Point bracket into the open slot connections on the bottom of the angle adapter bracket. Rotate the Access Point bracket upward and align the top holes on the sides with the top holes on the angle adapter bracket. Insert two M6 hex flange screws into the top holes on the angle adapter bracket.
4. Use a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, to finish attaching the angle adapter bracket to the Access Point bracket with the four M6 hex flange screws in the open slot connections and the top holes on the angle adapter bracket. Do not tighten the screws until all rotation and tilt adjustments are complete.
5. To adjust the position of the Access Point, rotate the Access Point bracket (plus or minus 15 degrees) and tilt the angle adapter bracket (up to 45 degrees).
6. Use a torque wrench or a ratchet and a 10mm socket, or an adjustable wrench, to tighten all screws when all adjustments are complete.
7. Tighten all hex flange screws to 60 inch pounds (lbf-in).

To use the extension arm with the mounting hardware kit:

1. With the open slot connections facing down, attach the angle adjust bracket at the desired mounting location using four #10/32 lag bolts.
2. Complete the steps for assembling and positioning the angle adapter bracket and Access Point bracket sections outlined above. See [Vertical Pole Mount on page 21](#).
3. With the Access Point positioned so the gore vent is facing down, attach the extension arm to the Access Point bracket with two ½ inch bolts and nuts. Tighten bolts to 300 inch pounds (lbf-in).



2.3 AP-7562 Power Options Using Power over Ethernet

Power over Ethernet (PoE) is the power source for an AP-7562 Access Point. For optimal performance, an AP-7562 can be powered by the following injectors and RFS controllers that support 802.AT PoE.

For installations requiring an outdoor PoE injector, the following options are recommended:

- AP-PSBIAS-7161-US
- AP-PSBIAS-7161-WW

The AP-PSBIAS-7161 is a 1-Port 802.3at PoE Gigabit Ethernet injector. The injector is IP66 rated for outdoor deployments when used with the weatherproof kit supplied.

There are two power cord options. The AP-PSBIAS-7161-US comes equipped with a cable with a standard three prong power plug. This plug can be removed by the installer if required when connecting to an AC source. The AP-PSBIAS-7161-WW comes equipped with a cable with open leads. Mounting kits are not supplied (see [Hardware and Mounting Accessories on page 9](#) for mounting kit part numbers).



NOTE Product installation and mounting instructions are provided with the outdoor power injector.

If located within 100 meters of the controller and a PoE port is available, the AP-7562 Access Point can also be connected directly to a WLAN or Integrated Services Controller running WiNG 5.6 or higher.

A standard CAT5E cable can be used to provide the connection to the AP-7562. The GE1/POE port on the AP-7562 is where the standard CAT5E cable will connect to the Access Point and use of the weatherproof RJ45 plug kit that comes with the unit will maintain a weatherproof seal for outdoor installation at the ethernet port.

If a CAT5E cable is used to connect the Access Point to an RFS controller through a building egress, a suitable lightning protection system should be considered. A professional installer should be consulted to identify an appropriate system.

3 Basic Access Point Configuration

Once the Access Point is installed and powered on, complete the following steps to get the device up and running and access management functions:

1. Attach an Ethernet cable from the Access Point to a controller with an 802.3af compatible power source to supply power to the AP-7562 (once fully cabled).

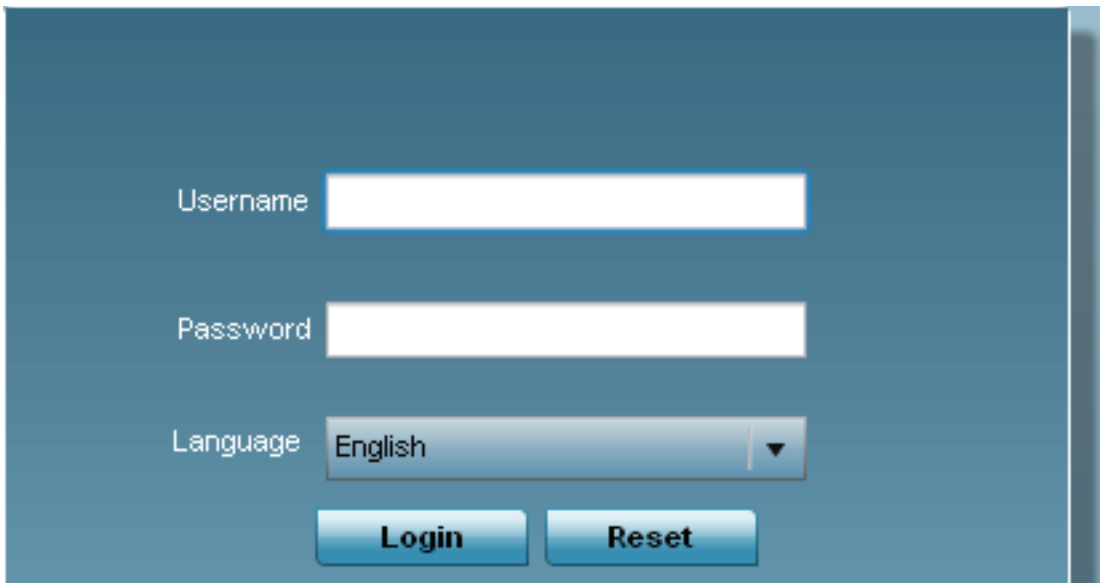
If your host system is a DHCP server, an IP address is automatically assigned to the AP-7162 and can be used for device connection. However, if a DHCP server is not available, you'll need to derive the IP address from the AP MAC address. Using this method, the last two bytes of the MAC address become the last two octets of the IP address. For example:

MAC address - 00:C0:23:00:F0:0A

Zero-Config IP address - 169.254.240.10

To derive the Access Point's IP address using its MAC address:

- a. Open the Windows calculator by selecting *Start > All Programs > Accessories > Calculator*. This menu path may vary slightly depending on your version of Windows.
 - b. With the Calculator displayed, select *View > Scientific*. Select the **Hex** radio button.
 - c. Enter a hex byte of the Access Point's MAC address. For example, F0.
2. Select the **Dec** radio button. The calculator converts F0 into 240. Repeat this process for the last Access Point MAC address octet. Point the Web browser to the Access Point's IP address. The following login screen displays:



The image shows a login screen for an Access Point. It has a blue background. There are three input fields: 'Username' with a white text box, 'Password' with a white text box, and 'Language' with a dropdown menu showing 'English'. Below these fields are two buttons: 'Login' and 'Reset', both with blue backgrounds and white text.

3. Enter the default username **admin** in the **Username** field.
4. Enter the default password **admin123** in the **Password** field.
5. Click the **Login** button to load the management interface.



NOTE When logging in for the first time, you're prompted to change the password to enhance device security in subsequent logins.



NOTE If you get disconnected when running the wizard, you can connect again with the Access Point's actual IP address (once obtained) and resume the wizard.

6. If this is the first time the management interface has been accessed, the Initial Setup Wizard automatically displays.



Function Highlight

- Access Point Types: Virtual Controller AP, Standalone AP, or Dependent AP
- Networking Mode: Bridge or Router Operation
- LAN Configuration
- Radio Configuration
- WAN Configuration
- Wireless LAN Setup
- Location, Country Code, Time Zone, Date and Time
- Summary and Save/Commit

Choose One Type to Setup the Access Point

- ☒ Typical Setup (Recommended)
 - The wizard uses as many default parameters as possible to simply the configuration process.
- ☐ Advanced Setup
 - With this selection, you may configure the access point's LAN, WAN, Radio Mapping, Radius Server, WLAN, etc.

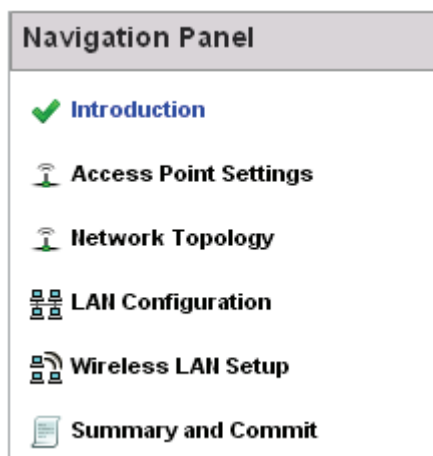
The Introduction screen displays the various actions that can be performed using the wizard under the **Function Highlight** field.

Use the **Choose One type to Setup the Access Point** field options to select the type of wizard to run. The **Typical Setup** is the recommended wizard. This wizard uses the default parameters for most of the configuration parameters and sets up a working network with the least amount of manual configuration.

The **Advanced Setup** wizard is for administrators who prefer more control over the different configuration parameters. A few more configuration screens are available for customization when the Advanced Setup wizard is used.

The first page of the *Initial Setup Wizard* displays the **Navigation Panel** and **Function Highlights** for the configuration activities comprising the Access Point's initial setup. This page also displays options to select the typical or advanced mode for the wizard.

The Navigation Panel for the Typical Setup Wizard displays the basic configuration options.



A green checkmark to the left of an item in the **Navigation Panel** defines the task as having its minimum required configuration set correctly. A red X defines a task as still requiring at least one parameter be defined correctly.

7. Select **Save/Commit** within each page to save the updates made to that page's configuration. Select **Next** to proceed to the next page listed in the Navigation Panel without saving your updates.



NOTE While you can navigate to any page in the navigation panel, you cannot complete the Initial AP Setup Wizard until each task in the Navigation Panel has a green checkmark.

For the purposes of this guide, use the **Typical Setup (Recommended)** option to simplify the process of getting the Access Point up and running quickly with a minimum number of changes to the Access Point's default configuration.

For information on using the Access Point's Advanced Setup option, refer to the *WiNG Access Point System Reference Guide* to familiarize yourself with the feature set supported by the WiNG operating system. The guide is available at www.zebra.com/support.

To configure the Access Point using the Typical Setup Wizard:

8. Select **Typical Setup** from the **Choose One type to Setup the Access Point** field on the Initial Setup Wizard.
9. The Typical Setup Wizard displays the **Access Point Settings** screen to define the Access Point's Standalone versus Virtual Controller AP functionality. This screen also enables selection of the country of operation for the Access Point.



Access Point Type Selection

- ☐ Virtual Controller AP - When more than one access point is deployed, a single access point can function as a Virtual Controller AP and manage Dependent mode access points. The Virtual Controller AP can adopt and configure other like APs in a 24-cell deployment.
- ☒ Standalone AP - Select this option to deploy this access point as an autonomous "fat" access point. A standalone AP isn't managed by a Virtual Controller AP, or adopted by a controller.

Country

10. Select an **Access Point Type** from the following options:

- *Virtual Controller AP* - When more than one Access Point is deployed, a single Access Point can function as a Virtual Controller AP. Up to 24 Access Points can be connected to, and managed by, a single Virtual Controller AP of the same Access Point type. These connected Access Points must be the same type as the Virtual Controller AP.
- *Standalone AP* - Select this option to deploy this Access Point as an autonomous fat Access Point. A Standalone AP isn't managed by a Virtual Controller AP, or adopted by a controller.



NOTE If wanting to adopt the Access Point to a controller or service platform, use the controller or service platform's resident UI to connect to the Access Point, provision its configuration and administrate the Access Point's configuration.



NOTE If designating the Access Point as a Standalone AP, it is recommended the Access Point's UI be used exclusively to define its device configuration, and not the CLI. The CLI provides the ability to define more than one profile and the UI does not. Consequently, the two interfaces cannot be used collectively to manage profiles without an administrator encountering problems.

11. Select the **Country Code** of the country where the Access Point is deployed. Selecting a proper country is a critical task while configuring the Access Point, as it defines the correct channels of operation and ensures compliance to the regulations of the selected country. This field is only available for the Typical Setup Wizard.



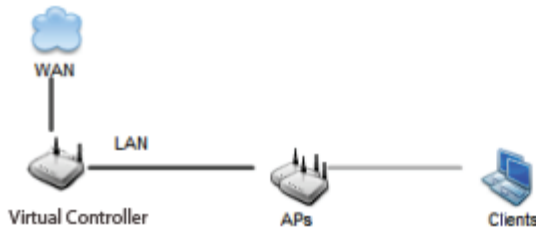
NOTE Access Point AP-7562-67040-US lists US as the only option in the list of country codes.

12. Select **Next** to set the Access Point's network mode.

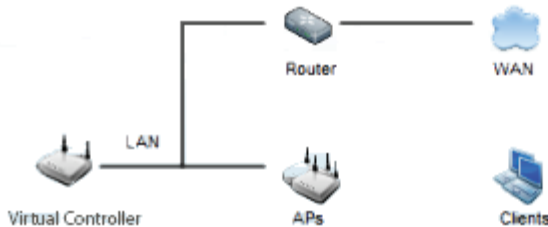
13. The Typical Setup Wizard displays the **Network Topology** screen to define how the Access Point handles network traffic.

Network Topology

- ☒ Router Mode - the access point routes traffic between the wireless network and the Internet or corporate network (WAN).



- ☐ Bridge Mode - In Bridge Mode, the access point depends on an external router for routing LAN and WAN traffic. Routing is generally used on one device, whereas bridging is typically used in a larger density network. Thus, select Bridge Mode when deploying this access point with numerous peer APs supporting clients on both the 2.4 and 5GHz radio bands.



14. Select an Access Point Mode from the available options.

- *Router Mode* - In Router Mode, the Access Point routes traffic between the local network (LAN) and the Internet or external network (WAN). Router mode is recommended in a deployment supported by just a single Access Point.
- *Bridge Mode* - In Bridge Mode, the Access Point depends on an external router for routing LAN and WAN traffic. Routing is generally used on one device, whereas bridging is typically used in a larger density network. Select Bridge Mode when deploying this Access Point with numerous peer Access Points supporting clients on both the 2.4GHz and 5GHz radio bands.



NOTE When Bridge Mode is selected, WAN configuration cannot be performed and the Typical Setup Wizard does not display the WAN configuration screen.

15. Select **Next**. The Typical Setup Wizard displays the **LAN Configuration** screen to set the Access Point's LAN interface configuration.



LAN Configuration

Please configure interface settings for LAN (VLAN 1) which will be used by wireless clients



Use DHCP [What is this?](#)



Static IP Address/Subnet [What is this?](#)

192. 168. 13 . 23 / 24 *

DHCP Server



Use on-board DHCP server to assign IP addresses to wireless clients

Range 192. 168. 0 . 100 -- 192. 168. 0 . 200

Default Gateway 192. 168. 0 . 1

Domain Name Server (DNS)



DNS Forwarding

Primary DNS . . .

Secondary DNS . . .

16. Set the following DHCP and Static IP Address/Subnet information for the LAN interface:
- *Use DHCP* - Select the checkbox to enable an automatic network address configuration using the Access Point's DHCP server.
 - *Static IP Address/Subnet* - Enter an IP Address and a subnet for the Access Point's LAN interface. If *Use DHCP* is selected, this field is not available. When selecting this option, define the following *DHCP Server* and *Domain Name Server (DNS)* resources, as those fields will become enabled on the bottom portion of the screen.
 - *Use on-board DHCP server to assign IP addresses to wireless clients* - Select the checkbox to enable the Access Point's DHCP server to provide IP and DNS information to clients on the LAN interface.
 - *Range* - Enter a starting and ending IP Address range for client assignments on the LAN interface. Avoid assigning IP addresses from x.x.x.1 - x.x.x.10 and x.x.x.255, as they are often reserved for standard network services. This is a required parameter.
 - *Default Gateway* - Define a default gateway address for use with the default gateway. This is a required parameter.

- *DNS Forwarding* - Select this option to allow a DNS server to translate domain names into IP addresses. If this option is not selected, a primary and secondary DNS resource must be specified. DNS forwarding is useful when a request for a domain name is made but the DNS server, responsible for converting the name into its corresponding IP address, cannot locate the matching IP address.
 - *Primary DNS* - Enter an IP Address for the main Domain Name Server providing DNS services for the Access Point's LAN interface.
 - *Secondary DNS* - Enter an IP Address for the backup Domain Name Server providing DNS services for the Access Point's LAN interface.
17. Select **Next**. The Typical Setup Wizard displays the **Wireless LAN Setup** screen to set the Access Point's Wireless LAN interface configuration.

WLAN 1 Configuration

SSID: [What is this?](#) *

WLAN Type: ☒ No Authentication and No Encryption [What is this?](#)

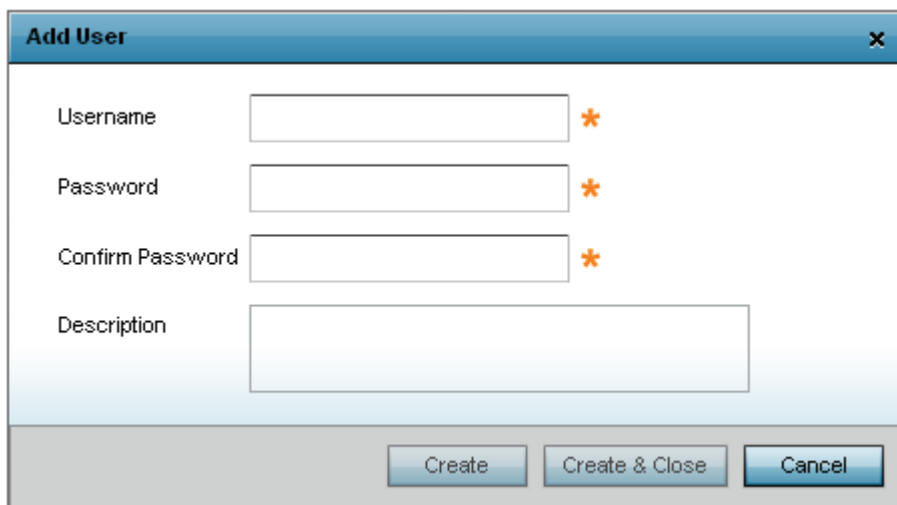
☐ Captive Portal Authentication and No Encryption [What is this?](#)

☐ PSK authentication, WPA2 encryption [What is this?](#)

18. Set the following WLAN1 Configuration parameters:
- *SSID* - Configure the SSID for the WLAN.
 - *WLAN Type* - Configure the encryption and authentication to use with this WLAN.
 - *No Authentication and No Encryption* - Configures a network without any authentication. This option also configures the network without encryption. This means that any data transmitted through the network is in plain text. Any device between end points can see the information transmitted. This is the least secure of all network configurations.
 - *Captive Portal Authentication and No Encryption* - Configures a network that uses a RADIUS server to authenticate users before allowing them on to the network. Once on the network, no encryption is used for the data being transmitted through the network. Select this option to use a Web page (either internally or externally hosted) to authenticate users before access is granted to the network.
 - *PSK authentication, WPA2 encryption* - Configures a network that uses PSK authentication and WPA2 encryption. Select this option to implement a pre-shared key that must be correctly shared between the Access Point and requesting clients using this WLAN.

- Some WLANs require authentication using the on-board RADIUS server. User accounts must be added for all users that should be authorized by the server.

21. Select **Add User** to display the dialog to enter user information to add to the RADIUS server user database.



22. Enter the following user information:
- *Username* - Provide a user name used to authenticate the user.
 - *Password* - Provide a password used to authenticate the user.
 - *Confirm Password* - Confirm the password by entering the same password as entered in the Password field.
 - *Description* - Provide a description to identify the user created in the RADIUS server database.
23. To create the entry in the RADIUS server database and add another user, select **Create**. To create the entry in the RADIUS server database and close the Add User dialog, select **Create & Close**.
24. Select **Modify User** on the RADIUS Server Configuration screen to modify information for an existing user from the RADIUS database. Highlight the user entry then select **Modify User**.



NOTE The *Username* cannot be modified with this dialog.

25. Select **Delete User** on the RADIUS Server Configuration screen to remove information for an existing user from the RADIUS database. Highlight the user entry and select **Delete User**.
26. Select **Confirm** on the dialog displayed. The entry for the user is removed from the RADIUS database.
27. To dismiss the dialog without adding, modifying or removing entries in the RADIUS server database, select **Cancel**.

28. Select **Next**. The Typical Setup Wizard displays the **Summary and Commit** screen to summarize the screens (pages) and settings updated using the Typical Setup Wizard.



Access Point Type Page

Access Point Type Standalone AP



Networking Mode Page

Networking Mode Router Mode



LAN Configuration Page

LAN Configuration Type Static IP Address/Subnet

VLAN ID for the LAN Interface 1

Static IP Address/Subnet 192.168.13.23/24



WAN Configuration Page

WAN Configuration Type Use DHCP

Port to External GE1 Port



WLAN Configuration

No user intervention or additional settings are required. Its an additional means of validating the Access Point's updated configuration before it's deployed. However, if a screen displays settings not intended as part of the initial configuration, then any screen can be selected again from within the Navigation Panel and its settings modified accordingly.

29. If the configuration displays as intended, select **Save/Commit** to implement these settings to the Access Point's configuration. If additional changes are warranted based on the summary, either select the target page from the **Navigational Panel**, or use the **Back** and **Next** buttons to scroll to the target screen.

4 Specifications

4.1 Physical Characteristics

Dimensions	9.0 in. L x 10.0 in. W x 2.6 in. H 22.8 cm L x 25.4 cm W x 6.6 cm H
Weight (Unit)	5.6lbs / 2.54 Kg
Housing	Outdoor IP67 rated, die-cast aluminum, corrosion resistant enclosure, salt, fog, rust per ASTM B117
LED activity indication	2 top mounted LEDs
Uplink	2 ports (GE1/GE2) auto-sensing 10/100/1000BaseT Ethernet; 802.3at on GE1 LAN port
Antenna Connectors	6 N-Type console ports
Console Port	Outdoor rated RJ45 console port
Multi Band Security Sensor	Outdoor 24x7 <i>Wireless Intrusion Prevention System</i> (WIPS)

4.2 Environmental Characteristics

Operating Temperature	-22° F to 140° F/-30° C to 60° C
Storage Temperature	-40° F to 140° F/-40° C to 60° C
Operating Humidity	5 to 95% RH non-condensing
IP Sealing	IP 67
Operating Altitude	8,000 ft. at 12 °C
Storage Altitude	30,000 ft. at 28 °C
Wind Rating	150 mph
Electrostatic Discharge	15kV air, 8kV contact
Operational Shock	IEC60721-3-4, Class 4M3, MIL STD 810F
Operational Vibration	IEC60721-3-4, Class 4M3

4.3 Power Characteristics

Operating Voltage	36-57 VDC
Operating Current	375mA at 48V in 802.3at mode
Integrated PoE	802.3af, 802.3at

5 Regulatory Information

This device is approved under Zebra Technologies Corporation.

All Zebra devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required.

Local language translations are available at the following website:

www.zebra.com/support

Any changes or modifications to Zebra equipment, not expressly approved by Zebra Technologies, could void the user's authority to operate the equipment.

Zebra devices are professionally installed, the Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation.

Antennas: Use only the supplied or an approved replacement antennas. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

5.1 Wireless Country Approvals

Regulatory markings are applied to the device signifying the radio(s) are approved for use in the following countries: United States, Canada, Australia, and Europe.

Please refer to the *Declaration of Conformity (DoC)* for details of other country markings. This is available at: www.zebra.com/doc.

Note: Europe includes, Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Operation of the device without regulatory approval is illegal.

Country Selection

Select only the country in which you are using the device. Any other selection will make the operation of this device illegal.

5.2 Frequency of Operation - FCC and IC

2.4 GHz Only

The available channels for 802.11bg operation in the US are Channels 1 to 11. The range of channels is limited by firmware.



NOTE The EIRP for all outdoor antennas used in the 5.15 - 5.25 GHz band should not exceed a maximum 125 mW EIRP (21dBm) at any elevation angle above 30 degrees (21dBm).

5.3 Industry Canada Statement

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.

Avertissement: Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bands 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL

5.4 Health and Safety Recommendations

5.4.1 Warnings for the Use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices.

5.4.2 Potentially Hazardous Atmospheres

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify the adjacent equipment is not adversely affected.

Pacemakers

Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Persons with Pacemakers:

- 1.Should ALWAYS keep the device more than 15cm (6 inches) from their pacemaker when turned ON.
- 2.Should not carry the device in a breast pocket.
- 3.Should use the ear furthest from the pacemaker to minimise the potential for interference.
- 4.If you have any reason to suspect that interference is taking place, turn OFF your device.

Other Medical Devices

Please consult your physician or the manufacturer of the medical device, to determine if the operation of your wireless product may interfere with the medical device.

5.5 RF Exposure Guidelines

Reduce RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

International

The device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices. For information on "International" human exposure to electromagnetic fields refer to the *Declaration of Conformity* (DoC) at www.zebra.com/doc.

For further information on the safety of RF energy from wireless devices - see www.zebra.com/support.

Located under Wireless Communications and Health

Europe**Remote and Standalone Antenna Configurations**

To comply with EU RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop of similar configurations must operate with a minimum separation distance of 35 cm from all persons.

US and Canada

Co-located statement

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

To satisfy US and Canadian RF exposure requirements, a transmitting device must operate with a minimum separation distance of 35 cm or more from a person's body.

Pour satisfaire aux exigences Américaines et Canadiennes d'exposition aux radiofréquences, un dispositif de transmission doit fonctionner avec une distance de séparation minimale de 35 cm ou plus de corps d'une personne.

5.6 Power Supply

This device must be powered from a 802.3af or 802.3at compliant power source which has been certified by the appropriate agencies, or by a LISTED Type no. PWRS-14000-247R or AP-PSBIAS-2P3-ATR, direct plug-in power supply, marked Class 2 or LPS (IEC60950-1,SELV). Use of alternative Power Supply will invalidate any approvals given to this unit and may be dangerous

5.7 Radio Frequency Interference Requirements - FCC



This equipment has been tested and found to comply with the limits 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 in accordance with 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 can be determined 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 and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

5.7.1 Radio Transmitters (Part 15)

This device 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.

5.8 Radio Frequency Interference Requirements - Canada

For RLAN Devices:

The use of 5 GHz RLAN's, for use in Canada, have the following restrictions:

- Restricted Band 5.60 - 5.65 GHz

This device complies with RSS 210 of Industry Canada. 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Label Marking: The Term "IC:" before the radio certification only signifies that Industry Canada technical specifications were met

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the *equivalent isotropically radiated power* (EIRP) is not more than that permitted for successful communication.

The device could automatically discontinue transmission in case of absence of information to trans-mit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

In compliance with respective local regulatory law, Access Point software provides professional installers the option to configure the antenna type and antenna gain for approved antennas.

This radio transmitter MODEL: AP-7562 has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio MODEL: AP-7562 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Refer [AP-7562 Antenna Accessories on page 6](#) of this guide for a listing of the 2.4 and 5 GHz antennas initially approved for use with the AP-7562.

5.9 CE Marking and European Economic Area (EEA)



The use of 2.4 GHz RLAN's, for use through the EEA, have the following restrictions:

- Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 -2.4835 GHz
- Italy requires a user license for outside usage.

5.10 Statement of Compliance

Zebra hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from www.zebra.com/doc.

5.11 Other Countries

Australia

Use of 5 GHz RLAN's in Australia is restricted in the following band: 5.50 – 5.65 GHz.

Brazil (UNWANTED EMISSIONS - ALL PRODUCTS)

Regulatory Declarations for AP-7562 - BRAZIL

For more information consult the website <http://www.anatel.gov.br>.

Declarações Regulamentares para AP-7562 - Brasil

Nota: A marca de certificação se aplica ao Transceptor, modelo AP-7562. Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário. Para maiores informações sobre ANATEL consulte o site: <http://www.anatel.gov.br>.

Chile

Este equipo cumple con la Resolución No 403 de 2008, de la Subsecretaria de telecomunicaciones, relativa a radiaciones electromagnéticas.

China

通过访问以下网址可下载当地语言支持的产品说明书

www.zebra.com/support

确认进网标贴和证书真伪可查询网址

<http://www.tenaa.com.cn/>

Hong Kong

In accordance with HKTA1039, the band 5.15GHz - 5.35GHz is for indoor operation only.

Mexico

Restrict Frequency Range to: 2.450 – 2.4835 GHz.

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

S. Korea

For a radio equipment using 2400~2483.5MHz or 5725~5825MHz, the following two expression should be displayed;

무선설비는 운용 중 전파혼신 가능성이 있음

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다.

Taiwan

臺灣

低功率電波輻射性電機管理辦法

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

無線接入點 (專業安裝)

1. 「本公司於說明書中提供所有必要資訊以指導使用者/安裝者正確的安裝及操作」警語。

並於該中文使用說明書及器材上標示

2. 「本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者」警語。

「電磁波曝露量 MPE 標準值 $1\text{mW}/\text{cm}^2$ ，本產品使用時建議應距離人體：35 cm」。

Ukraine

Дане обладнання відповідає вимогам технічного регламенту №1057, № 2008 на обмеження щодо використання деяких небезпечних речовин в електричних та електронних пристроях.

Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามข้อกำหนดของ กทช.

5.12 Waste Electrical and Electronic Equipment (WEEE)



English: For EU Customers: All products at the end of their life must be returned to Zebra for recycling. For information on how to return product, please go to: www.zebra.com/weee.

Français: Clients de l'Union Européenne: Tous les produits en fin de cycle de vie doivent être retournés à Zebra pour recyclage. Pour de plus amples informations sur le retour de produits, consultez: www.zebra.com/weee.

Español: Para clientes en la Unión Europea: todos los productos deberán entregarse a Zebra al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: www.zebra.com/weee.

Български: За клиенти от ЕС: След края на полезния им живот всички продукти трябва да се връщат на Zebra за рециклиране. За информация относно връщането на продукти, моля отидете на адрес: www.zebra.com/weee.

Deutsch: Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Zebra zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter www.zebra.com/weee.

Italiano: per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Zebra al fine di consentirne il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: www.zebra.com/weee.

Português: Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Zebra para reciclagem. Para obter informações sobre como devolver o produto, visite: www.zebra.com/weee.

Nederlands: Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Zebra te worden teruggezonden voor recycling. Raadpleeg www.zebra.com/weee voor meer informatie over het terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócić do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej www.zebra.com/weee.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Zebra k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: www.zebra.com/weee.

Eesti: EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Zebra'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: www.zebra.com/weee.

Magyar: Az EU-ban vásárlóknak: Minden tönkrement terméket a Zebra vállalatához kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalókért látogasson el a www.zebra.com/weee weboldalra.

Svenska: För kunder inom EU: Alla produkter som uppnått sin livslängd måste returneras till Zebra för återvinning. Information om hur du returnerar produkten finns på www.zebra.com/weee.

Suomi: Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Zebra-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa www.zebra.com/weee.

Dansk: Til kunder i EU: Alle produkter skal returneres til Zebra til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: www.zebra.com/weee.

Ελληνικά: Για πελάτες στην Ε.Ε.: Όλα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Zebra για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση www.zebra.com/weee στο Διαδίκτυο.

Malti: Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Zebra għar-riċiklaġġ. Għal aktar tagħrif dwar kif għandek tirritorna l-prodott, jekk jogħġbok żur: www.zebra.com/weee.

Românesc: Pentru clienții din UE: Toate produsele, la sfârșitul duratei lor de funcționare, trebuie returnate la Zebra pentru reciclare. Pentru informații despre returnarea produsului, accesați: www.zebra.com/weee.

Slovenski: Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Zebra za reciklažo. Za informacije o vračilu izdelka obiščite: www.zebra.com/weee.

Slovenčina: Pre zákazníkov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Zebra na recykláciu. Bližšie informácie o vrátení výrobkov nájdete na: www.zebra.com/weee.

Lietuvių: ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti grąžinti utilizuoti į kompaniją „Zebra“. Daugiau informacijos, kaip grąžinti gaminių, rasite: www.zebra.com/weee.

Latviešu: ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Zebra otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Zebra, lūdzu, skatiet: www.zebra.com/weee.

Türkçe: AB Müşterileri için: Kullanım süresi dolan tüm ürünler geri dönüştürme için Zebra'ya iade edilmelidir. Ürünlerin nasıl iade edileceği hakkında bilgi için lütfen şu adresi ziyaret edin: www.zebra.com/weee.

5.13 Turkish WEEE Statement of Compliance

EEE Yönetmeliğine Uygundur

6 Support

If you have a problem with your equipment, contact support for your region.

Contact information is available at: www.zebra.com/support.

When contacting support, please provide the following information:

- Serial number of the unit
- Model number or product name
- Software type and version number

Support responds to calls by e-mail, telephone, or fax within the time limits set forth in support agreements. If you purchased your product from a business partner, contact that business partner for support.

Customer Support Web Sites

The Support site, located at www.zebra.com/support.

provides information and online assistance including developer tools, software downloads, product manuals and online repair requests.

Manuals

www.zebra.com/support.

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8 AP-7562 Series ROHS Compliance

部件名称 (Parts)	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	X	O	O	O	O	O
电路模块 (Circuit Modules)	X	O	O	O	O	O
电缆及电缆组件 (Cables and Cable Assemblies)	X	O	O	O	O	O
塑料和聚合物部件 (Plastic and Polymeric Parts)	O	O	O	O	O	O
光学和光学组件 (Optics and Optical Components)	O	O	O	O	O	O
电池 (Batteries)	O	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。

O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。（企业可在此处，根据实际情况对上表中打“×”的技术原因进行进一步说明。）

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