AP-7622

Access Point

Installation Guide

ZEBRA

1   Introduction

The Access Point's unique WiNG 5 software enables the Access Point to function as either a *Standalone* Access Point, an *Adaptive* Access Point or a *Virtual Controller.*

If new to Access Point technology, 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*.

This document is written for the qualified network device installer.

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   Warnings
- Read all installation instructions and site survey reports, and verify correct equipment installation before connecting the Access Point.
- Remove jewelry and watches before installing this equipment.
- Verify any device connected to this unit is properly wired and grounded.
- Verify there is adequate ventilation around the device, and that ambient temperatures meet equipment operation specifications.

1.3   Site Preparation
- Consult your site survey and network analysis reports to determine specific equipment placement, power drops, and so on.
- Assign installation responsibility to the appropriate personnel.
- Identify and document where all installed components are located.
- Ensure adequate, dust-free ventilation to all installed equipment.
- Identify and prepare Ethernet connections.

- Verify cable lengths are within the maximum allowable distances for optimal signal transmission.

1.4   AP-7622 Package Contents

An AP-7622 Access Point is available in internal antenna (AP-7622) configurations. An AP-7622 ships with the following:

- AP-7622 Access Point
- AP-7622 Quick Install Guide

1.4.1   Features

An AP-7622 Access Point supports the following feature set:

- Two RJ-45 connectors (GE1/POE and Console)
- Three LED indicators (2.4GHz, 5GHZ and BLE)
- One 2.4 GHz 802.11n radio and one 5 GHz 802.11ac radio

The GE1/POE accepts 802.3at or 802.3af compliant power from an external source.

✓ | *NOTE*   When operating in a Gigabit Ethernet environment, CAT-5e or CAT-6 cable is recommended for Gigabit operation.

1.5   AP-7622 Antennas

An AP-7622 internal antenna Access Point supports the following:

2.4 GHZ Gain (dBi)	5 GHZ Gain (dBi)
3.6dBi	5.8dBi

2   Hardware Installation

2.1   Installation Instructions

An AP-7622 Access Point mounts either on a wall or on a suspended ceiling T-Bar.

To prepare for the installation:

1. Match the part number on the purchase order with the part numbers in the packing list and on the case of the Access Point.
2. Verify the contents of the box include the intended AP-7622 Access Point, and the included hardware matches the package contents
    (see *AP-7622 Package Contents on page 6*).

Part Number	Description
AP-7622-68B30-US	802.11ac dual band radio 1x1; or single band radio 2x2, internal antenna, BLE, 1xGE (US only)
AP-7622-68B30-EU	802.11ac dual band radio 1x1; or single band radio 2x2, internal antenna, BLE, 1xGE (EU only)
AP-7622-68B30-IL	802.11ac dual band radio 1x1; or single band radio 2x2, internal antenna, BLE, 1xGE (Israel only)
AP-7622-68B30-WR	802.11ac dual band radio 1x1; or single band radio 2x2, internal antenna, BLE, 1xGE (WR)

3. Review site survey and network analysis reports to determine the location and mounting position for the AP-7622 Access Point.
4. Connect a CAT-5 or better Ethernet cable to a compatible 802.3at or 802.3af power source and run the cable to the installation site. Ensure there is sufficient slack on the cable to perform the installation steps.

✓ | *NOTE*   When operating in a Gigabit Ethernet environment, CAT-5e or CAT-6 cable is recommended for Gigabit operation.

2.2   Precautions

Before installing an AP-7622 Access Point, verify the following:

  • Your are using the correctly rated power solution for the AP-7622.

AP-PSBIAS-2P3-ATR	PWR INJECTOR: SINGLE PORT HI-PWR 802.3AT
PWR SPLY:100-240 VAC, 12VDC, 1.0A min, 2.5mm barrel, center positive, maximum operating temperature at least 40°C	AC/DC Power Supply

  • Do not to install the AP-7622 in wet or dusty areas.
  • Verify the environment has a continuous temperature range between 32° F to 104° (0-40°C).
  • This product is intended for indoor use only.

2.3   Access Point Placement

For optimal performance, install the Access Point away from transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators and other industrial equipment. Signal loss can occur when metal, concrete, walls or floors block transmission. Install the Access Point in an open area or add Access Points as needed to improve coverage.

Antenna coverage is analogous to lighting. Users might find an area lit from far away to be not bright enough. An area lit sharply might minimize coverage and create *dark areas.* Uniform antenna placement in an area (like even placement of a light bulb) provides even, efficient coverage.

Install the Access Point at an ideal height of 10 feet from the ground.

To maximize the Access Point's radio coverage area, recommends conducting a site survey to define and document radio interference obstacles before installing the Access Point.

2.4   Power Injector System

An AP-7622 Access Point can receive power via an Ethernet cable connected to the GE1/POE (LAN) port.

When users purchase a WLAN solution, they often need to place Access Points in obscure locations. In the past, a dedicated power source was required for each Access Point in addition to the Ethernet infrastructure. This often required an electrical contractor to install power drops at each Access Point location. The Power Injector merges power and Ethernet into one cable,

reducing the burden of installation and allowing optimal Access Point placement in respect to the intended coverage area.

⚠	*CAUTION*	Using a non-compliant injector, or an injector supporting legacy modes will not allow the AP-7622 to function at optimum performance levels.

⚠	*CAUTION*	Do not plug the AP-PSBIAS-2P3-ATR Power Injector into the Access Point's Console port. Connecting the Power Injector into the console port can damage the port and void the AP-7622's product warranty.

The AP-PSBIAS-2P3-ATR Power Injector is a high power POE Injector delivering up to 30 watts. The Access Point can only use a Power Injector when connecting the unit to the Access Point's GE1/POE port. The Power Injector is separately ordered and not shipped with an existing AP SKU.

The Access Point's Power Supply is not included with the Access Point and is orderable separately as an accessory. Disconnecting the AC power from the PWRS-14000-148R causes the Access Point to re-boot before sourcing power from the POE power injector. If the AP is operating using injector supplied power, the AP will not automatically reboot if an AC adapter is connected. The Access Point continues to operate with power supplied from the AC adapter without change to the Access Point operating configuration. If using AC adapter supplied power and a change to the AP's operating configuration is warranted, the Access Point needs to be manually rebooted by the customer.

⚠	*CAUTION*	The Access Point supports any standards-based compliant power source. However, using the wrong solution (including a POE system used on a legacy Access Point) could either limit functionality or severely damage the Access Point and void the product warranty.

A separate Power Injector is required for each AP-7622 Access Point comprising the network.
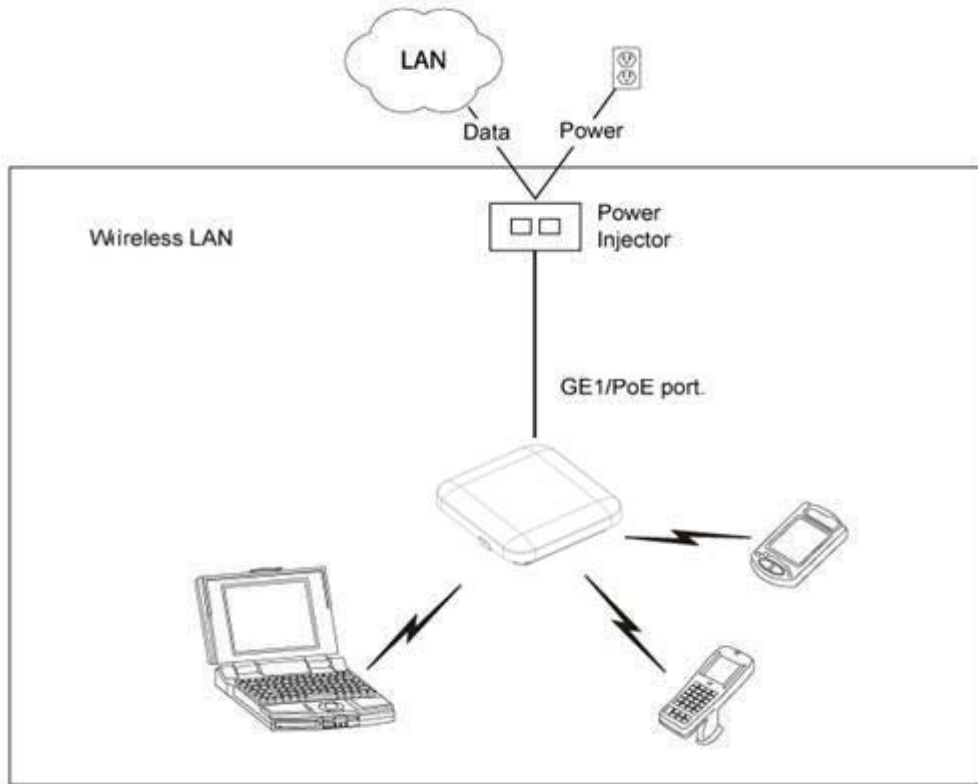
The Power Injector can be installed free standing, on an even horizontal surface or wall mounted using the power injector's wall mounting key holes. The following guidelines should be adhered to before cabling the Power Injector to an Ethernet source and an Access Point:

- Do not block or cover airflow to the Power Injector.
- Keep the Power Injector away from excessive heat, humidity, vibration and dust.
- The Power Injector isn't a repeater, and does not amplify the Ethernet signal. For optimal performance, ensure the Power Injector is placed as close as possible to the data port.

CAUTION To avoid problematic performance and restarts, disable POE from a wired switch port connected to an Access Point if mid-span power sourcing equipment (PSE) is used between the two, regardless of the manufacturer of the switch.

⚠   *CAUTION* Ensure AC power is supplied to the Power Injector using an AC cable with an appropriate ground connection approved for the country of operation.

To install the Power Injector to an Ethernet data source and an Access Point:

1. Connect the Power Injector to an AC outlet (100VAC to 240VAC).
2. Connect an RJ-45 Ethernet cable between the Power Injector **Data & Power Out** connector and the Access Point's GE1/POE port.
3. Connect an RJ-45 Ethernet cable between the network data supply (host) and the Power Injector **Data In** connector.

   Ensure the cable length from the Ethernet source (host) to the Power Injector and Access Point does not exceed 100 meters (333 ft).

   The Power Injector has no On/Off power switch. The Injector receives power and is ready for device connection and operation as soon as AC power is applied. Refer to the Installation Guide shipped with the Power Injector for a description of its LEDs.

2.5   Wall Mount Instructions

The AP-7622 can be mounted on to any plaster, wood or cement wall surface using the Access Point's integrated mounting bracket.

✓   *NOTE* Before wall mounting the AP-7622, obtain the unit's default IP address from the backside of the unit. This default IP address is needed when connecting to the Access Point.
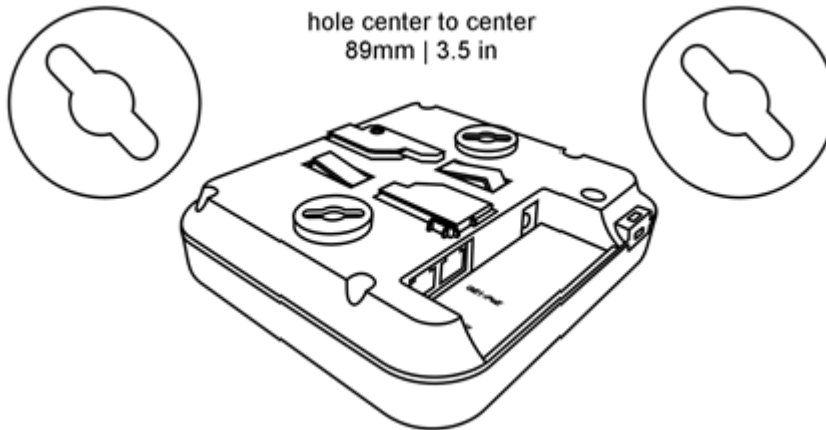
Optional customer provided installation tools include:

• Phillips head screw driver, or drill and drill bit

To wall mount an AP-7622 model Access Point:

1. Measure and mark two holes 89mm (3.5") apart at the intended deployment orientation of the unit.

✓   *NOTE* When pre-drilling a hole the recommended hole size is 4mm (0.16in.).

hole center to center
89mm | 3.5 in

2. Drill pilot holes at the locations marked on the wall.

3. Cable the Access Point using the Power Injector solution, approved AP-7622 power supply or a POE enabled switch.

   For Power Injector installations:

   a. Connect a RJ-45 CAT5e (or CAT6) Ethernet cable between the Power Injector **Data & Power Out** connector and the Access Point's GE1/POE port.

   b. Connect a RJ-45 CAT5e (or CAT6) Ethernet cable between the network data supply (host) and the Power Injector **Data In** connector.

   c. Ensure the cable length from the Ethernet source (host) to the Power Injector and Access Point does not exceed 100 meters (333 ft). The Power Injector has no On/Off switch. The Power Injector receives power as soon as AC power is applied.

   For standard power adapter (non Power Injector) and line cord installations:

   a. Connect a RJ-45 Ethernet cable between the network data supply (host) and the Access Point's GE1/POE port.

   b. Connect the power supply line cords to the power adapter.

   c. Attach the power adapter cable into the power connector on the Access Point.

   d. Attach the power supply line cord to a power supply or POE enabled switch.

✓   *NOTE*   Zebra recommends wrapping the auxiliary power adapter cable around the Access Point's cable hook to avoid accidental disconnection.

---

4. Verify the Access Point is receiving power by observing the LEDs are lit or flashing. For more information on AP-7622 LED behavior, see *LED Indicators on page 15*.

5. Secure the AP-7622 to the wall using oval head screws.

6. The Access Point is ready to configure.

2.6   Ceiling Mount Instructions

A ceiling mount requires holding the AP-7622 up against a T-Bar of a suspended ceiling grid and twisting the unit on to the T-Bar. If deploying the AP-7622 on a sculpted ceiling T-Bar, the Access Point mounting kit (Part No. KT-135628-01) can be used as well. A beam clip is also available to attach the Access Point to a ceiling beam.

> ✓   *NOTE*   Before mounting the AP-7622 on a ceiling, obtain the unit's default IP address from the backside of the unit. This default IP address is needed when connecting to the Access Point.

1. Align (but do not permanently secure) the Access Point's integrated mounting bracket on the T-Bar.
2. Cable the Access Point using the Power Injector solution, approved AP-7622 power supply or a POE enabled switch.

    For Power Injector installations:

    a. Connect a RJ-45 CAT5e (or CAT6) Ethernet cable between the network data supply (host) and the Power Injector **Data In** connector.
    b. Connect a RJ-45 CAT5e (or CAT6) Ethernet cable between the Power Injector **Data & Power Out** connector and the Access Point's GE1/POE port.
    c. Ensure the cable length from the Ethernet source (host) to the Power Injector and Access Point does not exceed 100 meters (333 ft). The Power Injector has no On/Off power switch. The Power Injector receives power as soon as AC power is applied.

    For standard power adapter (non Power Injector) and line cord installations:

    a. Connect a RJ-45 Ethernet cable between the network data supply (host) and the Access Point's GE1/POE port.
    b. Connect the power supply line cords to the power adapter.
    c. Attach the power adapter cable into the power connector on the Access Point.
    d. Attach the power supply line cord to a power supply.

> ✓   *NOTE*   Zebra recommends wrapping the auxiliary power adapter cable around the Access Point's cable hook to avoid accidental disconnection.

3. Verify the unit has power by observing the LEDs. For more information on AP-7622 LED behavior, see *LED Indicators on page 15.*
4. Orient the Access Point chassis by its length and the length of the ceiling T-Bar.
5. Rotate the Access Point chassis 45 degrees clockwise.

6. Push the back of the Access Point chassis on to the bottom of the ceiling T-Bar.
7. Rotate the Access Point 45 degrees counter-clockwise. The clips click as they fasten to the T-Bar.
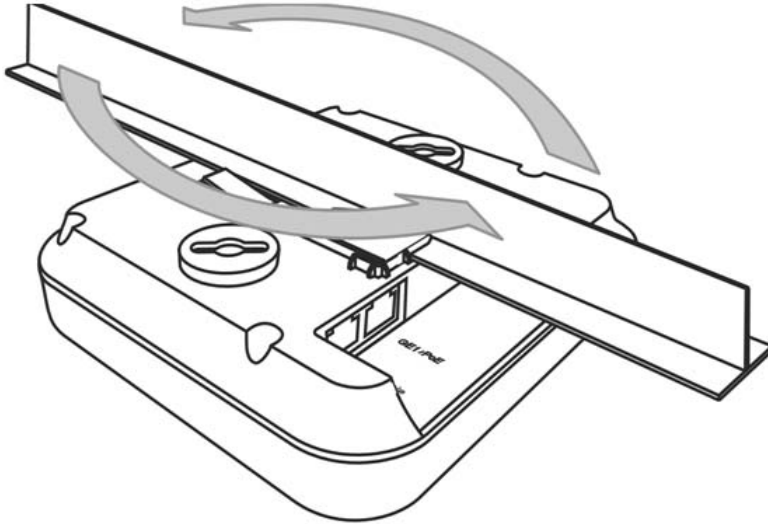
8. The Access Point is ready to configure.

2.6.1   AP-7622 Beam Clip

When needed, an AP-7622 can also be ceiling mounted using a beam clip.

If utilizing a beam clip, attach the beam clip to the AP-7622's integrated mounting bracket. Then connect the Access Point to the ceiling beam.

2.7   LED Indicators

The AP-7622's three LED activity indicators are located on the front of the housing and are visible through the enclosure.
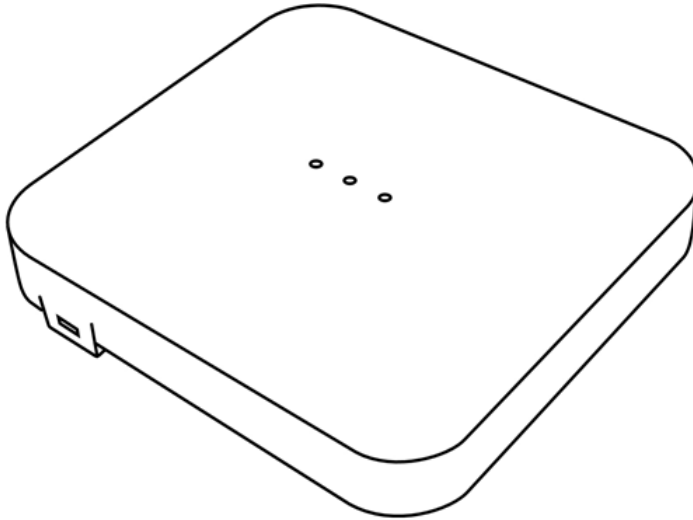
The LEDs provide a status display indicating error conditions, transmission, and network activity for the 5 GHz 802.11ac (amber) radio, 2.4 GHz 802.11n (green) radio and Bluetooth activity (blue) radio.

✓ *NOTE* LED behavior for the AP-7622 are identical in both WLAN and client bridge modes.

Task	Green	Amber	Blue
Firmware Update	Off	On	Off
Radio Disabled	Off	Off	N/A
Radio Enabled Not Configured	Solid Green	Solid Amber	N/A
Radio Enabled and Configured	Blink 500ms Out of sync with Amber LED	Blink 500ms Out of sync with Green LED	N/A
Sensor with Server Connected	On 1 second, Off 1 second Synced with Amber LED	On 1 second, Off 1 second Synced with Green LED	N/A

Task	*Green*	*Amber*	*Blue*
Sensor with Server Not Connected	On 1 second, Off 5 seconds Synced with Amber LED	On 1 second, Off 5 seconds Synced with Green LED	N/A
Locate AP Mode	Irregular Blink Rate, Green/Amber/Blue	Irregular Blink Rate, Green/Amber/Blue	Irregular Blink Rate, Green/Amber/Blue
Bluetooth Radio Enabled	N/A	N/A	Solid Blue
Bluetooth Radio Disabled	N/A	N/A	Off

3 Basic Access Point Configuration

Once the Access Point is installed and powered on, complete the following WiNG Assist configuration steps to get the Access Point up and running with minimal administrative intervention.

Startup Assist updates existing settings. To delete or revise existing Startup Assist settings, either rerun Startup Assist or navigate to where those parameters appear in the user interface and update them accordingly. Refer to the Access Point's more advanced configuration documentation available on the Zebra support site for updating the management interface beyond the scope of the WiNG Assist configuration described in this guide. For more information, see *www.zebra.com/support*.

1. Power the Access Point using an appropriate power adapter, PoE injector, or PoE switch.
2. Connect to the Access Point.

   The default IP address is located on the backside of the Access Point.
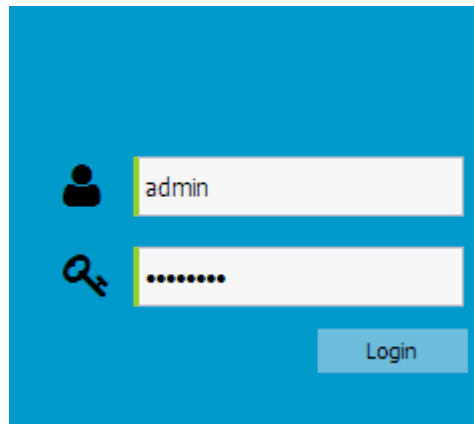
3. Enter the default username *admin* in the **Username** field.
4. Enter the default password *admin123* in the **Password** field.
5. Select the **Login** button to load the management interface.

   If logging in using a factory default configuration, Startup Assist automatically displays.

Start up Assist

Start up assist provides the basic setup information required to get one wireless LAN operational. Optionally, you may enable the guest portal. For Detailed configuration, Please access the appropriate page

Virtual Controller:	☐

Country Name: ✱ United States-us ⌄

Timezone: Etc/UTC ⌄

Date & Time: 01/03/2016 📅 Hour: 9 ⇕ Mins: 2 ⇕ ○ AM ⦿ PM

WLAN Settings ─────────────────────────────────

WLAN 1 Name: [   ]

Authentication: ⦿ Open ○ PSK

Key (If PSK): ✱ [   ] ☐ Show ⦿ Ascii ○ Hex

WLAN 2 Name: [   ]

Authentication: ⦿ Open ○ PSK

Key (If PSK): ✱ [   ] ☐ Show ⦿ Ascii ○ Hex

Apply   Discard

If Startup Assist does not automatically display, it can be invoked at any time from the upper-left of the **Basic Configuration** screen.

✓ Note • Startup Assist automatically sets the radio transmit power and enables Auto Channel selection. The Access Point's name is automatically assigned based on the Access Point type and the last three octets of the device's hardcoded MAC address. WLAN 1 and WLAN 2 both use VLAN ID 2200 by default. To adjust any of these parameters, edit the appropriate configuration screen directly. Refer to the Access Point reference material available on Zebra Support for configuring the Access Point beyond the scope of the minimal WiNG Assist configuration described in this guide. For more information, go to *www.zebra.com/support*.

6. Set the following Startup Assist parameters:
    *   *Virtual Controller* - Select this option to set this Access Point as a Virtual Controller capable of managing and provisioning up to 64 Access Points of the same model. Those Access Points managed by this Virtual Controller list this

Access Point's AP Name as its own. Only one Virtual Controller can be designated.

- *Country Name* - Set the country specific to this Access Point's deployment location. Selecting the correct country is central to legal operation. Each country has its own regulatory restrictions concerning electromagnetic emissions and the maximum RF signal strength that can be transmitted.

- *Timezone* - Use the drop-down menu to specify the geographic timezone where the Access Point is deployed. Different geographic time zones have daylight savings clock adjustments, so specifying the timezone correctly is important to account for geographic time changes.

- *Date & Time* -Set the date, hour and minute for the Access Point's current system time. Specify whether the current time is in the AM or PM.

- *WLAN 1 Name* - Provide a unique name for this WLAN as its network identifier. This is a required setting. The name is used for the SSID and is assigned to both of the Access Point's radios.

- *Authentication* - Select PSK to apply a 64 character maximum passphrase. Provide the passphrase in either ASCII or Hex format.The authenticating device must use the same PSK algorithm during authentication. Selecting **Show** displays the key in exposed plain text (not recommended).

  Selecting **Open** is not a recommended authentication scheme, as it would provide the Access Point's WLAN no security via credential exchange and would only make sense in a network where no sensitive data is either transmitted or received.

7. Select **Apply** to save and commit the Startup Assist changes to the Access Point's configuration. Select **Discard** to revert to the last saved configuration.

   The *Virtual Controller*, *Country Name*, *Timezone* and *Date & Time* portions of the Basic Settings screen update with the settings applied and saved in the Startup Assist screen. WLAN updates made in Startup Assist are displayed in Wireless screen, not the Basic Configuration screen.

4   AP-7622 Access Point Specifications

4.1   Electrical Characteristics

An AP-7622 Access Point has the following electrical characteristics:

Operating Current & Voltage	12VDC, 1A, 2.5mm barrel connector, center positive

4.2   Physical Characteristics

An AP-7622 Access Point has the following physical characteristics:

Dimensions	7.1 in. L x 6.5 in. W x 1.6 in. H 180 mm L x 165 mm W x 41 mm H
Weight	0.85 lbs/0.385 kg
Operating Temperature	32° F to 104° F/0° C to 40° C
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Operating Humidity	85% RH non-condensing
Operating Altitude (maximum)	8,000 ft @ 28C
Storage Altitude (maximum)	30,000 ft
Electrostatic Discharge	15KV air, 8KV contact

4.3   Radio Characteristics

The AP-7622 Access Point has the following radio characteristics:

Data Rates Supported	802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48 and 54 Mbps 802.11a: 6,9,12,18,24,36,48, and 54 Mbps 802.11n: MCS 0-15 up to 300 Mbps 802.11ac: MCS 0-9 up to 866.7 Mbps
Wireless Medium	*Direct Sequence Spread Spectrum* (DSSS) *Orthogonal Frequency Division Multiplexing* (OFDM)
Network Standards	IEEE 802.11a/b/g/n/ac 802.11d and 802.11i WPA2 WMM and WMM-UAPSD
Transmit Power Adjustment	1dB increments

5   Regulatory Information

5.1   Regulatory Information
This guide applies to the following Model Number AP-7622.

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 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 antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

Bluetooth® Wireless Technology

This is an approved Bluetooth® product. For more information or to view the End Product Listing, please visit *https://www.bluetooth.org/tpg/listings.cfm*.

5.2   Wireless Device Country Approvals
Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use in the following countries and continents: United States, Canada, Japan, China, South Korea, 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: For 2.4GHz or 5GHz Products: Europe includes Austria, Belgium, Bulgaria, Croatia, 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.

5.2.1 Country Selection

Select only the country in which the device will be used. Any other selection will make the operation of this device illegal.

Country Roaming

This device incorporates the International Roaming feature (IEEE802.11d) which will ensure the product operates on the correct channels for the particular country of use.

Ad-Hoc Operation (2.4 GHz band)

Ad-Hoc operation is limited to Channels 1-11 (2412-2462 MHz).

5.2.2 Frequency of Operation – FCC and IC
5 GHz Only

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.

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.

5.3 Health and Safety Recommendations

⚠️ **Ergonomic Recommendations**

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position

- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that 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:

- Should ALWAYS keep the device more than 15cm (6 inches) from their pacemaker when turned ON.
- Should not carry the device in a breast pocket.
- Should use the ear furthest from the pacemaker to minimise the potential for interference.
- 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.

5.4   RF Exposure Guidelines

5.4.1   Safety Information

Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

5.4.2   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 Zebra *Declaration of Conformity* (DoC) at: *www.zebra.com/doc*.

For further information on the safety of RF energy from wireless devices, see

https://www.zebra.com/us/en/about-zebra/company-information/corporate-responsibility.html located under Corporate

5.4.3   Access Points

Access Points must conform to U.S. Federal Communications Commission's (FCC) limitations. FCC has now stipulated a 21dBm EIRP limit for power directed 30 degrees above the horizon.

For Zebra-supplied antennas, compatible with 5.0 GHz on the access points, refer to the Antenna Guide for "Elevation Gain" information. If using a third-party antenna, it is required that you obtain the antenna-elevation gain information from the antenna manufacturer.

Panel antennas and polarized antennas for point to point only are excluded from this requirement.

The elevation gain must be configured if the access point:

- •   Is used with dipole antenna. and
- •   Is transmitting in the 5.15 - 5.25 GHz Unlicensed National Information Infrastructure-1 (UNII1) band.

5.5   Power Supply

Use ONLY a Zebra approved UL LISTED ITE (IEC/EN 60950-1, LPS/SELV) power supply with electrical ratings: Output 12Vdc, min 1A, with a maximum ambient temperature of at least 40 degrees C. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

Alternately this device may be powered from a 802.3af compliant power source which has been certified by the appropriate agencies, or by a Zebra approved UL LISTED ITE (IEC/EN 60950-1, LPS/SELV) power supply with electrical ratings: Output 48Vdc, min 0.25A, with a recommended ambient temperature greater than 50 degrees C. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

5.6   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.

5.6.1   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.

5.6.2 Radio Frequency Interference Requirements - Canada

CAN ICES-3 (B)/NMB-3(B)

Radio Transmitters

This device complies with Industry Canada's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

Pour les équipements RLAN:

L'utilisation de la bande RLAN 5 GHz au Canada présente les limitations suivantes :

- Bande restreinte 5.60 - 5.65 GHz

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

Etiquette de marquage: Le terme "IC" avant la certification radio signifie que le produit est compatible avec le spécification Industrie Canada

5.7 CE Marking and European Economic Area (EEA)

CE

The use of 2.4GHz 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.

Bluetooth® Wireless Technology for use throughout the EEA has the following restrictions:

- Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 -2.4835 GHz.

5.8   Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with Directive 2011/65/EU and 1999/5/EC or 2014/53/EU (2014/53/EU supersedes 1999/5/EC from 13th June 2017).

The full text of the EU Declaration of Conformity is available at the following internet address *www.zebra.com/doc*.

5.9   Japan (VCCI) - Voluntary Control Council for Interference

Class B ITE

> この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
> 取扱説明書に従って正しい取り扱いをして下さい。　　　　VCCI－B

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

5.10   Korea Warning Statement for Class B ITE

기 종 별	사 용 자 안 내 문
B급 기기 (가정용 방송통신기자재)	이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Class	User's Guide
Class B (Broadcasting Communication Device for Home Use)	This device obtained EMC registration mainly for home use (Class B) and may be used in all areas.

5.11   Other Countries

All 2.4GHz and 5GHz Wireless Devices:

Australia

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

Chile

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

This device complies with the Resolution Not 403 of 2008, of the Undersecretary of telecommunications, relating to electromagnetic radiation.

Chile: (Devices with a WLAN Radio)

The device will comply with Chile's Resolution 755, part j.1) which states that the device is set to operate in the following bands for indoor use only with maximum radiated power not greater than 150mW:

> 2.400 hasta 2.483,5 MHz
>
> 5.150 hasta 5.250MHz
>
> 5.250 hasta 5.350MHz
>
> 5.725 hasta 5.850MHz

as well as that band 5150-5250MHz will be restricted to the indoor use and the maximum radiated power density does not exceed 7.5MW / MHz in any 1 MHz band and 0.1875mW / 25kHz in any 25kHz band.

Conforme a Resolución 755 parte j.1), se ajustará el dispositivo a operar en interiores en las siguientes bandas con una potencia máxima radiada no superior a 150mW:

> 2.400 hasta 2.483,5 MHz
>
> 5.150 hasta 5.250MHz
>
> 5.250 hasta 5.350MHz
>
> 5.725 hasta 5.850MHz

Además, de acuerdo con Resolución 755, para la banda 5150-5250MHz la operación del equipo estará restringida al interior de inmuebles y la densidad de potencia radiada máxima no supera 7,5mW/MHz en cualquier banda de 1MHz y 0.1875mW/25kHz en cualquier banda de 25kHz.

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

合 格 证

Eurasian Customs Union

Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака ЕАС.

EAC

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 expressions should be displayed:

무선설비는 운용 중 전파혼신 가능성이 있음

당해 무선설비 는전파혼 신 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。

在5.25-5.35 秭赫頻帶內操作之無線資訊傳輸設備，限於室內使用。

無線接入點 (專業安裝)

- 「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
- 「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 1mW/cm² ; 送測產品實測值為 : 0.35473 mW/cm²

本產品使用時建議應距離人體 20cm

The equipment shall be subject to professional engineering personnel to install and configure, it just can be used, and may not be sold directly to the general consumer.

Based on 20cm separation distance to assess the amount of electromagnetic exposure (MPE).

For FCC parts, MPE limit 1mW/cm²; Test result is 0.35473 mW/cm²

For IC parts, MPE limit 5.4039 W/cm²; Test result is 2.6952 W/cm²

When using this device, it is recommended to have a separation distance of 20 cm.

Turkey

For terminals that support Turkish characters in SMS Release 8 services, the following statement should be printed on the packages and manual of the device:

Bu cihaz Türkçe karakterlerin tamam?n? ihtiva eden ETSI TS 123.038 V8.0.0 (veya sonraki sürümün kodu) ve ETSI TS 123.040 V8.1.0 (veya sonraki sürümün kodu) teknik özelliklerine uygundur.

This device conforms to technical specification in ETSI TS 123.038 V8.0.0 (or the code of any subsequent release) and ETSI TS 123.040 V8.1.0 (or the code of any subsequent release) which contain all Turkish characters.

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 nale¿y zwróciæ do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajduj¹ siê na stronie internetowej *www.zebra.com/weee*.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skonèení jejich životnosti vrátit spoleènosti Zebra k recyklaci. Informace o zpùsobu 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 vállalathoz 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 tagħħom, 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 clienţii din UE: Toate produsele, la sfârşitul duratei lor de funcţionare, trebuie returnate la Zebra pentru reciclare. Pentru informaţii despre returnarea produsului, accesaţi: *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 gaminį, 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.

7 Zebra Technologies Corporation ("Zebra") End-User Software License Agreement

BY INSTALLING AND/OR USING THIS PRODUCT, YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT AND AGREE TO BE BOUND ITS TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, ZEBRA IS NOT WILLING TO LICENSE THE PRODUCT TO YOU, AND YOU MUST NOT INSTALL OR USE THIS PRODUCT.

Definitions

Grant of License

Zebra Technologies Corporation ("Zebra") grants you ("Licensee" or "you") a personal, nonexclusive, nontransferable, revocable, nonassignable, limited license to use the software and documentation ("Product(s)") subject to the terms and conditions of this Agreement. You shall use the Products only for your internal business purposes, exclusively to support Zebra devices. Any use of the Products outside of the conditions set forth herein is strictly prohibited and will be deemed a breach of this Agreement resulting in immediate termination of your License. In the event of a breach of this Agreement, Zebra will be entitled to all available remedies at law or in equity (including immediate termination of the license without notice, immediate injunctive relief and repossession of all Products unless Licensee is a Federal agency of the United States Government).

You shall not distribute, sublicense, rent, loan, lease, export, re-export, resell, ship or divert or cause to be exported, re-exported, resold, shipped or diverted, directly or indirectly, the Products under this Agreement. You shall not, and shall not permit others to: (i) modify, translate, decompile, bootleg, reverse engineer, disassemble, or extract the inner workings of the Products, (ii) copy the look-and-feel or functionality of the Products; (iii) remove any proprietary notices, marks, labels, or logos from the Products; (iv) rent or transfer all or some of the Products to any other party without Zebra's prior written consent; or (v) utilize any computer software or hardware which is designed to defeat any copy protection device, should the Products be equipped with such a protection device.

Title to all copies of Products will not pass to Licensee at any time and remains vested exclusively in Zebra. All intellectual property developed, originated, or prepared by Zebra in connection with the Products remain vested exclusively in Zebra, and this Agreement does not grant to Licensee any intellectual property rights.

Portions of the Products are protected by United States patent and copyright laws, international treaty provisions, and other applicable laws. Therefore, you must treat

the Products like any other copyrighted material (e.g., a book or musical recording) except that you may make one copy of the Product solely for back-up purposes. Unauthorized duplication of the Products constitutes copyright infringement, and in the United States is punishable in federal court by fine and imprisonment.

Limited Warranty

Zebra warrants for a period of ninety (90) days from your receipt of the Products to you that the Software, under normal use, will perform substantially in accordance with Zebra's published specifications for that release level of the Software. The written materials are provided "AS IS" and without warranty of any kind. Zebra's entire liability and your sole and exclusive remedy for any breach of the foregoing limited warranty will be, at Zebra's option, the provision of a downloadable patch or replacement code, or a refund of the unused portion of your bargained for contractual benefit up to the amount paid for the Products.

Disclaimer

THIS LIMITED WARRANTY IS THE ONLY WARRANTY PROVIDED BY ZEBRA, AND ZEBRA MAKES, AND YOU RECEIVE, NO OTHER WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR IN ANY COMMUNICATION WITH YOU. ZEBRA SPECIFICALLY DISCLAIMS ANY WARRANTY INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILTY, NONINFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE. ZEBRA DOES NOT WARRANT THAT THE PRODUCTS WILL MEET YOUR REQUIREMENTS, OR THAT THE OPERATION OF THE PRODUCTS WILL BE UNINTERRUPTED OR ERROR FREE, OR THAT DEFECTS IN THE PRODUCTS WILL BE CORRECTED. ZEBRA MAKES NO WARRANTY WITH RESPECT TO THE CORRECTNESS, ACCURACY, OR RELIABILITY OF THE PRODUCTS. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Limitation of Liability

THE TOTAL LIABILITY OF ZEBRA UNDER THIS AGREEMENT FOR DAMAGES SHALL NOT EXCEED THE FAIR MARKET VALUE OF THE PRODUCTS LICENSED UNDER THIS AGREEMENT. IN NO EVENT WILL ZEBRA BE LIABLE IN ANY WAY FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST BUSINESS PROFITS, OR LIABILITY OR INJURY TO THIRD PERSONS, WHETHER FORESEEABLE OR NOT, REGARDLESS OF WHETHER ZEBRA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some jurisdictions do not permit limitations of liability for incidental or consequential damages, so the

above exclusions may not apply to you. This Limitation of Liability provision survives the termination of this Agreement and applies notwithstanding any contrary provision in this Agreement. Licensee must bring any action under this Agreement within one (1) year after the cause of action arises.

Maintenance

Unless provided for in a separate agreement, Zebra shall not be responsible for maintenance or field service of the Products.

High Risk Activities

The Products are not fault-tolerant and are not designed, manufactured or intended for use or resale as on-line control software in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of the Products could lead directly to death, personal injury, or severe physical or environmental damage ("High Risk Activities"). Zebra and its suppliers specifically disclaim any express or implied warranty of fitness for High Risk Activities, and if you elect to use the Products in any High Risk Activities, you agree to indemnify, defend, and hold Zebra harmless from and against any and all costs, damages, and losses related to that use.

U.S. Government

If you are acquiring the Products on behalf of any unit or agency of the U.S. Government, the following shall apply. Use, duplication, or disclosure of the Products is subject to the restrictions set forth in subparagraphs (c) (1) and (2) of the Commercial Computer Software - Restricted Rights clause at FAR 52.227-19 (JUNE 1987), if applicable, unless being provided to the Department of Defense. If being provided to the Department of Defense, use, duplication, or disclosure of the Products is subject to the restricted rights set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 (OCT 1988), if applicable. Products may or may not include a Restricted Rights notice, or other notice referring specifically to the terms and conditions of this Agreement. The terms and conditions of this Agreement shall each continue to apply, but only to the extent that such terms and conditions are not inconsistent with the rights provided to you under the aforementioned provisions of the FAR and DFARS, as applicable to the particular procuring agency and procurement transaction.

Assignment

Except as otherwise provided in this section, neither party may assign this Agreement, or any of its rights or obligations under this Agreement, without the prior

written approval of the other party, which will not be unreasonably withheld. Any attempted assignment, delegation, or transfer without the necessary approval will be void.   Notwithstanding the foregoing, for any Zebra acquisition, merger, consolidation, reorganization, or similar transaction, or any spin-off, divestiture, or other separation of a Zebra business, Zebra may, without the prior written consent of the other party: (i) assign its rights and obligations under this Agreement, in whole or in part, or (ii) split and assign its rights and obligations under this Agreement so as to retain the benefits of this Agreement for both Zebra and the assignee entity(ies) (and their respective Affiliates) following the split.

Governing Law

This Agreement shall be governed by the laws of the United States of America to the extent that they apply and otherwise by the laws of the State of New York without regard to its conflict of laws provisions or by the internal substantive laws of the country to which the Products is shipped if end-user customer is a sovereign governmental entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a Party's performance under this Agreement, UCITA does not govern any aspect of this End User License Agreement or any license granted under this End-User License Agreement, or any of the parties' rights or obligations under this End User License Agreement. The governing law will be that in effect prior to the applicability of UCITA.

Compliance with Laws

Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Zebra and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision will be a material breach of this Agreement, permitting immediate termination by Zebra.

Third Party Software

The Products may contain one or more items of Third-Party Software. The terms of this Agreement govern your use of any Third-Party Software UNLESS A SEPARATE THIRD-PARTY SOFTWARE LICENSE IS INCLUDED, IN WHICH CASE YOUR USE

OF THE THIRD-PARTY SOFTWARE WILL THEN BE GOVERNED BY THE
SEPARATE THIRD-PARTY LICENSE.

Open Source Software

The Products may contain one or more items of Open Source Software. Open Source
Software is software covered by a publicly available license governed solely under
Copyright law, whereas the complete terms and obligations of such license attach to
a licensee solely through the act of copying, using and/or distribution of the licensed
software, such obligations often include one or more of attribution obligations,
distribution obligations, copyright obligations, and intellectual property
encumbrances. The use of any Open Source Software is subject to the terms and
conditions of this Agreement as well as the terms and conditions of the corresponding
license of each Open Source Software package. If there is a conflict between the
terms and conditions of this Agreement and the terms and conditions of the Open
Source Software license, the applicable Open Source Software license will take
precedence. Copies of the licenses for the included Open Source Software, if any, as
well as their attributions, acknowledgements, and software information details, are
provided in the electronic copy of this Agreement, which is available in the Legal
Notices or README file associated with the Product. Zebra is required to reproduce
the software licenses, acknowledgments and copyright notices as provided by the
authors and owners, thus, all such information is provided in its native language form,
without modification or translation. Depending on the license terms of the specific
Open Source Software, source code may not be provided. Please reference and
review the entire Open Source Software information to identify which Open Source
Software packages have source code provided or available. For instructions on how
to obtain a copy of any source code made publicly available by Zebra related to Open
Source Software distributed by Zebra, you may send your request (including the
Zebra Product name and version, along with the Open Source Software specifics) in
writing to: Zebra Technologies Corporation, Open Source Software Director, Legal
Department, 3 Overlook Point, Lincolnshire, IL 60069 USA.

8   AP-7622 Access Point China 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)	O	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)	O	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。）

This table was created to comply with China RoHS requirements for AP-7622 Access Points.

ZEBRA