HPE Aruba Networking 750 Series Campus Access Points

Installation Guide

Hewlett Packard Enterprise

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Hewlett Packard Enterprise Company
Attn: General Counsel
WW Corporate Headquarters
1701 E Mossy Oaks Rd Spring, TX 77389
United States of America.

Contents

Chapter 1
About This Guide

This document describes the hardware features of the **HPE Aruba Networking 750 Series Campus Access Points**. It provides a detailed overview of the physical and performance characteristics of each access point model and explains how to install the access point.

Guide Overview

- Hardware Overview provides hardware detail for the 750 Series.
- Access Point Installation provides installation detail for the 750 Series.
- Regulatory Information provides technical specifications, safety, regulatory and compliance information for the 750 Series.

Related Documentation

For complete management of an HPE Aruba Networking access point, the following documents are required:

- Latest Software User Guide: https://www.arubanetworks.com/techdocs/ArubaDocPortal/content/cons-aos-home.htm
- Command Line Interface (CLI) Bank: https://www.arubanetworks.com/techdocs/CLI-Bank/Content/Home.htm

Contacting Support

Table 1: *Contact Information*

Main Site	https://www.arubanetworks.com
Support Site	https://networkingsupport.hpe.com
Airheads Social Forums and Knowledge Base	https://community.arubanetworks.com
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	https://arubanetworks.com/support-services/contact-support
Software Licensing Site	https://hpe.com/networking/support
End-of-life Information	https://www.arubanetworks.com/support-services/end-of-life
Security Incident Response Team	https://www.arubanetworks.com/support-services/security-bulletins Email: sirt@arubanetworks.com

Chapter 2
Hardware Overview

HPE Aruba Networking 750 Series Campus Access Points are high-performance, multi-radio wireless devices that can be deployed in either controller-based or controllerless network environments. These access points support the 802.11be standard in the 2.4 GHz, 5 GHz, and 6 GHz bands with a 4x4 MIMO tri-radio Wi-Fi 7 platform. Additionally, the 750 Series provides dual wired 10 Gbps Smart Rate Ethernet network interfaces that enhance performance and client capacity, enable (hitless) failover or capacity aggregation, and allow a combination of PoE power from two sources to deliver an increased power budget.

Package Contents

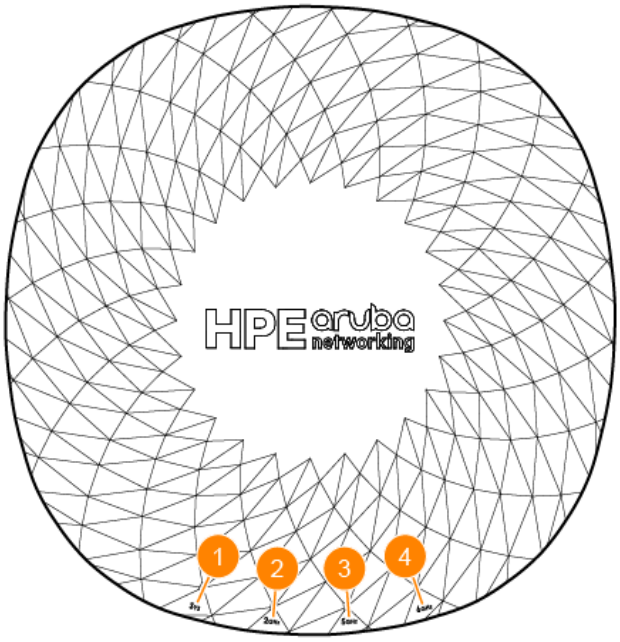
One of the following configurations:

Quantity	Item
1	**Single Pack** HPE Aruba Networking 750 Series Campus Access Point (AP-754 or AP-755)
5	**Eco-friendly Multi-Pack** HPE Aruba Networking 750 Series Campus Access Point (AP-755) and (1) Console Adapter Cable

- The AP mount bracket attaches to a variety of mounting kits (sold separately).
- Inform your supplier if there are any incorrect, missing or damaged parts. If possible, retain the carton, including the original packing materials which can be used to repack and return the unit to the supplier if needed.

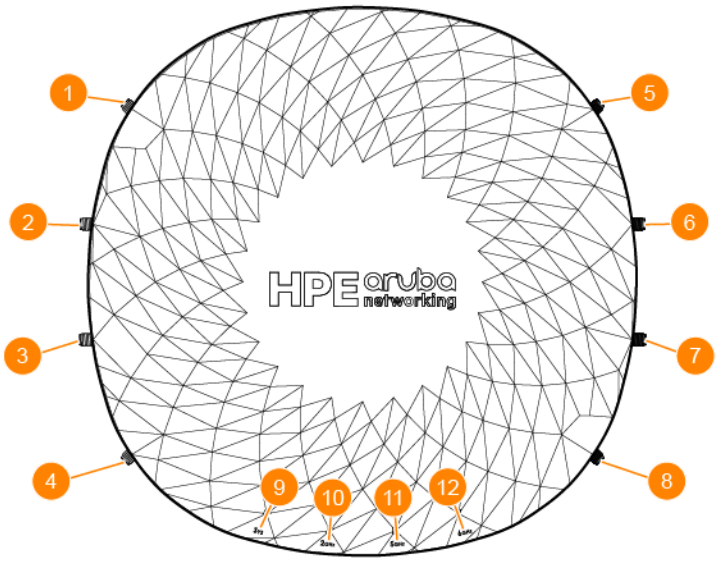
Front View

Figure 1 *AP-755 Access Point Front View*



Callout	Component
1	System LED
2	Radio LED (2.4GHz)
3	Radio LED (5GHz)
4	Radio LED (6GHz)

Figure 2 *AP-754 Access Point Front View*



Callout	Component
1	External Antenna Connector **A0** (2.4GHz and 5GHz, diplexed)
2	External Antenna Connector **A1** (2.4GHz and 5GHz, diplexed)
3	External Antenna Connector **A2** (2.4GHz and 5GHz, diplexed)
4	External Antenna Connector **A3** (2.4GHz and 5GHz, diplexed)
5	External Antenna Connector **B0** (6GHz)
6	External Antenna Connector **B1** (6GHz)
7	External Antenna Connector **B2** (6GHz)
8	External Antenna Connector **B3** (6GHz)
9	System LED
10	Radio LED (2.4GHz)
11	Radio LED (5GHz)
12	Radio LED (6GHz)

For more information on LED behavior, see LEDs.

External Antenna Connectors

AP-754 has two sets of four RP-SMA female connectors for external antennas:

- First set (labeled as A0 through A3): 2.4 GHz and 5 GHz, combined (diplexed)
- Second set (labeled as B0 through B3): 6 GHz

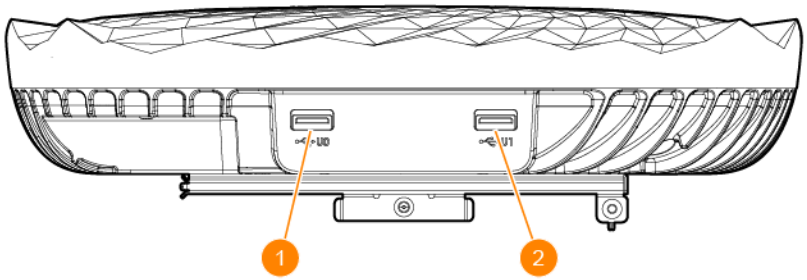
External antennas for this device must be installed by a professional installer, using manufacturer-approved antennas only. The Equivalent Isotropically Radiated Power (EIRP) levels for all external antenna devices must not exceed the regulatory limit set by the host country/domain. Installers are required to record the antenna gain for this device in the system management software. A list of approved antennas can be found in the ordering guide at https://www.hpe.com/psnow/doc/a00140934enw

Les antennes externes pour cet appareil doivent être installées par un professionnel agréé, en utilisant uniquement des antennes approuvées par le fabricant. Les niveaux équivalents de puissance à rayonnement isotrope (EIRP) pour tous les périphériques d'antenne externe ne doivent pas dépasser la limite réglementaire définie par le pays hôte / domaine. Les installateurs doivent enregistrer le gain d'antenne pour cet appareil dans le logiciel de gestion du système. Une liste d'antennes approuvées peut être trouvée à https://www.hpe.com/psnow/doc/a00140934enw

For the 6 GHz band, AP-754 is approved in the US (5925-6425 MHz and 6525-6875 MHz) and Canada (5925-6875 MHz) for Standard Power operations (in conjunction with an Automated Frequency Coordination [AFC] system).

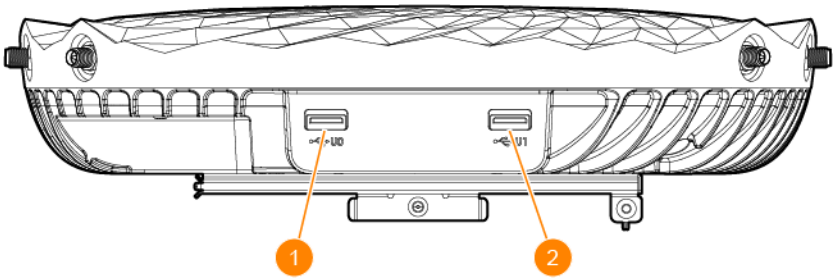
Side A View

Figure 3 *AP-755 Access Point Side A View*



Callout	Component
1	U0 (USB 2.0, Type-A)
2	U1 Host port (USB 2.0, Type-A)

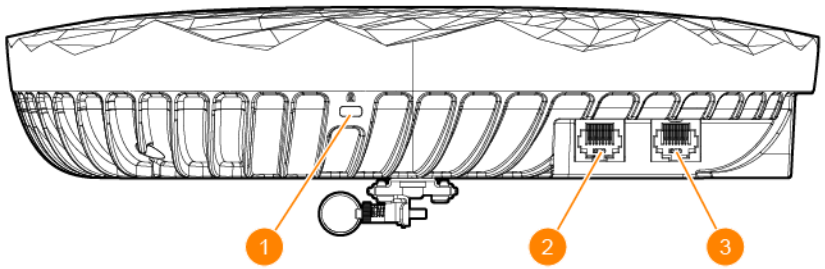
Figure 4 *AP-754 Access Point Side A View*



Callout	Component
1	U0 (USB 2.0, Type-A)
2	U1 Host port (USB 2.0, Type-A)

Side B View

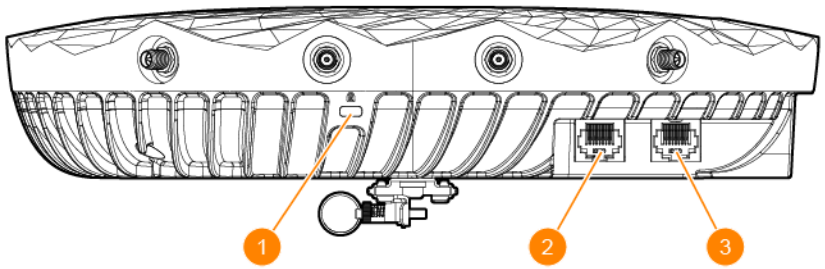
Figure 5 *AP-755 Access Point Side B View*



Callout	Component
1	Kensington Lock

Callout	Component
2	E1 Ethernet Port
3	E0 Ethernet Port

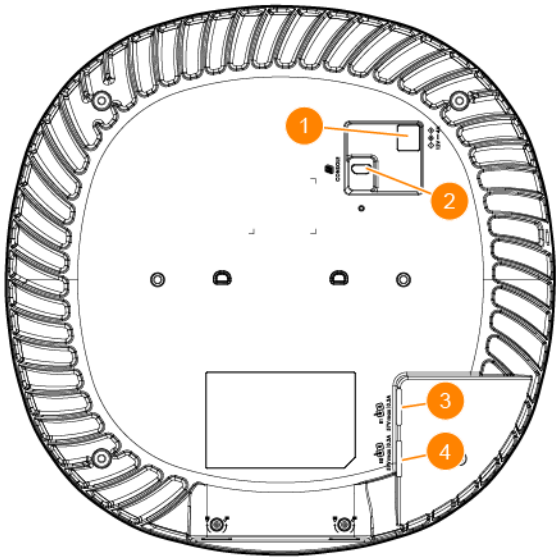
Figure 6 *AP-754 Access Point Side B View*



Callout	Component
1	Kensington Lock
2	E1 Ethernet Port
3	E0 Ethernet Port

Rear View

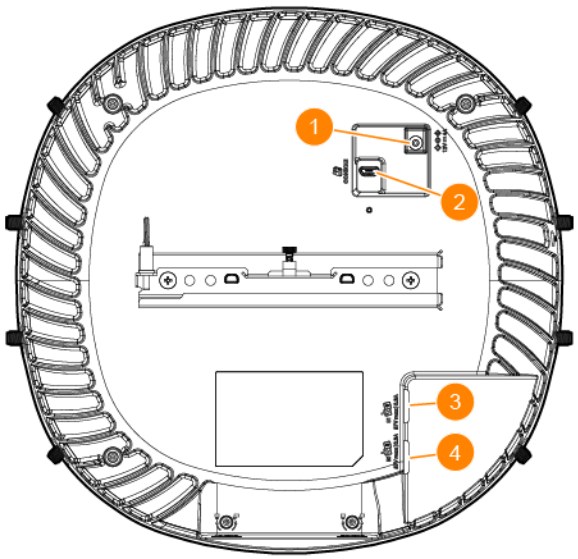
Figure 7 *AP-755 Access Point Rear View*



Callout	Component
1	DC Power Interface

Callout	Component
2	Console Port
3	E1 Ethernet Port
4	E0 Ethernet Port

Figure 8 *AP-754 Access Point Rear View*



Callout	Component
1	DC Power Interface
2	Console Port
3	E1 Ethernet Port
4	E0 Ethernet Port

LEDs

The LED indicators located on the front cover of the access point indicate the system status of the access point.

System Status LED

Table 2: *System Status LED*

Color/State	Meaning
Off	Device Powered off
Green- solid [1]	Device ready, fully functional, no network restrictions
Green- blinking [1]	Device booting, not ready
Green- flashing off [2]	Device ready, fully functional, either uplink negotiated in sub-optimal speed (< 1 Gbps)
Green- flashing on [3]	Device in deep-sleep mode
Amber- solid	Device ready, restricted power mode (limited PoE power available, or IPM restrictions applied), no network restrictions
Amber- flashing off [2]	Device ready, restricted power mode (limited PoE power available, or IPM restrictions applied), uplink negotiated in sub-optimal speed (< 1 Gbps)
Red	System error condition (insufficient PoE power source [802.3af] in use) - Immediate attention required

1. Blinking: one second on, one second off, 2 seconds cycle.
2. Flashing off: mostly on, fraction of a second off, 2 seconds cycle.
3. Flashing on: mostly off, fraction of a second on, 2 seconds cycle.

Radio Status LEDs

The Radio Status LED table below is applicable to 2GHz, 5GHz, and 6GHz indicators, for each corresponding radio.

Table 3: *Radio Status LED*

Color/State	Meaning
Off	Device powered off, or radio disabled
Green- solid	Radio enabled in access (AP) mode
Blue- solid	Radio enabled in uplink or mesh mode
Amber- solid	Radio enabled in monitor or spectrum analysis mode

LED Display Settings

The LEDs have three operating modes that can be selected in the system management software:

- Default mode: refer to Table 2 and Table 3.
- Off mode: all LEDs are off
- Blink mode: all LEDs blink green (synchronized)

To force the LEDs into off mode or back to software defined mode, press the reset button for a short duration (less than 10 seconds).

CAUTION

Pressing the reset button for longer than 10 seconds may cause the AP to reset and return to factory default state.

Bluetooth Low Energy and IEEE 802.15.4 Radio

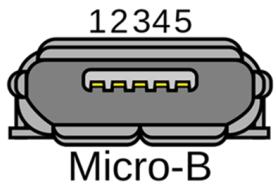
750 Series access points are equipped with an integrated BLE 5.0 and IEEE 802.15.4 (Zigbee) radio that provide the following capabilities:

- location and asset-tracking applications
- wireless console access
- IoT gateway applications

Console Port

The console port is a Micro-B connector is located on the back of this device. Use the proprietary AP-CBL-SERU cable or AP-MOD-SERU module (sold separately) for direct management of this device when connected to a serial terminal or laptop. For pin-out details, refer to Figure 9.

Figure 9 *Micro-B Port Pin-out*

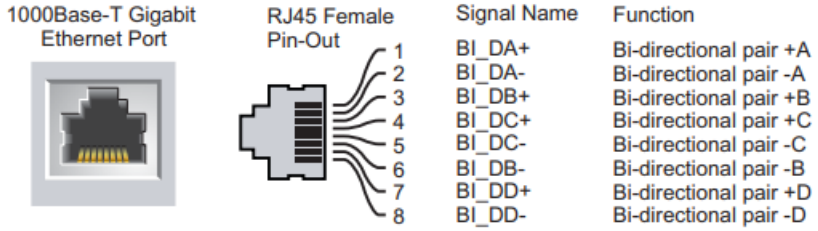


1: NC
2: RXD
3: TXD
4: GND
5: GND

Ethernet Ports

The 750 Series access points are equipped with two active Ethernet ports (E0 and E1). Both ports are 100/1000/2500/5000/10000 Base-T, auto-sensing MDI/MDIX, which supports uplink connectivity when linked by an Ethernet cable. Refer to Figure 10 for a detailed port pin-out.

Figure 10 *100/1000/2500/5000/10000 Base-T*



Kensington Lock Slot

750 Series access points are equipped with a Kensington lock slot for additional physical security.

USB Interface

The USB 2.0 interfaces located on the side of a 750 Series AP (see Side A View) are compatible with select cellular modems and other peripherals. When active, port U0 can supply up to 5W/0.9A and port U1 can supply up to 10W/2A, to a connected device.

Reset Button

The reset button located on the bottom of the device can be used to reset the access point to factory default settings or turn off/on the LED display.

Use one of the following methods to reset the access point to factory default settings:

To reset during normal operation:

1. Hold the reset button for more than 10 seconds while the access point is running.
2. Release the reset button.

To reset during power up, hold the reset button while the access point is powering up.

The system status LED will flash again within 15 seconds indicating that the reset is completed. The access point will now continue to boot with the factory default settings.

To toggle the LED display between Off and Blinking, during the normal operation of the access point, shortly press and release the reset button using a small, narrow object, such as a paperclip.

Power

Both Ethernet ports support PoE-in, allowing the AP to draw power from either one or a combination of class 3 (or higher) PoE power source. When the AP is powered by both E0 and E1 ports simultaneously, the AP will draw power from both ports, prioritizing E0 up to the available POE budget from each port.

PoE input rating is 57V max | 3.0A is per pair of wires in Ethernet cable. Ethernet cable has 4 pair of wires in total.

If PoE is not available, a proprietary 12V DC power adapter (sold separately) can be used to power the access point. When both PoE and DC power sources are available, the DC power source takes precedence. In that case, the access point simultaneously draws a minimal current from the PoE source. In the event that the DC source fails, the access point switches to the PoE source.

BLE Radio Default State

The integrated BLE radio is enabled by default when Access Points with a non TAA/FIPS product SKU are in the factory default state. TAA/FIPS compliant Access Points in the factory default state will have the integrated BLE radio disabled. Once the AP has established a connection with its management platform, the BLE radio state is updated to match what's configured there. This state is maintained if the AP is power-cycled or rebooted.

Console Port Default State

When the Access Point is in factory default state the console interface (both physical port and BLE) is enabled with default credentials (username is "admin" and password is the serial number of the unit). The console port state (enabled/disabled) and access credentials are updated to match what is configured in the management platform after the AP has established a connection and synchronized with the management platform. State and credentials are maintained if the AP is power-cycled or rebooted.

USB Host Interface Default State

When the Access Point is in factory default state the USB host interface is powered and enabled, assuming the AP is not in a restricted power mode. On some AP models the USB port may be disabled when a PoE source with insufficient power budget is used. The USB host interface state is updated to match what is configured in the management platform after the AP has established a connection and synchronized with the management platform. This state is maintained if the AP is power-cycled or rebooted.

Chapter 3
Installation

Refer to the sections below before beginning the installation process.

CAUTION

FCC Statement: Improper termination of access points installed in the United States configured to non-US model controllers will be in violation of the FCC grant of equipment authorization. Any such willful or intentional violation may result in a requirement by the FCC for immediate termination of operation and may be subject to forfeiture (47 CFR 1.80).

Pre-Installation Checklist

Before installing your 750 Series access point, ensure that you have the following:

NOTE

For Mounts, Antennas, Power and other Accessories, see the AP Accessories Guide.

- A mount kit compatible with the AP and mount surface
- One or two Cat6A or better UTP cables with network access
- Compatible antenna(s) and optional mount kit(s) when installing AP-754
- Optional items:
  - A compatible power adapter with cord
  - A compatible PoE midspan injector with power cord
  - An AP-CBL-SERU console cable
  - An AP-MOD-SERU console module
- Also, make sure at least one of the following network services is supported:
  - HPE Aruba Networking Discovery Protocol (ADP)
  - DNS server with an “A” record
  - DHCP Server with vendor specific options

NOTE

- HPE Aruba Networking in compliance with governmental requirements, has designed the HPE Aruba Networking 750 Series access points so that only authorized network administrators can change configuration settings. For more information about AP configuration, refer to the AP Software Quick Start Guide.
- If a power adapter other than an approved adapter is used in the US or Canada, it should be NRTL listed, with an output rated 12V DC, minimum 4A, marked “LPS” and “Class 2,” and suitable for plugging into a standard power receptacle in the US and Canada

Identifying Specific Installation Locations

Use the access point placement map generated by HPE Aruba Networking 750 Series RF Plan software application to determine the proper installation location(s). Each location should be as close as possible to the center of the intended coverage area and should be free from obstructions or obvious sources of interference. These RF

absorbers/reflectors/interference sources will impact RF propagation and should be accounted for during the planning phase and adjusted for in RF plan.

Identifying Known RF Absorbers/Reflectors/Interference Sources

Identifying known RF absorbers, reflectors, and interference sources while in the field during the installation phase is critical. Make sure that these sources are taken into consideration when you attach an access point to its fixed location.

RF absorbers include:

- Cement/concrete—Old concrete has high levels of water dissipation, which dries out the concrete, allowing for potential RF propagation. New concrete has high levels of water concentration in the concrete, blocking RF signals.
- Natural Items—Fish tanks, water fountains, ponds, and trees
- Brick

RF reflectors include:

- Metal Objects—Metal pans between floors, rebar, fire doors, air conditioning/heating ducts, mesh windows, blinds, chain link fences (depending on aperture size), refrigerators, racks, shelves, and filing cabinets.
- Do not place an access point between two air conditioning/heating ducts. Make sure that access points are placed below ducts to avoid RF disturbances.
- RF interference sources include:
- Microwave ovens and other 2.4 or 5 GHz objects (such as cordless phones)
- Cordless headset such as those used in call centers or lunch rooms

Portable RF communications equipment should be used no closer than 30 cm (12 inches) to any part of the access point. Otherwise, degradation of the performance of this equipment could result.

Access Point Installation

For indoor use only. The access point, AC adapter, and all connected cables are not to be installed outdoors. This stationary device is intended for stationary use in partly temperature controlled weather-protected environments (class 3.2 per ETSI 300 019).

- All access points should be professionally installed by a Certified Mobility Professional (ACMP). The installer is responsible for ensuring that grounding is available and meets applicable national and electrical codes. Failure to properly install this product may result in physical injury and/or damage to property.
- Tous les points d'accès doivent impérativement être installés par un professionnel agréé. Ce dernier doit s'assurer que l'appareil est mis à la terre et que le circuit de mise à la terre est conforme aux codes électriques nationaux en vigueur. Le fait de ne pas installer correctement ce produit peut entraîner des blessures corporelles et / ou des dommages matériels.

Software

For instructions on choosing operating modes and initial software configuration, refer to the AP Software Quick Start Guide.

Minimum Operating System Software Versions

- **AP-754 (*Excluding* 6 GHz support):**
  - ArubaOS and Aruba InstantOS (10.7.0.0 or later)
  - ArubaOS (10.7.0.0 or later)
- **AP-754 (*Including* 6 GHz support):**
  - ArubaOS and Aruba InstantOS (10.7.0.0 or later)
  - ArubaOS (10.7.0.0 or later)
- **AP-755:**
  - ArubaOS and Aruba InstantOS (10.7.0.0 or later)
  - ArubaOS (10.7.0.0 or later)

HPE Aruba Networking access points are classified as radio transmission devices, and are subject to government regulations of the host country. The network administrator(s) is/are responsible for ensuring that configuration and operation of this equipment is in compliance with their country's regulations. For a complete list of approved channels in your country, refer to the HPE Aruba Networking Downloadable Regulatory Table at https://www.arubanetworks.com/techdocs/DRT/Default.htm.

Verifying Post-Installation Connectivity

The integrated LEDs on the access point can be used to verify that the access point is receiving power and initializing successfully (see Table 1 and Table 2). Refer to the **AP Software Quick Start Guide** for further details on verifying post-installation network connectivity.

Chapter 4
Specifications, Safety and Compliance

Electrical

Ethernet

- E0: 100/1000/2500/5000/10000 Base-T auto-sensing Ethernet RJ-45 Interfaces
- E1: 100/1000/2500/5000/10000 Base-T auto-sensing Ethernet RJ-45 Interfaces

Power

- Power over Ethernet (IEEE 802.3at and 802.3bt compliant)
- 12V DC power interface, support powering through AC-to-DC power adapter
- Maximum power consumption: Refer to datasheet

Environmental

Operating

- Temperature: 0°C to +50°C (+32°F to +122°F)
- Humidity: 5% to 95% non-condensing

Storage

- Temperature: -25ºC to 55ºC (-13ºF to 131ºF)
- Relative Humidity: Up to 93% non-condensing

Transportation

- Temperature: -40ºC to 70ºC (-40ºF to 158ºF)
- Relative Humidity: Up to 95%

Medical

- Equipment not suitable for use in the presence of flammable mixtures.
- Connect to only IEC 62368-1 or IEC 60601-1 certified products and power sources. The end user is responsible for the resulting medical system complies with the requirements of IEC 60601-1.
- Wipe with a dry cloth, no additional maintenance required.
- No serviceable parts, the unit must be sent back to the manufacturer for repair.
- No modifications are allowed without approval from HPE Aruba Networking.

- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

- Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the access point. Otherwise, degradation of the performance of this equipment could result.

Regulatory Information

For the purpose of regulatory compliance certifications and identification, this product has been assigned a unique regulatory model number (RMN). The regulatory model number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to this regulatory model number. The regulatory model number RMN is not the marketing name or model number of the product.

The following regulatory model numbers apply to the 750 Series:

- AP-754 RMN: APIN0754
- AP-755 RMN: APIN0755

Regulatory consideration for AP-754: AP-754 will be offered in countries where there is an existing or clear and defined path to allow operation of 6GHz radios with external connectorized antennas, either as a Low Power Indoor (LPI) or Standard Power (SPI) product. Please contact your HPE Aruba Networking representative to confirm (existing or planned) availability for the country where the AP will be deployed.

Brazil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

O uso deste equipamento é restrito a ambientes fechados e proibido em plataformas petrolíferas, carros, trens, embarcações e no interior de aeronaves abaixo de 3.048 m (10.000 pés).

Para mais informações, consulte o site da Anatel: https://www.gov.br/anatel/pt-br

Canada

Innovation, Science and Economic Development

This Class B digital apparatus meets all of the requirements of the Canadian Interference-Causing Equipment Regulations.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). 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.

When operated in 5.15 to 5.25 GHz frequency range, this device is restricted to indoor use to reduce the potential for harmful interference with co-channel Mobile Satellite Systems.

This radio transmitter 4675A-APIN0754 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna	Gain (2.4/5/6GHz)	Impeadance
AP-ANT-311	3.0/6.0/6.0	50ohm
AP-ANT-312	3.0/6.0/6.0	50ohm
AP-ANT-313	3.0/6.0/6.0	50ohm
AP-ANT-340	4.0/5.0/5.0	50ohm
AP-ANT-345	4.5/5.5/5.5	50ohm
AP-ANT-348	7.0/7.0/7.0	50ohm

- Operation shall be limited to indoor use only.
- Operation on oil platforms, cars, trains, boats, and aircraft shall be prohibited except for on large aircraft flying above 10,000 feet.
- Devices shall not be used for control of or communications with unmanned aircraft systems.

Innovation, Sciences et Développement économique

Cet appareil numérique de classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Cet appareil contient des émetteurs / récepteurs exemptés de licence qui sont conformes aux RSS exempts de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes: (1) ce périphérique ne doit pas provoquer d'interférences, et (2) ce périphérique doit accepter toute interférence, y compris les interférences susceptibles de provoquer un dysfonctionnement.

En cas d'utilisation dans la plage de fréquences de 5,15 à 5,25 GHz, cet appareil doit uniquement être utilisé à intérieur afin de réduire les risques d'interférence avec les systèmes satellites mobiles partageant le même canal.

Cet émetteur radio 4675A-APIN0754 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antennes répertoriés ci-dessous, avec le gain maximum autorisé indiqué. Les types d'antennes non inclus dans cette liste qui ont un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil.

Antenne	Gagner (2.4/5/6GHz)	Impédance
AP-ANT-311	3.0/6.0/6.0	50ohm
AP-ANT-312	3.3/3.3/4.1	50ohm

Antenne	Gagner (2.4/5/6GHz)	Impédance
AP-ANT-313	3.0/6.0/6.0	50ohm
AP-ANT-340	4.0/5.0/5.0	50ohm
AP-ANT-345	4.5/5.5/5.5	50ohm
AP-ANT-348	7.0/7.0/7.0	50ohm

- Le fonctionnement est restreint à une utilisation à l'intérieur seulement.
- L'utilisation sur les plateformes pétrolières ou dans les voitures, les trains, les bateaux et les avions est interdite, à l'exception des gros avions volant à plus de 3 km (10 000 pi).
- Cet appareil ne doit pas être utilisé pour le contrôle ou pour la communication avec des systèmes de drones.

European Union and United Kingdom

The Declaration of Conformity made under Radio Equipment Directive 2014/53/EU as well as the United Kingdom's Radio Equipment Regulations 2017/UK is available for viewing below.. Select the document that corresponds to your device's model number as it is indicated on the product label.

EU & UK Declaration of Conformity

Compliance is only assured if the HPE Aruba Networking approved accessories as listed in the ordering guide are used.

This device is limited for indoor use. Use in trains with metal-coated windows (or similar structures made of materials with comparable attenuation characteristic) and aircraft is permitted. Operations in the 6GHz band are blocked by firmware for some countries pending adoption of spectrum. Refer to HPE Aruba Networking DRT release notes for details.

Wireless Channel Restrictions

5150-5350MHz band is limited to indoor only in the following countries; Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Latvia (LV), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Serbia (RS), Slovakia (SK), Slovenia (SL), Spain (ES), Sweden (SE), Switzerland (CH), Turkey (TR), United Kingdom (UK (NI).

Radio	Frequency Range	Max EIRP
BLE/Zigbee	2402-2480 MHz	10 dBm

Radio	Frequency Range	Max EIRP
Wi-Fi	2412-2472 MHz	20 dBm
	5150-5250 MHz	23 dBm
	5250-5350 MHz	23 dBm
	5470-5725 MHz	30 dBm
	5752-5850 MHz	14 dBm
	5945-6245 MHz	23dBm

NOTE

Lower power radio LAN product operating in 2.4 GHz and 5 GHz bands. Please refer to the ArubaOS User Guide/Instant User Guide for details on restrictions.

EU & UK Regulatory Contact:

HPE, Postfach 0001,1122 Wien, Austria

India

This product conforms to the relevant Essential Requirements of TEC, Department of Telecommunications, Ministry of Communications, Govt of India, New Delhi-110001.

Japan

この装置は、クラスB機器です。この装置は、住宅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 ー B

México

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 debeaceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

EAC

Нормативные требования Евhразийского Экономического Союза

EAC	ТОО «Хьюлетт-Паккард (К)», Республика Казахстан, 050040, г. Алматы, Бостандыкский район, проспект Аль-Фараби, 77/7, Телефон/факс: + 7 727 355 35 50 ЖШС «Хьюлетт-Паккард (К)», Қазақстан Республикасы, 050040, Алматы к., Бостандык ауданы, ӘлФараби даңғылы, 77/7, Телефон/факс: +7 727 355 35 50

Taiwan

- 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。
- 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，指依電信法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。
- 應避免影響附近雷達系統之操作。
- 高增益指向性天線只得應用於固定式點對點系統。
- 電波功率密度MPE 標準值：_ mW/cm2，送測產品實測值：_.__ mW/cm2，建議使用時設備天線至少距離人體20公分
- 報驗義務人(Applicant):慧與科技股份有限公司
- 地址(Address):11568 台北市南港區經貿二路66號10樓之1
- 電話(TEL): (02) 2652-8700

Thailand

Ukraine

Hereby, Hewlett Packard Enterprise Company declares that the radio equipment type [The Regulatory Model Number [RMN] for this device can be found in the Regulatory Information section of this document] is in compliance with Ukrainian Technical Regulation on Radio Equipment, approved by resolution of the CABINET OF MINISTERS OF UKRAINE dated May 24, 2017, No. 355. The full text of the UA declaration of conformity is available at the following internet address: https://certificates.ext.hpe.com/public/certificates.html.

Х'ЮЛЕТТ ПАКАРД ЕНТЕРПРАЗ, 6280 АМЕРИКА ЦЕНТР Д-Р, САН-ХОСЕ, КАЛІФОРНІЯ 95002, США

United States

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 manufacturer's 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

Improper termination of access points installed in the United States configured to a non-US model controller is a violation of the FCC grant of equipment authorization. Any such willful or intentional violation may result in a requirement by the FCC for immediate termination of operation and may be subject to forfeiture (47 CFR 1.80).

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

The network administrator(s) is/are responsible for ensuring that this device operates in accordance with local/regional laws of the host domain.

- FCC regulations restrict the operation of this device to indoor use only.
- The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet, only in the 5.925 - 6.425GHz band.
- Operation in the 5.9725-7.125 GHz band is prohibited for control of or communication with unnamed aircraft systems.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

- Toute modification effectuée sur cet équipement sans l'autorisation expresse de la partie responsable de la conformité est susceptible d'annuler son droit d'utilisation.
- RF Radiation Exposure Statement: This equipment complies with RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 8.66 inches (22cm) between the radiator and your body for 2.4 GHz, 5 GHz, and 6GHz operations. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Déclaration e la concernant l'exposition aux rayonnements à fréquence radioélectrique (FR): Cet appareil est conforme aux limites d'exposition aux rayonnements FR établies par la FCC. Il doit être installé et utilisé à une distance minimale de 22 cm (8,66 pouces) entre le radiateur et votre corps, qu'il opère sur la bande 2,4 GHz, 5 GHz, ou 6GHz. Cet émetteur ne doit pas être installé ou utilisé à proximité immédiate d'une autre antenne ni d'un autre transmetteur.

Proper Disposal of HPE Aruba Networking Equipment

HPE Aruba Networking equipment complies with countries' national laws for proper disposal and electronic waste management.

Waste of Electrical and Electronic Equipment

HPE Aruba Networking, a Hewlett Packard Enterprise company products at end of life are subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore are marked with the symbol shown at the left (crossed-out wheelie bin). The treatment applied at end of life of these products in these countries shall comply with the applicable national laws of countries implementing Directive 2012/19/EU on Waste of Electrical and Electronic Equipment (WEEE).

European Union RoHS

HPE Aruba Networking, a Hewlett Packard Enterprise company products also comply with the EU Restriction of Hazardous Substances Directive 2011/65/EU (RoHS). EU RoHS restricts the use of specific hazardous materials in the manufacture of electrical and electronic equipment. Specifically, restricted materials under the RoHS Directive are Lead (including Solder used in printed circuit assemblies), Cadmium, Mercury, Hexavalent Chromium, and Bromine. Some Aruba products are subject to the exemptions listed in RoHS Directive Annex 7 (Lead in solder used in printed circuit assemblies). Products and packaging will be marked with the "RoHS" label shown at the left indicating conformance to this Directive.

India RoHS

This product complies with the “India E-waste (Management) Rules, 2016” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule II of the Rule.

China RoHS

HPE Aruba Networking products also comply with China environmental declaration requirements and are labeled with the “EFUP 50” label shown at the left.

产品中有害物质的名称及含量
根据中国《电器电子产品有害物质限制使用管理办法》

部件名称	限用物质及其化学符号					
	铅 (Pb)	汞 (Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电池	O	O	O	O	O	O
传输线和网路线	O	O	O	O	O	O
断路器	X	O	O	O	O	O
冷却 & 加热系统	O	O	O	O	O	O
磁盘控制器	X	O	O	O	O	O
外部机箱	X	O	O	O	O	O
风扇	O	O	O	O	O	O
液晶显示器	X	O	O	O	O	O
硬盘(HDD)	X	O	O	O	O	O
液压 / 气压系统	O	O	O	O	O	O
键盘	O	O	O	O	O	O
介质（CD/DVD/光盘驱动器）	O	O	O	O	O	O
记忆体	O	O	O	O	O	O
鼠标	O	O	O	O	O	O
其他机械组装设备	X	O	O	O	O	O
电源/电源适配器	X	O	O	O	O	O
印刷电路组件 (PCAs)	X	O	O	O	O	O
天线	X	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

此表中所有名称中含 “X” 的部件均符合欧盟 RoHS 立法

注：环保使用期限的参考标识取决于产品正常工作的温度和湿度等条

除非另有标明，此电子电器产品有害物质限制使用(EPUP)
标签适用于所有慧与公司服务器，网络，存储设备

Taiwan RoHS

Taiwan RoHS Hazardous Substances table

台灣限用物質含有情況標示

單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr^{+6})	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
傳輸線和線材	O	O	O	O	O	O
外殼	—	O	O	O	O	O
記憶體	O	O	O	O	O	O
其他機械組裝設備	—	O	O	O	O	O
印刷電路零組件 (PCAs)	—	O	O	O	O	O
斷路器 (選配)	—	O	O	O	O	O
冷卻及加熱系統(選配)	O	O	O	O	O	O
風扇(選配)	O	O	O	O	O	O
存取裝置(HDD) (選配)	—	O	O	O	O	O
讀寫元件（CD/DVD/ 磁碟機）(選配)	—	O	O	O	O	O
變壓器/電源供應器(選配)	—	O	O	O	O	O
備考1. 〝O〞係指該項限用物質之百分比含量未超出百分比含量基準值。 備考2. 〝—〞係指該項限用物質為排除項目。						

選配單元使用於特定產品型號，詳細規格請參照產品說明書。

Turkey RoHS material content declaration

Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur