HPE Aruba Networking 600H Series Hospitality Access Points

Installation Guide



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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.



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This document describes the hardware features of the HPE Aruba Networking 600H Series Hospitality 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 a detailed hardware overview of the HPE Aruba Networking 600H Series Hospitality Access Points.
- <u>Installation</u> describes how to install the HPE Aruba Networking 600H Series Hospitality Access Points
- Specifications, Safety, and Compliance lists the HPE Aruba Networking 600H Series Hospitality Access Points's technical specifications, safety, and regulatory compliance information.

Related Documentation

You require the following documents for the complete management of HPE Aruba Networking access point.

- Latest document of the software user guide: https://www.arubanetworks.com/techdocs/ArubaDocPortal/content/cons-aos-home.htm
- CLI bank: https://www.arubanetworks.com/techdocs/CLI-Bank/Content/Home.htm

Contacting Support

Table 1: Contact Information

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

The HPE Aruba Networking 600H Series Hospitality Access Points supports the IEEE 802.11ax (Wi-Fi 6E) WLAN standard, while also supporting IEEE 802.11a/b/g/n/ac wireless services.

To simplify the ordering and distribution of the 600H Series access point, HPE Aruba Networking offers the AP-605HR remote AP bundle that combines an AP-605H, a desk stand, power adapter, and power cord.

Package Contents

Inform your supplier to check if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed.

Table 2: Package Contents for AP-605H

| Item | Quantity |
|---|----------|
| HPE Aruba Networking 600H Series Hospitality Access Points | 1 |
| M2.5 x 14 T8H security type tamper proof Torx screw | 1 |

Table 3: Package Contents for AP-605HR

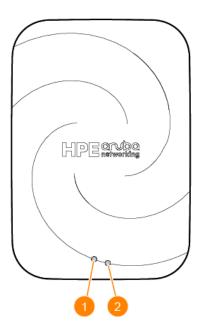
| Item | Quantity |
|---|----------|
| HPE Aruba Networking 600H Series Hospitality Access Points | 1 |
| Desk stand (pre-installed to the AP) | 1 |
| AC-to-DC power adapter | 1 |
| AC power cord | 1 |
| T8H TorX screw | 2 |



The two T8H Torx screw are provided as an alternative for the two Phillips head screws that are used to attach the desk stand to the AP.

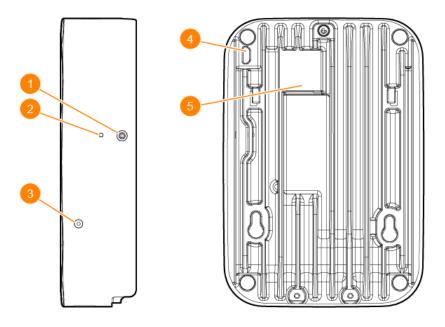
Access Point Views

Figure 1 AP-605H Front View



| 1 | System Status LED |
|---|-------------------|
| 2 | Radio Status LED |

Figure 2 AP-605H Side and Back View



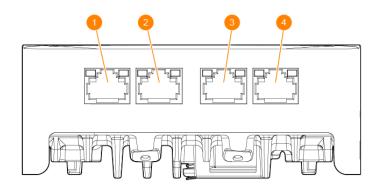
| 1 | Security Screw Hole |
|---|---------------------|
| 2 | Reset Button |

| 3 | DC Power Port |
|---|----------------------|
| 4 | Micro-B Console Port |
| 5 | E0 Ethernet Port |



There is a trunking design on the back of the AP for Ethernet cable routing from E0 Ethernet port.

Figure 3 AP-605H Bottom View



| 1 | E1 Ethernet Port |
|---|------------------|
| 2 | E2 Ethernet Port |
| 3 | E3 Ethernet Port |
| 4 | E4 Ethernet Port |

Figure 4 AP-605H Top View

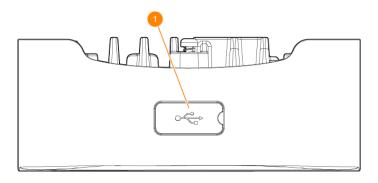
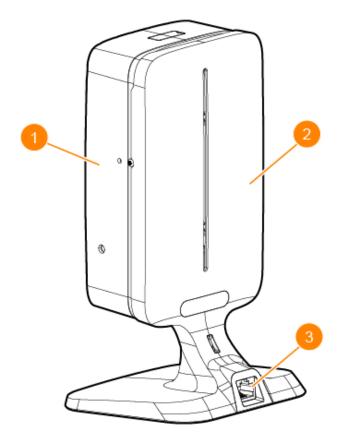


Figure 5 AP-605HR Back View



| 1 | AP-605H |
|---|------------------|
| 2 | Desk Stand |
| 3 | E0 Ethernet Port |

System Status LED

The system status LED indicates the system status of the access point.

Table 4: System Status LED

| LED | Color/State | Meaning |
|------------|----------------------------------|---|
| <u>(i)</u> | Off | AP Powered off |
| | Green- blinking 1 | AP booting, not ready |
| | Green- solid | AP ready, fully functional, no network restrictions |
| | Green- flashing off ² | AP ready, fully functional, uplink negotiated in sub-optimal speed (< 1 Gbps) |
| | Green- flashing on ³ | AP in deep-sleep mode |
| | Amber- solid | AP ready, restricted power mode (limited PoE power available, or IPM restrictions applied), no network restrictions |
| | Amber- flashing off | AP ready, restricted power mode (limited PoE power available, or IPM restrictions applied), uplink negotiated in sub-optimal speed (< 1 Gbps) |
| | Red | System error condition - 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 LED

The radio status LED indicates the radio status of the access point.

Table 5: Radio Status LED

| LED | Color/State | Meaning |
|---------|--|---|
| | Off | AP Powered off, or both radios disabled |
| | Green - solid | Both radios enabled in access mode |
| | Green - blinking 1 | One radio enabled in access mode, other disabled |
| | Amber - blinking ¹ | One radio enabled in monitor mode, other disabled |
| | Green/Amber - alternating ² | One radio in access mode, other in monitor mode |
| | Amber - solid | Both radios enabled in monitor mode |

- 1. Blinking: one second on, one second off, 2 seconds cycle.
- 2. Alternating: one second each color, 2 seconds cycle.

LED Display Settings

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

- Default mode: refer to Table 4 and Table 5
- Off mode: all LEDs are off
- Blink mode: all LEDs blink green (synchronized). One second on, one second off, 2 seconds cycle.

Pressing the reset button for less than 10 seconds during normal operation will toggle the LED mode between default and off mode.



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

Security Screw Hole

The security screw hole can be used with applicable mount brackets for additional physical security.

Reset Button

The reset button can be used to reset the AP to factory default settings, or turn off/on the LED.

- To reset the AP to factory default settings, hold down the reset button for several seconds while the AP is being powered on, or for more than 10 seconds during normal operation.
- To turn off or on the LED, press the reset button for less than 10 seconds during normal operation.

Micro-B Console Port

The console port is a Micro-B connector located on the back of the access point. Use the proprietary AP-CBL-SERU cable (sold separately) for direct management of the access point when connected to a serial terminal or laptop.

Figure 6 Micro-B Console Port Pin-out



Ethernet Ports

The access point has five Ethernet ports (E0 - E4):

■ The E0 port is a 100/1000/2500Base-T auto-sensing MDI/MDIX uplink port, supporting PoE-in (AP is a PoE-PD device), allowing the device to draw power from a compliant PoE power source.

■ The E1- E4 ports are 100/1000Base-T auto-sensing MDI/MDIX downlink ports. The E1- E2 ports have power sourcing capability (PSE) to supply power to any compliant 802.3af (class 0-3) or 802.3at (class 4) PD devices.

Each of the E1-E4 ports has two LEDs located on both sides, the left LED indicating the network status or activity on the port, while the right LED indicating the PoE PSE powering status when the access point is operating as a Power Sourcing Equipment (PSE).

Table 6: Ethernet Port LEDs

| LED | Color/State | Meaning | | | | |
|-------|------------------|--|--|--|--|--|
| Left | Off | Meet one of the following conditions: Access point is powered off Port is disabled No link established | | | | |
| | Green - blinking | Activity detected on the port | | | | |
| | Green - solid | Link established at max speed (1Gbps) | | | | |
| | Amber - solid | Link established at reduced speed (10/100Mbps) | | | | |
| Right | Off | Meet one of the following conditions: Access point is powered off Access point is not supplying PoE power | | | | |
| | Green - blinking | Access point is negotiating PoE power with the device connected to this port. | | | | |
| | Green - solid | Access point is supplying PoE power to the device connected to this port. | | | | |

Power

The E0 port supports PoE-in (AP is a PoE-PD device), allowing the AP to draw power from a compliant PoE power source. If PoE is not available, a proprietary AP-AC2-48C 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 sources.

When powered by DC or 802.3bt (class 6) PoE, the AP will support 802.3af (class 0-3) PoE-PSE power on E1 and E2, or 802.3at (class 4) PoE-PSE power on E1 or E2.

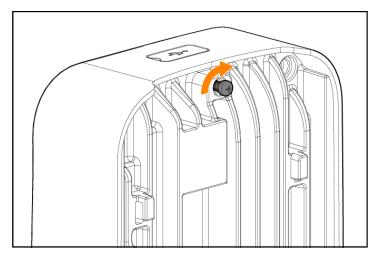
The Intelligent Power Monitoring (IPM) feature may also be used to manage the power consumption preferences for this device. When enabled, the user may enable/disable power restrictions for the access point using HPE Aruba Networking's AP management software. Refer to the HPE Aruba Networking 600H Series Hospitality Access Points datasheet for details on possible functional restrictions when the AP is powered by POE, and how IPM can help to avoid or minimize these restrictions.

USB 2.0 Host Interface

The USB 2.0 USB-A interface is compatible with selected cellular modems and other peripherals. When active, this USB interface can supply up to 5W/1A to a connected device.

To secure the USB device to the access point, tighten the USB security screw after the USB device is plugged into the USB interface.

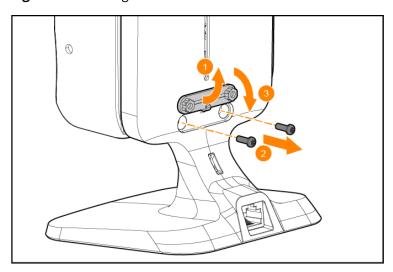
Figure 7 *Tightening USB Security Screw*



If you have ordered the AP-605HR remote AP bundle, a desk stand is pre-installed on the access point. The desk stand will block the USB security screw. To use the USB security screw, follow these steps:

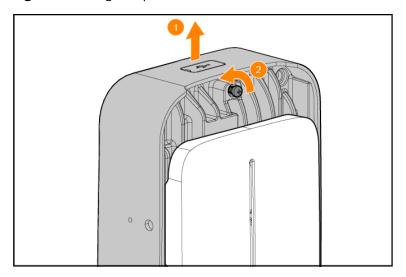
1. Lift the screw cap and remove the two screws from the desk stand.

Figure 8 Removing Two Screws



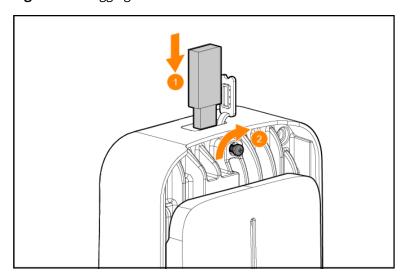
2. Slide the AP up, but do not remove the RJ45 connector from the access point. Loosen the USB security screw.

Figure 9 Sliding AP Up



3. Plug in the USB device, tighten the USB security screw and slide the AP down.

Figure 10 Plugging in USB Device



4. Tighten the two screws on the desk stand, and put the cap back.

BLE Radio Default State

When the access point is in factory default state the integrated BLE radio is enabled. This applies to the non-TAA product SKUs only. On the TAA products, the BLE radio is disabled when the unit is in factory default conditions. 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). Once the AP has established a connection with its management platform, the console port state

(enabled/disabled) and access credentials are updated to match what's configured there. 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. Once the AP has established a connection with its management platform, the USB host interface state is updated to match what's configured there. This state is maintained if the AP is power-cycled or rebooted.

Before You Begin

Refer to the sections below before beginning the installation process.



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 the access point, be sure that you have the following:

- A mount kit compatible with the AP and mount surface
- One or two Cat5E or better UTP cables with network access

Some optional items:

- A compatible power adapter with power cord
- A compatible PoE midspan injector with power cord
- An AP-CBL-SERU console cable

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



Access points are radio transmission devices and as such are subject to governmental regulation. Network administrators responsible for the configuration and operation of access points must comply with local broadcast regulations. Specifically, access points must use channel assignments appropriate to the location in which the access point will be used.

Identifying Specific Installation Locations

Use the access point placement map generated by HPE Aruba Networking 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:

- Other Wi-Fi networks
- Microwave ovens
- Bluetooth devices

Access Point Installation

The HPE Aruba Networking 600H Series Hospitality Access Points is designed for desk, wall, or wall box mount. HPE Aruba Networking provides several mount kits to use with the access point. These mount kits are available as accessories and must be ordered separately.

Table 7: Mount Kits for 600H Series Access Point

| Mount Kit | Installation Guide |
|--|--|
| AP-500H-MNTD2 mount kit for desk | AP-500H-MNTD2 Mount Kit Installation Guide |
| AP-600H-MNT1 mount kit for wall and single-gang wall box | AP-600H-MNT1 Mount Kit Installation Guide |
| AP-600H-MNT2 mount kit for dual-gang wall box | AP-600H-MNT2 Mount Kit Installation Guide |



- All HPE Aruba Networking access points should be professionally installed by a professional installer. 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 HPE Aruba Networking 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.



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).

Software

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



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.

Verifying Post-Installation Connectivity

The integrated LED on the access point can be used to verify that the access point access point is receiving power and initializing successfully. Refer to the <u>AP Software Quick Start Guide</u> for further details on verifying post-installation network connectivity.

This chapter provides an overview of the HPE Aruba Networking 600H Series Hospitality Access Points specifications, safety, and compliance information.

Electrical

- Ethernet
 - E0 port: 100/1000/2500Base-T auto-sensing MDI/MDX wired RJ45 network connectivity port.
 - E1 port: 100/1000Base-T auto-sensing MDI/MDX wired RJ45 network connectivity port, supporting PoE-PSE to a compliant 802.3af or 802.3at device.
 - E2 port: 100/1000Base-T auto-sensing MDI/MDX wired RJ45 network connectivity port, supporting PoE-PSE to a compliant 802.3af or 802.3at device.
 - E3 port: 100/1000Base-T auto-sensing MDI/MDX wired RJ45 network connectivity port.
 - E4 port: 100/1000Base-T auto-sensing MDI/MDX wired RJ45 network connectivity port.
- Power
 - 48V DC power interface, support powering through AC-to-DC power adapter
 - POE-PD: 802.3af/at/bt POE (class 3, 4 or 6)

Environmental

- Operating
 - Operating Temperature Range: 0°C to +40°C (+32°F to +104°F)
 - Operating Humidity Range: 5% to 93% (RH), non-condensing
- Storage
 - Storage Temperature Range: -40°C to +70°C (-40°F to +158°F)
 - Storage Humidity Range: 5% 93% (RH), non-condensing

For additional specifications on this product, please refer to the HPE Aruba Networking 600H Series Hospitality Access Points data sheet.

Regulatory Model Name

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 regulatory model name for the HPE Aruba Networking 600H Series Hospitality Access Points:

AP-605H RMN: APINH605AP-605HR RMN: APINH605

Brazil

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

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

Canada

Innovation, Science and Economic Development Canada

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 of this device 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.

When operated in the 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.



- 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 Canada

Cet appareil numérique de Classe B répond à toutes les exigences de la réglementation canadienne sur le matériel brouilleur.

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.

Pour un fonctionnement dans la bande de fréquences comprises entre 5,15 et 5,25 GHz, son utilisation est limitée à un environnement intérieur afin de réduire la possibilité d'interférences nuisibles avec les systèmes mobiles par satellite opérant sur le même canal.





- 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.

EAC

Нормативные требования Евразийского Экономического Союза

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, Әл-Фараби даңғылы, 77/7, Телефон/факс: +7 727 355 35 50



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

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), 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 |
| | 5725-5850 MHz | 14 dBm |
| | 5945-6425 MHz | 23 dMm |

RK CE

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 — B

Medical

- 1. Equipment not suitable for use in the presence of flammable mixtures.
- 2. 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.
- 3. Wipe with a dry cloth, no additional maintenance required.
- 4. No serviceable parts, the unit must be sent back to the manufacturer for repair.
- 5. 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.



- This device is intended for indoor use in professional healthcare facilities.
- This device has no IEC/EN60601-1-2 essential performance.
- Compliance is based on the use of HPE Aruba Networking approved accessories. Refer to the ordering guide for this access point at https://www.arubanetworks.com

Mexico

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.

Taiwan

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。

- 1.應避免影響附近雷達系統之操作。
- 2.高增益指向性天線只得應用於固定式點對點系統
- 3.電波功率密度 MPE 標準值 1 mW/cm²

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 declares that the radio equipment type [The Regulatory Model Number [RMN] for this device can be found in the Regulatory Model Name 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 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.

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).

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.
- Operation on oil platforms, cars, trains, boats, and aircraft shall be prohibited except for on large aircraft flying above 10,000 feet.
- Operation in the 5.9725-7.125GHz band is prohibited for control or communication with unnamed aircraft systems.



- **RF Radiation Exposure Statement**: This equipment complies with RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 7.87 inches (20 cm) between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Déclaration de la concernant l'exposition aux rayonnements à fréquence radioélectrique (FR): Cet appareil est conforme aux limites d'exposition aux rayonnements FR établies. Il doit être installé et utilisé à une distance minimale de 20 cm (7,87 pouces) entre le radiateur et votre corps. Cet émetteur ne doit pas être installé ou utilisé à proximité immédiate d'une autre antenne ni d'un autre transmetteur.



- 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.

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 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



Hewlett Packard Enterprise products 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 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 RoHS requirements as prescribed by E-Waste (Management & Handling) Rules, governed by the Ministry of Environment & Forests, Government of India.

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》

| | 限用物质及其化学符号 | | | | | | |
|----------------------|------------|--------|-------|-----------------|---------------|-----------------|--|
| 部件名称 | 铅 (Pb) | 汞 (Hg) | 镉(Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) | |
| 电池 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 传输线和网路线 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 断路器 | Х | 0 | 0 | 0 | 0 | 0 | |
| 冷却 & 加热系统 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 磁盘控制器 | Х | 0 | 0 | 0 | 0 | 0 | |
| 外部机箱 | Х | 0 | 0 | 0 | 0 | 0 | |
| 风扇 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 液晶显示器 | Х | 0 | 0 | 0 | 0 | 0 | |
| 硬盘(HDD) | Х | 0 | 0 | 0 | 0 | 0 | |
| 液压/气压系统 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 键盘 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 介貭(CD/DVD/光盘 驱动器) | 0 | 0 | 0 | 0 | 0 | 0 | |
| 记忆体 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 鼠标 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 其他机械组装设备 | Х | 0 | 0 | 0 | 0 | 0 | |
| 电源/电源适配器 | Х | 0 | 0 | 0 | 0 | 0 | |
| 印刷电路组件 (PCAs) | Х | 0 | 0 | 0 | 0 | 0 | |
| 天线 | Х | 0 | 0 | 0 | 0 | 0 | |

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

| | 限用物質及其化學符號 | | | | | | |
|-------------------------------------|------------|--------|--------|----------------------------|---------------|-----------------|--|
| 單元 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 外殼 | _ | 0 | 0 | 0 | О | O | |
| 記憶體 | 0 | 0 | 0 | 0 | О | 0 | |
| 其他機械組裝設備 | _ | 0 | 0 | 0 | 0 | 0 | |
| 印刷電路零組件 (PCAs) | _ | 0 | 0 | 0 | О | 0 | |
| 斷路器 (選配) | _ | 0 | 0 | 0 | 0 | O | |
| 冷卻及加熱系統(選配) | 0 | 0 | 0 | 0 | 0 | O | |
| 風扇(選配) | 0 | 0 | 0 | 0 | 0 | 0 | |
| 存取裝置(HDD) (選配) | _ | 0 | 0 | O | 0 | 0 | |
| 讀寫元件(CD/DVD/ 磁碟 機)(選配) | | 0 | 0 | 0 | 0 | 0 | |
| 變壓器/電源供應器(選配) | _ | 0 | 0 | 0 | О | 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1. *O″條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. *-″條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