

Aruba AP-375ATEX Series Access Points

Installation Guide

The Aruba AP-375ATEX series access points support IEEE 802.11 ac Wave 2 standard, delivering high performance with the MU-MIMO (Multi-User Multiple-Input, Multiple-Output) technology, while also supporting 802.11a/b/g/n wireless services.

Package Contents

- AP-375ATEX access point
- Cable gland x1
- USB console cable x1
- Copper lug x1
- M4x6 screw x1



The weatherproof caps for Ethernet and Console interfaces are connected to the access point, not loose in the package.



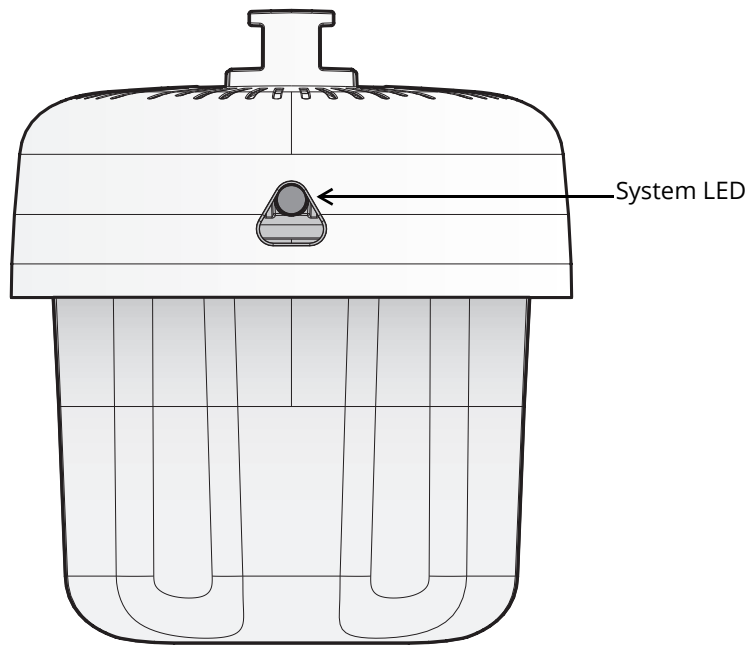
Mounting kits for use with the access points are sold separately. Contact your Aruba sales representative for details.



Inform your supplier 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.

Hardware Overview

Figure 1 AP-375ATEX Front View



LED

The access point is equipped with one LED that indicates the system status of the access point.

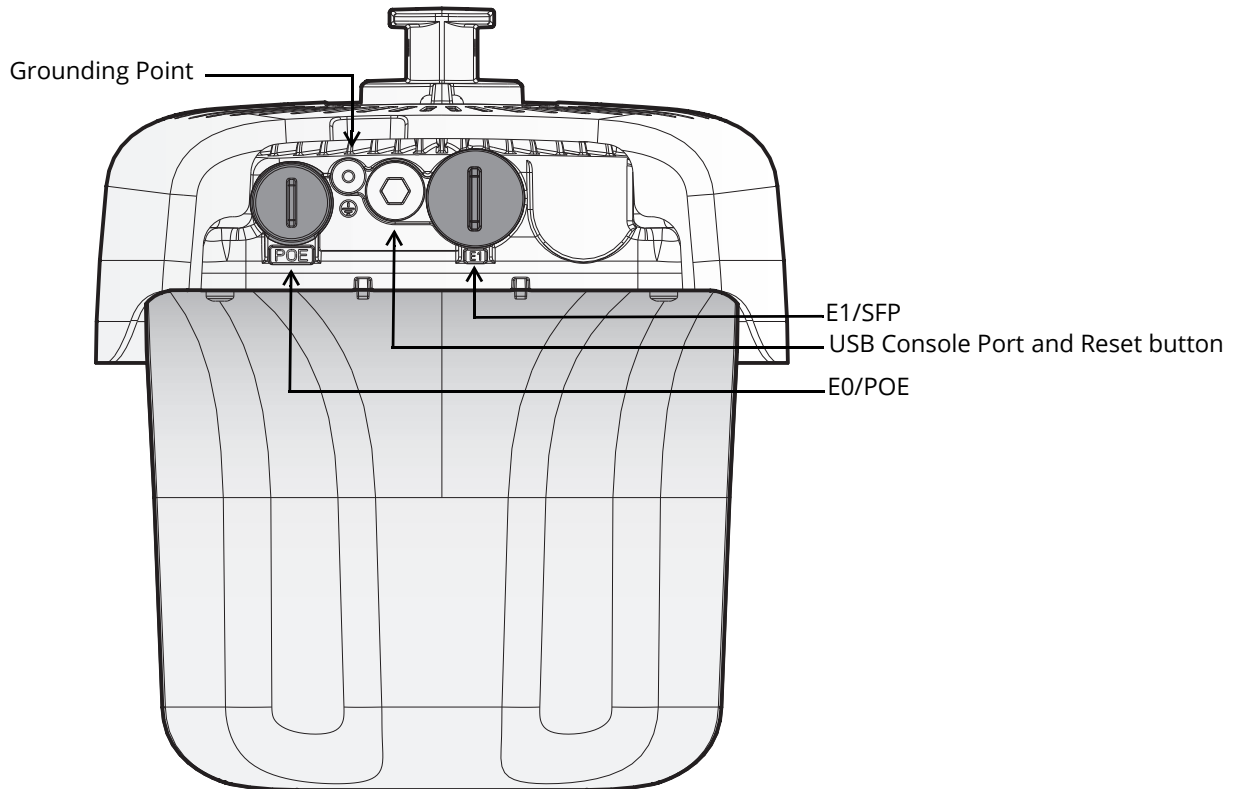
Table 1 LED Meanings during Boot Up

LED	Color/State	Meaning
System LED	Off	No power to AP
	Red	Initial power-up
	Green - Flashing	AP booting
	Green - Steady	AP ready and 1000Mbps Ethernet link established. The LED turns off after 1200 seconds
	Green - Yellow, 6 seconds period	AP ready and 10/100Mbps Ethernet link established. The LED turns off after 1200 seconds

Table 2 LED Meanings during Operation

LED	Color/State	Meaning
System LED	Solid Red	General fault-immediate action required
	One blink off every 3 seconds	Radio 0 fault (5 GHz)
	Two quick blink off 0.5 seconds apart cycled every 3 seconds	Radio 1 fault (2.4GHz)

Figure 2 AP-375ATEX Rear View




E0/POE

The AP-375ATEX access point is equipped with one 10/100/1000 Base-T auto-sensing MDI/MDX Ethernet port. This port supports wired-network connectivity, in addition to Power over Ethernet (PoE) from IEEE 802.3at compliant power sources.

The AP-375ATEX accepts 56V DC (802.3at) nominal as a standard powered device (PD) from a Power Sourcing Equipment (PSE) such as a PoE midspan injector, or network infrastructure that supports PoE. This port has an RJ-45 female connector with the pin-outs shown in [Figure 3](#).

Figure 3 Gigabit Ethernet Port Pin-Out

1000Base-T Gigabit Ethernet Port	RJ-45 Female Pin-Out	Signal Name	Function
	1	BI_DA+	Bi-directional pair +A, POE Negative
	2	BI_DA-	Bi-directional pair -A, POE Negative
	3	BI_DB+	Bi-directional pair +B, POE Positive
	4	BI_DC+	Bi-directional pair +C, POE Positive
	5	BI_DC-	Bi-directional pair -C, POE Positive
	6	BI_DB-	Bi-directional pair -B, POE Positive
	7	BI_DD+	Bi-directional pair +D, POE Negative
	8	BI_DD-	Bi-directional pair -D, POE Negative

E1/SFP Port

The fiber optic port is not certified for use in hazardous locations.

Grounding Point

Always remember to protect the access point by installing grounding lines. The ground connection must be complete before connecting power to the access point enclosure.

USB Console Port

The USB Micro-B console port allows you to connect the access point to a laptop or serial console for direct management. Use the included USB console cable to connect the access point. You can download the necessary driver for USB-UART adapter from support.arubanetworks.com under the **Tools & Resources** tab.



You need a proper Allen wrench (8mm) to open the cover of the USB Console port.

Use the following setting to access the terminal:

Table 3 Console Settings

Baud Rate	Data Bits	Parity	Stop Bits	Flow Control
9600	8	None	1	None

Reset Button

The reset button can be used to return the access point to factory default settings. To reset the access point:

1. Power off the AP.
2. Press and hold the reset button using a small, narrow object, such as a paperclip.
3. Power-on the AP without releasing the reset button. The system LED will flash within 5 seconds.
4. Release the reset button.

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

Before You Begin



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 Network Requirements



The instructions in this section are applicable to the AP-375ATEX access points running ArubaOS only.

After WLAN planning is complete and the appropriate products and their placement have been determined, the Aruba controller(s) must be installed and initial setup performed before the Aruba access points are deployed. For initial setup of the controller, refer to the *ArubaOS Quick Start Guide* for the software version installed on your controller.

Pre-Installation Checklist

Before installing your access point, be sure that you have the following:

- CAT5E UTP cable or better
 - IEEE 802.3at compliant PoE source
- For the access point running ArubaOS only:
- Aruba controller provisioned on the network
 - Layer 2/3 network connectivity to your access point
 - One of the following network services:
 - Aruba Discovery Protocol (ADP)
 - DNS server with an “A” record
 - DHCP Server with vendor specific options



Aruba in compliance with governmental requirements, has designed the AP-375ATEX access points so that only authorized network administrators can change configuration settings. For more information about AP configuration, refer to the *ArubaOS Quick Start Guide* and *ArubaOS/Instant User Guide*.



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.

Verifying Pre-Installation Connectivity



The instructions in this section are applicable to the AP-375ATEX access points running ArubaOS only.

Before you install access points in a network environment, make sure that the access points will be able to locate and connect to the controller when they are powered on. Specifically, you must verify the following conditions:

- When connected to the network, each access point is assigned a valid IP address.
- Access points are able to locate the controller.

Refer to the *ArubaOS Quick Start Guide* for instructions on locating and connecting to the controller.

Outdoor Planning and Deployment Considerations

Prior to deploying an outdoor wireless network, the environment must be evaluated to plan for a successful WLAN deployment. Successfully evaluating the environment enables the proper selection of routers and assists in the determination of their placement for optimal RF coverage. This process is considered WLAN or RF planning and Aruba's system engineers can assist in the outdoor planning process.



The rules for the 5600-5650 MHz band vary by region.

Identifying Specific Installation Locations

You can mount the access point on a wall or pole. Use the AP placement map generated by Aruba's 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 have been 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 AP to its fixed location. Examples of sources that degrade RF performance include:

- Cement and brick
- Objects that contain water
- Metal
- Microwave ovens
- Wireless phones and headsets

Installing the Access Point



Service to all Aruba products should be performed by trained service personnel only.

Using Mount Kits

The AP-375ATEX access point can be installed on a wall or attached to a pole by using mount kits:

Table 4 *Applicable Mount Kits for AP-375ATEX Access Point*

Part Number	Description
JW052A	AP-270-MNT-V1 long mount kit for wall and vertical pole mounting, 300 mm from vertical mounting asset.
JW053A	AP-270-MNT-V2 short mount kit for wall and vertical pole mounting, 75 mm from vertical mounting asset.
JW054A	AP-270-MNT-H1 mount kit for hanging from inclined or horizontal structure.
JW055A	AP-270-MNT-H2 flush mount kit for wall and ceiling mounting.



The AP-375ATEX access point does not ship with any mount kits. These mount kits are available as accessories and must be ordered separately.



For installation instructions on AP-270-MNT-V1, AP-270-MNT-V2, AP-270-MNT-H1 and AP-270-MNT-H2 mount kit, please refer to the *AP-270-MNT-V1 Installation Guide*, *AP-270-MNT-V2 Installation Guide*, *AP-270-MNT-H1 Installation Guide* and *AP-270-MNT-H2 Installation Guide* respectively.

Grounding the Access Point

The grounding must be completed before powering up the access point. The grounding wire should be #8 AWG.

1. Peel the cover of one end of the grounding wire and place the bare grounding wire into the included copper lug, and press firmly with the crimping pliers.
2. Fasten the copper lug to the grounding hole on the access point with the included M4 x6 screw.

Connecting the Ethernet Cable

To connect the Ethernet cable to the access point, perform the following steps.

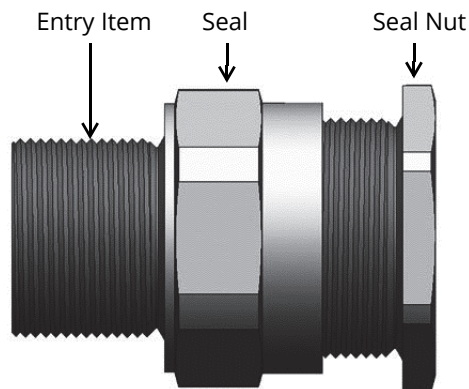


Failure to use the cable gland can lead to connectivity and POE issues.



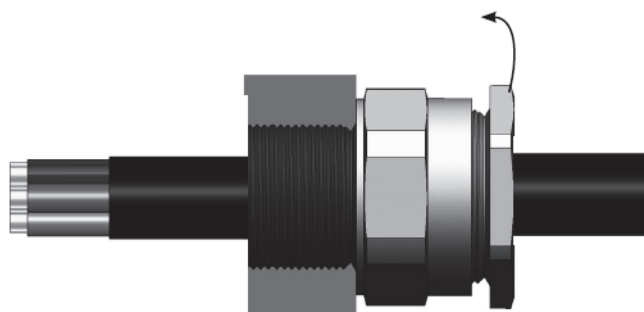
The cable is not included and must be purchased separately. Purchase a suitable UV-resistant, outdoor rated, CAT 5E or better RJ45 cable for use with the access point.

Figure 4 Cable Gland



1. Remove the dust cap from the Ethernet port.
2. It is not necessary to dismantle the cable gland any further than illustrated in [Figure 4](#).
3. Fit the cable gland into the Ethernet port with the shroud and fully tighten the entry item.
4. Determine the conductor length required to suit the installation and prepare the cable accordingly, removing part of the outer sheath where required to reveal the insulated conductors.
5. Slacken the seal nut to relax the seal.
6. Pass the cable through the cable gland (See [Figure 5](#)), then attach the connector to the end of the cable.
7. Insert the cable connector to the Ethernet port, then tighten the seal nut by hand until resistance is felt (when the seal contacts the cable). Tighten with a spanner one further turn.

Figure 5 Passing a Cable through the Cable Gland



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](#)). For instructions on initial setup and software configuration, refer to the AP Software Quick Start Guide.

Electrical and Environmental Specifications

Electrical

- Ethernet
 - One 10/100/1000Base-T auto-sensing Ethernet RJ-45 Interfaces
 - Power over Ethernet (IEEE 802.3at compliant)

Environmental

- Operating
 - Temperature: -40°C to 65°C (-40°F to 149°F)
- Storage
 - Temperature: -40°C to 70°C (-40°F to 158°F)
 - Humidity: 5% to 93% non-condensing

For additional specifications on this product, please refer to the data sheet at www.arubanetworks.com.

Regulatory Model Number

The following regulatory model number applies to the AP-375ATEX:

- AP-375ATEX: APEX0375

Safety and Regulatory Compliance

ATEX Marking



II 3 G Ex ec IIC T4 Gc

-40°C ≤ Ta ≤ +65°C

EN standard: EN 60079-0: 2018 and EN 60079-7: 2015 + A1:2018

WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING – DO NOT CONNECT OR DISCONNECT WHEN ENERGIZED

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE BELOW

1. Control of environmental humidity to minimize the generation of static electricity;
2. Protection from direct airflow;
3. The equipment is not intended to be used when the area is known to be hazardous;
4. Gas detection monitoring;
5. Touch with an insulating object;
6. Means to continuously drain off electrostatic charges.

Special Conditions of Use

- The equipment incorporates non-metallic parts for the enclosure. These components should only be contacted with a damp cloth as per the warnings on the equipment and in the manual to prevent the possibility of an ignition through static discharge.
- The enclosure for the equipment is not intended to be opened in normal operation. Follow the instruction manual for repairing and maintenance for the equipment. The gaskets should be replaced if the enclosure is opened for service.
- APEX0375 series provided for the access to the input signal reference circuit ground (MOV & TVS). Care shall be taken whilst installing the equipment to ensure a dielectric isolation of 500Vrms is maintained.

FCC

To view the FCC ID for controller-managed access points:

1. Log into the controller WebUI
2. Navigate to Maintenance > Controller > About

To view the FCC ID for Instant access points:

1. Log into the virtual controller WebUI
2. Navigate to Maintenance > About



RF Radiation Exposure Statement: This equipment complies with RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 13.78 inches (35cm) between the radiator and your body for 2.4 GHz and 5 GHz operations. 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 par la FCC. Il doit être installé et utilisé à une distance minimale de 35 cm (13,78 pouces) entre le radiateur et votre corps, qu'il opère sur la bande 2,4 GHz ou 5 GHz. Cet émetteur ne doit pas être installé ou utilisé à proximité immédiate d'une autre antenne ni d'un autre transmetteur.



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



Changes or modifications to this unit 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.

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).

Industry Canada

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

In accordance with Industry Canada regulations, this radio transmitter and receiver may only be used with an antenna, the maximum type and gain of which must be approved by Industry Canada. To reduce potential radio interference, the type of antenna and its gain shall be chosen so that the equivalent isotropic radiated power (EIRP) does not exceed the values necessary for effective communication.

This device complies with Industry Canada's license-exempt RSS regulations. 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 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.

Déclaration d'Industrie Canada

Ce périphérique est conforme aux règlements RSS exempts de licence d'Industrie Canada. L'utilisation de ce périphérique est soumise 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 en intérieur afin de réduire les risques d'interférence avec les systèmes satellites mobiles partageant le même canal.

Déclaration d'Industrie Canada

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 radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

European Union Regulatory Conformance

The Declaration of Conformity made under Radio Equipment Directive 2014/53/EU is available for viewing at: www.hpe.com/eu/certificates. Select the document that corresponds to your device's model number as it is indicated on the product label.

Medical

1. Equipment not suitable for use in the presence of flammable mixtures.
2. Connect to only IEC 60950-1 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 Aruba approval.



NOTE

This device intended to be installed outdoors.



NOTE

This device has no IEC/EN60601-1-2 essential performance.



CAUTION

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.



NOTE

Compliance is based on the use of Aruba approved accessories. Refer to the ordering guide for this access point at www.arubanetworks.com.



CAUTION

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.



The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.

Radio Type	Frequency Range	Power (EIRP)	Modulation
BLE	2400-2483.5MHz	<10dBm	GFSK
802.11	2400-2483.5MHz	20dBm	CCK, OFDM
802.11	5150-5250MHz	23dBm	OFDM
802.11	5250-5350MHz	23dBm	OFDM
802.11	5500-5700MHz	30dBm	OFDM
802.11	5725-5850MHz	36dBm	OFDM



Actual output power values will depend on national restrictions and the antennas used.

Complies with:	Emissions - CISPR11/EN55011, Group 1, Class B
Immunity:	
Electrostatic discharge:	+/-8kV contact/ +/-15kV air
Radiated RF EM fields:	80MHz - 2.7GHz, 3V/m
Proximity fields from RF wireless communication equipment:	per Table 9 of the IEC/EN 606010-1-2
RATED power frequency magnetic fields:	30A/m
Electrical Fast Transients:	+/-2kV
Surges (line-to-line):	+/- 0.5, 1.0
Surges (line-to-ground):	+/- 0.5, 1.0, 2kV
Conducted disturbances induced by RF fields:	0.15MHz-80MHz, 3Vrms
Voltage Dips:	0%, 0.5 cycles, 0%, 1 cycle, 70% 25/30 cycles
Voltage Interruptions:	0% 250/300 cycles

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。

Brazil

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

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

Нормативные требования Евразийского Экономического Союза



НРЕ Russia: ООО "Хьюлетт Паккард Энтерпрайз" Российская Федерация, 125171, г. Москва, Ленинградское шоссе, 16А, стр.3, Телефон: +7 499 403 4248 Факс: +7 499 403 4677

НРЕ Kazakhstan: ТОО «Хьюлетт-Паккард (К)», Республика Казахстан, 050040, г. Алматы, Бостандыкский район, проспект Аль-Фараби, 77/7, Телефон/факс: + 7 727 355 35 50

Kazakhstan

ЖШС "Хьюлетт Паккард Энтерпрайз" Ресей Федерациясы, 125171, Мәскеу, Ленинград тас жолы, 16А блок 3, Телефон: +7 499 403 4248 Факс: +7 499 403 4677

ЖШС «Хьюлетт-Паккард (К)», Қазақстан Республикасы, 050040, Алматы к., Бостандық ауданы, Әл-Фараби даңғылы, 77/7, Телефон/факс: +7 (727) 355 35 50

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 Model Number](#) 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>

ХЬЮЛЕТТ ПАКАРД ЕНТЕРПРАЗ, 6280 АМЕРИКА ЦЕНТР Д-Р, САН-ХОСЕ, КАЛИФОРНИЯ 95002, США

Oman

OMAN - TRA
D080320
R/5434/18

Philippines



NTC

Type-Approval No.
ESD-1816942C

Singapore

Complies with
IDA Standards
DB100427

Contact Aruba

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

Copyright

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Open Source Code

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses.

A complete machine-readable copy of the source code corresponding to such code is available upon request. This offer is valid to anyone in receipt of this information and shall expire three years following the date of the final distribution of this product version by Hewlett Packard Enterprise Company.

To obtain such source code, send a check or money order in the amount of US \$10.00 to:

Hewlett Packard Enterprise Company

Attn: General Counsel

6280 America Center Drive

San Jose, CA 94089

USA

Warranty

This hardware product is protected by an Aruba warranty. For more details, visit www.hpe.com/us/en/support.html