Overview

HPE Aruba Networking 9000 Series Branch Gateways

Versatile, cost-effective branch networking, SD-WAN, and security

HPE Aruba Networking 9000 Series Branch Gateways provide high-performance networking, SD-WAN and security functionality in compact and cost-effective form factors. Ideally suited for branch and small campus networks, the HPE Aruba Networking 9000 series serves a key role within HPE Aruba Networking's SD-Branch solution, which unifies WLAN, LAN, SD-WAN and security for distributed enterprises.

The HPE Aruba Networking 9000 series can be easily configured and managed using HPE Aruba Networking Central, a cloud-based network operations, assurance, and security platform. Onsite deployment is accomplished with a simple mobile installer application.

HPE Aruba Networking 9004 Branch Gateway

Overview

HPE Aruba Networking 9012 Branch Gateway

Key Features

- Cloud-managed and purpose-built for branch SDWAN requirements.
- Up to 10 times the performance and 80 times the client density of typical SD-WAN appliances.
- Unified policy enforcement for wired and wireless traffic through Dynamic Segmentation.
- Visibility into over 3,000 applications with no added hardware.

Standard Features

High Performance and Reliability

For distributed enterprises with increasing performance and bandwidth needs, the HPE Aruba Networking 9000 Series Branch Gateways is designed with scale and flexibility and equipped with plenty of horsepower at a competitive price-point.

This series provides connectivity for up to 2,048 users or client devices at up to 6 Gbps of firewall throughput. These capabilities are up to 80 times the client density and 10 times the maximum throughput of typical SD-WAN appliances.

For enhanced resiliency and high availability, multiple HPE Aruba Networking 9000 series can be clustered together at each branch.

Flexible Consumption

The gateway supports WLAN and SD-WAN deployments with HPE Aruba Networking Central subscription licenses. HPE GreenLake for Networking can help with the transition to a subscription-based network consumption model.

Iot and Integration Ready

The HPE Aruba Networking 9000 Series Branch Gateways includes flexible connectivity options, with up to 12 Ethernet ports (6x PoE+) that can be used as access/WAN uplinks, a USB 3.0 port for cellular connectivity, and an IoT radio that supports Bluetooth 5, Zigbee, and Near Field Communication (NFC) wireless protocols.

The gateway also uses integrated device profiling to improve client visibility and works with HPE Aruba Networking Central, HPE Aruba Networking ClearPass Policy Manager or HPE Aruba Networking ClearPass Device Insight to provide advanced user, device and IoT policy management and insights.

SD-WAN Deployment

For organizations that are now managing multiple WAN connections, HPE Aruba Networking 9000 Series Branch Gateways can be connected to the HPE Aruba Networking SD-WAN fabric right out of the box. SD-WAN is a rich WAN management solution that is used to simplify management of traffic entering and exiting branch sites. Role-based intrusion detection and prevention (IDS/IPS), dynamic segmentation, and stateful firewall deliver integrated security requirements. Please refer to the **SD-WAN datasheet** for more information.

Branch and Campus Deployment

HPE Aruba Networking 9000 Series Branch Gateways can also be re-purposed as mobility controllers starting with HPE Aruba Networking AOS 8.5 software to provide WLAN and LAN services such as dynamic segmentation, stateful firewall and live upgrades. In this mode, the HPE Aruba Networking 9000 series cannot simultaneously be used for SD-WAN.

Integrated LTE

The 9004-has an integrated LTE module that can use high speed LTE as a dedicated or redundant WAN uplink. The LTE operations are managed via HPE Aruba Networking Central.

Dynamic segmentation and policy enforcement

Protecting and delivering network access across enterprise branch and campus sites is critical and complex. To improve security and simplify management, Dynamic Segmentation eliminates the time consuming and error-prone task of managing complex and static VLANs, ACLs, and subnets by dynamically assigning policies and keeping traffic secure and separated. IT can centrally configure with automatic enforcement of role-based policies that define proper access privileges for employees, guests, contractors, and other user groups– no matter where users connect on wired and WLANs. Additionally, the HPE Aruba Networking 9000 Series relies on a built-in Layer 4-7 stateful firewall known as the policy enforcement firewall (PEF). It streamlines policy management by working across WLAN, LAN, and WAN and policies are automatically enforced to simplify SSID, VLAN and policy management.

Microsoft Features

HPE Aruba Networking's integration with Microsoft enables unique application intelligence that detects Microsoft 365 (Office 365), Teams, and Skype for Business traffic and then prioritizes them over less critical applications. Through management interfaces on HPE Aruba Networking Central, HPE Aruba Networking AOS, and HPE Aruba Networking Management Software (AirWave), IT can visualize call quality metrics such as MOS, latency, jitter, and packet loss for additional insights.

Standard Features

Enhanced Capabilities
Policy Enforcement Firewall
The HPE Aruba Networking 9000 Series Branch Gateways includes a Layer 4-7 stateful firewall with PEF to deliver a consistent user, device, and application awareness across WLAN, LAN, and WAN. When deployed alongside HPE Aruba Networking ClearPass Policy Manager, policies are automatically enforced to simplify SSID, VLAN and policy management.

Threat Defense with IDS/IPS
To improve security against a growing attack surface, gateways deployed in SD-WAN mode add role and identity-based intrusion detection and prevention capabilities (IDS/IPS) on top of existing security features. The threat defense function is further augmented with one-click integration with third-party cloud-based security solutions.

Application Visibility Control
Deep Packet Inspection (DPI) technology, which is a component of PEF, consistently evaluates and optimizes performance and usage policies for over 3,800 applications. This ensures the highest possible Quality of Service (QoS) – even for encrypted traffic.

High Availability
This series can be deployed with N+1 or NxN redundancy, and can also join a controller cluster when deployed as a mobility controller managed by HPE Aruba Networking Mobility Conductor. This increases performance and scale for enhanced resiliency.

Simple To Use, Mobile Provisioning
Allows on-site personnel to use a mobile app to onboard gateways. A central IT team can verify device location, licenses, and status with no additional steps required.
Available for iOS and Android.

Unified Communications and Collaboration (UCC)
Visualize and troubleshoot networks based on call quality metrics such as MOS, latency jitter and packet loss. Supported applications include: Teams, Wi-Fi Calling, FaceTime, SIP, Jabber, Spark and more.

Streaming API
Enables you to subscribe to a select set of topics, instead of polling the NB API to get continuous state and stats messages. Also enables you to write value-added applications based on the aggregated context.

HPE Aruba Networking Central NetConductor
Enables the creation of EVPN/VXLAN overlays with an intuitive, graphical user interface to streamline the adoption of role-based access policies and Dynamic Segmentation at global scale with distributed enforcement.

AIOps for IT Efficiency
AI-powered HPE Aruba Networking Central insights for improved troubleshooting and optimization with AI Search, AI Insights, and AI Assist.

Configuration Information

BTO Models

Remarks	Description	SKU
	HPE Aruba Networking 9004 Gateway	
	HPE Aruba Networking 9004 (US) 4-Port GbE RJ45 2K Clients - 32 APs Gateway	R1B20A
	HPE Aruba Networking 9004 (RW) 4-Port GbE RJ45 2K Clients - 32 APs Gateway	R1B21A
	HPE Aruba Networking 9004 (JP) 4-Port GbE RJ45 2K Clients - 32 APs Gateway	R1B22A
	HPE Aruba Networking 9004 (IL) 4-Port GbE RJ45 2K Clients - 32 APs Gateway	R1B23A
	HPE Aruba Networking 9004 (EG) 4-Port GbE RJ45 2K Clients - 32 APs Gateway	R1B24A
	HPE Aruba Networking 9004 TAA Gateway	
	HPE Aruba Networking 9004 (US) TAA 4-Port 10/100/1000BASE-T Branch 2K Clients - 32 APs Gateway	R1B25A
	HPE Aruba Networking 9004 (RW) TAA 4-Port 10/100/1000BASE-T Branch 2K Clients - 32 APs Gateway	R1B26A
	HPE Aruba Networking 9004 (JP) TAA 4-Port 10/100/1000BASE-T Branch 2K Clients - 32 APs Gateway	R1B27A
	HPE Aruba Networking 9004 (IL) TAA 4-Port 10/100/1000BASE-T Branch 2K Clients - 32 APs Gateway	R1B28A
	HPE Aruba Networking 9004 (EG) TAA 4-Port 10/100/1000BASE-T Branch 2K Clients - 32 APs Gateway	R1B29A
	HPE Aruba Networking 9004 LTE Gateway	
	HPE Aruba Networking 9004 (US) 4-Port 10/100/1000BASE-T LTE 2K Clients - 32 APs Branch Gateway	R3V91A
	HPE Aruba Networking 9004 (RW) 4-Port 10/100/1000BASE-T LTE 2K Clients - 32 APs Branch Gateway	R3V90A
	HPE Aruba Networking 9004 (JP) 4-Port 10/100/1000BASE-T LTE 2K Clients - 32 APs Branch Gateway	R3V89A
	HPE Aruba Networking 9004 (IL) 4-Port 10/100/1000BASE-T LTE 2K Clients - 32 APs Branch Gateway	R3V88A
	HPE Aruba Networking 9004 (EG) 4-Port 10/100/1000BASE-T LTE 2K Clients - 32 APs Branch Gateway	R3V87A
	HPE Aruba Networking 9004 LTE TAA Gateway	
	HPE Aruba Networking 9004 (US) 4-Port 10/100/1000BASE-T 2K Clients with LTE TAA Branch Gateway	R3V96A
	HPE Aruba Networking 9004 (RW) 4-Port 10/100/1000BASE-T 2K Clients with LTE TAA Branch Gateway	R3V95A
	HPE Aruba Networking 9004 (JP) 4-Port 10/100/1000BASE-T 2K Clients with LTE TAA Branch Gateway	R3V94A
	HPE Aruba Networking 9004 (IL) 4-Port 10/100/1000BASE-T 2K Clients with LTE TAA Branch Gateway	R3V93A
	HPE Aruba Networking 9004 (EG) 4-Port 10/100/1000BASE-T 2K Clients with LTE TAA Branch Gateway	R3V92A
	HPE Aruba Networking 9012 Gateway	
	HPE Aruba Networking 9012 (US) 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B31A
	HPE Aruba Networking 9012 (RW) 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B32A
	HPE Aruba Networking 9012 (JP) 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B33A
	HPE Aruba Networking 9012 (IL) 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B34A
	HPE Aruba Networking 9012 (EG) 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B35A
	HPE Aruba Networking 9012 TAA Gateway	
	HPE Aruba Networking 9012 (US) TAA 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B36A
	HPE Aruba Networking 9012 (RW) TAA 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B37A

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HPE Aruba Networking 9012 (JP) TAA 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B38A
HPE Aruba Networking 9012 (IL) TAA 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B39A
HPE Aruba Networking 9012 (EG) TAA 12xGbE 6xPoE+ Branch 2K Clients - 32 APs Gateway	R1B40A

Notes: Each HPE Aruba Networking 9000 model includes a JX990A power adapter

Bring in (Min 1 // Max 1) Localized power cord based on the HPE Aruba Networking Localization Menu

OCA Only Model Selection Form –

HPE Aruba Networking > Gateways and Controllers > Mobility Controllers > Branch / Standalone > HPE Aruba Networking 9000 Series Mobility Controller

HPE Aruba Networking > Gateways and Controllers > SD-WAN Gateways > Branch / Standalone > HPE Aruba Networking 9000 Series Branch Gateway

Power Options

Remarks	Description	SKU
	Power Cord For Power Supply	
	HPE Aruba Networking PC-AC-ARG 250V/10A 1.8m C13 to IRAM 2073 (AR) AC Power Cord	JW113A
	HPE Aruba Networking PC-AC-AUS 250V/10A 1.8m C13 to AS3112 (AU) AC Power Cord	JW114A
	HPE Aruba Networking PC-AC-BR 250V/10A 1.8m C13 to NBR 14136 (BR) AC Power Cord	JW115A
	HPE Aruba Networking PC-AC-CHN 250V/10A 1.8m C13 to GB2099 (CH) AC Power Cord	JW116A
	HPE Aruba Networking PC-AC-DEN 250V/10A 1.8m C13 to AFSNIT 107-2-D1 (DK) AC Power Cord	JW117A
	HPE Aruba Networking PC-AC-EC 250V/10A 1.8m C13 to CEE7/7 (EU) AC Power Cord	JW118A
	HPE Aruba Networking PC-AC-IN 250V/6A 1.8m C13 to IS1293 (IN) AC Power Cord	JW119A
	HPE Aruba Networking PC-AC-IL 250V/10A 1.8m C13 to SI32 (IL) AC Power Cord	JW120A
	HPE Aruba Networking PC-AC-IT 250V/10A 1.8m C13 to CEI 23-50 (IT) AC Power Cord	JW121A
	HPE Aruba Networking PC-AC-JPN 125V/12A 1.8m C13 to JISC 8303 (JP) AC Power Cord	JW122A
	HPE Aruba Networking PC-AC-KOR 250V/7A 1.8m C13 to KSC 8305 (KR) AC Power Cord	JW123A
	HPE Aruba Networking PC-AC-NA 125V/10A 1.8m C13 to NEMA 5-15P (NA) AC Power Cord	JW124A

Accessories

Remarks	Description	SKU
	Rack Mount Kit	
1, 2	HPE Aruba Networking 9004-MNT-19 9004 Series 19-inch Rack Mount Kit	R1B30A
2, 4	HPE Aruba Networking 9004-LTE-MNT-19 9004-LTE Series 19-inch Rack Mount Kit	R3W17A
	Antenna Extender Kit	
4, 5	HPE Aruba Networking 90xx-LTE Indoor Antennas Extender Kit 20 ft with Indoor LTE and GPS Antennas	R4Y91A
4, 5	HPE Aruba Networking 90xx-LTE Indoor Antennas Extender Kit 40 ft with Indoor LTE and GPS Antennas	R4Y92A
4, 5	HPE Aruba Networking 90xx-LTE Outdoor Extender Kit 35 ft with Outdoor LTE and GPS Antennas	R4Y93A
	Configuration Rules	
1	This is only available on the HPE Aruba Networking 9004/9004 TAA Branch Gateway	
2	Min 0 / Max 1	
4	This Rack Mount Kit is only available on the HPE Aruba Networking 9004 LTE/9004 LTE TAA Gateway	
5	Min 0 // Max 2	

Notes: HPE Aruba Networking 9004-MNT-19 can hold up to qty 2 Gateways

HPE Aruba Networking 9004-LTE-MNT-19 can hold up to qty 1 Gateways

Configuration Information

Spares

Rule #	Description	SKU
	Std (Min 0 // max 99) User Selection (min 0 // max 99)	
1, 2	HPE Aruba Networking AP-AC2-12B 12V/48W AC/DC Desktop Style Power Adapter with 2.1/5.5mm Connector	R3K00A
	HPE Aruba Networking 90xx-LTE Spare Indoor Antennas Replacement and GPS Antennas	R4Y94A
	HPE Aruba Networking 90xx-LTE Spare SIM Tray Kit with Ejector Pin	R4Y95A
3	HPE Aruba Networking 9012-MNT-19 9012 Gateway Spare 19-inch Rack Mount Kit	R4X13A
	HPE Aruba Networking 90xx-LTE Spare Outdoor Replacement and GPS Antennas	R6M37A
	Configuration Rules	
1	Bring in (Min 1 // Max 1) Localized power cord based on the HPE Aruba Networking Localization Menu	
2	This is only available on the 9004/9004 TAA Branch Gateway series	
3	This Rack Mount Kit is only available on the 9012/9012 TAA Series Branch Gateway	
Notes:	Power Adapter is included with HPE Aruba Networking 9004/9004 TAA Branch Gateway series. Internal Power Supply Unit is included with HPE Aruba Networking 9012/9012 TAA Branch Gateway series. Localized power cord is systematically added as a line item on the bill of materials.	

Software

Gateway License

Std (Min 0 // max 1) User Selection (min 1 // max 1)

Rule #	Description	SKU
1	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 1-year Subscription E-STU	JZ118AAE
2	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 3-year Subscription E-STU	JZ119AAE
3	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 5-year Subscription E-STU	JZ120AAE
4	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 7-year Subscription E-STU	R0G52AAE
5	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 10-year Subscription E-STU	R0G53AAE
1	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 1-year Subscription E-STU	JZ124AAE
2	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 3-year Subscription E-STU	JZ125AAE
3	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 5-year Subscription E-STU	JZ126AAE
4	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 7-year Subscription E-STU	R0G56AAE
5	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 10-year Subscription E-STU	R0G57AAE
1	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 1-year Subscription E-STU	JZ121AAE
2	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 3-year Subscription E-STU	JZ122AAE
3	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 5-year Subscription E-STU	JZ123AAE
4	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 7-year Subscription E-STU	R0G54AAE
5	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 10-year Subscription E-STU	R0G55AAE
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 1-year Subscription SaaS	JZ118AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 3-year Subscription SaaS	JZ119AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 5-year Subscription SaaS	JZ120AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 1-year Subscription SaaS	JZ121AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 3-year Subscription SaaS	JZ122AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 5-year Subscription SaaS	JZ123AAS

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11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 1-year Subscription SaaS	JZ124AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 3-year Subscription SaaS	JZ125AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 5-year Subscription SaaS	JZ126AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 7-year Subscription SaaS	R0G52AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation 10-year Subscription SaaS	R0G53AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 7-year Subscription SaaS	R0G54AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Advanced 10-year Subscription SaaS	R0G55AAS
11	HPE Aruba Networking 90/70xx SD-Branch Gateway Foundation Base Capacity 7-year Subscription SaaS	R0G56AAS
	Gateway License w/ Threat Defense	
6	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Base Plus Security 1-year Subscription E-STU	R4D93AAE
7	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Base Plus Security 3-year Subscription E-STU	R4D94AAE
8	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Base Plus Security 5-year Subscription E-STU	R4D95AAE
9	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Base Plus Security 7-year Subscription E-STU	R4D96AAE
10	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Base Plus Security 10-year Subscription E-STU	R4D97AAE
6	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Plus Security 1-year Subscription E-STU	R4D98AAE
7	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Plus Security 3-year Subscription E-STU	R4D99AAE
8	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Plus Security 5-year Subscription E-STU	R4E00AAE
9	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Plus Security 7-year Subscription E-STU	R4E01AAE
10	HPE Aruba Networking 90xx SD-Branch Gateway Foundation Plus Security 10-year Subscription E-STU	R4E02AAE
6	HPE Aruba Networking 90xx SD-Branch Gateway Advanced Plus Security 1-year Subscription E-STU	R4E03AAE
7	HPE Aruba Networking 90xx SD-Branch Gateway Advanced Plus Security 3-year Subscription E-STU	R4E04AAE
8	HPE Aruba Networking 90xx SD-Branch Gateway Advanced Plus Security 5-year Subscription E-STU	R4E05AAE
9	HPE Aruba Networking 90xx SD-Branch Gateway Advanced Plus Security 7-year Subscription E-STU	R4E06AAE
10	HPE Aruba Networking 90xx SD-Branch Gateway Advanced Plus Security 10-year Subscription E-STU	R4E07AAE
11	HPE Aruba Networking 90xx Central Gateway Foundation Base Plus Security 1-year Subscription SaaS	R4D93AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Base Plus Security 3-year Subscription SaaS	R4D94AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Base Plus Security 5-year Subscription SaaS	R4D95AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Base Plus Security 7-year Subscription SaaS	R4D96AAS

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11	HPE Aruba Networking 90xx Central Gateway Foundation Base Plus Security 10-year Subscription SaaS	R4D97AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Plus Security 1-year Subscription SaaS	R4D98AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Plus Security 3-year Subscription SaaS	R4D99AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Plus Security 5-year Subscription SaaS	R4E00AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Plus Security 7-year Subscription SaaS	R4E01AAS
11	HPE Aruba Networking 90xx Central Gateway Foundation Plus Security 10-year Subscription SaaS	R4E02AAS
11	HPE Aruba Networking 90xx Central Gateway Advanced Plus Security 1-year Subscription SaaS	R4E03AAS
11	HPE Aruba Networking 90xx Central Gateway Advanced Plus Security 3-year Subscription SaaS	R4E04AAS
11	HPE Aruba Networking 90xx Central Gateway Advanced Plus Security 5-year Subscription SaaS	R4E05AAS
11	HPE Aruba Networking 90xx Central Gateway Advanced Plus Security 7-year Subscription SaaS	R4E06AAS
11	HPE Aruba Networking 90xx Central Gateway Advanced Plus Security 10-year Subscription SaaS	R4E07AAS

Configuration Rules

Rule #	Description	
Notes:	– When configuring BTO model, display table of Subscription Type as follows:	

- When configuring BTO model, display table of Subscription Type as follows:
  - o Title = "Select License"
  - o ChoiceA = "Gateway License"
  - o ChoiceB = "Gateway License w/ Threat Defense"

- If user selects ChoiceA, then display table of subscription term as follows:
  - o Title "Select Gateway License Term"
  - o ChoiceA1 = "1-Year"
  - o ChoiceA2 = "3-Year"
  - o ChoiceA3 = "5-Year"
  - o ChoiceA4 = "7-Year"
  - o ChoiceA5 = "10-Year"

- If user selects ChoiceB, then display table of subscription term as follows:
  - o Title = "Select Gateway License Term w/ Threat Defense"
  - o ChoiceB1 = "1-Year"
  - o ChoiceB2 = "3-Year"
  - o ChoiceB3 = "5-Year"
  - o ChoiceB4 = "7-Year"
  - o ChoiceB5 = "10-Year"

1	If ChoiceA1 is selected, then present this SKU as a selectable option
2	If ChoiceA2 is selected, then present this SKU as a selectable option
3	If ChoiceA3 is selected, then present this SKU as a selectable option
4	If ChoiceA4 is selected, then present this SKU as a selectable option
5	If ChoiceA5 is selected, then present this SKU as a selectable option
6	If ChoiceB1 is selected, then present this SKU as a selectable option
7	If ChoiceB2 is selected, then present this SKU as a selectable option
8	If ChoiceB3 is selected, then present this SKU as a selectable option
9	If ChoiceB4 is selected, then present this SKU as a selectable option
10	If ChoiceB5 is selected, then present this SKU as a selectable option
11	For IRIS reference only. No action required for OCX and Clic

HPE Aruba Networking Central

Cloud Web Policy Enforcement / IAP

1	HPE Aruba Networking SUB1-WE-IAP-1 Cloud Web Policy Enforcement 1 Instant AP 1y Subscription E-STU	JW455AAE
1	HPE Aruba Networking SUB3-WE-IAP-1 Cloud Web Policy Enforcement 1 Instant AP 3y Subscription E-STU	JW456AAE

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1	HPE Aruba Networking SUB5-WE-IAP-1 Cloud Web Policy Enforcement 1 Instant AP 5y Subscription E-STU	JW457AAE
Notes:	Cloud web policy enforcement for 1 AP (NOT required for Access Points with Central Subscription)	

Cloud Services / WLAN Gateway Subscriptions

2	HPE Aruba Networking 90/70xx Gateway WLAN Advanced 1-year Subscription E-STU	S0U81AAE
2	HPE Aruba Networking 90/70xx Gateway WLAN Advanced 3-year Subscription E-STU	S0U82AAE
2	HPE Aruba Networking 90/70xx Gateway WLAN Advanced 5-year Subscription E-STU	S0U83AAE
2	HPE Aruba Networking 90/70xx Gateway WLAN Advanced 7-year Subscription E-STU	S0U84AAE
2	HPE Aruba Networking 90/70xx Gateway WLAN Advanced 10-year Subscription E-STU	S0U85AAE

Cloud Services / WLAN Gateway Foundation Subscriptions

2	HPE Aruba Networking Central WLAN Gateway Foundation 1 year Subscription SaaS	R4G90AAS
2	HPE Aruba Networking Central WLAN Gateway Foundation 3 year Subscription SaaS	R4G91AAS
2	HPE Aruba Networking Central WLAN Gateway Foundation 5 year Subscription SaaS	R4G92AAS
2	HPE Aruba Networking Central WLAN Gateway Foundation 7 year Subscription SaaS	R4G93AAS
2	HPE Aruba Networking Central WLAN Gateway Foundation 10 year Subscription SaaS	R4G94AAS

On-Prem Services / Gateway and Controller Foundation Subscriptions

3	HPE Aruba Networking Central On-Premises Campus Gateway Ctr Foundation 1 yr Subscription E-STU	R6U58AAE
3	HPE Aruba Networking Central On-Premises Campus Gateway Ctr Foundation 3 yr Subscription E-STU	R6U59AAE
3	HPE Aruba Networking Central On-Premises Campus Gateway Ctr Foundation 5 yr Subscription E-STU	R6U60AAE
3	HPE Aruba Networking Central On-Premises Campus Gateway Ctr Foundation 7 yr Subscription E-STU	R6U61AAE
3	HPE Aruba Networking Central On-Premises Campus Gateway Ctr Foundation 10 yr Subscription E-STU	R6U62AAE

On-Prem Services / Gateway and Controller Foundation Government Subscriptions

3	HPE Aruba Networking COP Controller Foundation 1-year Government Subscription E-STU	S1P61AAE
3	HPE Aruba Networking COP Controller Foundation 3-year Government Subscription E-STU	S1P62AAE
3	HPE Aruba Networking COP Controller Foundation 5-year Government Subscription E-STU	S1P63AAE
3	HPE Aruba Networking COP Controller Foundation 7-year Government Subscription E-STU	S1P64AAE
3	HPE Aruba Networking COP Controller Foundation 10-year Government Subscription E-STU	S1P65AAE

Configuration Rules

Rule #	Description	SKU
1	For use with iQuote. Do not model in OCx as it is already visible in the HPE Aruba Networking Catalog under Network Management.	
2	Add the Central Cloud SKUs to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services	
3	Add the Central On-Prem SKUs to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > On-Prem Services	

Mobility Controller Licenses (Alternate)

Remarks	Description	SKU
	HPE Aruba Networking LIC-AP Controller per AP Capacity License E-LTU	JW472AAE
	HPE Aruba Networking LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	JW473AAE
	HPE Aruba Networking LIC-RFP Controller RFProtect Per AP License E-LTU	JW474AAE
	HPE Aruba Networking LIC-ENT Enterprise (LIC-AP LIC-PEF LIC-RFP and LIC-AW) License Bundle E-LTU	JW471AAE

Configuration Information

HPE Aruba Networking LIC-ACR Controller Advanced Cryptography 1 Session License E-LTU	Q9B90AAE
HPE Aruba Networking Controller Web Content Classification 1-year Subscription E-STU	JY028AAE
HPE Aruba Networking Controller Web Content Classification 3-year Subscription E-STU	JY029AAE
HPE Aruba Networking Controller Web Content Classification 5-year Subscription E-STU	JY030AAE
HPE Aruba Networking Controller Web Content Classification 7-year Subscription E-STU	JY031AAE
HPE Aruba Networking Controller Web Content Classification 10-year Subscription E-STU	JY032AAE

Notes:
- A single HPE Aruba Networking 9004 Branch Gateway cannot be simultaneously used for SD-WAN and Mobility Controller functionality.
- For each AP attached to the gateway, the minimal configuration is 1 x LIC-AP per AP.
- LIC-AW is a device license for the AirWave network management system.
- For dynamic segmentation, the per-AP license count must equal the sum of APs and switches that are tunneling traffic. For virtual switch stacks, one AP license will be consumed per stack.

- LIC-VIA license is a per-user session license that can be transferred from one gateway/controller to another.
- LIC-VIA supports centralized licensing and can be managed by Mobility Master or a master controller in an HPE Aruba Networking AOS 8 deployment.

Technical Specifications

9000 Series Technical Specifications			
	9004	**9004-LTE**	**9012**
Interfaces	4x GbE[1]	4x GbE + 4G cellular	12x GbE
Notes: [1]The 9004 was originally released (8.5) to operate in an Auto/Auto configuration. A software fix was introduced in 8.7.1.5, 8.8.0.2, 10.2.0.3, and SDWAN-2.3.0.2, which allows users to configure the speed and duplex of the interfaces on the 9004 to: Auto/Auto, 1000/Full, or 100/Full. • Speed Configuration: The 9004 Interface speed can now be set to Auto/1000/100. • Full Duplex Configuration: 9004 Interface: Auto • Partnering Device Duplex Configuration: Full • Partnering Device Auto Negotiation: Enabled			
Power over Ethernet	x	x	120W
Firewall throughput (Gbps)	4	4	6
Encrypted throughput GRE (Gbps)	4	4	6
Encrypted throughput AES-CBC-128 (Gbps)	4	4	4
Encrypted throughput AES-CBC-256 (Gbps)	4	4	4
Encrypted throughput AES-GCM-128 (Gbps)	4	4	6
Encrypted throughput AES-GCM-256 (Gbps)	4	4	6
AOS-10 Specifications			
Minimum supported software version	AOS 10.4		
Cluster size	4	4	4
Maximum clients (User MAC)	2K	2K	2K
Maximum clients per cluster	8K	8K	8K
Maximum devices (APs)	128	128	256
Maximum devices (APs) per cluster	512	512	768
Maximum datapath / firewall sessions	128K	128K	128K
Maximum bridge table	64K	64K	64K
Firewall session creation rate (1000 sessions per sec)	130	130	130
L2 VLANs	4K	4K	4K
L3 VLANs (IPv4 interfaces)	128	128	128
L3 VLANs (IPv6 interfaces)	128	128	128
Concurrent IPSec tunnels	2K	2K	2K
ARP	2K	2K	2K
Maximum DHCP clients	4K	4K	4K
IPv4 static routes	2K	2K	2K
IPv6 neighbours	7K	7K	7K
IPv6 static routes	577	577	577
Maximum OSPF routes	8K	8K	8K
ACLs	2678	2678	2678
Configurable bandwidth contracts	1024	1024	1024
AOS-8			
Minimum supported software version	AOS 8.5	Not supported	AOS 8.7
Cluster size	4		4

Technical Specifications

Maximum campus or Remote Access Points	32		64[1]
Notes: [1]On software versions lower than AOS 8.12, the 9012 will only support 32 APs.			
Maximum concurrent users	2K		2K
Maximum BSSIDs	512		512
Maximum datapath / firewall sessions	64K		64K
Maximum bridge table	64K		64K
IPv4 static routes	2K		2K
IPV6 neighbours	7K		7K
IPV6 static routes	577		577
Maximum VLANs	4K		4K
Concurrent IPsec sessions	2K		2K
Concurrent SSL sessions	2K		2K
Concurrent GRE tunnels	544		544
Maximum IAP-VPNs	129		129
Maximum DHCP clients	2K		2K

Interfaces and Indicators

Features	9004/9004-LTE	9012
Form factor/footprint	Desktop/fanless[2] Optional mount rack tray	Rack mount
Notes: [2]1RU can support two 9004 gateways side-by-side using an optional mount kit.		
100/1000BASE-T	4	12 (6x PoE+ ports)
Bluetooth 5	Yes	Yes
USB 3.0 Type-A	1	2
System status LED	Yes	Yes
WAN ports status LED	Yes	Yes
LAN ports status LED	Yes	Yes
Gateway mode LED	Yes	Yes
Central connectivity status LED[1]	Yes	Yes
Notes: [1]LED utilized by the SD-WAN solution		
Cellular (LTE) status LED	Yes	Yes
Console port	micro USB, RJ45	micro USB, RJ45

Integrated LTE

Available on the 9004-LTE only	
Downlink/uplink speed	600/150 Mbps
LTE category	12
Connectors	2xSMA connectors for main and diversity antenna 1xSMA connector for GPS antenna
Bands Supported	
Regions supported	Global Worldwide LTE-A and UMTS/HSPA+ coverage
LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B21/B25/B26/B28/B29/B30/B32/B66
LTE-TDD	B38/39/B40/B41
2 x CA	B1+B3/B5/B18/B19/B20/B21/B26; B2+B2/B4/B5/B12/B13/B17/B29/B30/B66; B3+B3/B5/B7/B8/B19/B20/B28; B4+B4/B5/B12/B13/B17/B29/B30; B5+B7/B25/B30/B66; B7+B7/B20/B28; B12+B25/B30; B13+B66; B20+B32; B25+B25/B26/B41; B29+B30; B38+B38; B40+B40; B41+B41; B66+B66

Technical Specifications

3 x CA	DL inter-band 3CA: B1+B3+B7; B1+B3+B19; B1+B3+B20; B1+B19+B21; B2+B4+B5; B2+B4+B13; B2+B5+B30; B2+B12+B30; B2+B29+B30; B3+B7+B20; B3+B7+B28; B4+B5+B30; B4+B12+B30; B4+B29+B30; B5+B66+B2; B13+B66+B2 DL 2 contiguous plus inter-band 3CA: B2+B2+B5; B2+B2+B13; B3+B3+B7; B3+B7+B7; B3+B3+B20; B4+B4+B5; B4+B4+B13; B5+B66+B66; B13+B66+B66; B66+B66+B2; B66+B66+B66
UMTS	B1/B2/B3/B4/B5/B8/B19
Certifications	CE/ FCC/ IC/ NCC/ RCM/ GCF*/ PTCRB*/ ICASA* / WHQL AT&T, Verizon, T-Mobile

Physical

	9004/9004-LTE	9012
Dimensions (H x W x D)	3.82 cm x 19.85 cm x 15.31 cm (1.5" x 7.815" x 6.03")	4.37 cm x 39.5 cm x 26.00 cm (1.72" x 15.55" x 10.24")
Weight	1.143 kg (2.519 lbs)	3.42 kg (7.54 lbs)

Environmental Range

Specification	9004/9004-LTE	9012
Operating temperature	0° C to 40° C (32° C to 104° F)	0° C to 40° C (32° C to 104° F)
Storage temperature	-40° C to 70° C (-40° F to 158° F)	-40° C to 70° C (-40° F to 158° F)
Operating humidity	10% to 90% (RH), non-condensing	10% to 90% (RH), non-condensing
Storage humidity	10% to 95% (RH), non-condensing	10% to 95% (RH), non-condensing
Operating altitude	10,000 feet	10,000 feet
Acoustic noise	0 dBA (fan less)	29.1 – 63.5 dBA
Cooling	Conduction cooling	Forced cooling
Maximum power consumption	25W (with USB)	160W (with 120W of PoE)
Power source	12v DC, 2.5A AC-to-DCpower adapter	Internal Power Supply 90VAC – 264VAC 47-63Hz 3A at 100Vrms

Power Adapter Specifications

Features	9004/9004-LTE
Input voltage range	90 VAC to 264 VAC
Output voltage	+12VDC, 2.5A
Input frequency	47-63 Hz
AC line input current (steady state)	1.0A
Operating temperature	-0° to +40° C
Cooling	–
Weight	0.28 kg (.61 lbs)

Technical Specifications

| Regulatory and Safety Compliance		
Description	**9004/9004-LTE**	**9012**
Minimum supported software version		
AOS-10	AOS 10.3.1.1 (SSR) AOS 10.3.1.1 (SSR)	AOS 10.3.1.1 (SSR) AOS 10.3.1.1 (SSR)
AOS-8 (WLAN gateway mode)	9004: 8.5.0.5 9004-LTE: Not Supported	8.7.1.1 or 8.8.0.0
SD-Branch	9004: SD-WAN R1.7 and Central 2.5.x in SD-WAN mode 9004-LTE: SD-WAN R2.2.0.2 or R2.3.0.0 and Central 2.51.x in SD-WAN mode	SD-WAN R2.2.0.2 or R2.3.0.0 and Central 2.5.x in SD-WAN mode
Regulatory SKU information	ARCN9004 / ARCN9004LTE	ARCN9012
Safety certifications	UL 60950-1 Second Edition	UL 60950-1 Second Edition
	CAN/CSA-C22.2 No. 60950-1 Second Edition	CAN/CSA-C22.2 No. 60950-1 Second Edition
	EN 60950-1 Second Edition	EN 60950-1 Second Edition
	EN 60950:2005	EN 60950:2005
	IEC 60950-1 Second Edition	IEC 60950-1 Second Edition
	EN/IEC 62368-1 2nd Edition	EN/IEC 62368-1 2nd Edition
	NOM (obtained by partners and distributors)	NOM (obtained by partners and distributors)
Electromagnetic emissions certifications	FCC Part 15 Class B	FCC Part 15 Class A
	CISPR32 Class B	CISPR32 Class A
	EN55032 Class B	EN55032 Class A
	ICES-003 Class B	ICES-003 Class A
	EN61000-3-2	EN61000-3-2
	EN61000-3-3	EN61000-3-3
	EN55024, EN301 489-1/-17, EN301 489-52 (9004-LTE)	EN55024, EN301 489-1/-17
	KN32 Class B , KN35, KN301 489-1/-17, KN301 489–52 (9004-LTE)	KN32 Class A, KN35, KN301 489-1/-17
	CNS13438 Class B	CNS13438 Class A
Telco	Common Language Equipment Identifier (CLEI) Code	Common Language Equipment Identifier (CLEI) Code
Wireless certifications	FCC/ISED	FCC/ISED
	RED Directive 2014/53/EU	RED Directive 2014/53/EU
	Others: MIC, NCC, ANATEL, COFTEL, CCC	Others: MIC, NCC, ANATEL, COFTEL, CCC

Summary of Changes

Date	Version History	Action	Description of Change
16-Dec-2024	Version 18	Changed	Standard Features section was updated
18-Nov-2024	Version 17	Changed	Overview, Standard Features, Configuration Information, sections were updated.
03-Sep-2024	Version 16	Changed	Overview, Standard Features, Configuration Information, and Technical Specifications sections were updated.
04-Dec-2023	Version 15	Changed	Series name was updated.
06-Nov-2023	Version 14	Changed	Configuration Information section was updated. Series name was updated.
16-Oct-2023	Version 13	Changed	Configuration Information section was updated
05-Dec-2022	Version 12	Changed	Configuration Information section was updated, and new SKUs were added.
15-Mar-2021	Version 11	Changed	SKUs added in Configuration Information section.
14-Dec-2020	Version 10	Changed	The Standard Features section was updated.
03-Aug-2020	Version 9	Changed	The Configuration Information section was updated. New SKUS were added,
06-Jul-2020	Version 8	Changed	The Configuration Information section was updated. New SKUS were added,
01-Jun-2020	Version 7	Changed	Configuration Information section was updated.
04-May-2020	Version 6	Changed	Configuration Information section was updated.
06-Apr-2020	Version 5	Changed	Configuration Information section was updated.
03-Feb-2020	Version 4	Changed	Overview, Configuration Information and Technical Specifications sections were updated. New SKUs for 9012 models were added. Product Name was updated.
02-Dec-2019	Version 3	Changed	Configuration Information sections was updated.
04-Nov-2019	Version 2	Changed	Standard Features, Configuration Information and Technical Specification sections were updated.
03-Sep-2019	Version 1	New	New QuickSpecs

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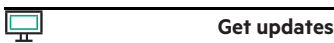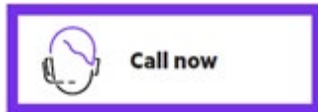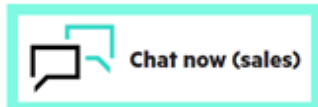
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