

DATA SHEET

ARUBA 9004 SERIES GATEWAYS

Versatile and cost-effective branch networking

Aruba 9004 Series Gateways provide high-performance SD-WAN and security functionality in a compact and cost-effective form factor. Ideally suited for branch and small campus networks, the 9004 Series Gateways serve a key role within Aruba's **SD-Branch** solution, which unifies WLAN, LAN, SD-WAN and security for distributed enterprises.

The 9004 Series can be easily configured and managed using Aruba Central, a cloud-based network operations, assurance and security platform. Onsite deployment is accomplished with a simple mobile installer application.

HIGH PERFORMANCE AND RELIABILITY

For distributed enterprises with increasing performance and bandwidth needs, the 9004 is designed with scale and flexibility, and equipped with plenty of horsepower.

The 9004 provides connectivity for up to 2,048 users or client devices at up to 2 Gbps of firewall throughput or up to 4 Gbps of wired bridged throughput. These capabilities are up to 40 times the client density and 10 times the maximum throughput of typical SD-WAN appliances.

For enhanced resiliency and high availability, the 9004 can be clustered together with multiple gateways at each branch.

UNRESTRICTED BANDWIDTH

Unlike other SD-WAN vendors, Aruba SD-WAN provides unrestricted bandwidth on every gateway license. This means you have access to full hardware performance capabilities right out of the box - no upgrade purchases required.

IOT AND INTEGRATION READY

The 9004 includes flexible connectivity options, with four Ethernet ports that can be used as access/WAN uplinks, a USB 3.0 port for cellular third-party connectivity, and an integrated IoT radio that supports Bluetooth 5, Zigbee, and Near Field Communication (NFC) wireless protocols.



KEY FEATURES

- Cloud-managed and purpose-built for branch SD-WAN requirements.
- Up to 10 times the performance and 40 times the client density of typical SD-WAN appliances.
- Unified policy enforcement for wired and wireless traffic through Aruba Dynamic Segmentation.
- Visibility into over 3,000 applications with no added hardware.

The gateway also uses integrated device profiling to improve client visibility, and works with Aruba ClearPass Policy Manager or 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, 9004 Gateways can be connected to Aruba's 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. Please refer to the [SD-WAN datasheet](#) for more information.

Optional Mobility Controller Mode

9004 Gateways can also be re-purposed as Mobility Controllers with ArubaOS 8.5 software to provide wireless LAN services. In this mode, the 9004 cannot simultaneously be used for SD-WAN. For more information, refer to the [ArubaOS datasheet](#).

UNIFIED POLICY ENFORCEMENT

To simplify and better secure wired and wireless network access, the 9004 Series Gateways are a pivotal component in Aruba's Dynamic Segmentation framework. Wired and wireless traffic can be tunneled to a gateway, which then provides consistent policy enforcement based on user role (e.g. guest, contractor, departmental employee), device type, application or network location. Learn about Dynamic Segmentation [in this guide](#).

EXTENDED FEATURES

Policy Enforcement Firewall

The 9004 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 Aruba ClearPass Policy Manager, policies are automatically enforced to simplify SSID, VLAN and policy management. This is the foundation of Dynamic Segmentation, and is included within the Foundation, Foundation Base Capacity, and PEF licenses.

Application visibility and control

Deep Packet Inspection (DPI) technology, which is a component of PEF, consistently evaluates and optimizes performance and usage policies for over 3,000 applications. This ensures the highest possible Quality of Service (QoS) – even for encrypted traffic.

High Availability

The 9004 can be deployed with N+1 or NxN redundancy, and can also join a controller cluster when deployed as a Mobility Controller managed by Mobility Master. 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.

Office365, Teams and Skype for Business

Aruba's integration with Microsoft enable unique application insight that detects Office365, Teams and Skype for Business traffic and then prioritizes them over less critical applications. Aruba Central also includes specific call quality heuristics for additional visibility.

TECHNICAL SPECIFICATIONS

Performance and Capacity

SD-WAN Deployment Mode*	9004
Sizing	Small site
Maximum clients	Up to 2,048*
Firewall throughput (Gbps)	2
Encrypted throughput AES-CCM (Gbps)	2
Encrypted throughput (AES-CBC-256) (Gbps)	4
Active firewall sessions	32,426
Mobility Controller Deployment Mode*	9004
Maximum campus or remote Access Points	32
Maximum concurrent users/devices	2,048
Maximum VLANs	4,096
Active firewall sessions	32,426
Concurrent GRE tunnels	544
Concurrent IPsec sessions	2,048
Concurrent SSL sessions	2,048
Concurrent tunneled ports	2,048
Firewall throughput (Gbps)	2
Wired bridged throughput (Gbps)	4
Encrypted throughput 3DES (Gbps)	4
Encrypted throughput AES-CBC-256 (Gbps)	4
Encrypted throughput AES-CCM (Gbps)	2
Encrypted throughput AES-GCM-256 (Gbps)	4

*These modes are only enabled when the appropriate minimum licenses and ArubaOS firmware are deployed:

- SD-WAN Mode – Aruba Central Foundation or Foundation Base Licenses
- Controller Mode – AP License

Interfaces and Indicators

Features	9004
Form factor/footprint	Desktop/Fanless ³ Optional Mount Rack Tray
100/1000BASE-T	4
10G SFP+ Ports (SFP also supported)	-
Bluetooth 5, NFC and Zigbee/15.4 integrated radio ¹ • 8dBm transmit power (class 1)	Yes
USB 3.0 Type-A	1
System status LED	Yes
WAN ports status LED	Yes
LAN ports status LED	Yes
Gateway mode LED	Yes
Central connectivity status LED ²	Yes
LTE status LED	Yes
Console port	micro USB, RJ45

¹ BLE enabled with the initial release, NFC and 15.4 enabled in a future release

² LED utilized by the SD-WAN Gateway solution

³ 1RU can support two 9004 gateways side-by-side using an optional mount kit.

Physical

Features	9004
Dimensions (HxWxD)	3.82 cm x 19.85 cm x 15.31 cm (1.5" x 7.815" x 6.03")-
Weight	1.143 Kg (2,519 lbs)

Environmental

Features	9004
Operating Temperature	0° C to 40° C (32° C to 104° F)
Storage Temperature	-40° C to 70° C (-40° F to 158° F)
Operating Humidity	10% to 90% (RH), non-condensing
Storage Humidity	10% to 95% (RH), non-condensing
Operating Altitude	10,000 feet
Acoustic Noise	0 dBA (fan less)
Cooling	Conduction cooling
Maximum Power Consumption	25W (with USB)
Power Source	12v DC, 2.5A AC-to-DC power adapter

Power Adapter Specifications

Features	
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)

REGULATORY AND SAFETY COMPLIANCE

Description	9004
Regulatory SKU information	ARCN9004
Minimum Software Versions	SD-WAN R1.7 (default) and Aruba Central 2.5.x in SD-WAN mode, or ArubaOS 8.5.0.0 in Mobility Controller mode.
	Wi-Fi 6 (802.11ax), AOS 8.5; Wi-Fi CERTIFIED WPA3™, AOS 8.5; WI-FI CERTIFIED Enhanced Open™, AOS 8.5
Safety certifications	UL 60950-1 Second Edition
	CAN/CSA-C22.2 No. 60950-1 Second Edition
	EN 60950-1 Second Edition
	EN 60950:2005
	IEC 60950-1 Second Edition
	EN/IEC 62368-1 2nd Edition
	NOM (obtained by partners and distributors)
Electromagnetic emissions certifications	FCC Part 15 Class B
	CISPR32 Class B
	EN55032 Class B
	ICES-003 Class B
	VCCI Class B
	EN61000-3-2
	EN61000-3-3
	EN55024, EN301 489-1/-17
	KN32 Class B (9004), KN35, KN301 489-1/-17
	CNS13438 Class B
Telco	Common Language Equipment Identifier (CLEI) Code
Wireless certifications	FCC/ISED
	RED Directive 2014/53/EU
	Others: MIC, NCC, ANATEL, COFTEL, CCC

Warranty and Support

- Hardware: 1 year parts/ labor, can be extended with support contract
- Mobility Controller Software: 90 days, can be extended with support contract
- SD-WAN Gateway Software: 1, 3, 5, 7, or 10 year subscription licenses.

ORDERING INFORMATION

Part Number	Description
Aruba 9004 Series Gateway	
R1B20A	Aruba 9004 (US) 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B21A	Aruba 9004 (RW) 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B22A	Aruba 9004 (JP) 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B23A	Aruba 9004 (IL) 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B24A	Aruba 9004 (EG) 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B25A	Aruba 9004 (US) TAA 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B26A	Aruba 9004 (RW) TAA 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B27A	Aruba 9004 (JP) TAA 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B28A	Aruba 9004 (IL) TAA 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs
R1B29A	Aruba 9004 (EG) TAA 4-Port GbE RJ45 Gateway, 2K Clients - 32 APs

SHELF MOUNT KIT (OPTIONAL OR SPARES)

Part Number	Description
R1B30A ³	Aruba 9004-MNT-19 9004 Series 19-inch Rack Mount Kit
JX990A	AP-AC-12V30B 12V 30W Power Adapter

³ 1RU can support two 9004 gateways side-by-side using an optional mount kit.

For more ordering information, please refer to the [9004 series ordering guide](#).