

HPE Aruba Networking 7000 series mobility controllers

Improved network performance, visibility, and control



HPE Aruba Networking 7000 Series Mobility

Controllers enhance WLAN performance

by centralizing all control functionality for

individual HPE Aruba Networking access

security, and client roaming. Ideally suited for

midsize campuses and branches, the 7000

Series can be deployed using Zero Touch

Provisioning to simplify deployment.

Simple and secure access

The HPE Aruba Networking 7000 Series

serves a key role in Dynamic Segmentation,

providing HPE Aruba Networking's Policy

Enforcement Firewall (PEF) to enforce

policies based on user role, device type,

application, and network location-and

simplifying and securing wired and wireless

network access. Traffic is encapsulated in

VLANs or ACLs for each new client on

points (APs) to improve AP utilization,

Key features

- Support for new Wi-Fi 6/6E (802.11ax), WPA3 and Enhanced Open—and existing standards
- Patented HPE Aruba Networking ClientMatch technology can now group together Wi-Fi 6 capable devices
- HPE Aruba Networking Dynamic Segmentation enforces wired and wireless access policies to simplify and secure the network
- Application awareness for 3,000+ applications without additional hardware
- Built-in AI-powered wireless/RF optimization
- 8 Gbps of maximum firewall throughput



GreenLake

*7010 and 7030 Mobility Controllers shown

GRE tunnels for complete encryption all the way from an AP or switch. This feature can be enabled with the HPE Aruba Networking Operating System PEF license and eliminates the need to manually configure SSIDs,

the network

High performance and reliability

Each HPE Aruba Networking 7000 Series provides connectivity for up to 4,096 concurrent users or client devices, 64

access points and include multiple fiber WAN uplinks. With 8Gbps of maximum throughput to perform <u>Policy Enforcement</u> <u>Firewall (PEF)</u> features, the 7000 Series delvers plenty of horsepower for the most demanding enterprise environments.

For enhanced resiliency and availability, the 7000 Series can be clustered together in a network.

24x7 mission-critical networking

HPE Aruba Networking's unique patented wireless technologies are based on Al-powered machine learning algorithms and integrated directly into HPE Aruba Networking Operating System. Adaptive Radio Management, HPE Aruba Networking AirMatch and HPE Aruba Networking ClientMatch provide RF optimization techniques to improve user experience and network health based on changing environmental conditions, correct for noisy or congested RF and resolve sticky client issues during user roaming. HPE Aruba Networking RFProtect (RFP) provides advanced spectrum analysis and wireless intrusion protection (WIPS/WIDS) to help identify and mitigate Wi-Fi and non-Wi-Fi sources of interference, as well as containment of potential security risks.

When deployed with HPE Aruba Networking Mobility Conductor, the HPE Aruba Networking 7000 Series can be joined to a controller cluster to increase scale, improve reliability using High Availability (HA), adopt configurations seamlessly based on hierarchy, support Live Upgrades to reduce maintenance windows, and share licenses from a global licensing pool.

Learn more about the 7000 Series Mobility Controller features in the <u>HPE Aruba Networking Operating</u> System datasheet.

SD-WAN deployment

For organizations that are now managing multiple WAN connections, the HPE Aruba Networking 7000 Series can be connected to HPE Aruba Networking's SD-WAN fabric right out of the box. SD-Branch is a rich WAN management solutions that is used to simplify management of traffic entering and exiting branch sites. Please refer to the <u>SD-Branch datasheet</u> for more information.

Microsoft features

HPE Aruba Networking's integration with Microsoft enables unique application intelligence that detects Microsoft 365 and Teams traffic and then prioritizes them over less critical applications. IT can visualize call quality metrics such as MOS, latency, jitter, and packet loss for additional insights.

Enhanced capabilities

Client optimization

The Wi-Fi 6 and Wi-Fi 6E standard brings enhanced performance, speed, and efficiency with key features such as OFDMA and bidirectional MU-MIMO. Combined with HPE Aruba Networking's patented ClientMatch technology, 802.11ax clients will now be grouped together to optimize the multi-user experience.

Enhanced wireless security

Support for WPA3 brings stronger encryption and authentication methods, while Enhanced Open brings automatic security to open networks. The new WPA2-MPSK feature enables simpler passkey management for WPA2 devices—should the Wi-Fi password on one device need to be changed, no additional key changes are needed for other devices on the network.

Dynamic segmentation

To simplify and better secure wired and wireless network access, the HPE Aruba Networking 7000 Series can enforce per-user and device roles across wired and wireless networks by integrating with HPE Aruba Networking NAC or using HPE Aruba Networking Central NetConductor. This ensures consistent policy regardless of user role and device type, and eliminates the need to configure unnecessary SSIDs, ACLs, VLANs and subnets at every node in the network.

Policy enforcement firewall

Wired and wireless user and application traffic can be tunneled to a stateful firewall on the 7000 Series through GRE tunnels for inspection as part of the PEF add-on license. Policies are then enforced based on user role, device type, application and location as described in Dynamic Segmentation.

Application visibility and control

As part of the PEF, Deep Packet Inspection (DPI) provides application visibility to evaluate and optimize performance and Quality of Service policies for over 3,000 applications—even for encrypted or hidden traffic.

Web content filtering

WebCC is an add-on feature that classifies websites by content category and rates them by reputation. It can also block, apply QoS, bandwidth-limit, mirror, and log web content.

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, Skype for Business®, Wi-Fi Calling, Facetime, SIP, Jabber, Spark and more.

Zero Touch Provisioning

The 7000 Series can be factory-shipped and deployed onsite with cloud-based HPE Aruba Networking Activate. For network-specific requirements, settings can be applied based on hierarchical configuration.

Integrated VPN services

With support for IPSec/SSL VPNs, HPE Aruba Networking remote APs (RAPs) and HPE Aruba Networking VIA VPN users can establish encrypted sessions without any additional hardware required.

Third-party security integration

For advanced malware or antivirus protection, the 7000 Series can assume the role of an on-premises agent of centrally-hosted firewalls such as those provided by Palo Alto Networks and Check Point Software. Dedicated firewall appliances are no longer needed at each branch.

HPE Aruba Networking Wireless Operating System Software AOS 10 considerations

When deploying the HPE Aruba Networking 7000 Series using AOS 10 and HPE Aruba Networking Central, many enhanced capabilities (Policy Enforcement Firewall, WebCC, and UCC) reside as services within the HPE Aruba Networking Central cloud and are included in the HPE Aruba Networking Central subscription license. Refer to the <u>HPE Aruba Networking Central</u> data sheet for more details on what is included in the license.

Performance and capacity

Features	7010	7030
Maximum campus or remote AP licenses	32	64
Maximum concurrent users/devices	2,048	4,096
Maximum VLANs	4,096	4,096
Active firewall sessions	64K	64K
Concurrent GRE tunnels	512	1,024
Concurrent IPsec sessions	2,048	4,096
Concurrent SSL sessions	2,048	4,096
Firewall throughput (Gbps)	8	8
Wired bridged throughput (Gbps)	8	8
Encrypted throughput 3DES (Gbps)	2.4	2.4
Encrypted throughput AES-CBC-256 (Gbps)	2.6	2.6
Encrypted throughput AES-CCM (Gbps)	3.4	4.0
Encrypted throughput AES-GCM-256 (Gbps)	3.3	3.4

Interfaces and indicators

Features	7010	7030	
Form factor/footprint	1xRU	1xRU	
10/100/1000BASE-T	16	Q (comb c)	
1000BASE-X	2xSFP	- 8 (combo)	
10G Ports (10G or 1G supported)	-	-	
USB 2.0	2	1	
Management/status LEDs	Yes	Yes	
LINK/ACT and status LEDs	Yes	Yes	
LCD panel and navigation buttons	Yes	Yes	
Console port	mini USB, RJ-45	mini USB, RJ-45	
Out-of-band management port	Yes	No	



Power over Ethernet (PoE) support

Features	7010	7030
PoE ¹ Role/Mode	Power Source Equipment (PSE)	-
PoE In or Out	Out	-
Max concurrent of PoE ports	12	-
Max ² concurrent PoE+ ports	12	-
PoE power budget	150W	-

² PoE+: 802.3at, up to 30W per port from the PSE and up to 25.5W at the PD, not to exceed the total PoE Power Budget.

Physical

	7010	7030
Dimensions (H x W x D)	4.42 cm x 31.75 cm x 33.7 cm (1.74" x 12.75" x 13.3")	4.4 cm x 30.5 cm x 21.1 cm (1.7" x 12" x 8.3")
Weight	3.4 kg (7.5 lbs)	2.06 kg (4.54 lbs)
MTBF (hours, @ 40C)	232,843	390,679

Environmental range

Specification	7010	7030
Operating temperature	0° C to 40° C	
Storage temperature	-40° C to 70° C	
Humidity/storage humidity	5% to 95%, NC	5% to 95%, NC
Operating altitude	10,000 feet	
Acoustic noise ³	39.8–58.6 dBA	29.1–57.4 dBA
Maximum heat dissipation (BTU/hour)	300	168
Maximum power consumption	190W (with PoE)	55W
Power source	Internal power supply	Internal power supply

 $^{\rm 3}$ Sound power per ETSI 300 753 in accordance with ISO 7779

Power adapter and supply specifications

Features	12v-30W	150-watt
Input voltage range	90 VAC to 264 VAC	90 VAC to 264 VAC
Output voltage	+12VDC, 4A	54VDC, 2.78A
Input frequency	47-63 Hz	47-63 Hz
AC line input current (steady state)	1.0A	2.0A



Power adapter and supply specifications

Features	12v-30W	150-watt
Operating temperature	-0° to +40° C	-0° to +40° C
Cooling	-	-
Weight	.24 kg (.53 lbs)	.72 kg (1.58 lbs)

Regulatory and safety compliance

Features	7010	7030
Regulatory SKU information	ARCN0103	ARCN7030
Minimum HPE Aruba Networking operating system release	8.x	8.x
	Wi-Fi Certified WPA3, AOS 8.4; Wi AOS 8.4; Wi-Fi Certified 802.11ad	-Fi Certified Enhanced Open, AOS 8.4; Wi-Fi 6 (802.11ax), , AOS 8.4
Safety certifications	UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1 Sec IEC 60950-1 Second Edition NOM (obtained by partners and di	cond Edition EN 60950-1 Second Edition EN 60950:2005 istributors)
Electromagnetic emissions certifications	FCC Part 15 Class B CE AS/NZS CISPR22 Class B CISPR22 Class A (7010, 7024, 7030), Class B (7005) EN55022 Class A (7010, 7024, 7030), Class B (7005) ICES-003 Class A (7010, 7024, 7030), Class B (7005) VCCI Class A (7010, 7024, 7030), Class B (7005) EN61000-3-2 EN61000-3-3 EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11, AS/NZS 3548 KN22 Class B KCC CNS13438 Class B EN55024/CISPR24 KN24 Industry Canada Class B CE mark, cTUVus, CB, C-tick, Anatel, NOM, MIC	
Telco	Common Language Equipment Ide	entifier (CLEI) Code

Service and warranty information

- Hardware: 1-Year parts/labor, can be extended with support contract
- Software: 90 days, can be extended with support contract

Ordering information

Part Number	Description		
HPE Aruba Netv	HPE Aruba Networking 7010 series mobility controllers		
JW678A	HPE Aruba Networking 7010 (RW) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller		
JW679A	HPE Aruba Networking 7010 (US) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller		
JW680A	HPE Aruba Networking 7010(IL) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 for AP and 2K Clients Controller		



Ordering information

Part Number	Description		
HPE Aruba Net	HPE Aruba Networking 7010 series mobility controllers		
JW681A	HPE Aruba Networking 7010 (JP) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP for 32 AP and 2K Clients Controller		
JW702A	HPE Aruba Networking 7010 (RW) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller		
JW703A	HPE Aruba Networking 7010 (US) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller		
JW704A	HPE Aruba Networking 7010 (IL) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller		
JW705A	HPE Aruba Networking 7010 (JP) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller		
JY850A	HPE Aruba Networking 7010 (EG) 16x 1000BASE-T + 2x SFP Ports 32 AP Branch Controller		

Part Number Description

HPE Aruba N	etworking 7030 series mobility controllers
JW686A	HPE Aruba Networking 7030 (RW) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW687A	HPE Aruba Networking 7030 (US) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW688A	HPE Aruba Networking 7030 (IL) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW689A	HPE Aruba Networking 7030 (JP) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW710A	HPE Aruba Networking 7030 (RW) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW711A	HPE Aruba Networking 7030 (US) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW712A	HPE Aruba Networking 7030 (IL) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T 1GBASE-X SFP 64 AP and 4K Clients Controller
JW713A	HPE Aruba Networking 7030 (JP) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JY851A	HPE Aruba Networking 7030 (EG) 8x 1000BASE-T or 8xSFP64 AP Branch Controller

Controller accessories

JX989A	AP-AC-12V30A 12V 30W Power Adapter
JX933A	HPE Aruba Networking PSU-150-AC 150W AC Power Supply
JW083A	HPE Aruba Networking SPR-WL2-MNT S2500/S1500 7024 Wall and Rack Mount Kit
JW084A	HPE Aruba Networking 7005-MNT-19 7005 Series 19-inch Rack Mount Kit
JX934A	HPE Aruba Networking 7008-MNT-19 7008 Series 19-inch Rack Mount Kit
JW085A	HPE Aruba Networking 7010-MNT-19 7010 Series Replacement 19-inch Rack Mounting Kit
JW082A	HPE Aruba Networking SPR-RK3-MNT 7205/7024/S2500-xx/S1500-24P/48P Spare Front Rack Mount
JW086A	HPE Aruba Networking 7030-MNT-19 7030 Series Replacement 19-inch Rack Mounting Kit





Ordering information

Part Number	Description	7010	7030	
Transceivers				
JW087A	HPE Aruba Networking 1000BASE-LX LC Connector SFP XCVR	Х	Х	
JW088A	HPE Aruba Networking 1000BASE-SX LC Connector SFP XCVR	Х	Х	
JW089A	HPE Aruba Networking 1000BASE-T RJ45 Connector SFP XCVR	Х	Х	
JW149A	SFP-EX 1000BASE-EX LC SFP XCVR	Х	Х	
JW150A	SFP-ZX 1000BASE-ZX LC SFP XCVR	Х	Х	
J4859D	HPE Aruba Networking 1G SFP LC LX 10km SMF Transceiver	X1	X1	
J4858D	HPE Aruba Networking 1G SFP LC SX 500m OM2 MCRF Transceiver	X1	X1	
J4860D	HPE Aruba Networking 1G SFP LC LH 70km SMF Transceiver	X ²	X ²	
J8177D	HPE Aruba Networking 1G SFP RJ45 T 100m Cat5e Transceiver	X1	X1	
JL745A	HPE Aruba Networking 1G SFP LC SX 500m MMF TAA XCVR	X3	X ³	
JL746A	HPE Aruba Networking 1G SFP LC LX 10km SMF TAA XCVR	X3	X ³	
JL747A	HPE Aruba Networking 1G SFP RJ45 T 100m Cat5e TAA XCVR	X ³	X ³	
JL748A	HPE Aruba Networking 10G SFP+ LC SR 300m MMF TAA XCVR	X ³	X ³	
JL749A	HPE Aruba Networking 10G SFP+ LC LR 10km SMF TAA XCVR	X ³	X ³	

Accessories for HPE Aruba Networking 7005 and 7008 controllers

Accessories for 7005 and 7008 Controllers are orderable although the controllers themselves are end of sale.

7005 accessories

Power cord part number	Description	
JX989A	AP-AC-12V30A 12V/30W AC/DC Desktop Style 1.7/4.0/9.5mm Circular 90 Deg Plug DoE Level VI Adapter	
R3J99A	12V/36W AC/DC power adapter type A	
Rack mount part number	Description	
JW084A	HPE Aruba Networking 7005-MNT-19 7005 Series 19-inch Rack Mount Kit	

7008 accessories

Power cord part number	Description
JW113A	PC-AC-ARG Argentina 220V AC 10A 2-meter AC Power Cord
JW114A	PC-AC-AUS Australian AC Power Cord
JW115A	PC-AC-BR Brazil AC Power Cord

7008 accessories

Power cord part number	Description
JW116A	PC-AC-CHN China AC Power Cord
JW117A	PC-AC-DEN Denmark 220V AC 10A 2-meter AC Power Cord
JW118A	PC-AC-EC Continental European/Schuko AC Power Cord
JW119A	PC-AC-IN India AC Power Cord
JW120A	PC-AC-IL Israel 250V AC 10A 2-meter AC Power Cord
JW121A	PC-AC-IT Italian AC Power Cord
JW122A	PC-AC-JP Japanese AC Power Cord
JW123A	PC-AC-KOR Korea AC Power Cord
JW124A	PC-AC-NA North America AC Power Cord
JW125A	PC-AC-SWI Switzerland 220V AC 10A 2-meter AC Power Cord
JW127A	PC-AC-UK UK AC Power Cord
JW128A	PC-AC-ZA South Africa 250V AC 10A 2-meter AC Power Cord
Rack mount kit part number	Description
JX934A	HPE Aruba Networking 7008-MNT-19 7008 Series 19-inch Rack Mount Kit

For additional information on the HPE Aruba Networking 7000 Series Mobility Controllers please refer to:

• HPE Aruba Networking Operating System Network Operating System Data Sheet

- 7000 Series Mobility Controller
- 7000 Series Ordering Guide
- SD-Branch Data Sheet

Make the right purchase decision. Contact our presales specialists.





© Copyright 2023 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.



DS_hpeanw7000SeriesMC_LP_111423 a00059069enw