DATA SHEET

ARUBA 7000 SERIES MOBILITY CONTROLLERS

Improved network performance, visibility, and control

Aruba 7000 Series Mobility Controllers enhance WLAN performance by centralizing all control functionality for individual Aruba access points (APs) to improve AP utilization and client roaming. Ideally suited for midsize campuses and branches, the 7000 Series can be deployed using Zero Touch Provisioning (ZTP) to simplify deployment.

SIMPLE AND SECURE ACCESS

The 7000 Series serves a key role in Dynamic Segmentation, providing Aruba'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 GRE tunnels for complete encryption all the way from an AP or switch. This feature can be enabled with the ArubaOS PEF license and eliminates the need to manually configure SSIDs, VLANs or ACLs for each new client on the network.

The 7000 Series runs the ArubaOS network operating system and manages up to 4,096 concurrent users, 64 access points and include up to 24 Ethernet ports and multiple WAN uplinks. With 8 Gbps of maximum throughput to perform stateful firewall policy enforcement, the controller delivers plenty of horsepower for the most demanding enterprise environments.

24/7 MISSION-CRITICAL NETWORKING

Aruba's unique patented wireless technologies are based on AI-powered machine learning algorithms and integrated directly into ArubaOS. Adaptive Radio Management, AirMatch and ClientMatch (now enhanced with Wi-Fi 6 grouping) 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. RFProtect 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. Learn more about Aruba's software features on the ArubaOS datasheet.



*7005, 7008, 7010 and 7030 Mobility Controllers shown

KEY FEATURES

- Support for new Wi-Fi 6 (802.11ax), WPA3 and Enhanced Open – and existing standards
- Patented ClientMatch technology can now group together Wi-Fi 6 capable devices
- 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

When deployed with Aruba Mobility Master, the 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. The 7000 Series also serves a key policy enforcement role in Aruba's 360 Secure Fabric. Aruba AirWave provides real-time monitoring, reporting and Wi-Fi planning and visibility services.

MICROSOFT FEATURES

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

ENHANCED CAPABILITIES

Wi-Fi 6 (802.11ax) enhanced with ClientMatch

The latest Wi-Fi standard brings enhanced performance, speed, and efficiency with key features such as OFDMA, 1024-QAM, and bidirectional MU-MIMO. Combined with Aruba'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. 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 7000 Series can enforce per-user and device roles across wired and wireless networks by integrating with ClearPass Policy Manager. 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

Enabled by the PEF license, wired and wireless user and application traffic can be tunneled to a stateful firewall on the 7000 Series through GRE tunnels for inspection. 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 license, application visibility with Deep Packet Inspection (DPI) technology evaluates and optimizes 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 subscription-based 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) Dashboard

Visualize and troubleshoot networks based on call quality metrics such as MOS, latency, jitter and packet loss. Supported applications include: 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 Aruba Activate. For network-specific requirements, settings can be applied based on hierarchical configuration.

Integrated VPN services

With support for IPSec/SSL VPNs, Aruba remote APs (RAPs) and Aruba 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.

PERFORMANCE AND CAPACITY

Features	7005	7008	7010	7024	7030
Maximum campus or remote AP licenses	16	16	32	32	64
Maximum concurrent users/devices	1,024	1,024	2,048	2,048	4,096
Maximum VLANs	4,096	4,096	4,096	4,096	4,096
Active firewall sessions	16,384	16,384	32,768	32,768	65,536
Concurrent GRE tunnels	256	256	512	512	1,024
Concurrent IPsec sessions	1,024	1,024	2,048	2,048	4,096
Concurrent SSL sessions	1,024	1,024	2,048	2,048	4,096
Firewall throughput (Gbps)	2	2	4	4	8
Wired Bridged Throughput (Gbps)	4	4	8	8	8
Encrypted throughput 3DES (Gbps)	1.2	1.2	2.4	2.4	2.4
Encrypted throughput AES-CBC-256 (Gbps)	1.3	1.3	2.6	2.6	2.6
Encrypted throughput AES-CCM (Gbps)	1.9	2.2	3.5	3.5	4.0
Encrypted throughput AES-GCM-256 (Gbps)	1.7	1.7	3.4	3.4	3.4

INTERFACES AND INDICATORS

Features	7005	7008	7010	7024	7030
Form factor/footprint	Desktop/fanless	Desktop/fanless	1xRU	1xRU	1xRU
10/100/1000BASE-T	4	8	16	24	8 (combo)
1000BASE-X	–	–	2xSFP	–	
10G Ports (10G or 1G supported)	–	–	–	2xSFP+	–
USB 2.0	1	2	2	1	1
Management/status LEDs	Yes	Yes	Yes	Yes	Yes
LINK/ACT and status LEDs	Yes	Yes	Yes	Yes	Yes
LCD panel and navigation buttons	No	No	Yes	Yes	Yes
Console port	mini USB, RJ-45	RJ-45	mini USB, RJ-45	micro USB, RJ-45	mini USB, RJ-45
Out-of-band management port	No	No	Yes	Yes	No

POWER OVER ETHERNET (PoE) SUPPORT

	7005	7008	7010	7024	7030
PoE[1] Role/Mode	Powered Device (PD)	Power Source Equipment (PSE)	PSE	PSE	–
PoE In or Out	In – Port 0	Out	Out	Out	–
Max concurrent of PoE Ports	–	8	12	24	–
Max[2] concurrent PoE+ Ports	–	8	12	24	–
PoE Power Budget	–	100W	150W	400W	–

[1] PoE: 802.3af, up to 15.4W from the PSE and up to 12.95W at the PD, not to exceed the total PoE Power Budget.
[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

	7005	7008	7010	7024	7030
Dimensions (H x W x D)	4.1 cm x 20 cm x 20 cm (1.6" x 7.9" x 7.9")	4.2 cm x 20.32 cm x 20.32 cm (1.65" x 8.0" x 8.0")	4.42 cm x 31.75 cm x 33.7 cm (1.74" x 12.75" x 13.3")	4.37 cm x 44.2 cm x 31.3 cm (1.72" x 17.4" x 12.32")	4.4 cm x 30.5 cm x 21.1 cm (1.7" x 12" x 8.3")
Weight	0.92 kg (2.03 lbs)	1.0 kg (2.2 lbs)	3.4 kg (7.5 lbs)	5.127 kg (11.3 lbs)	2.06 kg (4.54 lbs)
MTBF (hours, @ 40C)	323,896	300,000	232,843	311,901	390,679

ENVIRONMENTAL RANGE

Specification	7005	7008	7010	7024	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	5% to 95%, NC	10% to 95%, NC	5% to 95%, NC
Operating Altitude	10,000 feet				
Acoustic noise[3]	0 dBA (fanless)	0 dBA (fanless)	39.8 – 58.6 dBA	34.3 – 71.2 dBA	29.1 – 57.4 dBA
Maximum Heat Dissipation (BTU/hour)	51.18	430	300	1842	168
Maximum power consumption	16.6W (with USB)	126W (with PoE)	190W (with PoE)	450W (with PoE)	55W
Power Source	PoE or 12v - 30W	150-watt power supply	internal power supply	internal power supply	internal power supply

[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
Operating Temperature	-0o to +40o C	-0o to +40o C
Cooling	–	–
Weight	.24 kg (.53 lbs)	.72 kg (1.58 lbs)

REGULATORY AND SAFETY COMPLIANCE

Features	7005	7008	7010	7024	7030
Regulatory SKU information	ARCN01014	ARCN7008	ARCN0103	ARCN7024	ARCN7030
Minimum ArubaOS Release	6.4.1.0	6.5.0.0	6.4.1.0	6.4.3.0	6.4.1.0
	WI-FI CERTIFIED WPA3, AOS 8.4; WI-FI CERTIFIED Enhanced Open, AOS 8.4; Wi-Fi 6 (802.11ax), AOS 8.4; WI-FI CERTIFIED 802.11ad, AOS 8.4				
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 NOM (obtained by partners and distributors)				
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 Identifier (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
Aruba 7005 Series Mobility Controllers	
JW633A	Aruba 7005 (RW) 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW634A	Aruba 7005 (US) 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW635A	Aruba 7005 (RW) FIPS/TAA-compliant 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW636A	Aruba 7005 (US) FIPS/TAA-compliant 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW637A	Aruba 7005 (IL) 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW638A	Aruba 7005 (IL) FIPS/TAA-compliant 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW639A	Aruba 7005 (JP) 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JW640A	Aruba 7005 (JP) FIPS/TAA-compliant 4-port 10/100/1000BASE-T 16 AP and 1K Client Controller
JY849A	Aruba 7005 (EG) 4x 10/100/1000BASE-T Ports 16 AP Branch Controller
Aruba 7008 Series Mobility Controllers	
JX925A	Aruba 7008 (IL) 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX926A	Aruba 7008 (JP) 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX927A	Aruba 7008 (RW) 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX928A	Aruba 7008 (US) 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX929A	Aruba 7008 (IL) FIPS/TAA 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX930A	Aruba 7008 (JP) FIPS/TAA 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX931A	Aruba 7008 (RW) FIPS/TAA 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
JX932A	Aruba 7008 (US) FIPS/TAA 8p 100W PoE+ 10/100/1000BASE-T 16 AP and 1K Client Controller
Aruba 7010 Series Mobility Controllers	
JW678A	Aruba 7010 (RW) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller
JW679A	Aruba 7010 (US) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller
JW680A	Aruba 7010(IL) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 for AP and 2K Clients Controller
JW681A	Aruba 7010 (JP) 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP for 32 AP and 2K Clients Controller
JW702A	Aruba 7010 (RW) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller
JW703A	Aruba 7010 (US) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller
JW704A	Aruba 7010 (IL) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1G BASE-X SFP 32 AP and 2K Clients Controller
JW705A	Aruba 7010 (JP) FIPS/TAA 16p 150W PoE+ 10/100/1000BASE-T 1GBASE-X SFP 32 AP and 2K Clients Controller
JY850A	Aruba 7010 (EG) 16x 1000BASE-T + 2x SFP Ports 32 AP Branch Controller
Aruba 7024 Series Mobility Controllers	
JW682A	Aruba 7024 (RW) 24-port 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW683A	Aruba 7024 (US) 24-port 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW684A	Aruba 7024 (IL) 24-port 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW685A	Aruba 7024 (JP) 24-port 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW706A	Aruba 7024 (RW) FIPS/TAA-compliant 24p 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW707A	Aruba 7024 (US) FIPS/TAA-compliant 24p 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW708A	Aruba 7024 (IL) FIPS/TAA-compliant 24p 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller
JW709A	Aruba 7024 (JP) FIPS/TAA-compliant 24p 400W PoE+ 10G BASE-X SFP+ 32 AP and 2K Clients Controller

ORDERING INFORMATION

Part Number	Description
Aruba 7030 Series Mobility Controllers	
JW686A	Aruba 7030 (RW) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW687A	Aruba 7030 (US) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW688A	Aruba 7030 (IL) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW689A	Aruba 7030 (JP) 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW710A	Aruba 7030 (RW) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW711A	Aruba 7030 (US) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JW712A	Aruba 7030 (IL) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T 1GBASE-X SFP 64 AP and 4K Clients Controller
JW713A	Aruba 7030 (JP) FIPS/TAA 8p Dual Pers 10/100/1000BASE-T/1GBASE-X SFP 64 AP and 4K Clients Controller
JY851A	Aruba 7030 (EG) 8x 1000BASE-T or 8xSFP64 AP Branch Controller
Controller Accessories	
JX989A	AP-AC-12V30A 12V 30W Power Adapter
JX933A	Aruba PSU-150-AC 150W AC Power Supply
JW083A	Aruba SPR-WL2-MNT S2500/S1500 7024 Wall and Rack Mount Kit
JW084A	Aruba 7005-MNT-19 7005 Series 19-inch Rack Mount Kit
JX934A	Aruba 7008-MNT-19 7008 Series 19-inch Rack Mount Kit
JW085A	Aruba 7010-MNT-19 7010 Series Replacement 19-inch Rack Mounting Kit
JW082A	Aruba SPR-RK3-MNT 7205/7024/S2500-xx/S1500-24P/48P Spare Front Rack Mount
JW086A	Aruba 7030-MNT-19 7030 Series Replacement 19-inch Rack Mounting Kit

ORDERING INFORMATION

Part Number	Description	7010	7024	7030
Transceivers				
JW087A	Aruba 1000BASE-LX LC Connector SFP XCVR	X	X	X
JW088A	Aruba 1000BASE-SX LC Connector SFP XCVR	X	X	X
JW089A	Aruba 1000BASE-T RJ45 Connector SFP XCVR	X	X	X
JW149A	SFP-EX 1000BASE-EX LC SFP XCVR	X	X	X
JW150A	SFP-ZX 1000BASE-ZX LC SFP XCVR	X	X	X
J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	X[1]	X[1]	X[1]
J4858D	Aruba 1G SFP LC SX 500m OM2 MMF Transceiver	X[1]	X[1]	X[1]
J4860D	Aruba 1G SFP LC LH 70km SMF Transceiver	X[2]	X[2]	X[2]
J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	X[1]	X[1]	X[1]
JW092A	Aruba 10GBASE-LR LC Connector SFP+ XCVR		X	
JW091A	Aruba 10GBASE-SR LC Connector SFP+ XCVR		X	
JW090A	Aruba 10GBASE-LRM LC Connector SFP+ XCVR		X	
JW100A	SFP+ Direct Attach 0.5M Cable		X	
JW101A	SFP+ Direct Attach 1M Cable		X	
JW102A	SFP+ Direct Attach 3M Cable		X	
JW103A	SFP+ Direct Attach 5M Cable		X	
JW104A	SFP+ Direct Attach 7M Cable		X	
JW147A	SFP-10GE-ER 10G LC Cnctr SFP+ XCVR		X	
JW148A	SFP-10GE-ZR 10G LC Cnctr SFP+ XCVR		X	
J9150D	Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver		X[1]	
J9151D	Aruba 10G SFP+ LC LR 10km SMF Transceiver		X[1]	
J9152D	Aruba 10G SFP+ LC LRM 220m OM2 MMF Transceiver		X[1]	
J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver		X[1]	
J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable		X[1]	
J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable		X[1]	
J9285D	Aruba 10G SFP+ to SFP+ 7m DAC Cable		X[1]	

X: Supported transceiver
[1]Default minimum ArubaOS software version is 6.5.3.0 and 8.1.0.0
[2]Minimum ArubaOS software version is 6.5.4.7 and 8.4.0.0

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

- ArubaOS Network Operating System Data Sheet (and licenses)
- 7000 Series Mobility Controller
- 7000 Series Ordering Guide

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