

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, security, 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.

HIGH PERFORMANCE AND RELIABILITY

Each 7000 Series provides connectivity for up to 4,096 concurrent users or client devices, 64 access points and include up to 24 Ethernet ports and multiple WAN uplinks. With 8Gbps of maximum throughput to perform Policy Enforcement Firewall (PEF) features, the 7000 Series delvers plenty of horsepower for the most demanding enterprise environments. These capabilities are over 40 times the client density and 10 times the maximum throughput of typical network appliances.

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

24/7 MISSION-CRITICAL NETWORKING

Aruba's unique patented wireless technologies are based on Al-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



*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 Al-powered wireless/RF optimization
- 8 Gbps of maximum firewall throughput

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.

When deployed with Aruba Mobility Conductor, 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.

Learn more about the 7000 Series Mobility Controller features in the ArubaOS datasheet.

SD-WAN DEPLOYMENT

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

MICROSOFT FEATURES

Aruba's integration with Microsoft enables unique application intelligence that detects Microsoft 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 insights.

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)

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 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	64K	64K	64K	64K	64K	
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)	4	4	8	8	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)	2.0	2.0	3.4	3.4	4.0	
Encrypted throughput AES-GCM-256 (Gbps)	1.7	1.7	3.3	3.3	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	Q (combo)	
1000BASE-X	-	_	2xSFP	-	8 (combo)	
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	-	

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		

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

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.

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)			

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
		A3, AOS 8.4; WI-FI CE TFIED 802.11ad, AOS		pen, AOS 8.4; Wi-Fi 6	(802.11ax),
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	CISPR22 Class A (70 EN55022 Class A (70 ICES-003 Class A (70 VCCI Class A (7010, EN61000-3-3 EN 61000-4-2, EN 6 61000-4-11, AS/NZS KN22 Class B KCC CNS13438 Class B E Industry Canada Cla	EN55024/CISPR24 KN	is B (7005) ss B (7005) ss B (7005) ss B (7005) (7005) EN61000-3-2 4-4, EN 61000-4-5, El	N 61000-4- 6, EN 610	000-4-8, EN
Telco	Common Language	Equipment Identifier	(CLEI) Codo		

SERVICE AND WARRANTY INFORMATION

- Hardware: 1 year parts/labor, can be extended with support contract
- $\boldsymbol{\cdot}$ Software: 90 days, can be extended with support contract

Part Number	Description
Aruba 7005 Series Mob	
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
IW636A	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 Mob	, ,
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 Mob	pility 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 Controlle
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 Mob	pility 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

Part Number	Description				
Aruba 7030 Series Mob	ility Controllers				
JW686A	Aruba 7030 (RW) 8p Dual Pers 10/100/1000BASE-T/1GE	BASE-X SFP 64 AP	and 4K Clients Co	ntroller	
JW687A	Aruba 7030 (US) 8p Dual Pers 10/100/1000BASE-T/1GE	BASE-X SFP 64 AP 8	and 4K Clients Cor	ntroller	
JW688A	Aruba 7030 (IL) 8p Dual Pers 10/100/1000BASE-T/1GBA	SE-X SFP 64 AP aı	nd 4K Clients Cont	roller	
JW689A	Aruba 7030 (JP) 8p Dual Pers 10/100/1000BASE-T/1GB/	ASE-X SFP 64 AP a	nd 4K Clients Con	troller	
JW710A	Aruba 7030 (RW) FIPS/TAA 8p Dual Pers 10/100/1000BA	SE-T/1GBASE-X SF	P 64 AP and 4K C	lients Control	
W711A	Aruba 7030 (US) FIPS/TAA 8p Dual Pers 10/100/1000BA	SE-T/1GBASE-X SF	P 64 AP and 4K Cl	ients Controll	
W712A	Aruba 7030 (IL) FIPS/TAA 8p Dual Pers 10/100/1000BAS	E-T 1GBASE-X SFP	64 AP and 4K Clie	nts Controlle	
JW713A	Aruba 7030 (JP) FIPS/TAA 8p Dual Pers 10/100/1000BAS	E-T/1GBASE-X SFP	64 AP and 4K Clie	ents Controlle	
Y851A	Aruba 7030 (EG) 8x 1000BASE-T or 8xSFP64 AP Branch	Controller			
Controller Accessories					
JX989A	AP-AC-12V30A 12V 30W Power Adapter				
X933A	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				
X934A	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 R	ack Mounting Kit			
Part Number	Description	7010	7024	7030	
Transceivers					
JW087A	Aruba 1000BASE-LX LC Connector SFP XCVR	X	X	Х	
W088A	Aruba 1000BASE-SX LC Connector SFP XCVR	X	Х	X	
W089A	Aruba 1000BASE-T RJ45 Connector SFP XCVR	X	Х	Х	
JW149A	SFP-EX 1000BASE-EX LC SFP XCVR	Х	X	Х	
JW150A	SFP-ZX 1000BASE-ZX LC SFP XCVR	X	Х	Х	
J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	X1	X ¹	X ¹	
J4858D	Aruba 1G SFP LC SX 500m OM2 MCRF Transceiver	X ¹	X ¹	X ¹	
14860D	Aruba 1G SFP LC LH 70km SMF Transceiver	X ²	X ²	X ²	
J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	X1	X ¹	X ¹	
JW092A	Aruba 10GBASE-LR LC Connector SFP+ XCVR		Х		
JW091A	Aruba 10GBASE-SR LC Connector SFP+ XCVR		Χ		
W090A	Aruba 10GBASE-LRM LC Connector SFP+ XCVR		Χ		
W100A	SFP+ Direct Attach 0.5M Cable		Χ		
W101A	SFP+ Direct Attach 1M Cable		Χ		
JW102A	SFP+ Direct Attach 3M Cable		Χ		
JW103A	SFP+ Direct Attach 5M Cable		Χ		
			Х		

ORDERING INFORMATION							
Part Number	Description	7010	7024	7030			
Transceivers (continued)							
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 MCRF Transceiver		X ¹				
J9151E	Aruba 10G SFP+ LC LR 10km SMF Transceiver		X ¹				
J9152D	Aruba 10G SFP+ LC LRM 220m OM2 MCRF 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

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
- SD-WAN Data Sheet (and licenses)



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¹Default minimum ArubaOS software version is 6.5.3.0 and 8.1.0.0

²Minimum ArubaOS software version is 6.5.4.7 and 8.4.0.0