

## DATA SHEET

# MOBILITY CONTROLLER VIRTUAL APPLIANCE

The functionality of a hardware controller in a cost-effective virtualized environment

## OVERVIEW

Aruba Mobility Controller Virtual Appliances (VMCs) offer the option to leverage your existing virtualization infrastructure. VMCs offer the same functionality as the physical Aruba Mobility Controllers but require Aruba's Mobility Master for control plane functionality. The VMC can be deployed using Zero Touch Provisioning (ZTP) to simplify deployment.

## SIMPLE AND SECURE ACCESS

The VMC serves a key role in **Dynamic Segmentation**, providing Aruba's Policy Enforcement Firewall 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 VMC can manage up to 16,000 concurrent users and 1,000 access points, and can be installed on VMware ESXi, Microsoft Hyper-V and open-source KVM instances. As campus and branch requirements change, additional VMCs, memory and compute resources can be added.

## 24/7 MISSION-CRITICAL NETWORKING

ArubaOS includes unique, and patented AI-powered machine learning Adaptive Radio Management features, such as **AirMatch** and **ClientMatch** (now enhanced with 802.11ax grouping) for automatic RF optimization. These features improve the network's performance based on changing environmental conditions, 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 to contain potential security risks. Learn more about Aruba's software features on the **ArubaOS** datasheet.

As part of a controller cluster managed by the Mobility Master, the VMC helps enhance scale, improves reliability

## KEY FEATURES

- Support for Wi-Fi 6 (802.11ax), WPA3 and Enhanced Open – and existing standards
- Patented ClientMatch technology can now group together 802.11ax-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
- Unifies policy enforcement for WLAN, LAN and WAN traffic

using enhanced High Availability (HA), adopts configurations seamlessly based on hierarchy, enables Live Upgrades to reduce maintenance windows, and shares licenses from a global licensing pool. For network management, Aruba **AirWave** provides real-time monitoring, reporting and Wi-Fi location 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 bi-directional MU-MIMO. Combined with Aruba's patented ClientMatch technology, 802.11ax clients will now be grouped together to optimize the multi-user experience.

### Strong security: WPA3 and Enhanced Open

Support for WPA3 brings improved encryption and authentication methods, while Enhanced Open delivers automatic encryption 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 VMC 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 VMC 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

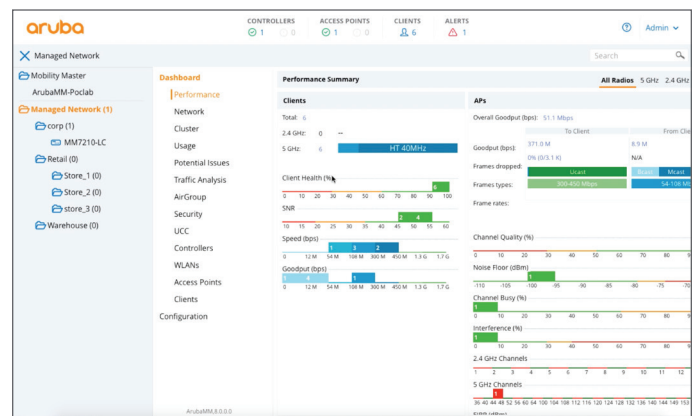
Enabled by the PEF license, Application visibility with Deep Packet Inspection (DPI) technology evaluates and optimizes performance and Quality of Service policies for over 3,000 applications – even for encrypted or hidden traffic.

### 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)

See real-time data 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.



\*Mobility Controller running ArubaOS 8

MOBILITY CONTROLLER VIRTUAL APPLIANCE TECHNICAL SPECIFICATIONS				
Model	MC-VA-10	MC-VA-50	MC-VA-250	MC-VA-1K
Maximum AP count	10	50	250	1,000
Maximum client count	256	800	4,000	16,000

Note: The Mobility Controller VA can be scaled by installing multiple instances of MC-VA-1K.

- 4x instances of MC-VA-1K install can scale up to 4,000 APs and 64,000 clients
- 6x instances of MC-VA-1K install can scale up to 6,000 APs and 96,000 clients

### SERVICE AND WARRANTY INFORMATION

- Software: 90 days, can be extended with support contract

## ORDERING INFORMATION

Part Number	Description
Q9B91AAE	Aruba MC-VA-10 Virtual Mobility Controller License (EG) with Support for up to 10 AP E-LTU
Q9B92AAE	Aruba MC-VA-10 Virtual Mobility Controller License (IL) with Support for up to 10 AP E-LTU
Q9B93AAE	Aruba MC-VA-10 Virtual Mobility Controller License (JP) with Support for up to 10 AP E-LTU
Q9B94AAE	Aruba MC-VA-10 Virtual Mobility Controller License (RW) with Support for up to 10 AP E-LTU
Q9B95AAE	Aruba MC-VA-10 Virtual Mobility Controller License (US) with Support for up to 10 AP E-LTU
Q9B54AAE	Aruba MC-VA-10 Virtual Mobility Controller License (WW) with Support for up to 10 AP E-LTU
Q9B55AAE	Aruba MC-VA-10 Virtual Mobility Controller License (EGF1) FIPS/TAA with Support for up to 10 AP E-LTU
Q9B56AAE	Aruba MC-VA-10 Virtual Mobility Controller License (ILF1) FIPS/TAA with Support for up to 10 AP E-LTU
Q9B57AAE	Aruba MC-VA-10 Virtual Mobility Controller License (JPF1) FIPS/TAA with Support for up to 10 AP E-LTU
Q9B58AAE	Aruba MC-VA-10 Virtual Mobility Controller License (RWF1) FIPS/TAA with Support for up to 10 AP E-LTU
Q9B59AAE	Aruba MC-VA-10 Virtual Mobility Controller License (USF1) FIPS/TAA with Support for up to 10 AP E-LTU
JY911AAE	Aruba MC-VA-50 Virtual Mobility Controller License (EG) with Support for up to 50 AP E-LTU
JY905AAE	Aruba MC-VA-50 Virtual Mobility Controller License (IL) with Support for up to 50 AP E-LTU
JY908AAE	Aruba MC-VA-50 Virtual Mobility Controller License (JP) with Support for up to 50 AP E-LTU
JY899AAE	Aruba MC-VA-50 Virtual Mobility Controller License (RW) with Support for up to 50 AP E-LTU
JY902AAE	Aruba MC-VA-50 Virtual Mobility Controller License (US) with Support for up to 50 AP E-LTU
JZ380AAE	Aruba MC-VA-50 Virtual Mobility Controller License (EGF1) with Support for up to 50 AP E-LTU
JZ383AAE	Aruba MC-VA-50 Virtual Mobility Controller License (ILF1) with Support for up to 50 AP E-LTU
JZ386AAE	Aruba MC-VA-50 Virtual Mobility Controller License (JPF1) with Support for up to 50 AP E-LTU
JZ389AAE	Aruba MC-VA-50 Virtual Mobility Controller License (RWF1) with Support for up to 50 AP E-LTU
JZ392AAE	Aruba MC-VA-50 Virtual Mobility Controller License (USF1) with Support for up to 50 AP E-LTU
JY912AAE	Aruba MC-VA-250 Virtual Mobility Controller License (EG) with Support for up to 250 AP E-LTU
JY906AAE	Aruba MC-VA-250 Virtual Mobility Controller License (IL) with Support for up to 250 AP E-LTU
JY909AAE	Aruba MC-VA-250 Virtual Mobility Controller License (JP) with Support for up to 250 AP E-LTU
JY900AAE	Aruba MC-VA-250 Virtual Mobility Controller License (RW) with Support for up to 250 AP E-LTU
JY903AAE	Aruba MC-VA-250 Virtual Mobility Controller License (US) with Support for up to 250 AP E-LTU
JZ381AAE	Aruba MC-VA-250 Virtual Mobility Controller License (EGF1) with Support for up to 250 AP E-LTU
JZ384AAE	Aruba MC-VA-250 Virtual Mobility Controller License (ILF1) with Support for up to 250 AP E-LTU
JZ387AAE	Aruba MC-VA-250 Virtual Mobility Controller License (JPF1) with Support for up to 250 AP E-LTU
JZ390AAE	Aruba MC-VA-250 Virtual Mobility Controller License (RWF1) with Support for up to 250 AP E-LTU
JZ393AAE	Aruba MC-VA-250 Virtual Mobility Controller License (USF1) with Support for up to 250 AP E-LTU
JY913AAE	Aruba MC-VA-1K Virtual Mobility Controller License (EG) with Support for up to 1000 AP E-LTU
JY907AAE	Aruba MC-VA-1K Virtual Mobility Controller License (IL) with Support for up to 1000 AP E-LTU
JY910AAE	Aruba MC-VA-1K Virtual Mobility Controller License (JP) with Support for up to 1000 AP E-LTU
JY901AAE	Aruba MC-VA-1K Virtual Mobility Controller License (RW) with Support for up to 1000 AP E-LTU
JY904AAE	Aruba MC-VA-1K Virtual Mobility Controller License (US) with Support for up to 1000 AP E-LTU
JZ382AAE	Aruba MC-VA-1K Virtual Mobility Controller License (EGF1) with Support for up to 1000 AP E-LTU
JZ385AAE	Aruba MC-VA-1K Virtual Mobility Controller License (ILF1) with Support for up to 1000 AP E-LTU
JZ388AAE	Aruba MC-VA-1K Virtual Mobility Controller License (JPF1) with Support for up to 1000 AP E-LTU
JZ391AAE	Aruba MC-VA-1K Virtual Mobility Controller License (RWF1) with Support for up to 1000 AP E-LTU
JZ394AAE	Aruba MC-VA-1K Virtual Mobility Controller License (USF1) with Support for up to 1000 AP E-LTU

For additional information on Aruba WLAN products,  
please refer to:

- [ArubaOS Data Sheet \(and licenses\)](#)
- [Mobility Master Product Page](#)
- [Access Points Product Page](#)