

## DATA SHEET

# AIRWAVE™

Comprehensive management for wireless, wired and remote networks

AirWave is a powerful and easy-to-use network operations system that manages Aruba wireless, wired and remote access networks, as well as wired and wireless infrastructures from a wide range of third-party manufacturers.

Offering unprecedented clarity and centralized control to effectively manage global enterprise infrastructures, AirWave lets service desk personnel triage connectivity issues so that IT engineers can focus on proactively optimizing network performance.

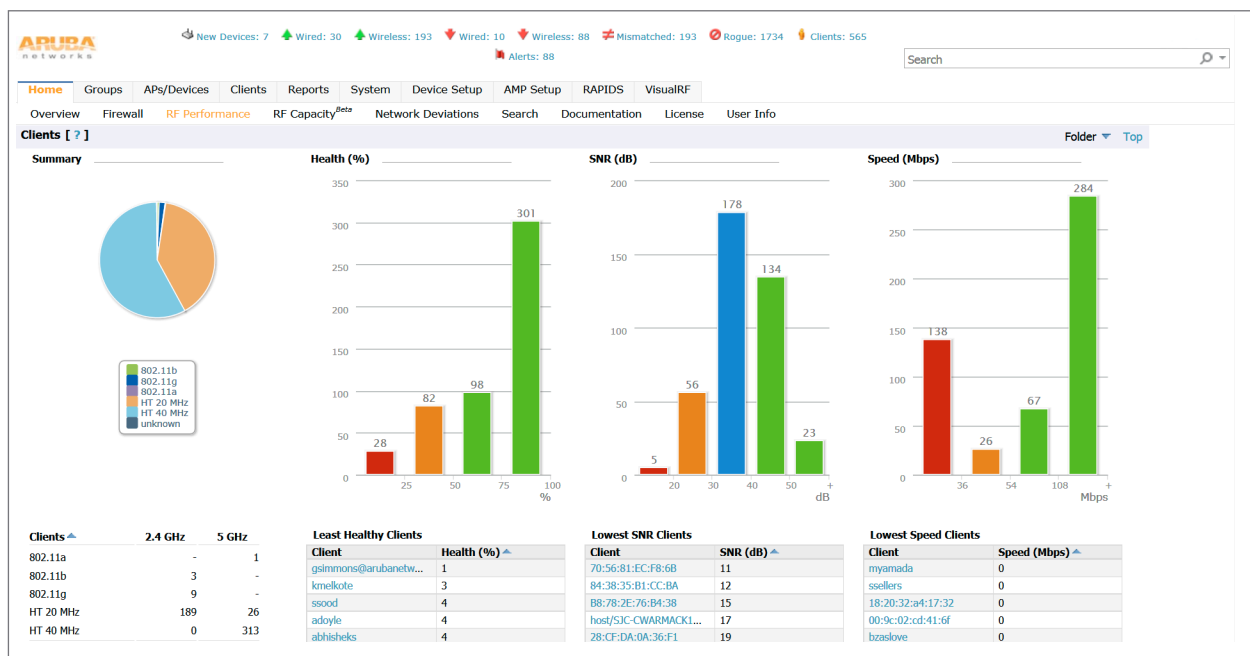
Through a centralized and intuitive user interface, AirWave provides real-time monitoring, proactive alerts, historical reporting, and fast, efficient troubleshooting. It also offers various dashboard views for quickly diagnosing and troubleshooting potential problems with RF coverage, unified communications and collaboration (UCC) traffic, and application performance to strengthen wireless security and demonstrate regulatory compliance.

AirWave VisualRF™ location and mapping offers network-wide views of the entire RF environment. Maps of Wi-Fi coverage and the underlying wired topology show a clear and accurate picture of who is on the network, their location and how the network is performing. Additionally, AirWave offers overlays on client health and application performance to quickly diagnose issues specific to a client, a floor plan or specific location.

The AirWave RAPIDS™ rogue detection works with the RFProtect™ wireless intrusion protection software module available in ArubaOS™ to collect rogue AP, rogue client and wireless intrusion events as well as mitigate rogue activity across wired and wireless infrastructures.

The wireless data collected by RAPIDS is correlated with wired network data to identify the most significant and relevant threats, while greatly reducing false-positives and strengthening network security.

Available as software or a combined hardware and software appliance, AirWave reduces cost and complexity, improves service quality, and enables IT to make intelligent, well-informed decisions about network design.



AirWave delivers identity-based monitoring and comprehensive management to multivendor wireless, wired and remote enterprise networks.

### EASY-TO-USE WEB INTERFACE

- Role-based access, viewing rights and administrative privileges tailored to job responsibilities.
- Custom graphs of key information allow for pan and zoom for visibility into specific periods of time.
- Identify and search for users by user name.
- Client overview summarizes the types of clients attached to the network and provides visibility into watched or VIP clients.
- Multiple dashboard views provide visibility into every aspect of the wireless network.

### DEVICE DISCOVERY

- Automatically discovers WLAN infrastructure devices.
- Operates in any network environment, including large distributed networks with multiple locations.

### TROUBLESHOOTING AND DIAGNOSTICS

- Collects and displays client device data from ArubaOS, Aruba Instant and Aruba ClearPass Policy Manager including device type, operating system, operating system details, manufacturer and model.
- Searching for clients by user name or MAC address provides a diagnostic view of device and network statistics along with indicators to evaluate overall health and performance.
- Overlay the client health on a floor plan to diagnose issues specific to the client or to an area on a floor plan.
- Advanced RF troubleshooting to easily diagnose RF issues in the network.

### REAL-TIME MONITORING AND VISIBILITY

- Automatically tracks every user and device – wireless and remote – on the network.
- Visibility into the wired infrastructure that connects wireless controllers and APs.
- Visibility into clients associated to network including location, SNR, connection speed and more
- Logs and displays radio and RADIUS errors, including noise floor and channel utilization information, frequent causes of connectivity problems.
- Provides rapid drill-down from network-wide to device-level monitoring views.
- Dashboards to track RF performance, capacity and application-level statistics as well as network deviations over a 40-week period.

### ROOT CAUSE ANALYSIS AND EVENT CORRELATION

- Maps upstream relationships between APs, controllers and switches to identify the root cause of downtime and performance problems.
- Correlates performance and downtime issues to send only a single alert in the event of an upstream device failure.

### AUTOMATED CONFIGURATION MANAGEMENT

- Automatically configures APs, controllers, Aruba Instant, and Aruba Mobility Access Switches.
- Configuration policies are defined through a web user interface or by importing a known-good configuration from an existing device.
- Enhanced configuration for the Aruba Instant family to provision large number of branch locations with ease. With tools like adding notes, and overrides, as well as multi-edit and context-sensitivity support make it easy to manage configurations across multiple locations.
- Efficient remote software distribution eliminates time-consuming and error-prone manual updates.
- Support for advanced firmware image upgrade features such as enforcing certified versions by group, splitting-up image downloads and reboot processes, as well as support for scheduling of firmware upgrades or change configurations to occur during off hours.
- Archives device configurations for auditing and version control. Additionally, archives device configurations and flash backups to restore previous state and configuration of Aruba controllers.
- Maintains detailed audit logs of changes made by all AirWave operators.

### BETTER NETWORK PLANNING AND PROVISIONING

- VisualRF and the offline VisualRF Plan tool allow quick planning of RF and wired coverage for new sites.

### MANAGE THE LATEST TECHNOLOGIES, ARCHITECTURES AND PRODUCTS

- A single management interface for multiple generations of devices.
- Supports autonomous, controller-managed and mesh APs, including outdoor Aruba AirMesh.
- Monitors Aruba Mobility Access Switches and other edge devices using standard MIB data.
- Generates reports on wired port utilization for capacity planning.
- Supports latest ArubaOS management capabilities.

- Supports WLAN products from leading vendors like Cisco, Motorola and Hewlett-Packard.
- Supports the latest Aruba WLAN products including 7200 series Mobility Controllers and AP-220 series 802.11ac access points.

## OPEN ARCHITECTURE

- XML API enables cost-effective integration of valuable location data with other applications.
- Much of the data that is visible in AirWave is accessible via the XML API.

## PLATFORM DATA

- Centralized network operations center requires no local agents.
- Runs on standard PC hardware/standard Linux operating system.
- Device communication through SSH, Telnet, SNMP v1/v2c/v3, HTTPS.
- Supports up to 100,000+ managed devices.

## VISUALRF FEATURES

### Real-Time Visualization

- Voice overlay displays coverage for voice handsets, including a radio count heat map.
- Displays Aruba Mobility Access Switches and other wiring closet devices for a comprehensive view of the network edge.
- Simulate failure feature enables analysis of what-if scenarios for proactive RF coverage planning.
- All AirWave real-time visualizations are HTML5-based, supporting a wider variety of browsers and devices."

### Effective Site Planning for Precise Deployment

- Determines the right quantity and placement of APs, controllers, Aruba Mobility Access Switches and other edge devices based on RF coverage goals.
- Incorporates Aruba Mobility Access Switches, other wiring closet devices and outdoor Aruba AirMesh products into the network design.
- Automatically generates bill of material reports.

### Standalone VisualRF Plan Tool

- Runs on Windows laptops and workstations.
- Uses the same RF planning and visualization algorithms as the integrated VisualRF module.
- Export offline plans to the integrated VisualRF module and export plans from the integrated VisualRF module to the standalone VisualRF tool.

### Integrated Location Tracking and RF Visualization

- Quickly locate users and wireless devices as well as track application and UCC performance for troubleshooting, planning and asset tracking.
- Playback location history of individual users over the past day to aid in troubleshooting and recovery of lost devices.
- Last known location of each tracked device is stored indefinitely to find lost and stolen devices.

## RAPIDS FEATURES

### Rapids Highlights

- Flexible rules-based determination of what a rogue AP means to the existing environment.
- Correlates data gathered from wired and wireless infrastructures to reduce false positives.
- Central management console for RFProtect software module monitors intrusion detection and prevention activity, while identifying and neutralizing rogue APs.
- Utilizes location data from VisualRF.
- Compliance reporting, including the payment card industry (PCI) data security standard.

### Rogue Device And Client Visualization

- Integrates with VisualRF to display the location of each rogue device and client on a building floor plan.

### Intrusion Detection System Events

- Aggregates, correlates, alerts and logs wireless attacks that are detected and reported on the network, providing a comprehensive picture of infrastructure security.

### Strong Enterprise-Grade Security

- View locations of rogue APs discovered by AirWave RAPIDS for faster investigation and threat removal.
- Plan the precise locations to deploy dedicated Wi-Fi sensors, such as Aruba air monitors, to ensure complete coverage.
- Compares wired and wireless scanning results to eliminate duplicates and refine threat assessment.

### Rules-Based Threat Classification

- Classify potential threats based on customized rules that define the characteristics of rogue devices.
- Reduce false-positives and enable the network security staff to focus on the most significant threats.

### Automated Alerts and Reports

- Predefined, customizable reports address common security, compliance and client needs, such as rogue device tracking, PCI compliance, and client session reporting.
- Supports syslog and SNMP traps from other networked devices, allowing administrators to search for these devices, set triggers to alert on device issues, and use device context for additional troubleshooting.
- Reports exportable to an external server in PDF, HTM and CSV formats

### Automatic and Manual Containment

- Manual and automated rogue AP containment with Aruba and Cisco controllers.
- Customize and define rules-based classification to determine when to automatically contain devices.
- Coordinate with the ArubaOS RFPProtect software to notify administrators which switch ports have rogue APs attached to them.

## ORDERING INFORMATION

Part Number	Description
AW-25	AirWave software to manage up to 25 devices (including controllers, APs, Aruba Mobility Access Switches and third-party switches)
AW-50	AirWave software to manage up to 50 devices
AW-100	AirWave software to manage up to 100 devices
AW-200	AirWave software to manage up to 200 devices
AW-500	AirWave software to manage up to 500 devices
AW-1000	AirWave software to manage up to 1,000 devices
AW-2500	AirWave software to manage up to 2,500 devices
AW-EXP1-50	AirWave expansion license for one additional AP/device for systems with 50 or greater existing device licenses
AW-EXP1-2500	AirWave expansion license for one additional AP/device for systems with 2,500 or greater existing device licenses
AW-MASTER	AirWave software license to manage multiple AirWave servers from a single console
AW-25-FR	AirWave failover software license for 25 devices
AW-50-FR	AirWave failover software license for 50 devices
AW-100-FR	AirWave failover software license for 100 devices
AW-200-FR	AirWave failover software license for 200 devices
AW-500-FR	AirWave failover software license for 500 devices
AW-1000-FR	AirWave failover software license for 1,000 devices
AW-2500-FR	AirWave failover software license for 2,500 devices
AW-EXF1-50	AirWave failover expansion license for one additional AP/device for systems with 50 or greater existing device licenses
AW-EXF1-2500	AirWave failover expansion license for one additional AP/device for systems with 2,500 or greater existing device licenses



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