

SOLUTION OVERVIEW

ARUBA INSTANT WI-FI – POWERFUL, SIMPLE, AFFORDABLE.



The undisputable need for users to be productive on their mobile devices is driving organizations everywhere to look for ways to cost-effectively build and support Wi-Fi networks that deliver the best connectivity and user experience.

Controllerless Wi-Fi solutions are simple and affordable. They eliminate the need for additional controller hardware by distributing controller functionality such as authentication and configuration to the access points (AP).

However, not all controllerless solutions are equal. Some solutions may have some serious limitations if speed and reliability associated with business-grade networks are sacrificed in favor of simplicity. The result can be Wi-Fi disruptions, poor performance, and unhappy users.

BUSINESS-GRADE WI-FI IN AN INSTANT

Aruba Instant is the only controllerless Wi-Fi solution that delivers superior Wi-Fi performance, business-grade security, resiliency and flexibility with the simplicity of zero-touch deployment. Aruba Instant is simple to setup and does not require network expertise to deploy and manage.

One dynamically-elected Instant AP automatically distributes the network configuration to other Instant APs in the network. Simply power-up one Instant AP, configure it over the air or in the cloud, and plug in the other APs – the entire process takes about five minutes.

SOLUTION BENEFITS

Fastest network

- Up to 10-times faster than competition at high density.
- Wi-Fi setup in minutes.
- Airtime fairness allows more clients to move faster on the network.
- Always-on scanning avoids performance-slowing interference.
- Aruba Instant APs optimize Wi-Fi channel use and power to speed-up clients.

Most resilient network

- 100% functional WLAN without a WAN link.
- Integrated spectrum management without compromise to identify and self-heal around Wi-Fi and non-Wi-Fi interference.
- Redundant ISP uplink and 3G/4G uplink option.

Most flexible architecture

- Single architecture across headquarters, branch and home.
- Local, cloud and on-premises management options.
- AppRF technology performs deep packet inspection and web content filtering.
- Internal RADIUS server on Aruba Instant AP, plus flexible external AAA options.
- 100% investment protection to convert to controller-managed APs.

The free local management interface, unique to Aruba Instant APs, eliminates dependency or required investment in external network management systems. Instant is a turnkey business-grade Wi-Fi solution that works right out of the box.

Even guest access to your network can be secure and uncomplicated for you and all your visitors. Simply create a guest network (SSID) and determine who gets access, how and what they have access to.

Use the simple built-in captive portal or a customizable externally hosted portal for guests to easily login. And secure the network by authenticating users with built-in guest accounts or integrate with external authentication servers.

ENHANCE USER EXPERIENCE AND PRODUCTIVITY

Aruba Instant's business-grade network performance delivers speeds up to 10-times faster than other solutions in environments with high densities of devices.

The Aruba InstantOS comes with integrated Adaptive Radio Management (ARM) technology, which optimizes Wi-Fi behavior and automatically ensures that the Instant APs stay clear of RF interference, resulting in a more reliable, higher-performing wireless network.

It also integrates patented [ClientMatch](#) technology, which continuously gathers session performance metrics from mobile devices. These metrics are then used to intelligently steer individual clients to the best AP with the strongest Wi-Fi signal as users move.

SECURE AND OPTIMIZE YOUR NETWORK WITH SMART APPLICATION HANDLING

AppRF technology in Aruba Instant intelligently monitors application usage and web traffic to secure and optimize network performance.

Deep packet inspection (DPI) monitors mobile app usage and performance while optimizing bandwidth, priority and network paths in real time – even for apps that are encrypted or appear as web traffic. DPI is vital to understanding usage patterns that may require changes to network design and capacity.

AppRF provides insight into over 1,800 apps, including apps like GoToMeeting, Box, Lync, SharePoint, and Salesforce.com.

AppRF technology also provides web content filtering, enabling IT to control what users can browse on the Internet. AppRF redirects web URL requests to a cloud database that contains always-up-to-date content and reputation information about millions of web pages.

This information can be used to determine what types of web browsing and web apps are allowed on the network for different users or different times of day. You can even combine rules that allow Facebook traffic but block other social media or permit Netflix traffic only after business hours.

The AppRF cloud database is updated in real-time with new information about malicious web addresses. Aruba AppRF will catch new types of web attacks before they cause damage.

Clients can be configured to use the AppRF web content filter even when they're not connected to an Aruba Instant network, which keeps clients safe no matter where they are.

Whether users are local or remote, AppRF web content filtering is instrumental in protecting the network against viruses and malware and gives IT precise control over which web sites users can access.

AVOID BUSINESS DISRUPTIONS DUE TO WI-FI FAILURE

Aruba Instant is a resilient network with advanced business-grade features that keep networks up and running, even if an Internet connection fails. Key capabilities include:

- Network survivability to the last AP. The controller function of an individual Instant network transitions seamlessly from one AP to the next to the last AP with no disruption or administrator intervention.
- Dual Ethernet uplinks leverage already-strong uplink resiliency options. Internet connections from two different ISPs can now plug into one Instant AP. This feature gives you the best-possible Internet availability.
- Supports a variety of 3G/4G USB modems that slot into Aruba APs. Now you have the fastest available cellular uplink, either as a primary connection in hard-to-wire areas or as a backup for mission-critical applications.
- Flexible image upgrade features let you download firmware now and reboot later during off hours. This lets you leave the office on time and upgrade when no one is using the network.
- Spectrum load-balancing evens out the client load across channels in a dense deployment. Everyone gets faster access through more efficient use of the available wireless spectrum.

CHOOSE A NETWORK MANAGEMENT OPTION RIGHT FOR YOUR BUSINESS

Manage your Instant network locally, in the cloud or on premises. Instant access points include a free management interface that provides visibility into the network. All capabilities required to manage a single Instant network are available on the local interface.

Additionally, organizations also have a choice of acquiring the [Aruba Central](#) services platform, for network management hosted in the cloud or Aruba [AirWave](#) for an on-premises management system.

Aruba Central simplifies network operations by providing zero-touch setup, centralized management of multiple Aruba Instant networks and **Mobility Access Switches**, historical data reporting, PCI compliance monitoring, and troubleshooting for networks located around town or around the world.

Aruba AirWave is a powerful network management system that not only manages Aruba APs and switches, but also wired and wireless infrastructures from a wide range of third-party manufacturers.

MAKE A SMART INVESTMENT IN A COST-EFFECTIVE SOLUTION

Aruba Instant is one of the most cost-effective business-grade Wi-Fi solutions available to day.

Low capex

With Aruba Instant, you get enterprise-grade features and controller functions embedded in the AP. We eliminate the hardware and maintenance expense of a separate controller, but keep all the performance and reliability advantages.

Low opex

Aruba Instant Wi-Fi integrates everything into the AP – controller functions, security, ARM RF management, ClientMatch performance optimization, and AppRF to improve the use of bandwidth, priority and network paths. It's so easy to setup and manage that you won't need a dedicated wireless expert.

Investment protection

Only Aruba offers controllerless and controller-managed Wi-Fi with public cloud, private cloud and on-premises management. You can even mix and match between them. You're not locked into one architecture, so when your needs change, you keep 100% of your investment.

No hardware changes. All Aruba Instant APs can utilize VPNs to access centralized resources like guest access or authentication services from corporate headquarters.

At any time, Aruba Instant APs can easily convert to controller-managed mode, enabling you to mix and match the right solution for the right location – headquarters, branch or home. No matter what you decide, your existing AP investments are fully protected.

The Aruba Instant product family consists of a wide range of APs with a variety of wireless, wired and WAN connectivity options.

INDOOR WI-FI

Instant 224/225

The ultimate in 802.11ac Wi-Fi performance

- For extremely high-density client environments
- 3x3 MIMO, three spatial streams, up to 1.3 Gbps
- 2.4- and 5-GHz radios
- Internal and external antenna options
- Mounts on ceiling or wall



Instant 214/215

Most popular 802.11ac AP

- For medium-density Wi-Fi environments
- 3x3 MIMO, three spatial streams, up to 1.3 Gbps
- 2.4- and 5-GHz radios
- Internal and external antenna options
- Mounts on ceiling or wall



Instant 204/205

Most affordable 802.11ac AP

- Top performance in medium-density environments
- 2x2 MIMO, two spatial streams, up to 867 Mbps
- 2.4- and 5-GHz radios
- Internal and external antenna options
- Mounts on ceiling or wall



Instant 228

Ruggedized 802.11ac AP for indoor deployments

- 3x3 MIMO, three spatial streams, up to 1.3 Mbps
- 2.4- and 5-GHz radios
- Six connectors for external antennas
- Mounts on ceiling or wall



Instant 103

Most affordable 802.11n AP

- For low-density Wi-Fi environments
- 2x2 MIMO, two spatial streams, up to 300 Mbps
- 2.4- and 5-GHz radios
- Two internal antennas per radio
- Mounts on ceiling or wall



INDOOR WI-FI – DESKTOP

Instant 205H

High performance 802.11ac AP for hospitality and branch deployments

- 2x2 MIMO, two spatial streams, up to 867 Mbps
- 2.4- and 5-GHz radios
- Four integrated semi-directional antennas
- Three ports to connect wired devices
- Optional 3G/4G WAN connection
- Sits on your desk or mounts on wall-box



Instant 155

Fastest performance, highest density wired and wireless

- 2.4- and 5-GHz radios
- 3x3 MIMO, three spatial streams, up to 450 Mbps, 100 Mbps encrypted throughput
- Four ports to connect wired devices (optional power-over-Ethernet on two ports)
- Optional 3G/4G WAN connection
- Sits on your desk



Instant 108/109

High-performance, high-density wired and wireless

- 2.4- and 5-GHz radios
- 2x2 MIMO, up to 300 Mbps
- One port to connect wired devices
- Optional 3G/4G WAN connection
- Sits on your desk



Instant 3

Most compact and affordable wired and wireless

- One 2.4-GHz radio
- 2x2 MIMO, up to 300 Mbps
- Two ports to connect wired devices
- Optional 3G/4G WAN connection
- Sits on your desk



OUTDOOR WI-FI

Instant 274/275/277

Ruggedized Gigabit Wi-Fi for outdoor environments

- 2.4- and 5-GHz radios
- 3x3 MIMO, three spatial streams, up to 1.3 Gbps
- Internal and external antenna options
- Mounts on a pole or building



Aruba has conducted exhaustive performance tests between the Instant APs and other controllerless solutions, with the following results:

- 10-times faster smartphone connections when measuring TCP downstream aggregate throughput (Mbps) for 20 smartphones (iPhones 1x1:1) in the 2.4-GHz band.
- 69% faster laptop connections when measuring TCP bidirectional aggregate throughput (Mbps) for 20 laptops (3x3:3) in the 5-GHz band.
- Two-times more HD video clients when measuring multicast HD video at scale (5 Mbps video stream to see max laptops on the network before the video becomes unwatchable).