



aruba

a Hewlett Packard
Enterprise company

EBOOK

EXTEND YOUR EDGE.

Accelerate Business Beyond The Office
With Aruba's Ruggedized Solution.



Intelligent edge extends beyond carpeted spaces

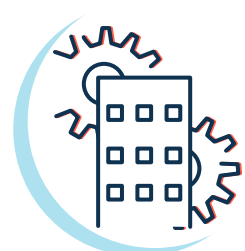
Opportunities to improve productivity, automation, and monitoring rely on network connectivity beyond the office. Does your business?



Manufacturing



Campuses



Smart cities and outdoor malls



Large public venues



Government



Warehouses and distribution centers



Agriculture



Transportation



Retail

Why extend your network beyond climate-controlled spaces?

Improved employee productivity across all workplaces.

Better customer experience in outdoor spaces.

Better visibility and safety of people.

Improved monitoring, automation, and control of network devices.

Enhanced facilities and asset monitoring.



IT challenges extend to harsh environments

Even greater security risks.

80% of organizations found IoT devices that they did not install or secure¹

IoT devices like security cameras, PoE lighting, and sensors bring safety and OT benefits, but they increase security risks because they are often deployed beyond controlled office spaces.

More management complexity with siloed tools.

75% of organizations use 4 or more network management tools²

Purpose-built ruggedized products designed to address tough environments weren't designed with IT in mind—lacking the security, management tools, and visibility that IT teams need for operational efficiency.

And more manual tasks leading to increased risk.

70% of network configuration is done manually³

Traditional network equipment designed to operate in extreme temperatures, outdoors, or in hazardous environments often has limited management capabilities, requiring highly manual operations with on-site IT.



How a modern ruggedized solution can help.

A ruggedized network keeps devices and users connected and productive in outdoor, harsh, or hazardous environments without compromising security, performance, or operational simplicity.

¹ Gartner, "Segmentation or Isolation: Implementing Best Practices for Connecting 'All' Devices," September 2019.

² Network Management Megatrends 2018: Exploring NetSecOps Convergence, Network Automation, and Cloud Networking

³ Gartner, "5 Network Cost Optimization Opportunities," June 2019



Extend your edge with Aruba's ruggedized solution



Experience better control and visibility with unified management

Gain context, visibility, and control over all domains from a single pane of glass. Aruba Central simplifies and streamlines IT operations for WLAN, LAN, and SD-WAN across campus, branch, remote worker, and data center locations.



Access a full portfolio of Wi-Fi 6 outdoor and ruggedized APs

Provide seamless connectivity to IT, OT, and IoT devices and users in carpeted, unconditioned, and hazardous locations, indoors and out with Aruba Wi-Fi certified outdoor APs—all backed by a limited lifetime warranty. Aruba's Wi-Fi 6 portfolio includes Bluetooth Low Energy and Zigbee radios and Wi-Fi mesh backhaul to adjacent buildings for greater reliability and performance.



Rely on high performance ruggedized Ethernet LAN switching

Designed to handle wide temperature ranges and harsh conditions, Aruba's ruggedized access switches deliver secure enterprise class connectivity and feature DIN rail and rack mounting, high-speed uplinks, and always-on 30W and 60W PoE for power-hungry devices.



Automate security for IoT and users

Combine policy management with real-time automation to consistently enforce security policies across wired, wireless, and WAN networks for users and devices, including IoT. FIPS 140-2 and Common Criteria validated solutions are ready for defense and government applications.



Meeting the needs of unique industry use cases

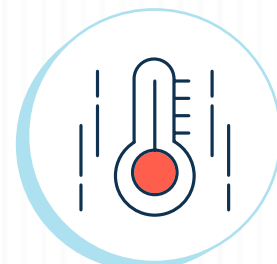
Smart, secure, and reliable connectivity boosts up-time and productivity

Application

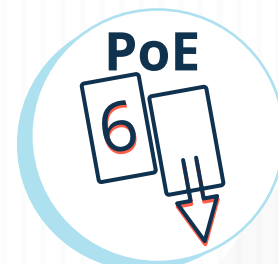
- Manufacturing
- Power Substation
- Transportation
- Traffic Control Systems
- Refrigerated Warehouses
- Smart Cities
- Ships
- Video Surveillance
- Agriculture
- Campuses

Challenges Aruba Solves

- Electrical noise, emissions, and immunity
- Specialized Communication networks
- Shock, vibration, power interruptions
- Specialized traffic control networks
- Low temperature, humidity
- High and low temperatures and humidity
- Small mounting footprints, power surges
- Camera power (PoE), wide temperature operation
- Voltage dips and ripples, remote management
- Compatibility with existing network management



-40°C to +70°C Vented Enclosure



IEEE 802.3bt 60W



Surge Immunity



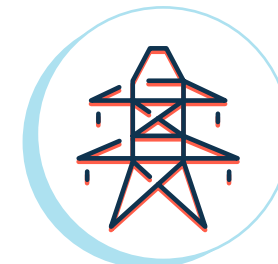
Dry Contact Alarm IO



NEMA-TS2 Smart Traffic



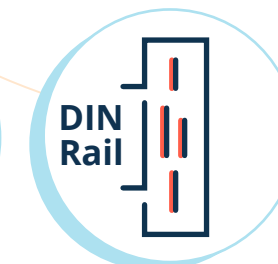
Rail



Substation



Redundant Power



DIN Rail Mounting



Purpose-built, high-performance outdoor and ruggedized APs

Ruggedized outdoor APs are designed for a broad range of surface, subsurface, and offshore applications

Wi-Fi 6 certification ensures interoperability and conformity to the highest standards at longer distances outdoors

IoT-ready to simplify deploying and managing IoT location services, asset-tracking services, security solutions, and IoT sensors with Bluetooth 5 and 802.15.4/Zigbee radios

Aruba AirSlice delivers SLA-grade application assurance to prioritize business-critical traffic

Enhanced security with Dynamic Segmentation for role-based policy enforcement and WPA3 and Enhanced Open for guest authentication and encryption

RF optimization to eliminate sticky clients, and ensure reliable coverage

Point-to-Point and Point-to-Multipoint wireless options provide Wi-Fi mesh capabilities to help extend coverage to areas without infrastructure

Peace of mind with Limited Lifetime Warranty



518 Series Multi-Gigabit Ruggedized Indoor/Outdoor



560 Series Small Form Factor Outdoor



560EX Series Small Form Factor HazLoc Certified



570 Series Extreme Density Outdoor



570EX Series Extreme Density HazLoc Certified

Simple to install and ready to support IT, OT, and IoT applications in unconditioned and hazardous environments of any size, even oil rigs or industrial freezers.



Wi-Fi designed to handle the toughest hazardous environments

Wi-Fi 6 for hazardous location environments

Handles multiple clients and drives efficiency with OFDMA and Target Wake Time to maximize battery life

Hazardous location certifications

Zone 2 certified for typical hazardous locations with optional enclosures from Analync, Bartec, Extronics, and R STAHL for Zone 1 areas

Integrated OT and IoT radios

Provides a secure backbone for data collection, control, and SCADA applications without the need for hardware gateways

Flexible deployment options

Can be deployed with or without gateways and managed by cloud-native Aruba Central, either in the cloud or on-premises

IoT-ready Bluetooth 5 and 802.15.4/Zigbee support

Simplifies deploying and managing IoT location services, asset-tracking services, security solutions, and IoT sensors

Maximum range with support for up to 512 clients per radio

Purpose built high power integrated radios deliver maximum range and performance for data, voice, video, and telemetry

Highly secure

Built on a Zero Trust and SASE framework, the access points include trusted Platform Modules (TPM), support WPA3 and Enhanced Open, and are available with FIPS 140-2 and Common Criteria validation

High-performance Wi-Fi 6 (802.11ax) connectivity for hazardous outdoor environments such as oil fields, mining facilities, and potentially explosive environments.



Aruba 560EX and 570EX Series APs



High performance ruggedized Ethernet switches

Powerful Ethernet Layer 2 switching

Fanless, compact 12 port DIN rail mount and 24 port 1U rack mount models, both with built-in high speed 1/10GbE uplinks

High power PoE

Combination of both Class 6 PoE (60W) and Class 4 PoE (30W) provides flexibility to power variety of IoT, access points, and user devices

Enhanced security

Aruba Dynamic Segmentation for role-based policy enforcement, ACLs, and Trusted Platform Module (TPM) to protect your network

Management flexibility

Supports a choice of management, including Aruba Central, CLI, switch Web GUI, Aruba NetEdit, and REST APIs

Robust protection

Sub-station applications and high tolerances for constant vibrations, shocks, and electronic immunity of railway applications

Mount where you need it

DIN rail and rack mount, options permit deployment virtually anywhere – equipment rooms, junction boxes, even wiring chases

Ready for the heat and cold

Supports extended operational temperatures from -40°C to +70°C using Aruba's industrial transceivers

Peace of mind

5-year Limited Lifetime warranty and no complex switch software licensing required

Designed to handle extreme temperatures, ruggedized Ethernet access switches provide built-in high-speed 10GbE uplinks and a combination of always-on 30W and 60W PoE for power-hungry IoT devices, making them ideal for parking lots, warehouses, National Electrical Manufacturers Association (NEMA) electrical enclosures, and industrial spaces.



Aruba CX 4100i Switch Series



Automated security for IoT, devices, and users

Flexible architecture that easily scales

Aruba Dynamic Segmentation is designed to operate at the pace of your growing business. This means it can be deployed in one portion of your network or everywhere—wired, wireless, or WAN—for remote workers, the branch, campus, or cloud.

Completely automated approach

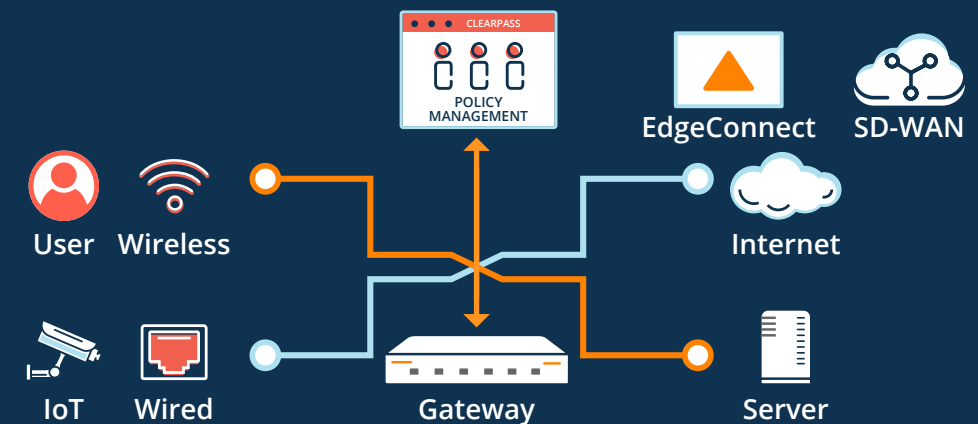
Combine policy management with real time automation to make consistent segmentation and enforcement decisions in any location for IT, users, and IoT. Automated policy also minimizes the errors that creep in when configurations are done individually.

Eliminate VLAN fatigue

Aruba Policy Enforcement Firewall (PEF) provides access enforcement for Dynamic Segmentation. It is a Layer 7, stateful firewall that runs natively on the Aruba infrastructure. Instead of configuring individual VLANs to control IT access, PEF along with Aruba ClearPass Policy Manager achieves business outcomes in an integrated solution.

What is Aruba Dynamic Segmentation?

Dynamic Segmentation simplifies and secures the network by unifying policy enforcement across the wired, wireless, and VPN infrastructure.





Aruba Central

A single pane of glass network management solution

Intuitive workflows

Simplify how you provision, deploy, and update your network using zero touch provisioning, GUI-driven configs, and built-in validation checks.

Network-wide monitoring

Get detailed insights into the health and performance of networks and what's connected to them, in your building and beyond.

AI-powered operations

Preempt issues and continuously optimize networks with automated anomaly detection, dynamic baselines, and peer benchmarks.

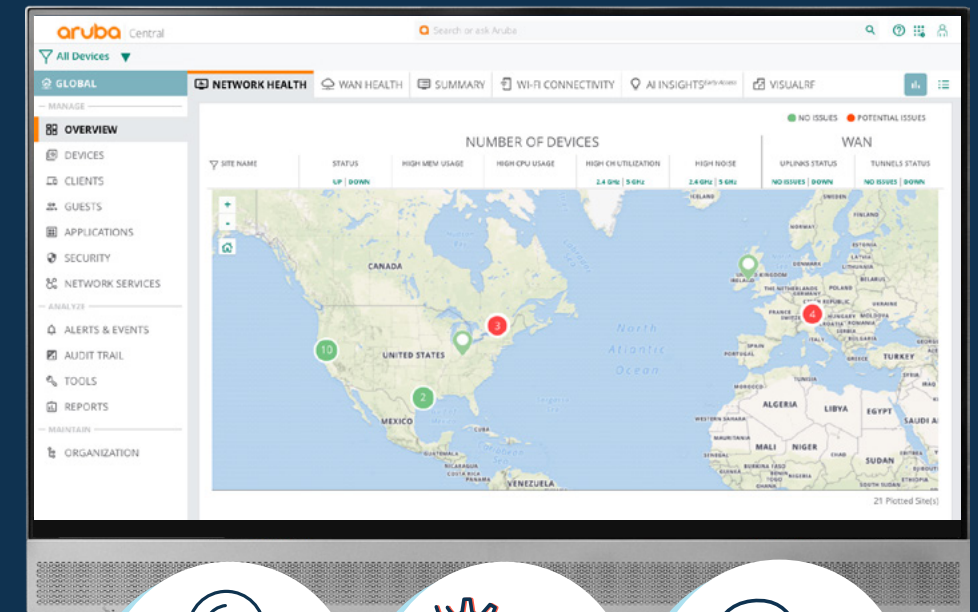
Unified client visibility

Discover and classify all endpoints connecting to wired and wireless devices, including IoT, using built-in machine learning and dynamic profiling techniques.

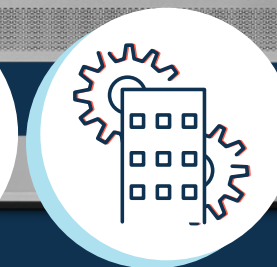


ARUBA CENTRAL

Unified, AI-powered cloud networking for branch, campus, and remote networks



SaaS



On-Prem



Managed Services

Deployment Flexibility



Extend your edge today

Leverage the links below to learn more about the Aruba ruggedized solutions and the value they provide!



Try Aruba Central

Experience the power of Central—a cloud networking solution with AI-powered insights, workflow automation, and robust security.

[EXPERIENCE THE INTERACTIVE DEMO](#)



Outdoor and ruggedized access points

Explore Aruba's Outdoor Access Points that meet the needs of enterprises no matter what size or where they operate—with simple mounting options.

[READ THE AT-A-GLANCE](#)



Ruggedized Ethernet switches

Discover Aruba's ruggedized, high performance, and secure Ethernet switches designed to connect IoT, access points, and user devices deployed in harsh environments.

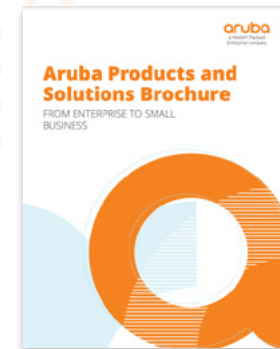
[READ THE AT-A-GLANCE](#)



Designing hyper-aware facilities

Learn about how Aruba technology can help support your industrial IOT networks.

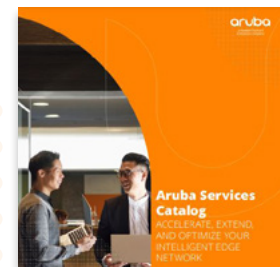
[EXPLORE THE ARUBA IOT SOLUTION](#)



Aruba Products and Solutions

Learn about Aruba's portfolio, including Aruba Central, access points, switches, Aruba ClearPass, and more.

[READ THE ARUBA PRODUCTS AND SOLUTIONS OVERVIEW](#)



Single point of contact

Explore Aruba's global support and services designed to help every step of the network lifecycle.

[LEARN ABOUT OUR SERVICES](#)



Network as a Service (NaaS)

HPE GreenLake for Aruba is a flexible way to consume enterprise network infrastructure that enables businesses to optimize network performance and user experiences through a cloud-like subscription model.

[EXPLORE NaaS](#)



Thank You

Contact Us

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