

# The Cisco Wireless CW9171 Wi-Fi 7 Access Point

Power your business with Wi-Fi 7: Introducing the Cisco Wireless CW9171 Wi-Fi 7 Access Point

Connecting your business and customers with intelligent and secure Wi-Fi is the first step to building a better network and better outcomes for your business. Support your growth and success with Cisco Wireless access points to future proof your network.

Experience unprecedented speed, ultra-low latency, and enhanced capacity for your most demanding applications, all within a discreet, enterprise-grade design perfect for any environment. The Cisco Wireless 9171 Series delivers the groundbreaking capabilities of Wi-Fi 7 in a flexible, easy-to-deploy form factor, seamlessly integrating with your existing Cisco Wireless infrastructure.

## Overview

The Cisco® Wireless CW9171 Series Wi-Fi 7 Access Point is a cutting-edge, compact, and versatile wireless solution designed to bring the full power of the Wi-Fi 7 (802.11be) standard to your organization. Building on proven reliability and discreet design, this next-generation access point delivers unparalleled performance in a small footprint.

Ideal for small to medium-sized businesses, remote and branch offices, home offices, hospitality, education, and any enterprise

environment requiring robust, high-performance Wi-Fi 7 connectivity without compromising aesthetics or space.

Deliver the groundbreaking capabilities of Wi-Fi 7: including multi-gigabit speeds, ultra-low latency, and superior capacity, in a discreet, flexible, and easy-to-deploy form factor, seamlessly integrating with your existing Cisco Wireless infrastructure whether managing on premises or with cloud.



## Benefits

- **Unprecedented speed and throughput:**
  - Experience speeds enabling lightning-fast downloads, seamless 8K video streaming, and rapid large file transfers.
  - Leverage 4096-QAM (Quadrature Amplitude Modulation) and ultra-wide 320 MHz channels (in the 6 GHz band) to maximize data rates and deliver a superior user experience, even for the most bandwidth-intensive applications.
- **Ultra-low latency for real-time applications:**
  - Significantly reduce delays, making it perfect for demanding real-time applications such as Augmented and Virtual Reality (AR/VR), high-definition video conferencing, cloud gaming, and sensitive industrial IoT operations.
  - Multi-Link Operation (MLO) enhances responsiveness and ensures critical applications have the dependable connectivity they need.
- **Enhanced capacity and efficiency in dense environments:**
  - Support a higher density of devices simultaneously without performance degradation, thanks to Wi-Fi 7's advanced resource management and preamble puncturing.
  - Ensure optimal performance in crowded spaces like open offices, conference rooms, and public venues.
- **Future-proof your network:**
  - Invest in the latest Wi-Fi standard (802.11be) to ensure your network is ready for emerging technologies and increasing demands, providing long-term value and investment protection.
  - Backward compatibility ensures seamless integration with your existing Wi-Fi 6, Wi-Fi 6E, and older devices.
- **Simplified management and enterprise-grade security:**
  - Seamlessly integrate with Cisco Catalyst™ Center and Cisco Wireless Controllers for centralized management, automation, real-time analytics, and robust policy enforcement. Or utilize cloud management or monitoring to get real-time insights and control from anywhere with the Cisco Meraki™ Dashboard.
  - Benefit from WPA3 and Cisco CleanAir Pro solutions, providing integrated security, resiliency, and operational flexibility to protect your network and data.
- **Compact, Flexible, and discreet deployment:**
  - Its small form factor allows for versatile deployment options, for even the tightest and hardest to reach spaces. The CW9171 allows for an energy efficient and compact deployment in areas like lobbies, offices, and retail venues.

## Trends and challenges

Small to midsize wireless are navigating a period of unprecedented transformation and challenge. The last several years have been marked by a surge in connected devices, a tripling of data consumption, and a growing reliance on latency-sensitive applications like voice applications and video streaming. This has placed immense pressure on network performance, reliability, and security.

Beyond the strain of supporting user clients, there is also a challenge to secure the network from threats and bad actors. Security is paramount with the number of transient users and devices connecting to a network on any given day.

These wireless networks are facing escalating demands from exponential device growth, increased data consumption from cloud and real-time applications, and a heightened security threat landscape. Older Wi-Fi solutions struggle to keep pace with these challenges, leading to degraded performance, security vulnerabilities, and operational complexities for IT teams.

### Performance and scalability pressures

Your small to midsize wireless networks are experiencing unprecedented demands. Device proliferation continues to surge, with average concurrent devices per AP ranging from 25–50 for Wi-Fi 6, and Wi-Fi 7 supporting over 100 clients. This high density, coupled with monthly data usage exceeding 300–400 GB per AP from cloud applications and IoT, strains both wireless capacity and wired backhaul. While Wi-Fi 6 offers theoretical speeds of 9.6 Gbps, real-world client throughput often falls short. Congestion in the 2.4 GHz and 5 GHz bands, along with inefficient roaming, leads to poor user experience. Wi-Fi 7 addresses these by leveraging the uncongested 6 GHz band, Multi-Link Operation (MLO), and 320 MHz channels to deliver latency under 10ms and up to a 3x performance increase over previous standards.

### Security and threat landscape

Small and Medium-sized Businesses (SMBs) are heavily targeted by attackers, with credential theft driving 30–45% of breaches. Rogue APs and Evil Twin attacks are prevalent, exposing networks to data exfiltration. Vulnerable IoT devices with default credentials and unpatched firmware provide easy entry points. Adoption of modern security standards like WPA3 and 802.1X authentication remains slow among SMBs, leaving networks susceptible. Furthermore, 60–70% of SMBs report inadequate IT staffing, hindering their ability to detect and respond to threats. The Cisco Wireless 9171 Series, with WPA3 and Cisco Trustworthy Solutions, provides robust security to help mitigate these risks.

### Operational and financial pressures

Managing wireless networks presents significant operational and financial hurdles for SMBs. High initial capital expenditure for traditional controllers and the need for specialized on-site staff are common challenges. Troubleshooting is often manual and time-consuming, leading to high Mean-Time-to-Repair (MTTR) and costly downtime. The market is shifting towards cloud-managed WLAN solutions and AI-driven Operations (AIOps) to reduce costs, automate troubleshooting, and manage networks effectively despite limited IT staff. The Cisco Wireless 9171 Series integrates seamlessly with Cisco Catalyst Center or Meraki dashboard, supporting this shift to more efficient, automated management.

## How it works

The Cisco Wireless 9171 Series Wi-Fi 7 Access Point is a compact and versatile wireless access point designed to bring the full power of the Wi-Fi 7 (802.11be) standard to your organization. It delivers premium performance and reliability, multi-gigabit speeds, ultra-low latency, and superior capacity in a small footprint, helping you future-proof your network, enhance user experience, and simplify management for demanding environments.

- **Enterprise-grade security:** Supports WPA3 for robust encryption and authentication, along with Cisco's advanced security features like Cisco Trustworthy Solutions.
- **Intelligent RF (Radio Frequency) optimization:** Leverages Cisco's advanced AI Radio Resource Management (AI-RRM) and CleanAir Pro technology for optimal performance and interference mitigation.
- **Integrated IoT Capabilities:** Features integrated Bluetooth Low Energy (BLE) for location-based services, asset tracking, and IoT device onboarding.
- **Flexible power options:** Supports Power over Ethernet (PoE+) or an optional external AC/DC power supply for simplified deployment and reduced cabling complexity.
- **Cisco Catalyst Center and controller integration:** Full compatibility with Cisco Catalyst Center for AI-enhanced networking, analytics, automation, and assurance, and seamless integration with Cisco 9800 Series Wireless Controllers.
- **Cisco cloud management and monitoring:** Manage with the cloud-native Meraki platform for real-time visibility, easy configuration and performance visualizations, or, keep your management on premises and use the cloud to monitor your wireless from anywhere.
- **Cisco user-defined network plus:** Enables IT departments to grant end-users control over their own wireless network partitions for secure and personalized access in multi-dwelling buildings like dormitories, hotels, and hospice centers.







## Use cases

Table 1. [Need caption]

| Industry | Use case description   |
|----------|--|
| Retail   | <ul style="list-style-type: none"><li>▪ <b>Advanced integrations for retail functionality:</b> Leverages Wi-Fi 7's increased capacity and integrated Electronic Shelf Labels (ESL) gateways to deliver real-time price and product label changes and promotional content. The CW9171 can support ESL natively or by using the USB port on PoE+ power.</li><li>▪ <b>Ultra-secure and resilient operational Wi-Fi:</b> Wi-Fi 7 ensures ultra-reliable, high-throughput, and low-latency connectivity for critical business systems, including Point of Sale (POS), inventory management, and mobile staff devices. Enhanced WPA3-Enterprise and 802.11be security features provide robust encryption and strong access controls.</li><li>▪ <b>Personalized customer engagement:</b> Guest Wi-Fi services leverage Wi-Fi 7 for seamless onboarding and rapid authentication. Customizable splash pages enable branding, targeted promotions, and data collection. Integration with loyalty programs or mobile apps is enhanced by improved BLE and deterministic latency for next-level engagement.</li></ul> |

| Industry     | Use case description  |
|--------------|---|
| Healthcare   | <ul style="list-style-type: none"> <li>▪ <b>Instantaneous patient monitoring and medical IoT:</b> Wi-Fi 7's deterministic latency, multi-link reliability, and increased spectrum ensure real-time, uninterrupted wireless connectivity for medical IoT devices (such as vital sign monitors and infusion pumps), supporting instant, secure transmission of critical patient data.</li> <li>▪ <b>Secure and compliant Electronic Health Record (EHR) Access:</b> Medical staff benefit from robust, encrypted Wi-Fi 7 connections for accessing patient records on mobile devices and tablets, utilizing WPA3-Enterprise and 802.1X for advanced authentication and compliance with healthcare data privacy requirements.</li> <li>▪ <b>Asset Tracking and Indoor Navigation:</b> Integrated BLE and Wi-Fi 7's enhanced location services support precise tracking of medical assets (e.g., wheelchairs, IV stands) and enable intuitive wayfinding solutions for patients and visitors across large healthcare facilities.</li> </ul> |
| Small office | <ul style="list-style-type: none"> <li>▪ <b>High-performance collaboration:</b> Wi-Fi 7's ultra-low latency, higher throughput, and improved spectral efficiency ensure flawless video conferencing (Webex®, Zoom), screen sharing, and cloud collaboration across meeting rooms and open workspaces, even in device-dense environments.</li> <li>▪ <b>Granular secure BYOD and corporate access:</b> Supports advanced policy control and network segmentation, empowering secure access for both corporate (802.1X) and employee-owned (BYOD) or guest devices. Wi-Fi 7 enhances traffic isolation, safeguarding sensitive company resources.</li> <li>▪ <b>Smart office automation and space optimization:</b> Leveraging Wi-Fi 7 and integrated BLE, organizations enable real-time occupancy sensing, desk and room booking, and personalized environmental controls, optimizing space utilization and enhancing employee comfort.</li> </ul>  |
| Education    | <ul style="list-style-type: none"> <li>▪ <b>High-density, High-bandwidth connectivity:</b> Wi-Fi 7's Orthogonal Frequency-Division Multiple Access (OFDMA), Multi-User Multiple Input Multiple Output (MU-MIMO), and wider 320 MHz channels deliver reliable, high-bandwidth connections in classrooms, lecture halls, and dorms, supporting simultaneous multi-device learning and next-gen digital education.</li> <li>▪ <b>Secure, seamless access for all:</b> Segregated Wi-Fi 7 networks for students, staff, and guests leverage WPA3-Enterprise and 802.1X for secure authentication, while captive portals streamline onboarding for visitors and temporary users.</li> <li>▪ <b>IoT and smart campus solutions:</b> Wi-Fi 7 and BLE integration provide the foundation for asset tracking (lab equipment, AV carts), indoor navigation, and smart classroom automation, driving digital transformation across campus environments.</li> </ul>   |



## Cisco Capital

### Financing to help you achieve your objectives

Cisco Capital® can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)

## Build your network with Cisco

Cisco offers a comprehensive, enterprise-wide strategy and architecture that supports closed-loop intent-based networking across all domains: access, WAN, data center, and security. This approach provides flexibility, simplicity, and confidence to power digital transformation. Our solutions enable business leaders to support new initiatives confidently, IT teams to manage complex environments sustainably, and security teams to protect users, applications, and data effectively.

Cisco's architecture enables continuous alignment with evolving business needs, offering a choice of platforms, hardware, software, and consumption models that scale and adapt. Open platform extensibility enables evolving network capabilities at the pace of the business.

Cisco uses automation, AI/ML, and machine reasoning to simplify operations, reduce costs, and proactively identify and fix problems. Open platform integrations streamline IT and security workflows for smooth integration into existing environments.

### Learn more

Ready to upgrade your business to the Wi-Fi your business demands? Check out our CW9171 access point and the entire Wi-Fi 7 line up here: <https://www.cisco.com/site/us/en/products/networking/wireless/access-points/catalyst-9100-series/index.html>.