

Scalable, Resilient Outdoor Wireless



User demand for fast, secure, and reliable connectivity doesn't stop at the door – and neither should your Wi-Fi. To power the experiences, devices, and workloads that now live outside your walls, you need a wireless foundation engineered for the AI era. Cisco® outdoor wireless solutions deliver the scale, resilience, and intelligence to help your organization thrive in every environment.

Benefits

- Cisco wireless outdoor access points empower you to elevate your wireless infrastructure with cutting-edge Wi-Fi 7 technology.
- Scale effortlessly for the AI era with tri-band Wi-Fi 7 radios, up to 16 spatial streams, and support for hundreds of concurrent clients per access point.
- Future-proof your uplink with 10-Gbps Ethernet, fiber, and DC power options that remove bottlenecks as bandwidth demands grow.
- Deploy anywhere with confidence thanks to IP67-rated ruggedization, a wide operating temperature range, and optional environmental hardening for extreme conditions.
- Unlock location-aware experiences with integrated GPS/GNSS, Bluetooth Low Energy (BLE), and an IoT radio that combine with Cisco Spaces, asset tracking, and regulatory compliance.
- Secure every connection with Wi-Fi Protected Access 3 (WPA3), advanced encryption, and Cisco's unified security architecture – built in, not bolted on.
- Simplify operations with seamless integration across Catalyst Center and the Meraki dashboard.

Overview

Outdoor spaces are no longer the edge of your network – they're central to how your organization operates. Whether it's a parking lot, courtyard, stadium, campus quad, bulk storage yard, or industrial site, users and devices expect the same seamless, secure experience they get indoors. Meeting that expectation means extending wireless with confidence into environments that demand ruggedness, scale, and intelligence.

Cisco outdoor wireless access points securely connect the people and things you rely on, with the AI-ready performance to future-proof your spaces. Manage your network on-premises with a wireless controller or from the cloud via the Cisco Meraki™ dashboard or Cisco Catalyst™ Center – and extend intelligence with Cisco Spaces for location-aware experiences and real-time insight. Purpose-built for harsh conditions and dense client environments, every Cisco outdoor access point delivers high-performance, secure connectivity that doesn't quit – rain or shine, indoors or out.

Cisco Wireless 9177 Series Access Points

The Cisco Wireless 9177 Series offers tri-band, tri-radio support (2.4 GHz, 5 GHz, and 6 GHz) with 4x4:4, enabling high throughput and robust multiclient performance. With a 10-Gbps Ethernet uplink, fiber and DC-in power options, and advanced power management features, the 9177 Series helps you reduce operational costs while future-proofing your network. Its rugged IP67-rated enclosure and wide operating temperature range (-40° to 65°C) help ensure dependable performance in harsh conditions. Integrated GPS/GNSS supports precise location services and regulatory compliance, while advanced security protocols like WPA3 safeguard the network. The 9177 Series integrates seamlessly with Cisco management platforms such as Catalyst Center, Cisco Spaces, and the Meraki dashboard.

Cisco Wireless 9179F Access Point

The Cisco Wireless 9179F adds to these capabilities with enhancements tailored for even more demanding outdoor deployments. It supports tri-band Wi-Fi 7 radios with 2.4GHz, dual 5-GHz, and 6GHz radios and 4x4:4 spatial streams and includes a 10-Gbps Ethernet uplink with fiber and DC power options. The 9179F features additional ruggedization and environmental resilience, maintaining reliable operation across extreme temperature ranges and weather conditions. It also incorporates advanced antenna options for directional and front-to-back signal and supports multilink operation for optimized spectrum use. Like the 9177 Series, it includes integrated GPS/GNSS for location accuracy and supports the latest security standards. The 9179F is designed to deliver superior throughput, expanded frequency bands, and enhanced client capacity, providing you with a future-ready, high-performance outdoor wireless solution that performs.

Trends and challenges

Wireless that doesn't stop at the door

Increasingly, critical applications and capabilities depend on reliable, secure wireless, even outdoors. [According to the Cisco State of Wireless 2026 report](#), organizations are extending their wireless networks to support a rapidly expanding set of use cases: IoT and smart devices, user mobility and BYOD, high-bandwidth streaming, and emerging AI and OT workloads. As these demands grow, outdoor connectivity has shifted from a nice-to-have to a strategic requirement.

At the same time, the wireless landscape itself is evolving quickly. The significant spectrum expansion introduced with Wi-Fi 6E, combined with the enhanced feature set of Wi-Fi 7, including multilink operation, 320-MHz channels, and deterministic low-latency performance, gives organizations deploying new access point technology the headroom to support tomorrow's performance demands today.

The opportunity: Extend the same intelligence, security, and assurance you expect indoors to every outdoor environment, from stadium seating bowls to substations to smart city corridors, without compromise.

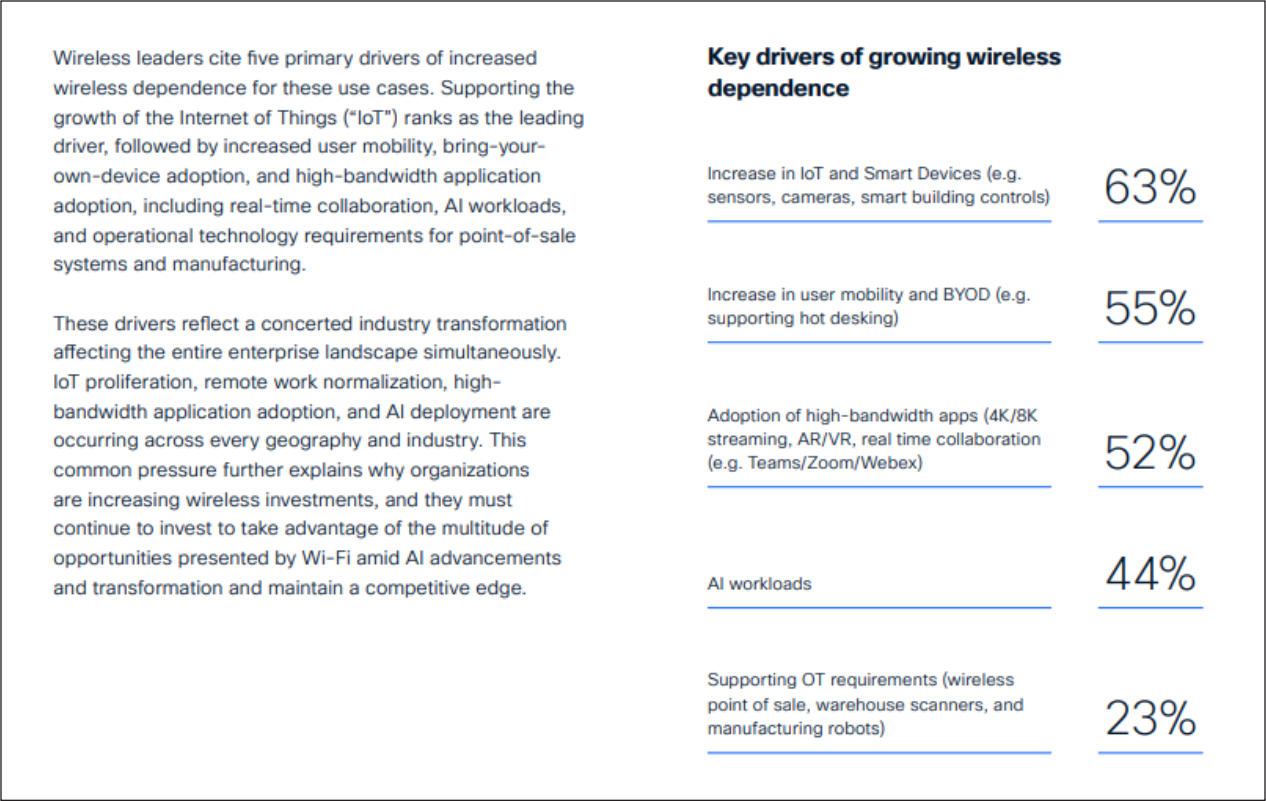


Figure 1. Cisco State of Wireless report

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How it works

Outdoor models and options

As with any wireless refresh, design and placement are key for an optimally functioning network. Cisco’s outdoor access points are purpose-built for flexible installation and a myriad of use cases.

With a variety of models and options to choose from, you can purpose-build your wireless for the AI era and whatever is next.

Table 1. Cisco wireless outdoor access points

	9179F	9177I	9177D	9177E	9163E
Generation	Wi-Fi 7 (802.11be)				Wi-Fi 6E (802.11ax)
Radios	Quad client-serving radios (2.4 GHz, dual 5 GHz, 6 GHz)	Tri-band radios (2.4 GHz, 5 GHz, 6 GHz or 2.4 GHz, 5 GHz, 5 GHz), 4x4 MIMO			Tri-band radios (2.4 GHz, 5 GHz, 6 GHz), 2x2 MIMO
Antenna type	Internal directional and/or external antenna	Internal omni-directional	Internal directional	External antenna	External antenna
Temperature	0° to 50°C (32° to 122°F)	-40° to +65°C (-40° to 149° F) (operating)			

Use cases

Table 2. Use cases

Industry	Use case
Utilities and energy sector	The access points facilitate secure wireless connectivity for outdoor utility sites, including power plants, substations, and renewable energy installations. The integrated IoT radios support sensor networks for monitoring equipment status, environmental conditions, and safety compliance.
Hospitality and entertainment venues	Outdoor stadiums, resorts, and event spaces require high-capacity, low-latency wireless networks. The 9179F access point delivers Multigigabit throughput and supports dense client populations, enabling immersive guest experiences, mobile ticketing, and real-time event analytics.
Higher education and campus environments	Outdoor campus areas benefit from the high capacity and multiband capabilities of the 9177 Series and CW9179F, providing seamless connectivity for students, faculty, and staff. The access points support location analytics, adaptive policy enforcement, and secure guest access, enhancing the campus experience and operational efficiency.
Industrial and manufacturing facilities	The rugged design and IP67 rating allow for deployment in some industrial outdoor environments, which can be exposed to dust, moisture, and temperature extremes. The access points support high-density client environments and IoT sensor networks for real-time monitoring, automation, and predictive maintenance in manufacturing plants, warehouses, and logistics centers.
Transportation and railway systems	Cisco access points are suited for deployment in transportation hubs, in railyards, and along railway tracks. The 9177 Series supports Cisco Ultra-Reliable Wireless Backhaul (URWB) for high-throughput wireless connectivity for passenger Wi-Fi, operational communications, and IoT sensors monitoring infrastructure health and safety.
Smart cities and municipalities	Cisco wireless outdoor access points support extensive outdoor coverage with robust security and IoT integration, making them ideal for smart city deployments. They enable connectivity for public Wi-Fi, smart lighting, environmental sensors, traffic management systems, and public safety communications. The integrated BLE and client radios facilitate seamless IoT device integration for applications like smart parking and asset tracking.

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.](#)

Cisco reimagines wireless as a strategic foundation for the AI era.

Learn more

Is your outdoor wireless network ready for the AI era?

Learn more and review products here:
www.cisco.com/go/wireless.

Two innovative technologies. The best wireless out-come.

Cisco outdoor access points are engineered to support two of the most important innovations shaping modern outdoor wireless, giving you the flexibility to optimize capacity or continuity, depending on your environment.

Automated Frequency Coordination (AFC): Unlock the full power of 6 GHz

AFC enables standard power operation in the 6-GHz band outdoors,* delivering up to 6x more range, wider channels, and significantly higher throughput than low-power modes. It coordinates spectrum use in real time, protecting incumbents while maximizing your available bandwidth. Ideal for stadiums, campuses, smart cities, and any high-density out-door venue.

Ultra-Reliable Wireless Backhaul (URWB): Keep things moving

Cisco URWB delivers deterministic, low-latency wireless for environments where downtime isn't an option and assets are on the move. With sub-10 ms handoffs and Multigigabit throughput, URWB extends mission-critical connectivity to trains, industrial vehicles, mining operations, and public safety networks.

* AFC availability varies by country; check regional regulatory status.

The Cisco Advantage

Cisco reimagines wireless as a strategic foundation for the AI era. Wireless is not just a utility, but a catalyst for business transformation. By uniting AI-native intelligence, built-in security, and assurance-driven automation, Cisco delivers wireless networks that see more, secure more, and do more.

From high-density enterprise access points to ruggedized industrial IoT and location-aware experiences powered by Cisco Spaces, our unified architecture helps ensure consistent policy, seamless roaming, and end-to-end visibility across every environment, indoors and out.

The result: a resilient, scalable wireless fabric engineered to simplify operations, accelerate outcomes, and future-proof your business for what's next.