

# Which Catalyst 9124 access point is right for your outdoor network?

The Cisco® Catalyst® 9124 Series Access Points bring the Wi-Fi 6 (802.11ax) standard to the great outdoors, with antenna choices for a wide range of use cases.

The only difference between the three access points is the antennas. All of the Catalyst 9124 Series access points come equipped with up to three radios: 2.4 GHz (4x4:4), 5 GHz (4x4:4), and a built-in Bluetooth Low Energy (BLE) radio, perfect for IoT deployments. The 9124 Series provides Orthogonal Frequency-Division Multiple Access (OFDMA) and Multiuser Multiple-Input Multiple-Output (MU-MIMO) support and will lead the charge into the next generation of outdoor wireless.

With AI/ML and advanced analytics baselining the network performance, Cisco wireless products are equipped to provide intelligent root cause analysis and the ability to delve deeper into the network for greater visibility.

The access points are supported in Cisco IOS® XE-based platforms and have the Cisco RF ASIC to deliver next-generation Cisco CleanAir®. They provide other enhanced features as well, such as Cisco Fastlane+, Wireless Intrusion Prevention Systems (wIPS), Dynamic Frequency Selection (DFS), Target Wake Time, and much more.

Why the need for three different antennas? You told us that your outdoor deployments aren't all the same. Different deployments call for different tools. You wouldn't chop down a 60-foot redwood with an axe, and you certainly wouldn't use a chainsaw to cut down a young sapling. It's the same with access points.

For wide network coverage in a general-purpose environment, consider the **Catalyst 9124I access point**.

Use cases include university campuses and corporate organizations with multiple buildings.

For network coverage in a high-density area with point-to-point bridging when cable can't be run, consider the **Catalyst 9124D access point**.

Use cases include stadiums, outdoor concert halls, and large parks.

For network coverage that needs to be controlled by the user, consider the **Catalyst 9124E access point**.

Use cases include warehouses and outdoor shopping malls.

**The Catalyst 9124 Series is available in three different variations:**

- The Catalyst 9124I access point with an internal omnidirectional antenna
- The Catalyst 9124D access point with an internal directional antenna
- The Catalyst 9124E access point with external support of both omni and directional antennas

For more information on the Cisco Catalyst 9124 Series Access Points and their features and functions, visit <https://www.cisco.com/site/us/en/products/networking/wireless/access-points/catalyst-9100-series/index.html>.