

Cisco Business 150AX Access Point

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Ideal for smaller networks, the Cisco® Business 150AX Access Point brings a full slate of Cisco high-performance functionality to the business environment at an affordable price point.

Product overview

The Cisco Business 150AX Access Point delivers industry-leading wireless performance with support for the latest Wi-Fi 6 standard, IEEE’s 802.11ax (Figure 1). It also meets the growing flexibility of wireless networks by introducing mesh technology which enables scalable expansion of the network where network cabling may not exist—all while delivering a simple user experience, deployable with the Cisco Business Mobile app or the integrated WebUI.

The 150AX access point extends coverage and capacity to Wi-Fi clients such as smartphones, tablets, and high-performance laptops that have integrated Wi-Fi 6 capabilities, while being backwards compatible with the previous 802.11ac Wave 1 or Wave 2 standards.



Figure 1.
Cisco Business 150AX Access Point

Features and benefits

By adhering to the 802.11ax standard, the Cisco Business 150AX Access Point delivers a data rate of up to 1.2 Gbps on its 5-GHz radio. This exceeds the data rates offered by access points that support the 802.11ac Wave 1 and Wave 2 standards. It also enables a total aggregate dual-radio data rate of up to 1 Gbps, providing the necessary foundation to stay ahead of the performance expectations and needs of wireless users.

In recent years, small businesses have increasingly preferred wireless access as the principal form of network connectivity. Along with this shift, there is an expectation that wireless should enable a high performance experience. The Cisco Business 150AX Access Point delivers industry-leading performance for highly secure and reliable wireless connections, for an optimal end-user experience.

Table 1 lists the features and benefits of the Cisco Business 150AX Access Point.

Table 1. Features and benefits

Feature	Benefits
Wi-Fi 6 (802.11ax)	The IEEE 802.11ax emerging standard, also known as High-Efficiency Wireless (HEW) or Wi-Fi 6, builds on 802.11ac. It delivers a better experience in typical environments with more predictable performance for advanced applications such as 4K or 8K video, high-density, high-definition collaboration apps, all-wireless offices, and IoT. Wi-Fi 6 is designed to use both the 2.4-GHz and 5-GHz bands, unlike the 802.11ac standard.
Uplink/downlink OFDMA	OFDMA-based scheduling splits the bandwidth into smaller frequency allocations called Resource Units (RUs), which can be assigned to individual clients in both the downlink and uplink directions to reduce overhead and latency.
Downlink MU-MIMO technology	Supporting two spatial streams, MU-MIMO enables access points to split spatial streams between client devices to maximize throughput.
Simplified management	Easily deploy and manage multiple Cisco Business Wireless CBW150AX access points and CBW151AXM mesh extenders as one entity, without a physical controller or licensing, using your favorite web browser with the integrated WebUI or using your mobile device with the Cisco Business Mobile app. Optional multisite remote management is available through the Cisco Business Dashboard, which is free to use for up to 25 devices
Mesh technology support	Easily enhance your wireless coverage and capacity without network cabling and Ethernet switches. Mix and match Cisco Business Wi-Fi 6 Mesh Extenders and/or Access Points to extend seamless Wi-Fi coverage throughout your business or workplace.
Bluetooth 5	Integrated Bluetooth Low Energy (BLE) 5 radio [for future use]
Flexible deployment	Flexible deployment models supporting multiple concurrent use cases required by small businesses, including point of sale systems, surveillance cameras, secure guest access, and more.
Optional Cloud-based Security	Cisco Umbrella offers a cloud-based security service to protect your business and connected wireless users, devices, & guests. The seamless integration enables content filtering, blocks malware & phishing attacks and is always up-to-date.

Prominent features

Increased wireless performance and coverage, featuring mesh technology

The Cisco Business 150AX Access Point supports the latest Wi-Fi 6 standard for higher performance, greater coverage, and higher-density networks. With simultaneous dual radios and dual bands with 802.11ax functionality, this access point can handle the increasing number of high-bandwidth devices and applications that will soon become a common part of the network.

Integrated mesh technology enables deployment flexibility that is simple and secure. You can easily expand coverage and capacity using Cisco Business Wi-Fi 6 wireless access points & mesh extenders, which include models that can be placed on a desktop, or plugged directly into an AC electrical outlet.

Cisco Business Mobile app

The Cisco Business 150AX Access Point can be easily deployed and managed with your favorite mobile device using the Cisco Business Mobile app. This intuitive mobile application dramatically simplifies the traditional challenges associated with wireless network deployment, all without having to be an IT or networking expert. You can easily extend your network by adding new mesh extenders using Quick Response (QR) codes and wireless network activation in minutes. A robust management capability dynamically changes network configuration such as enabling secure guest access. Network usage, traffic patterns, and network throughput can be closely monitored, providing a real-time snapshot; this not only provides peace of mind, it virtually ensures optimal user experience. The Cisco Business Mobile app is available on app stores for both iPhone and Android devices.

Power over Ethernet injector is included

The Cisco Business 150AX Access Point features a single Gigabit Ethernet uplink port and is powered by a passive Power over Ethernet injector (this injector is not supported with other Cisco Business Access Point Models).

Mounting

This sleek, compact access point is designed with flexible mounting options in mind. You can mount it directly on the ceiling (primary orientation) or a vertically on a wall (secondary orientation). It is easy to install, and the necessary mounting hardware is included.

Product specifications

Table 2 lists the specifications for the Cisco Business 150AX Access Point.

Table 2. Specifications

Item	Specification
Authentication and security	<ul style="list-style-type: none"> • Wi-Fi Protected Access - with WPA2 or WPA3, including WPA2-Enterprise authentication • 802.1X, RADIUS Authentication, Authorization, and Accounting (AAA) • Segmentation via VLANs (up to 16) • 802.11r and 802.11i • Guest network can also authenticate against a Social Login account: Google and Facebook
Maximum clients	<ul style="list-style-type: none"> • Maximum number of associated wireless clients: 200 per Wi-Fi radio, for a total of 400 clients per access point, or 1000 in a system
Maximum # of Access Points	<ul style="list-style-type: none"> • 50 • Recommended up to 25
Max # of Mesh Extenders	<ul style="list-style-type: none"> • Maximum number of associated Cisco Business mesh extenders: 25 per Access Point, up to 8 hops
Management Compatibility	<ul style="list-style-type: none"> • A group of access points and mesh extenders comprised of only CBW150AX and CBW151AXM devices may be managed as a single entity. • CBW150AX access points must not be installed on the same management network and CBW140AC or CBW240AC access points. • CBW150AX and CBW151AXM devices are supported by Cisco Business Dashboard versions 2.4.1 and higher.
802.11ax	<ul style="list-style-type: none"> • 2x2 downlink MU-MIMO with two spatial streams • Uplink/downlink OFDMA • TWT • BSS coloring • MRC • 802.11ax beamforming • 20-, 40-, 80- channels • PHY data rates up to 1.488 Gbps (80 MHz with 5 GHz and 20 MHz with 2.4 GHz) • Packet aggregation: A-MPDU (transmit and receive), A-MSDU (transmit and receive) • 802.11 DFS • CSD support • WPA3 support
802.11ac	<ul style="list-style-type: none"> • 2x2 single-user/multi-user MIMO with two spatial streams, up to 867 Mbps in 5GHz • 20-, 40-, and 80-MHz channels • Dynamic Frequency Selection (DFS)
Ethernet ports	<ul style="list-style-type: none"> • Authentication with 802.1X or MAC filtered • Dynamic VLAN or per port • Traffic locally switched or tunneled back to Master AP

Item	Specification	
Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps	
	802.11b/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps	
	802.11n data rates on 2.4 GHz: 6.5 to 300 Mbps (MCS0-MCS15, HT 20/40)	
	802.11ac data rates on 5 GHz: 6.5 to 867 Mbps (MCS0-MCS9)	
	802.11ax data rates on 2.4 & 5GHz: 6.5 to 1200 Mbps (MCS0-MCS11)	
Integrated antenna	2.4GHz: peak gain 4dBi, internal antenna, omnidirectional in azimuth 5GHz: peak gain 5dBi, internal antenna, omnidirectional in azimuth	
Maximum number of non-overlapping channels	<p>A (A regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels <ul style="list-style-type: none"> ◦ excludes 5.600 to 5.640 GHz • 5.745 to 5.825 GHz; 5 channels <p>B (B regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.720 GHz; 12 channels • 5.745 to 5.825 GHz; 5 channels <p>E (E regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels <p>I (I regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels 	<p>Q (Q regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 11 channels <p>R (R regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.660 to 5.700 GHz; 3 channels • 5.745 to 5.805 GHz; 4 channels <p>Z (Z regulatory domain):</p> <ul style="list-style-type: none"> • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels <ul style="list-style-type: none"> ◦ excludes 5.600 to 5.640 GHz • 5.745 to 5.825 GHz; 5 channels
Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.		
Available transmit power settings	2.4 GHz Up to 20 dBm	5 GHz Up to 20 dBm
Note: The maximum power setting will vary by channel and according to individual country regulations. Refer to the product documentation for specific details.		
Interfaces	• 1x Gigabit Ethernet (10/100/1000BASE-T autosensing), Power over Ethernet (PoE)	
Indicators	• Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors	
Dimensions (W x L x H)	• Access point (without mounting bracket): 5.92 x 5.92 x 1.57 in. (150.4 x 150.4 x 39.9 mm)	
Weight	• Access point without mounting bracket or any other accessories: 11.6 oz (330 g)	

Item	Specification
Environmental	<p>Operating</p> <ul style="list-style-type: none"> • Temperature: 32° to 104° F (0° to 40° C) • Humidity: 0% to 95% (noncondensing) • Maximum altitude: 9843 ft (3000 m) at 40° C <p>Nonoperating (storage and transportation)</p> <ul style="list-style-type: none"> • Temperature: -22° to 158° F (-30° to 70° C) • Humidity: 0% to 95% (noncondensing) • Maximum altitude: 15,000 ft (4570 m) at 25° C
System	<ul style="list-style-type: none"> • 1 GB DRAM, 512MB flash • 1GHz quad core processor
Powering options	<ul style="list-style-type: none"> • Use the included Cisco Business passive PoE injector <p>or</p> <ul style="list-style-type: none"> • 802.3af/at Ethernet switch; a Cisco Business Switch with PoE is recommended (CBS220/250/350 series)
Power draw	<ul style="list-style-type: none"> • 9.2W (maximum, on PoE)
Mounting and physical security	<p>Included with the access point:</p> <ul style="list-style-type: none"> • Mounting bracket and hardware
Warranty	<p>Cisco Business 3-year limited hardware warranty</p> <p>Free software updates, no service contract required</p>
Compliance	<ul style="list-style-type: none"> • Safety: <ul style="list-style-type: none"> ◦ UL 60950-1 ◦ CAN/CSA-C22.2 No. 60950-1 ◦ IEC 60950-1 ◦ EN 60950-1 ◦ IEC 62368-1 ◦ EN 62368-1 ◦ UL/CUL 62368-1 • Radio approvals: <ul style="list-style-type: none"> ◦ FCC Part 15.247, 15.407 ◦ RSS-247 ◦ EN 300328, EN 301893 ◦ EN 50385 ◦ ARIB-STD 66 ◦ ARIB-STD T71 • EMC <ul style="list-style-type: none"> ◦ EMI and susceptibility (Class B) ◦ FCC Part 15B ◦ ICES-003 ◦ VCCI(Japan) ◦ EN 301489-1 and -17 ◦ EN 55032, EN55035

Item	Specification
	<ul style="list-style-type: none"> • IEEE standards: <ul style="list-style-type: none"> ◦ IEEE 802.3 ◦ IEEE 802.3ab ◦ IEEE 802.3af/at ◦ IEEE 802.11a/b/g/n/ac/ax ◦ IEEE 802.11h, 802.11d • Security: <ul style="list-style-type: none"> ◦ 802.11i, WPA2, WAP3, WPA ◦ 802.1X ◦ AES • Extensible Authentication Protocol (EAP) types: <ul style="list-style-type: none"> ◦ EAP-Transport Layer Security (TLS) ◦ EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2) ◦ Protected EAP (PEAP) v0 or EAP-MSCHAPv2 ◦ EAP-Flexible Authentication via Secure Tunneling (FAST) ◦ PEAP v1 or EAP-Generic Token Card (GTC) ◦ EAP-Subscriber Identity Module (SIM) • Multimedia: <ul style="list-style-type: none"> ◦ Wi-Fi Multimedia (WMM) • Other: <ul style="list-style-type: none"> ◦ FCC Bulletin OET-65C ◦ RSS-102

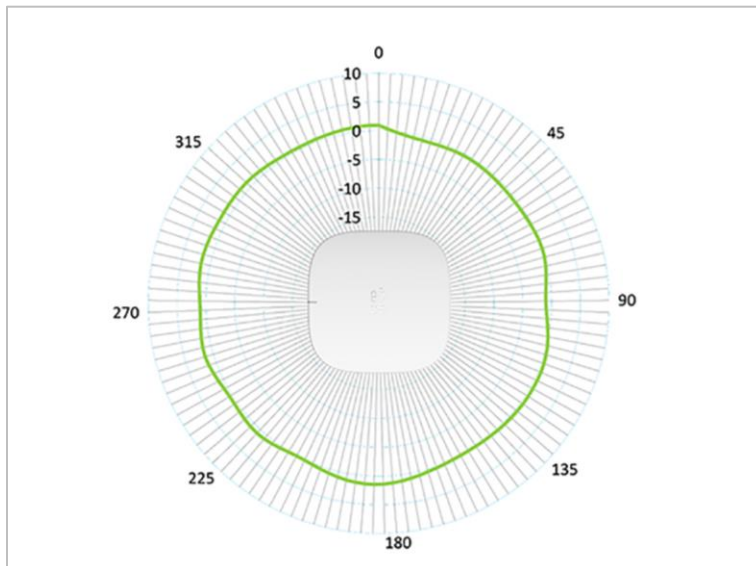


Figure 2.
Cisco CBW150AX Antenna Pattern 2.4GHz - Azimuth

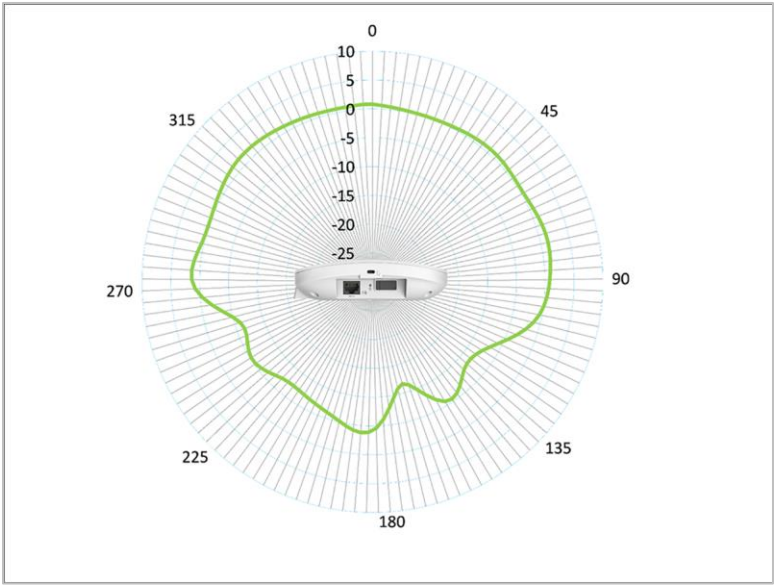


Figure 3.
Cisco CBW150AX Antenna Pattern 2.4GHz - Elevation

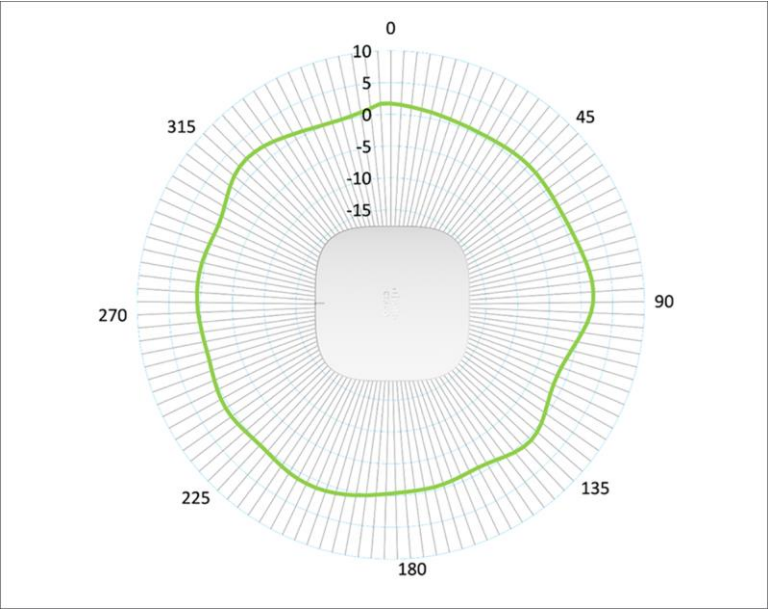


Figure 4.
Cisco CBW150AX Antenna Pattern 5GHz - Azimuth

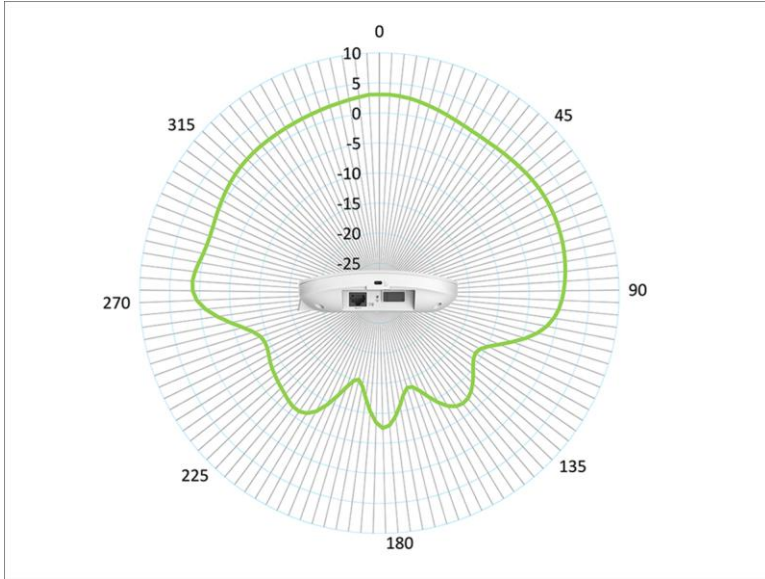


Figure 5.
Cisco CBW150AX Antenna Pattern 5GHz - Elevation

Ordering information

Table 3 provides ordering information for the Cisco Business 150AX Access Point.

To download software, visit the [Cisco Software Center](#).

Table 3. Ordering information for the Cisco Business Wireless Access Point. To place an order, visit the Cisco Ordering homepage

Part number	Description
CBW150AX-x	Cisco Business 150AX Wi-Fi 6 Access Point, Ceiling Mounted

Note: Customers are responsible for verifying approval for use in their individual countries.

To verify approval that corresponds to a particular country or the regulatory domain used in a specific country, visit <https://www.cisco.com/go/compliance>.

Regulatory domain approval occurs in phases. As they are approved, the part numbers will be available on the Cisco Wholesale Price List (WPL).

Regulatory domains: (x = regulatory domain).

Cisco 3-year limited hardware warranty for Cisco Business products

This Cisco Business product comes with a 3-year limited hardware warranty. Product warranty terms and other information applicable to Cisco products are available at <https://www.cisco.com/go/warranty>.

Product sustainability

Information about Cisco's environmental, social and governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability [reporting](#).

Table 4. Product sustainability information

Sustainability Topic		Reference
General	Information on product-material-content laws and regulations	Materials
	Information on electronic waste laws and regulations, including our products, batteries and packaging	WEEE Compliance
	Information on product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability Inquiries	Contact: csr_inquiries@cisco.com
Material	Product packaging weight and materials	Contact: environment@cisco.com

Cisco Business Support Service

Achieve infrastructure excellence faster with less risk. Cisco Services for Small Business provide expert guidance to help you successfully deploy, manage and support the Cisco Business Products and Solutions. With unmatched networking expertise, best practices, and innovative tools, Cisco Services can help you reduce overall upgrade, refresh, and migration costs as you introduce new hardware, software, and protocols into the network. With a comprehensive lifecycle of services, Cisco experts will help you minimize disruption and improve operational efficiency to extract maximum value from your Cisco Business infrastructure.

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Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital® makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more](#).

For more information

For more information on Cisco Business products and solutions, visit:

<https://www.cisco.com/c/en/us/products/wireless/business-100-series-access-points/index.html>.

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