The bridge to possible

Cisco Business 145AC Access Point

Contents

With a sleek design and small form factor, the Cisco Business 145AC Access Point brings a full slate of Cisco high-performance functionality to in-room or office deployments where a mixture of wired and wireless devices is used.

Product overview

The Cisco® Business 145AC Access Point (Figure 1) is a compact, wall plate–mountable access point, ideal for in-room or office deployments requiring connectivity for both wired and wireless devices.

Incorporating support for 802.11ac Wave 2 wireless standards and Gigabit Ethernet wired connectivity into a sleek device, the Cisco Business 145AC is built to take full advantage of in-wall cabling infrastructure while blending into the visual footprint. This combination provides deployment flexibility while offering best-in-class performance.

Figure 1.
Cisco Business 145AC Access Point

Features and benefits

By adhering to the 802.11ac Wave 2 standard, the Cisco Business 145AC Access Point delivers a data rate of up to 867 Mbps on its 5-GHz radio. This exceeds the data rates offered by access points that support the 802.11n standard. It also enables a total aggregate dual-radio data rate of up to 1 Gbps, providing the necessary foundation for small business and Managed Service Providers (MSPs) to stay ahead of the performance expectations and needs of their wireless users.

In recent years, small businesses, enterprises, and managed service providers alike 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 145AC Access Point delivers industry-leading performance with highly secure and reliable wireless connections, for a robust, mobile end-user experience.

Table 1 lists the features and benefits of the Cisco Business 145AC Access Point.

Table 1.   Features and benefits

Feature	Benefits
MU-MIMO	Multi-User (MU) Multiple-Input Multiple-Output (MU-MIMO) technology allows transmission of data to multiple 802.11ac Wave 2-capable clients simultaneously to improve the client experience. Prior to MU-MIMO, 802.11n and 802.11ac Wave 1 access points could transmit data to only one client at a time. This was typically referred to as Single-User MIMO (SU-MIMO).
Gigabit Ethernet ports	Three local Gigabit Ethernet ports are available to securely connect wired devices to the network. Traffic from wired devices can be tunneled back to Master AP or be locally switched by the access point. One of these Ethernet ports can also provide Power over Ethernet (PoE) out to power a device such as an IP phone or a security camera.
Simplified management	Deploy and configure multiple Cisco Business access points and mesh extenders easily without a physical controller, using Cisco Business Mobile app. Optional multisite remote management is available through the Cisco FindIT Network Management.
Mesh technology support	Mix and match Cisco Business mesh extenders or access points to increase WiFi coverage throughout your business.
Flexible deployment	Flexible deployment models supporting multiple concurrent use cases required by small businesses, including point of sale systems, surveillance cameras, guest access, and more.

Prominent features

Increased wireless performance

The Cisco Business 145AC Access Point supports the latest 802.11ac Wave 2 standard for higher performance, greater access, and higher-density networks. With simultaneous dual radios and dual bands with 802.11ac Wave 2 MU-MIMO functionality, this access point can handle the increasing number of high-bandwidth devices that will soon become a common part of the network.

Cisco Business Mobile app

The Cisco Business 145AC Access Point is managed by the Cisco Business Mobile app, an intuitive client application that simplifies traditional challenges associated with wireless network deployment, right from your mobile device. You can extend your network by adding new mesh extenders and automating wireless network activation in minutes. A robust management capability dynamically changes network configuration such as enabling 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 for iPhone, iPad, and Android devices.

Wired access

The Cisco Business 145AC Access Point allows wired access via a single Gigabit Ethernet port. It supports full operation modes using PoE 802.3af power. The 145AC comes with three local Gigabit Ethernet ports, one uplink Gigabit Ethernet port, and one passive pass-through RJ-45 port, allowing for a variety of connections.

Mounting

This compact access point is designed with flexible mounting options in mind. You can mount it directly on the wall or to numerous global wall junction standards. It is easy to install, and the mounting hardware is included.

Product specifications

Table 2 lists the specifications for the Cisco Business 145AC Access Point.

Table 2.   Specifications

Item	Specification	
Authentication and security	• Wi-Fi Protected Access 2 and 3 (WPA2 and WPA3) • 802.1X, RADIUS Authentication, Authorization, and Accounting (AAA) • 802.11r and 802.11i	
Maximum clients	• Maximum number of associated wireless clients: 200 per Wi-Fi radio, for a total of 400 clients per access point	
Max # of Mesh Extenders	• Maximum number of associated Cisco Business mesh extenders: 25 per Access Point, up to 8 hops	
802.11ac	• 2x2 single-user/multi-user MIMO with two spatial streams, up to 867 Mbps • 20-, 40-, and 80-MHz channels • Dynamic Frequency Selection (DFS)	
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)	
Maximum number of nonoverlapping channels	**A (A regulatory domain):** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz) • 5.745 to 5.825 GHz; 5 channels **B (B regulatory domain):** • 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 **C (C regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.745 to 5.825 GHz; 5 channels **D (D regulatory domain):** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels	**K (K regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.620 GHz; 7 channels • 5.745 to 5.805 GHz; 4 channels **N (N regulatory domain):** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels **Q (Q regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 11 channels **R (R regulatory domain):** • 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

Item	Specification	
	E (E regulatory domain): • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz) **F (F regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.745 to 5.805 GHz; 4 channels **G (G regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.745 to 5.865 GHz; 7 channels **H (H regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels **I (I regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels	**S (S regulatory domain):** • 2.412 to 2.472 GHz; 13 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 11 channels • 5.745 to 5.825 GHz; 5 channels **T (T regulatory domain):** • 2.412 to 2.462 GHz; 11 channels • 5.280 to 5.320 GHz; 3 channels • 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz) • 5.745 to 5.825 GHz; 5 channels **Z (Z regulatory domain):** • 2.412 to 2.462 GHz; 11 channels • 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz; 8 channels (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.

Item	Specification
Integrated antennas	• 2.4 GHz, gain 2 dBi • 5 GHz, gain 3 dBi
Interfaces	• 1x Gigabit Ethernet uplink (10/100/1000BASE-T autosensing), PoE • 3x Gigabit Ethernet local ports (10/100/1000BASE-T), including one PoE out port: ◦ PoE out provides 802.3af (Class 0) when access point is powered by 802.3at, or no output when powered by 802.3af • One passive pass-through port, RJ-45 (back to bottom)
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): 3.5 x 5.5 x 1.25 in. (89 x 140 x 31.5 mm)
Weight	• Access point without mounting bracket or any other accessories: 10 oz (280 g)

Environmental	• Operating
	  ◦ Temperature: 32° to 104°F (0° to 50°C)
	  ◦ Humidity: 10% to 90% (noncondensing)
	  ◦ Maximum altitude: 9843 ft (3000 m) at 40°C
	• Nonoperating (storage and transportation)
	  ◦ Temperature: -22° to 158°F (-30° to 70°C)

Item	Specification
	◦ Humidity: 10% to 90% (noncondensing)
	◦ Maximum altitude: 15,000 ft (4500 m) at 25° C
System	• 1 GB DRAM
	• 256 MB flash
	• 710-MHz quad-core processor
Powering options	• 802.3af/at Ethernet switch; a Cisco Business switch with PoE is recommended
	• Optional Cisco Business PoE injector (CB-PWRINJ-xx)
Power draw	• 8.5W (maximum, without PoE out)
Physical security	• Torx security screw, included with the access point
	• Kensington lock slot to lock device to mounting bracket
Mounting	• Bracket is included with the access point
Warranty	Cisco Business limited lifetime hardware warranty
	Free software updates, no service contract required
Compliance	• Safety:
	◦ UL 60950-1
	◦ CAN/CSA-C22.2 No. 60950-1
	◦ UL 2043
	◦ IEC 60950-1
	◦ EN 60950-1
	• Radio approvals:
	◦ FCC Part 15.247, 15.407
	◦ RSS-247 (Canada)
	◦ EN 300.328, EN 301.893 (Europe)
	◦ ARIB-STD 66 (Japan)
	◦ ARIB-STD T71 (Japan)
	◦ EMI and susceptibility (Class B)
	◦ FCC Part 15.107 and 15.109
	◦ ICES-003 (Canada)
	◦ VCCI (Japan)
	◦ EN 301.489-1 and -17 (Europe)
	◦ EN 50385
	• IEEE standards:
	◦ IEEE 802.11a/b/g, 802.11n, 802.11h, 802.11d
	◦ IEEE 802.11ac
	• Security:
	◦ 802.11i, WPA2, WAP3, WPA
	◦ 802.1X
	◦ AES
	• Extensible Authentication Protocol (EAP) types:
	◦ EAP-Transport Layer Security (TLS)
	◦ EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2)

Item	Specification
	◦ 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:
	◦ Wi-Fi Multimedia (WMM)
	● Other:
	◦ FCC Bulletin OET-65C
	◦ RSS-102

Ordering information

Table 3 provides ordering information for the Cisco Business 145AC Access Point.

To download software, visit the Cisco Software Center.

Table 3.   Ordering information

Part number	Description
CBW145AC-x	CBW145AC 802.11ac 2x2 Wave 2 Access Point Wall Plate
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 limited lifetime warranty for Cisco Business products

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

Cisco Business Support Service

This optional subscription-based, device-level service offers affordable, 3-year peace-of-mind coverage. It helps you protect your investment and derive maximum value from Cisco Business products. Delivered by Cisco and backed by your trusted partner, this comprehensive service includes software updates, extended access to the Cisco Business Support Center, and expedited hardware replacement, should it be required.

Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's Corporate Social Responsibility (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

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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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