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Cisco Business 140AC Access Point

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Ideal for smaller networks, the Cisco[®] Business 140AC Access Point brings a full slate of Cisco high-performance functionality to the business environment.

Product overview

The Cisco Business 140AC Access Point delivers industry-leading wireless performance with support for the latest Wi-Fi standard, IEEE's 802.11ac Wave 2 (Figure 1). It also meets the growing flexibility requirements of wireless networks by introducing mesh technology—all while delivering a simple user experience.

The 140AC access point extends coverage and capacity to Wi-Fi clients such as smartphones, tablets, and high-performance laptops that have integrated 802.11ac Wave 1 or Wave 2 support.



Figure 1.Cisco Business 140AC Access Point

Features and benefits

By adhering to the 802.11ac Wave 2 standard, the Cisco Business 140AC 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 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 140AC Access Point delivers industry-leading performance for highly secure and reliable wireless connections, for a optimal end-user experience.

Table 1 lists the features and benefits of the Cisco Business 140AC 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, typically referred to as Single-User MIMO (SU-MIMO).
	802.11ac Wave 2 with 2x2:2 MIMO technology uses two spatial streams when operating in SU-MIMO or MU-MIMO mode, offering 867-Mbps rates for more capacity and reliability than competing access points.
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 and coverage, featuring mesh technology

The Cisco Business 140AC Access Point supports the latest 802.11ac Wave 2 standard for higher performance, greater coverage, 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 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 wireless mesh extenders, which include models that can be placed on a desktop, plugged into an AC electrical outlet, or mounted directly to a wall.

Cisco Business Mobile app

The Cisco Business 140AC 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 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 for iPhone, iPad, and Android devices.

Power over Ethernet

The Cisco Business 140AC Access Point features a single Gigabit Ethernet uplink port and is powered by Power over Ethernet (802.3af PoE standard).

Mounting

This sleek, compact access point is designed with flexible mounting options in mind. You can mount it directly on the ceiling (including T-bar rail mounting) or a wall. It is easy to install, and the mounting hardware is included.

Product specifications

Table 2 lists the specifications for the Cisco Business 140AC Access Point.

Table 2.Specifications

Item	Specification
Authentication and security	 Wi-Fi Protected Access 2 (WPA2) WPA3 is coming in a post-Frame Check Sequence (FCS) release 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: Google and Facebook
Maximum clients	• 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	• 50 • Recommended up to 25
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 in 5GHz 20-, 40-, and 80-MHz channels Dynamic Frequency Selection (DFS)
Ethernet ports	 Authentication with 802.1X or MAC filtered Dynamic VLAN or per port Traffic locally switched or tunneled back to Master AP
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)

Item	Specification	
Maximum number of	A (A regulatory domain):	K (K regulatory domain):
nonoverlapping channels	• 2.412 to 2.462 GHz; 11 channels	• 2.412 to 2.472 GHz; 13 channels
	• 5.180 to 5.320 GHz; 8 channels	• 5.180 to 5.320 GHz; 8 channels
	• 5.500 to 5.700 GHz; 8 channels	• 5.500 to 5.620 GHz; 7 channels
	(excludes 5.600 to 5.640 GHz)	• 5.745 to 5.805 GHz; 4 channels
	• 5.745 to 5.825 GHz; 5 channels	N (N regulatory domain):
	B (B regulatory domain):	• 2.412 to 2.462 GHz; 11 channels
	• 2.412 to 2.462 GHz; 11 channels	• 5.180 to 5.320 GHz; 8 channels
	• 5.180 to 5.320 GHz; 8 channels	• 5.745 to 5.825 GHz; 5 channels
	 5.500 to 5.720 GHz; 12 channels 5.745 to 5.825 GHz; 5 channels 	Q (Q regulatory domain):
	·	• 2.412 to 2.472 GHz; 13 channels
	C (C regulatory domain):	• 5.180 to 5.320 GHz; 8 channels
	• 2.412 to 2.472 GHz; 13 channels	• 5.500 to 5.700 GHz; 11 channels
	• 5.745 to 5.825 GHz; 5 channels	R (R regulatory domain):
	D (D regulatory domain):	• 2.412 to 2.472 GHz; 13 channels
	• 2.412 to 2.462 GHz; 11 channels	• 5.180 to 5.320 GHz; 8 channels
	• 5.180 to 5.320 GHz; 8 channels	• 5.660 to 5.700 GHz; 3 channels
	• 5.745 to 5.825 GHz; 5 channels	• S5.745 to 5.805 GHz; 4 channels
	E (E regulatory domain):	S (S regulatory domain):
	• 2.412 to 2.472 GHz; 13 channels	• 2.412 to 2.472 GHz; 13 channels
	• 5.180 to 5.320 GHz; 8 channels	• 5.180 to 5.320 GHz; 8 channels
	• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)	• 5.500 to 5.700 GHz; 11 channels
	F (F regulatory domain):	• 5.745 to 5.825 GHz; 5 channels
	• 2.412 to 2.472 GHz; 13 channels	T (T regulatory domain):
	• 5.745 to 5.805 GHz; 4 channels	• 2.412 to 2.462 GHz; 11 channels
	G (G regulatory domain):	• 5.280 to 5.320 GHz; 3 channels
	• 2.412 to 2.472 GHz; 13 channels	• 5.500 to 5.700 GHz; 8 channels (excludes 5.600 to 5.640 GHz)
	• 5.745 to 5.865 GHz; 7 channels	• 5.745 to 5.825 GHz; 5 channels
	H (H regulatory domain):	Z (Z regulatory domain):
	• 2.412 to 2.472 GHz; 13 channels	• 2.412 to 2.462 GHz; 11 channels
	• 5.180 to 5.320 GHz; 8 channels	• 5.180 to 5.320 GHz; 8 channels
	• 5.745 to 5.825 GHz; 5 channels	• 5.500 to 5.700 GHz; 8 channels
	I (I regulatory domain):	(excludes 5.600 to 5.640 GHz) • 5.745 to 5.825 GHz; 5 channels
	• 2.412 to 2.472 GHz; 13 channels	5.7.40 to 5.525 GHz, 5 GHammers
	• 5.180 to 5.320 GHz; 8 channels	
Note: This varies by regulatory domain. Refer to the product documentation for specific details for each regulatory domain.		
Available transmit	2.4 GHz	5 GHz
power settings		

Available transmit	2.4 GHz	5 GHz
power settings	Up to 20 dBm	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 dBi5 GHz, gain 4 dBi
Interfaces	 1x Gigabit Ethernet (10/100/1000BASE-T autosensing), Power over Ethernet (PoE) RJ-45 console port (not functional)
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): 6 x 6 x 1.3 in. (150.8 x 150.8 x 33 mm)
Weight	Access point without mounting bracket or any other accessories: 14 oz (400 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) 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
Power draw	• 8.3W (maximum, on PoE)
Mounting and physical security	Included with the access point: • Mounting bracket • Torx security screw • Ceiling rail mount clip
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)

Item	Specification
	 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)
	 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 140AC 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 <u>Cisco Ordering homepage</u>

Part number	Description
CBW140AC-x	CBW140AC 802.11ac 2x2 Wave 2 Access Point Ceiling Mount
3-CBW140AC-x	CBW140AC 802.11ac 2x2 Wave 2 Access Point Ceiling Mount - 3P
5-CBW140AC-x	CBW140AC 802.11ac 2x2 Wave 2 Access Point Ceiling Mount - 5P

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 <u>Corporate Social Responsibility</u> (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	<u>Materials</u>
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

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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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Printed in USA C78-742934-01 03/20