XE5-8 Wi-Fi 6/6E Indoor Access Point

802.11ax Five-Radio Tri-Band 8x8/4x4 High-density Access Point

QUICK LOOK:

- **Five-radio Tri-Band W-Fi 6 and 6E**

- **15.6 Gbps aggregate data rate**

- **Dual software-defined 5 GHz/6 GHz radios**

- **Dual 5 GbE uplink ports**

- **Microsoft Azure and Google G Suite integration**

WI-FI BUILT FOR THE FUTURE

The XE5-8 is a five-radio Wi-Fi 6/6E 8x8/4x4 access point (AP) designed to deliver high-density, future-proof performance for building next generation wireless networks. With five user servicing radios, the XE5-8 delivers the highest density Wi-Fi 6 solution in the industry. Wi-Fi 6E support extends the capacity of Wi-Fi into the 6 GHz band, more than tripling the wireless spectrum available. With high-speed software-defined radios, the XE5-8 enables seamless transition to Wi-Fi 6E with the ability to easily change from dual-band to tri-band (2.4 GHz, 5 GHz, 6 GHz) support when sufficient 6 GHz clients are available. The XE5-8 is fully backward compatible with existing Wi-Fi technology, enabling simultaneous support of new high speed clients, legacy clients, low-bitrate IoT devices, and more in a single wireless infrastructure.

The XE5-8 comes with Limited Lifetime Warranty providing return and repair service on the access point from date of purchase until end of life of the product.

CLOUD AND ON-PREMISES MANAGEMENT

XE5-8 operates with either Cambium Networks' XMS or cnMaestro™ management system. Choose the management system that best fits your business and use the latest technology from Cambium Networks.

cnMaestro

XMS

cnMaestro™ Essentials and X

- Fixed Wireless Broadband, Wi-Fi and Switching
- Help desk troubleshooting tools
- Cloud managed Guest Access

XMS-Cloud

- Wi-Fi and Switching
- Real-time and historical analytics
- EasyPass™ User and Device Onboarding
- Application Visibility and Control

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Access Point Specifications

Note: Some features will be included on subsequent firmware releases.

FCC Ch 1–11, 36–48, 52–64, 100–144, 149–165

ISED Ch 1–11, 36–48, 52–64, 100–144, 149–165

ETSI Ch 1–13, 32–48, 52–64, 100–144

ROW (Individual country limits may apply)
Ch 1–14, 36–48, 52–64, 100–144, 149–173

6 GHz Channels
FCC/IC/ROW Ch 1–233

EU Ch 1–93

Radios	Two: 4x4 5/6 GHz 802.11a/n/ac/ax, SW configurable to 5 or 6GHz operation
	Two: 4x4 5 GHz 802.11a/n/ac/ax, SW configurable to one 8x8 radio
	One: 4x4 2.4 GHz 802.11 b/g/n/ax
	BLE 4.1
Wi-Fi	802.11 a/b/g/n/ac Wave 2/ax
SSID Security	WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK (TKIP), WEP, Open
Ports	2 x IEEE 10/100/1000/2500/5000 Mbps Ethernet 1 x USB 3.0
Antenna	**6 GHz:** 4 dBi, Omni
	5 GHz: 5 dBi, Omni
	2.4 GHz: 5 dBi, Omni
Max EIRP	**6 GHz:** 30 dBm
	5 GHz: 32 dBm
	2.4 GHz: 31 dBm

Power	Max 59W 802.3bt powered device
Dimensions	300 mm x 300 x 58 mm (without bracket) (11.81 in x 11.81 x 2.28 in)
Weight	1.8 kg (3.97 lbs)
Security	Kensington lock slot
LEDs	Multi-color status LEDs
Ambient Operating Temperature	0ºC to 50ºC (32ºF to 122ºF)
Storage Temperature	-40ºC to 70ºC (-40ºF to 158ºF)
Humidity	95% RH non-condensing
MTBF	2,198,639 hours 25ºC 791,890 hours at 50ºC
Mount Options	Wall or ceiling, T-bar with included locking bracket, ceiling tile plate
Certifications (Compliance)	FCC, IC, CE, EN 60601-1-2, EN 60950-1, IEC 62368-1 Safety, EN 60601-1-2 Medical EMC, EN 61000-4-2/3/5 Immunity, EN 50121-1 Railway EMC, EN 50121-4 Railway EMC, IEC 61373 Railway Shock & Vibration, EN 62311 Human Safety/RF Exposure, WEEE & RoHS

Max Data Rate

Radio Type	Band	Number of Radios	Max Data Rate Per Radio	Max Data Rate Total
4x4 SW-Defined	5 or 6 GHz	2	4.804 Gbps	9.608 Gbps
4x4	5 GHz	2	2.402 Gbps	4.804 Gbps
4x4	2.4 GHz	1	1.147 Gbps	1.147 Gbps
Total		**5**		**15.559 Gbps**

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Management

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Cambium Networks cnMaestro uses a distributed intelligence architecture with cloud-first management and edge-intelligent APs that self-optimize for the RF environment. cnMaestro delivers a single pane-ofglass management for Cambium broadband fixed wireless, cnMatrix Ethernet switches, enterprise grade Wi-Fi APs and service provider residential routers.

Cambium Networks XMS leverages intelligent APs with an embedded edge controller to deliver edge services at any network density. XMS management plane is a cloud-first technology with a simple and easy-to-use interface delivering application L7 policy-based control, EasyPass BYOD secure access, and an MSP dashboard with drag-and-drop design.

	XMS Management	cnMaestro Management
Deployment	Xirrus Management System (XMS-Cloud)	cnMaestro Cloud, cnMaestro on-premises
Services	Deep Packet Inspection (DPI) Application Visibility and Control for 2,000+ apps EasyPass Access Services	Monetized guest portal with design tools
APIs	RESTful management and statistics API Location API	RESTful management and statistics API Location API Webhooks
Captive Portal	Web Page Redirect, landing page, redirect to internal or external server, landing page and authentication EasyPass, Guest Ambassador Client isolation per SSID, per network Client rate limiting per SSID Click-through authentication Microsoft Azure and Google G Suite SSO integration	Hosted on cnMaestro or hosted on site AP Redirect to HTTP/RADIUS external portal/authentication Active Directory integration, Google, Facebook, Office 365 integration Data rate, time duration, data throughput limit Server DNS logging, Hotspot 2.0 Credit Card Merchant billing, ePSK, Vouchers
Accounting	RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM	

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Network Specifications

Operational Modes	Controllerless Standalone Cloud managed cnMaestro or VM Cloud managed XMS		**Mesh**	Multi-hop, either band
WLAN	2500 clients per AP, 16 SSIDs WPA-TKIP, WPA2 AES, WPA3 SAE, WPA3 Enterprise, 802.1x, 802.11w PMF		**Channel Selection**	Multimodal channel selection with AutoChannel and AutoBand. Granular control of off-channel scan and channel selection
Captive Portal	Hosted in XMS-Cloud or cnMaestro VM On-AP hosted guest portal Redirect to HTTP/RADIUS Server DNS logging		**RF Management**	Multimodal RF optimization supporting AutoCell performed in the intelligent edge AP. Out-of-band RF spectrum analysis, radio self test network assurance, RF monitor with chn/noise/interference
Authentication Encryption	Hotspot 2.0 802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS, MAC authentication to local database or external RADIUS			Data rate pruning and minimum data rates
Accounting	RADIUS accounting, multiple AAA		**Network**	TCP connection log, NAT logging firewall, DHCP server, L2, L3 or DNS based access control, VLAN Pooling, RADIUS attribute VID VLAN per SSID per user
Scheduled WLAN	On/off by day, week, time of day		**Band Steer Load Balance**	Yes
Guest Access	EasyPass guest self-registration, guest Ambassador, ePSK or UPSK, Vouchers, Rate Limit, Splash page hosted in XMS-Cloud, cnMaestro, or on AP Client isolation per SSID, per network		**Tunnel**	L2TPv2, L2GRE, PPPoE
Data Limit	Client rate per SSID		**Network and RF Management Tools**	Wired and wireles remote packet capture, ZapD performance tool, rogue AP detection
Subscriber QoS	WMM		**Services**	NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure
Fast Roaming	802.11r, OKC, assisted roaming		**API**	RESTful management and statistics API Presence location APIs

Standards

|	
Wi-Fi Protocols	VHT MCS rates, 16/64/256/1024/4096-QAM, 20/40/80/160 MHz
	TWT, Long OFDM Symbol, Transmit beamforming, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM, OFDMA, UL/DL MU-MIMO
	IEEE 802.11 a/ac/ax/b/d/e/g/h/i/j/k/n/r/s/u/v

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Top View

Top View

Left Corner

Right Side

Back Panel
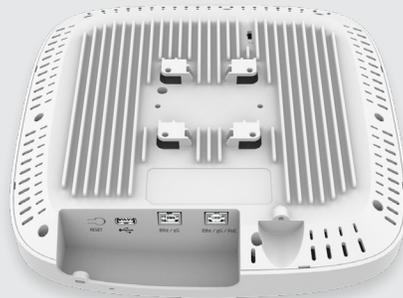
Back Panel

XE5-8 Wi-Fi 6/6E Indoor Access Point

4x4 2.4 GHz Azimuth

Max Gain (dB): 10
Scale: 10dB/Div

4x4 2.4 GHz Elevation
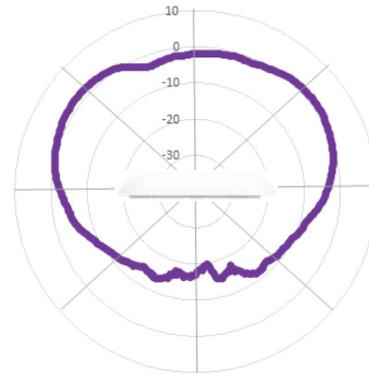
Max Gain (dB): 10
Scale: 10dB/Div

4x4 5 GHz Azimuth
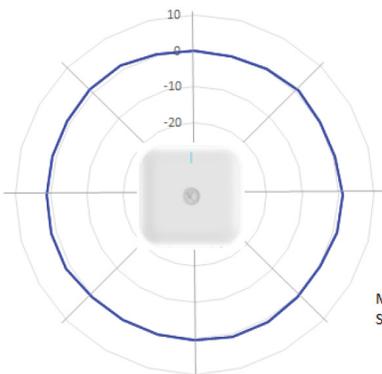
Max Gain (dB): 10
Scale: 10dB/Div

4x4 5 GHz Elevation
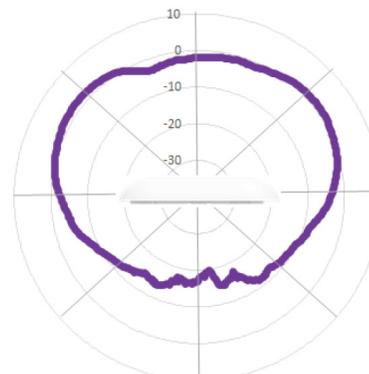
Max Gain (dB): 10
Scale: 10dB/Div

8x8 5 GHz Azimuth
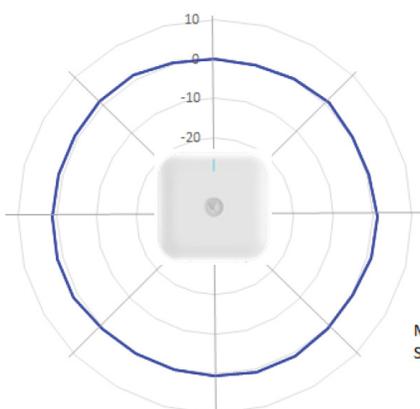
Max Gain (dB): 10
Scale: 10dB/Div

8x8 5 GHz Elevation
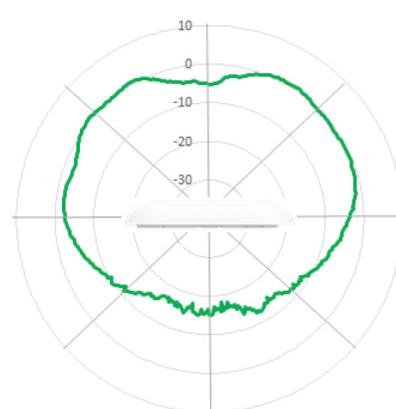
Max Gain (dB): 10
Scale: 10dB/Div

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Antenna Patterns

4x4 6 GHz Azimuth

Max Gain (dB): 10
Scale: 10dB/Div

4x4 6 GHz Elevation

Max Gain (dB): 10
Scale: 10dB/Div
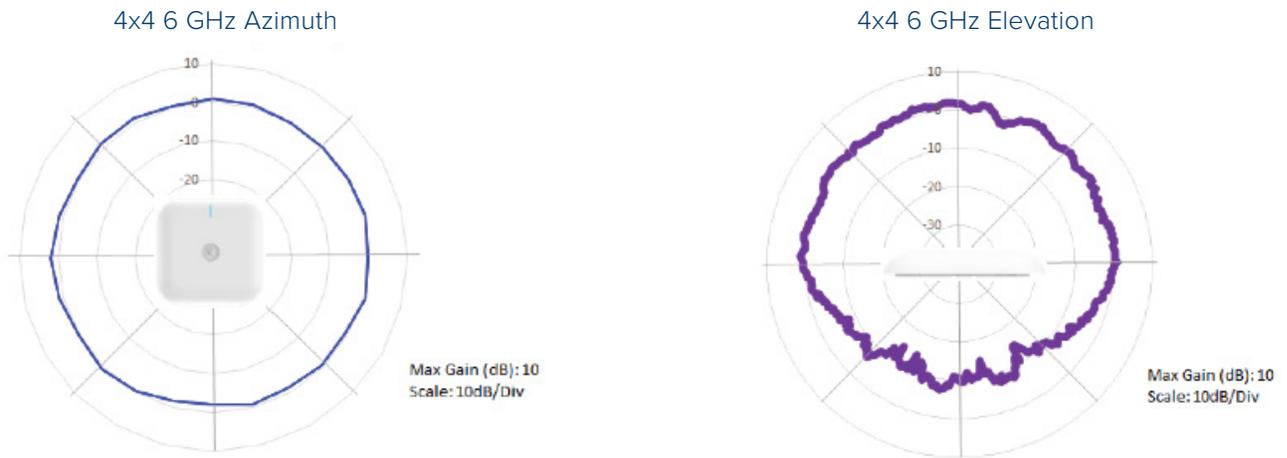
XE5-8 Ordering Information

Regulatory Model	XE5-8
XE5-8X00A00-US	Indoor 5-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 8x8/4x4, US
XE5-8X00A00-EU	Indoor 5-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 8x8/4x4, EU
XE5-8X00A00-RoW	Indoor 5-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 8x8/4x4, RoW
XE5-8X00A00-CA	Indoor 5-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 8x8/4x4, CA
N000000L142A	PoE injector, 60W, 5 GbE, Indoor, Energy Level 6 Supply
AX-E510RBKT-WW	Shock mount bracket

cnMaestro X Ordering Information

MSX-SUB-T3-1	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 1-year term
MSX-SUB-T3-3	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 3-year term
MSX-SUB-T3-5	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 5-year term
MSX-SUB-T3-M	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 1-month term

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XMS and EasyPass Subscription Information

XMSC-SUB-4R-1	XMS-Cloud 1-year subscription: 4 or 5-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-4R-3	XMS-Cloud 3-year subscription: 4 or 5-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-4R-5	XMS-Cloud 5-year subscription: 4 or 5-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
EASY-SUB-4R-1	EasyPass 1-year subscription for a 4 or 5-radio AP operating with XMS-Cloud
EASY-SUB-4R-3	EasyPass 3-year subscription for a 4 or 5-radio AP operating with XMS-Cloud
EASY-SUB-4R-5	EasyPass 5-year subscription for a 4 or 5-radio AP operating with XMS-Cloud

Cambium Care Support Information

CCADV-SUP-XE5-8-1	Cambium Care Advanced, 1-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XE5-8-3	Cambium Care Advanced, 3-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XE5-8-5	Cambium Care Advanced, 5-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCPRO-SUP-XE5-8-1	Cambium Care Pro, 1-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCPRO-SUP-XE5-8-3	Cambium Care Pro, 3-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCPRO-SUP-XE5-8-5	Cambium Care Pro, 5-year support for one XE5-8 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCADV-UPG-XE5-8-1	Cambium Care Advanced Add-on to cnMaestro X, 1-year support for one XE3-4. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XE5-8-3	Cambium Care Advanced Add-on to cnMaestro X, 3-year support for one XE3-4. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XE5-8-5	Cambium Care Advanced Add-on to cnMaestro X, 5-year support for one XE3-4. 24x7 TAC support, SW updates, and NBDS advance replacement for HW

LIMITED LIFETIME WARRANTY

Cambium Networks XE5-8 Wi-Fi 6/6E Access Point includes a limited lifetime hardware warranty for a period of 5 years after end of sale.

ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

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