

# XE3-4 Wi-Fi 6/6E Indoor Access Point

802.11ax Tri-Radio 4x4/2x2 Access Point with Software-Defined Radio

## QUICKLOOK :

- Tri-Radio/Tri-Band W-Fi 6 and 6E
- 6.6 Gbps aggregate data rate
- Software-defined 5 GHz/6 GHz radio
- 2.5 GbE and 1 GbE uplink ports
- EasyPass with Microsoft Azure and Google G Suite integration



### Designed for high density and edge services

The XE3-4 is a tri-radio Wi-Fi 6/6E 4x4/2x2 access point (AP) designed to deliver future-proof performance and value for building next generation networks. Wi-Fi 6 delivers faster and more efficient wireless network connections than previous generation Wi-Fi technologies. Wi-Fi 6E extends the capacity of Wi-Fi into the 6 GHz band, more than tripling the wireless spectrum available. With a high speed software-defined radio, the XE3-4 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) mode when sufficient 6 GHz clients are available.

The XE3-4 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 XE3-4 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

XE3-4 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™

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

#### XMS

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

## XE3-4 Wi-Fi 6/6E Indoor Access Point

### Access Point Specifications

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

<p><b>FCC</b> Ch 1–11, 36–64, 100–144, 149–165  <b>ISED</b> Ch 1–11, 36–64, 100–116, 149–165  <b>ETSI</b> Ch 1–13, 36–64, 100–140  <b>ROW</b> (Individual country limits may apply)  Ch 1–14, 36–64, 100–144, 149–173  <b>6 GHz Channels</b>  <b>FCC/IC/ROW</b> Ch 1–233  <b>EU</b> Ch 1–93</p>	<p><b>Power</b> 32W 802.3bt powered device  25.5W (802.3at) with USB, BT disabled  Typical 22W (USB disabled).</p>
<p><b>Radios</b> 5 GHz/6 GHz: 802.11a/n/ac/ax, 4x4 SW configurable  5 GHz: 802.11 a/n/ac Wave 2/ax, 2x2  2.4 GHz: 802.11 b/g/n/ax, 2x2  BLE 4.1</p>	<p><b>Dimensions</b> 215 mm x 215 x 42 (without bracket)  (8.46 in x 8.46 x 1.65 )</p>
<p><b>Wi-Fi</b> 802.11 a/b/g/n/ac Wave 2/ax</p>	<p><b>Weight</b> 900 g (1.98 lbs)</p>
<p><b>SSID Security</b> WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK (TKIP), WEP, Open</p>	<p><b>Security</b> Kensington lock slot</p>
<p><b>Ports</b> 1 x IEEE 10/100/1000/2500 Mbps Ethernet  1 x IEEE 10/100/1000 Mbps Ethernet  1 x USB 2.0</p>	<p><b>LEDs</b> Multi-color status LEDs</p>
<p><b>Antenna</b> 6 GHz: 6.29 dBi, Omni  5 GHz: 6.12 dBi, Omni  2.4 GHz: 4.85 dBi, Omni</p>	<p><b>Ambient Operating Temperature</b> 0°C to 50°C (32°F to 122°F)</p>
<p><b>Max EIRP</b> 6 GHz: 30 dBm  5 GHz: 31 dBm  2.4 GHz: 29 dBm</p>	<p><b>Storage Temperature</b> -40°C to 70°C (-40°F to 158°F)</p>
	<p><b>Humidity</b> 95% RH non-condensing</p>
	<p><b>MTBF</b> 668,759 hours 25°C  314,145 hours at 50°C</p>
	<p><b>Mount Options</b> Wall or ceiling, T-bar with included locking bracket, ceiling tile plate</p>
	<p><b>Certifications (Compliance)</b> 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 &amp; Vibration, UL 2043 Plenum, EN 62311 Human Safety/RF Exposure, WEEE &amp; RoHS</p>

### Max Data Rate

Radio Type	Band	Number of Radios	Max Data Rate
<b>4x4 SW-Defined</b>	5 or 6 GHz	1	4.804 Gbps
<b>2x2</b>	5 GHz	1	1.201 Gbps
<b>2x2</b>	2.4 GHz	1	574 Mbps
<b>Total</b>		3	6.579 Gbps

## XE3-4 Wi-Fi 6/6E Indoor Access Point

### Management

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



**Cambium Networks XMS** leverages intelligent access points (AP) with embedded edge controller to deliver edge services at any network density. The 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 architecture supports SDR to operate the XE3-4 radio in either 5 GHz 2x2+4x4 mode or 5 GHz 2x2 + 6Ghz 4x4 mode.



**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-of-glass management for Cambium broadband fixed wireless, cnMatrix Ethernet switches, enterprise-grade Wi-Fi APs and service provider residential routers.

cnMaestro management architecture supports SDR to operate the XE3-4 radio in either 5 GHz 2x2+4x4 mode or 5 GHz 2x2 + 6Ghz 4x4 mode.

	XMS Management	cnMaestro Management
<b>Deployment</b>	Xirrus Management System (XMS-Cloud)	cnMaestro Cloud, cnMaestro on-premises
<b>Services</b>	Deep Packet Inspection (DPI) Application Visibility and Control for 2,000+ apps EasyPass Access Services	Monetized guest portal with design tools
<b>APIs</b>	RESTful management and statistics API Location API	RESTful management and statistics API Location API Webhooks
<b>Captive Portal</b>	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
<b>Accounting</b>	RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM	

## XE3-4 Wi-Fi 6/6E Indoor Access Point

### Network Specifications

<b>Operational Modes</b>	Controllerless Standalone Cloud managed cnMaestro or VM Cloud managed XMS	<b>Mesh</b>	Multi-hop, either band
<b>WLAN</b>	1,500 clients, 16 SSIDs WPA-TKIP, WPA2 AES, WPA3 SAE, WPA3 Enterprise, 802.1x, 802.1w PMF	<b>Channel Selection</b>	Multimodal channel selection with AutoChannel and AutoBand. Granular control of off-channel scan and channel selection
<b>Captive Portal</b>	Hosted in XMS-Cloud or cnMaestro VM On-AP hosted guest portal Redirect to HTTP/RADIUS Server DNS logging	<b>RF Management</b>	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  Data rate pruning and minimum data rates
<b>Authentication Encryption</b>	Hotspot 2.0 802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS, MAC authentication to local database or external RADIUS	<b>Network</b>	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, LACP
<b>Accounting</b>	RADIUS accounting, multiple AAA	<b>Band Steer Load Balance</b>	Yes
<b>Scheduled WLAN</b>	On/off by day, week, time of day	<b>Tunnel</b>	L2TPv2, L2GRE, PPPoE
<b>Guest Access</b>	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	<b>Network and RF Management Tools</b>	Wired and wireless remote packet capture, ZapD performance tool, rogue AP detection
<b>Data Limit</b>	Client rate per SSID	<b>Services</b>	WIDs/WIPs, NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure, Layer 2 – layer 7 application visibility & control
<b>Subscriber QoS</b>	WMM	<b>API</b>	RESTful management and statistics API Presence location APIs
<b>Fast Roaming</b>	802.11r, OKC, assisted roaming		

### Standards

<b>Wi-Fi Protocols</b>	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

### XE3-4 Wi-Fi 6/6E Indoor Access Point



Front

Back view



Left side



Right side



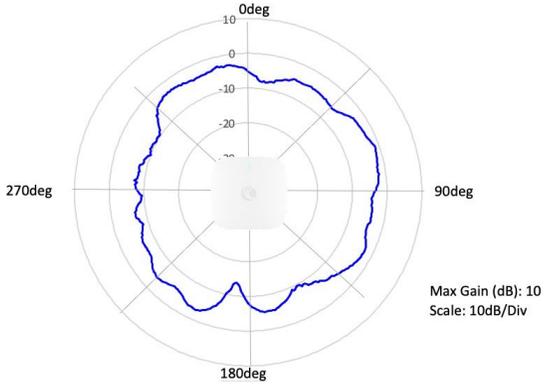
Back panel

Back panel

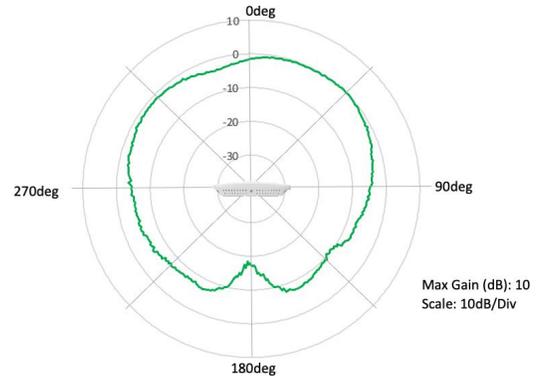
# XE3-4 Wi-Fi 6/6E Indoor Access Point

## Antenna Patterns

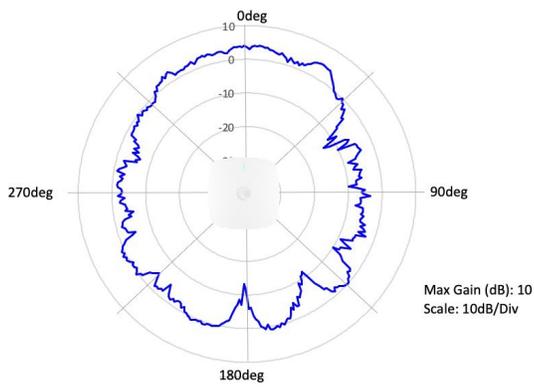
2x2 2.4 GHz Azimuth



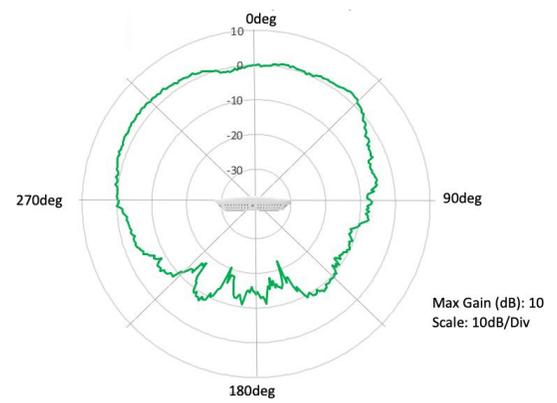
2x2 2.4 GHz Elevation



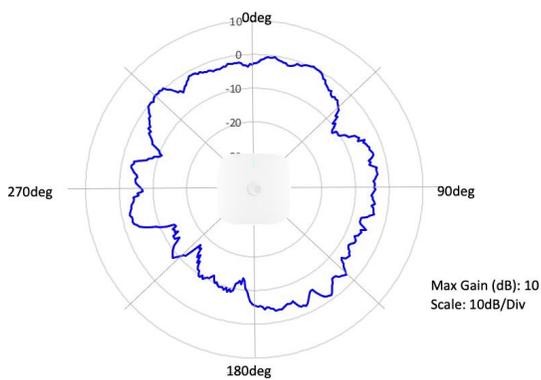
2x2 5 GHz Azimuth



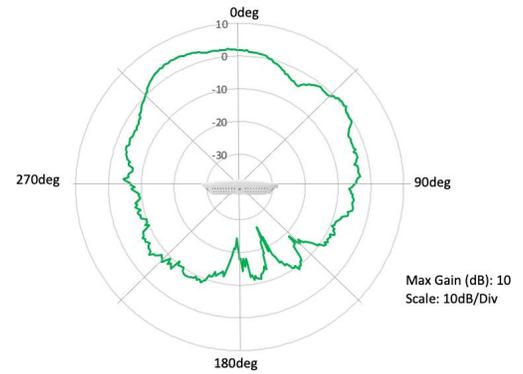
2x2 5 GHz Elevation



4x4 5 GHz Azimuth



4x4 5 GHz Elevation



## XE3-4 Wi-Fi 6/6E Indoor Access Point

### Antenna Patterns



### XE3-4 Ordering Information

<b>Regulatory Model</b>	XE3-4
<b>XE3-4X00A00-US</b>	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, US
<b>XE3-4X00A00-EU</b>	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, EU
<b>XE3-4X00A00-RW</b>	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, RW
<b>XE3-4X00A00-CA</b>	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, CA
<b>N000000L142A</b>	PoE injector, 60W, 5 GbE, Indoor, Energy Level 6 Supply
<b>AX-E510RBKT-WW</b>	Shock mount bracket

### cnMaestro X Ordering Information

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

## XE3-4 Wi-Fi 6/6E Indoor Access Point

### XMS and EasyPass Subscription Information

<b>XMSC-SUB-2R-1</b>	XMS-Cloud 1-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
<b>XMSC-SUB-2R-3</b>	XMS-Cloud 3-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
<b>XMSC-SUB-2R-5</b>	XMS-Cloud 5-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
<b>EASY-SUB-2R-1</b>	EasyPass 1-year subscription for a 2 or 3-radio AP operating with XMS-Cloud
<b>EASY-SUB-2R-3</b>	EasyPass 3-year subscription for a 2 or 3-radio AP operating with XMS-Cloud
<b>EASY-SUB-2R-5</b>	EasyPass 5-year subscription for a 2 or 3-radio AP operating with XMS-Cloud

### Cambium Care Support Information

<b>CCADV-SUP-XE3-4-1</b>	Cambium Care Advanced, 1-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
<b>CCADV-SUP-XE3-4-3</b>	Cambium Care Advanced, 3-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
<b>CCADV-SUP-XE3-4-5</b>	Cambium Care Advanced, 5-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
<b>CCPRO-SUP-XE3-4-1</b>	Cambium Care Pro, 1-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
<b>CCPRO-SUP-XE3-4-3</b>	Cambium Care Pro, 3-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
<b>CCPRO-SUP-XE3-4-5</b>	Cambium Care Pro, 5-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
<b>CCADV-UPG-XE3-4-1</b>	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
<b>CCADV-UPG-XE3-4-3</b>	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
<b>CCADV-UPG-XE3-4-5</b>	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 XE3-4 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 enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.