

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

QUICK LOOK:

- 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™

- 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

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Access Point Specifications

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

FCC Ch 1–11, 36–64, 100–144, 149–165 ISED Ch 1–11, 36–64, 100–116, 149–165

ETSI Ch 1–13, 36–64, 100–140

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

6 GHz Channels

FCC/IC/ROW Ch 1–233 **EU** Ch 1–93

Radios 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

Wi-Fi 802.11 a/b/g/n/ac Wave 2/ax

SSID WPA3, WPA2 (CCMP, AES, 802.11i), WPA2
Security Enterprise (802.1x/EAP), WPA PSK (TKIP),

WEP, Open

Ports 1 x IEEE 10/100/1000/2500 Mbps Ethernet

1 x IEEE 10/100/1000 Mbps Ethernet

1 x USB 2.0

Antenna 6 GHz: 6.29 dBi, Omni

5 GHz: 6.12 dBi, Omni **2.4 GHz:** 4.85 dBi, Omni

Max EIRP 6 GHz: 30 dBm

5 GHz: 31 dBm **2.4 GHz:** 29 dBm

Power	32W 802.3bt powered device 25.5W (802.3at) with USB, BT disabled Typical 22W (USB disabled).
Dimensions	215 mm x 215 x 42 (without bracket) (8.46 in x 8.46 x 1.65)
Weight	900 g (1.98 lbs)
Security	Kensington lock slot
LEDs	Multi-color status LEDs
Ambient Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	95% RH non-condensing
MTBF	668,759 hours 25°C 314,145 hours at 50°C
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, UL 2043 Plenum,

WEEE & RoHS

EN 62311 Human Safety/RF Exposure,

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



Management

Accounting

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+6 Ghz 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
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

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RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM



Network Spec	ifications		
Operational	Controllerless Standalone	Mesh	Multi-hop, either band
Modes	Cloud managed cnMaestro or VM Cloud managed XMS	Channel Selection	Multimodal channel selection with AutoChannel and AutoBand. Granular
WLAN	1,500 clients, 16 SSIDs WPA-TKIP, WPA2 AES, WPA3 SAE, WPA3 Enterprise, 802.1x, 802.11w PMF		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	Hotspot 2.0		Data rate pruning and minimum data rates
Encryption	802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS, MAC authentication to local database or external RADIUS	Network	TCP connection log, NAT logging firewall, DHCP server, L2, L3 or DNS based access control, VLAN Pooling, RADIUS attribute VID
Accounting	RADIUS accounting, multiple AAA		VLAN per SSID per user
Scheduled WLAN	On/off by day, week, time of day	Band Steer Load Balance	Yes
Guest	EasyPass guest self-registration, guest	Tunnel	L2TPv2, L2GRE, PPPoE
Access	Ambassador, ePSK or UPSK, Vouchers, Rate Limit, Splash page hosted in XMS-Cloud, cnMaestro, or on AP Client isolation per SSID, per network	Network and RF Management Tools	Wired and wireles remote packet capture, ZapD performance tool, rogue AP detection
Data Limit	Client rate per SSID	Services	WIDs/WIPs, NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure, Layer 2 –
Subscriber QoS	WMM		layer 7 application visibility & control
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



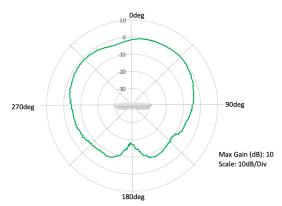




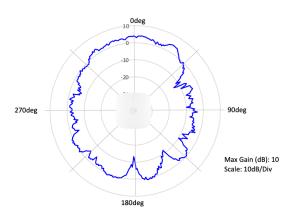
Antenna Patterns



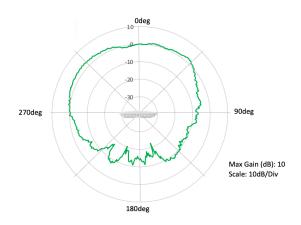
2x2 2.4 GHz Elevation



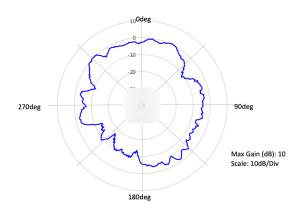
2x2 5 GHz Azimuth



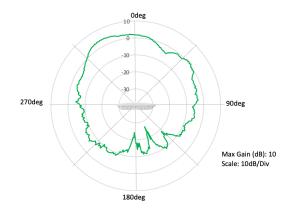
2x2 5 GHz Elevation



4x4 5 GHz Azimuth

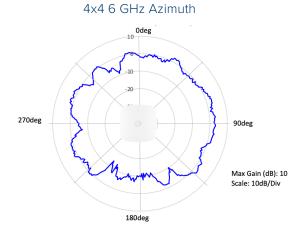


4x4 5 GHz Elevation

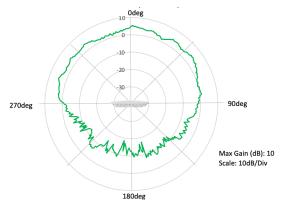




Antenna Patterns



4x4 6 GHz Elevation



XE3-4 Ordering Information

Regulatory Model	XE3-4
XE3-4X00A00-US	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, US
XE3-4X00A00-EU	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, EU
XE3-4X00A00-RW	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, RW
XE3-4X00A00-CA	Indoor Tri-Radio Wi-Fi 6/6E Access Point. SDR 802.11ax 4x4/2x2, 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 EasyPas	s Subscription Information
XMSC-SUB-2R-1	XMS-Cloud 1-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-2R-3	XMS-Cloud 3-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-2R-5	XMS-Cloud 5-year subscription: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
EASY-SUB-2R-1	EasyPass 1-year subscription for a 2 or 3-radio AP operating with XMS-Cloud
EASY-SUB-2R-3	EasyPass 3-year subscription for a 2 or 3-radio AP operating with XMS-Cloud
EASY-SUB-2R-5	EasyPass 5-year subscription for a 2 or 3-radio AP operating with XMS-Cloud
Cambium Care Su	pport Information
CCADV-SUP-XE3-4-1	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
CCADV-SUP-XE3-4-3	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
CCADV-SUP-XE3-4-3 CCADV-SUP-XE3-4-5	
	and NBD advance replacement for HW Cambium Care Advanced, 5-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support, SW updates,
CCADV-SUP-XE3-4-5	and NBD advance replacement for HW 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
CCADV-SUP-XE3-4-5 CCPRO-SUP-XE3-4-1	and NBD advance replacement for HW 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 Cambium Care Pro, 1-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCADV-SUP-XE3-4-5 CCPRO-SUP-XE3-4-3	and NBD advance replacement for HW 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 Cambium Care Pro, 1-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates Cambium Care Pro, 3-year support for one XE3-4 Wi-Fi 6/6E AP. 24x7 TAC support and SW updates

LIMITED LIFETIME WARRANTY

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

SW updates, and NBDS advance replacement for HW

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

CCADV-UPG-XE3-4-3

CCADV-UPG-XE3-4-5

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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