

802.11ax Tri-Radio 4x4/2x2 Access Point with N-type antenna connectors

#### QUICK LOOK:

- Tri-Radio/Tri-Band WiFi 6 and 6E
- Software-defined 5 GHz/6 GHz radio
- AFC compliant for 6 GHz operation\*
- 6.6 Gbps aggregate data rate
- 2.5 GbE and 1 GbE uplink ports
- Manage by cnMaestro, XMS-Cloud, Swift



#### Outdoor high-density, future proof Wi-Fi

The XE3-4TN is an outdoor rated 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.

## Software-defined radio provides flexibility

The software-defined radio (SDR) provides flexibility to match the capability of the connected clients and to match the regulatory limits in the 6 GHz band. Where 6 GHz outdoor is not allowed, operate the XE3-4TN in dual 5 GHz mode to expand capacity in the allowed 5 GHz channels. Where 6 GHz outdoor is allowed, and Wi-Fi clients support it, use tri-radio mode to dramatically increase density in a reduced RF interference environment.





XMS-Cloud

cnMaestro™ X

The XE3-4TN comes with industry leading three-year hardware warranty providing return and repair service on the access point and multiple tiers of customer support from the business day to extended hours and advanced replacement.

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<sup>\*</sup> Automatic frequency coordination (AFC) is under development and will be a cloud service that will assign operating channel and power. AFC is required for 6 GHz operation outdoors.



#### **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, 149-177

**6 GHz Channels** 

FCC/IC/ROW Ch 1-233

**EU** Ch 1–93

Note: FCC, IC, EU DFS channels not supported in first release

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, GPS receiver

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

**SSID** WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise

**Security** (802.1x/EAP), WPA PSK (TKIP), WEP, Open

Max PHY 5/6 GHz radio 4,804 Mbps Rate 5 GHz radio 1,201 Mbps

**2.4 GHz radio** 573.5Mbps

Ports 1 x IEEE 100/1000/2500 Mbps Ethernet

 $1 \times IEEE 10/100/1000 Mbps Ethernet with PoE out$ 

Max EIRP 5/6 GHz 36 dBm/TBD

**5 GHz** 36 dBm **2.4 GHz** 36 dBm

EIRP may be limited by country regulations

Power	Typical power 25W (802.3at)  Maximum power 62W with PoE out enabled and sourcing 30W
Dimensions	220mm x 200mm x 86mm (8.66 in x 7.87 in x 3.39 in)
Weight	2,920 g (6.44 lbs)
Security	Kensington lock slot
LEDs	Multi-color status LEDs
Ambient Operation Temperature	-40°C to 65°C (-40°F to 149°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	95% RH non-condensing
Certifications (Compliance)	WiFi Alliance 80211a/b/g/n/ac/ax, PP2.0 FCC, ETSI, CE, IC, IEC60950, IEC62368, EN61373, EN50121, EN 303 413 (GPS), IEC 60068-2-5 (solar radiation), IEC 60529 (Ingress Protection)



### **Network Specifications**

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

Operational Modes	Standalone Cloud managed cnMaestro or VM Cloud managed XMS
WLAN	1500 clients, 16 SSIDs WPA-TKIP, WPA2 AES, 802.1x 802.11w PMF
Authentication Encryption	Hotspot 2.0, 802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS, MAC authentication local database or RADIUS
Scheduled WLAN	On/off by day, week, time of day
Guest Access	EasyPass guest self-registration, guest Ambassador, ePSK, Vouchers, Rate Limit, Splash page hosted on AP or cnMaestro Client isolation per SSID, per network
Data Limit	Client rate limit per SSID
Subscriber QoS	WMM
Fast Roaming	802.11r, OKC, Enhanced roaming
Mesh	Multi-hop, either band
Channel Selection	Multi-modal channel selection with AutoChannel, AutoBand (XMS) and autotune

RF Management	Multi-Modal RF optimization supporting AutoCell (XMS) and AutoRF (cnMaestro) performed in the intelligent edge AP. Out of band RF spectrum analysis, radio self test network assurance (XMS), RF monitor with chn/noise/interference
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
Band Steer Load Balance	Yes
Tunnel	L2TP, L2oGRE, PPPoE
Network and RF Management Tools	Wired and wireles remote packet capture, auto logging, ZapD performance tool, rogue AP detection
Services	WIDs/WIPs, NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure, Layer 2 – layer 7 application visibility & control,
АРІ	RESTful management and statistics API Presence location APIs

## Standards

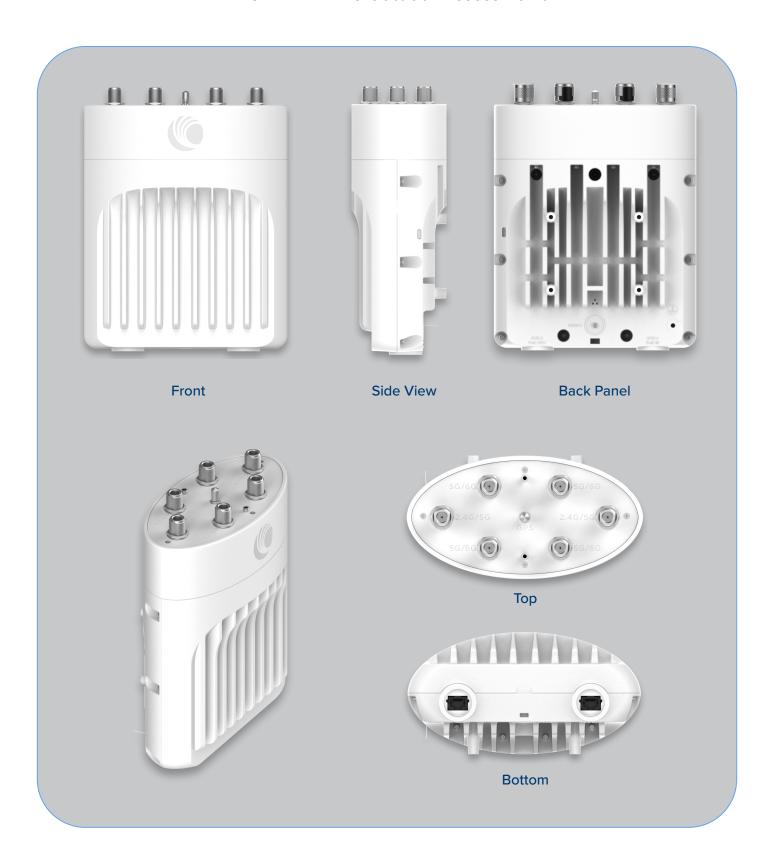
## Wi-Fi Protocols

 $802.11a/b/g/n/ac\ wave\ 2,\ 802.11ax,\ up\ to\ 4x4.\ 20/40/80/160\ MHz,\ MU-OFDMA,\ MU-MIMO,\ TWT,\ MIMO,\ VHT\ MCS\ rates,\ 16/64/256/1024/4096-QAM,\ HT20/40/80/160\ MHz$ 

Transmit Beam steering, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM

IEEE 802.11d/e/h/i/k/r/u/v/w







## XE3-4TN Radio Ordering Information

XE3-4T	Regulatory Model
XE3-4TN0A00-US	XE3-4TN Outdoor Wi-Fi 6E 4x4 SDR Access Point, 2.5 GbE, US
XE3-4TN0A00-EU	XE3-4TN Outdoor Wi-Fi 6E 4x4 SDR Access Point, 2.5 GbE, EU
XE3-4TN0A00-RW	XE3-4TN Outdoor Wi-Fi 6E 4x4 SDR Access Point, 2.5 GbE, 6 GHz radio disabled, RW
XE3-4TN0A06-RW	XE3-4TN Outdoor Wi-Fi 6E 4x4 SDR Access Point, 2.5 GbE, 6 GHz radio enabled, RW
XE3-4TN0A00-CA	XE3-4TN Outdoor Wi-Fi 6E 4x4 SDR Access Point, 2.5 GbE, CA
N000000L142A	N00000L142A PoE injector, 60W, 5 GbE, Indoor, Energy Level 6 Supply

Antenna Ordering Guide					
	2.4 GHz 2x2	5 GHz 2x2	2.4/5 GHz 2x2	5 GHz 4x4	6 GHz 4x4
Antenna ports 2.4 GHz/5 GHz	ANT-D15-2X2-2G ANT-D90-2X2-01 ANT-OM-1X1-05	ANT-D15-2X2-5G ANT-D90-2X2-01 ANT-OM-1X1-05	ANT-OM-1X1-05 ANT-D90-2X2-01	N/A	N/A
Antenna ports 5 GHz/6 GHz	N/A	N/A	N/A	ANT-D35-4X4-01 ANT-OM-1X1-05 ANT-D60-4X4-01	ANT-D35-4X4-01 ANT-OM-1X1-05 ANT-D60-4X4-01

## **Antenna Ordering Information**

ANT-OM-1X1-05	Tri-Band 2.4 GHz/5 GHz/6 GHz, 5 dBi, omni-directional 1x1 antenna with N-male connector
ANT-D35-4X4-01	Dual band 5 GHz/6 GHz, 13 dBi, 35° beamwidth 4x4 antenna with N-female connectors, bracket included, cables sold separately
ANT-D15-2X2-2G	2.4 GHz, 18 dBi, 15°, 2x2 panel antenna with N-female connectors, cables sold separately
ANT-D15-2X2-5G	5 GHz, 18 dBi, 15°,2x2 panel antenna with N-female connector for XH2-120. Cables sold separately
ANT-D90-2X2-01	2.4 GHz/5 GHz, 6/7 dBi 90° 2x2 panel antenna N-female connectors. Cables sold separately
ANT-GPS-01	GPS antenna
ANT-CB-10MM-03	Antenna cable N-type M to M, LMR400, 3m, qty 1 cable
ANT-CB-10MM-04	Antenna cable N-type M straight to N-type M Right Angle-LMR400, 3m, Qty 1 cable

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cnMaestro X Ordering Information		
MSX-SUB-XE3-4TN-1	cnMaestro X for one XE3-4TN AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support. 1-year subscription	
MSX-SUB-XE3-4TN-3	cnMaestro X for one XE3-4TN AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support. 3-year subscription	
MSX-SUB-XE3-4TN-5	cnMaestro X for one XE3-4TN AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support. 5-year subscription	

XMS and EasyPass	Ordering Information
XMSC-SUB-2R-1	XMS-Cloud 1-year subscription: 2 or 3-radio APs 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 APs 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 APs with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-EDU-SUB-2R-1	XMS-Cloud 1-year subscription for Education: 2 or 3-radio APs with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-EDU-SUB-2R-3	XMS-Cloud 3-year subscription for Education: 2 or 3-radio APs with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-EDU-SUB-2R-5	XMS-Cloud 5-year subscription for Education: 2 or 3-radio APs with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-MSP-SUB-2R-1	XMS-Cloud 1-year subscription for MSP: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-MSP-SUB-2R-3	XMS-Cloud 1-year subscription for MSP: 2 or 3-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-MSP-SUB-2R-5	XMS-Cloud 1-year subscription for MSP: 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 APs operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-3	EasyPass 3-year subscription for a 2 or 3-radio APs operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-5	EasyPass 5-year subscription for a 2 or 3-radio APs operating with XMS-Cloud or XMS-Enterprise

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

#### LIMITED WARRANTY

Cambium Networks XE3-4TN Wi-Fi 6 Access Point includes a 3-year hardware warranty.

#### **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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