

802.11ax Dual-Radio Indoor Access Point

QUICK LOOK:

- Dual Radio Wi-Fi 6
- 5 GHz (2x2), 2.4 GHz (2x2)
- 1 GbE RJ45 interface
- Managed by cnMaestro[™], Swift
- Limited lifetime warranty





Back panel with mounting bracket

Value-Tier Wi-Fi for any market

Cambium Networks XV2-21X Wi-Fi 6 Indoor access point delivers a high-performance to price ratio attractive to any market.

The XV2-21X can be adopted and managed by any of the Cambium Networks management systems, cnMaestro™ Cloud, cnMaestro™ X, cnMaestro™ onpremises, or Swift app-based management. Choose the management type you need, and change it at any time. Unlike other value-tier access points, the XV2-21X is never locked into just one management selection.

Designed for fast installation

The XV2-21X offers multiple installation methods included in the same shipping box. Mount the AP to a ceiling tile using the included steel plate, mount to an existing junction box with 83mm center-to-center holes, twist lock the AP onto a 36mm, 24mm and 14mm T-bar, or simply mount it to any flat surface using the included wall anchors. No accessory brackets are needed.

©2023 Cambium Networks, Inc. 1 cambiumnetworks.com



Access Point Specifications

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

FCC Ch 1-11, 36-48, 100-144, 149-165

ISED Ch 1–11, 36–48, 100–116, 149–165

ETSI Ch 1–13, 36–64, 100–140

ROW Individual country limits may apply. Please contact sales

for country specific regulations.

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

Radios 5 GHz 802.11 a/n/ac Wave 2/ax, 2x2:2

2.4 GHz 802.11 b/g/n/ax, 2x2:2

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

SSID WPA3-SAE, WPA3-Enterprise, WPA2 (CCMP, AES,

Security 802.11i), WPA2 Enterprise (802.1x/EAP), WEP, Open

Max PHY 5 GHz radio 2402 Mbps Rate 2.4 GHz radio 573.5Mbps

Ports 1 x IEEE 10/100/1000 Mbps

Antenna 5 GHz 6 dBi

2.4 GHz 5 dBi

Max EIRP 5 GHz 33 dBm

2.4 GHz 32 dBm

Power	Typical 11W, 802.3af powered device	
Dimensions	155 mm x 155 mm x 37 mm (6.1 in x 6.1 in x 1.46 in) With Bracket: 155 x 155 x 46 mm (6.1 x 6.1 x 1.81 in)	
Weight	475g (1.05 lbs)	
LEDs	Multi-color status LEDs, dimmable, on/off	
Ambient Operation 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	831,902 hours at 50°C ambient	
Mount Options	Wall or ceiling, T-bar with included locking bracket, ceiling tile plate	
Certifications (Compliance)	Passpoint 3.0, 802.11 a/b/e/g/i/k/n/r/u/v/w/ac/ax, PP2.0 FCC, IC, ETSI, CE, EN 60601-1-2, IEC60950,	

IEC62368, UL2043, EN 61373



Network Specifications

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

Operational Modes	Controller-less standalone Cloud-managed cnMaestro, VM	RF Man
WLAN	16 WLAN profiles per radio 128 clients per radio, 16 SSIDs, WPA-TKIP, WPA2 AES, 802.1x 802.11w PMF	Netv
Guest Access/ Captive Portal	cnMaestro, On-AP hosted guest portal Social login, Voucher based login, SMS gateway, Payment gateway support.	
	Supports radius based authentication. cnMaestro API support for external captive portal integration.	Band
Authentication	Hotspot 2.0, 802.1x EAP-SIM/AKA,	
Encryption	EAP-PEAP, EAP-TTLS, EAP-TLS, MAC Authentication local database or RADIUS	Netv
Scheduled WLAN	On/off by day, week, time of day	Netv RF M Tool
Data Limit	Client bitrate/time/throughput limit per SSID	Serv
Subscriber QoS	WMM	
Fast Roaming	802.11r, OKC, cnMaestro assisted roam	
Mesh	Multi-hop, either band	API
Channel Selection	Multi-modal channel selection with AutoChannel and autotune (cnMaestro)	IP

RF Management	Multi-Modal RF optimization supporting AutoRF (cnMaestro) performed in the intelligent edge AP. Out of band RF spectrum analysis, 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	L2TPv2, L2GRE, PPPoE
Network Tools	Wired and wireless remote packet capture, logging, ZapD
Network and RF Management Tools	Wired and wireles remote packet capture, ZapD performance tool, rogue AP detection
Services	L2-L7 application visibility & control, WiFi Calling control, WIDs/WIPs, NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure
АРІ	RESTful management and statistics API Presence location APIs
IP	IPv4, IPv6

Standards	
Wi-Fi Protocols	VHT MCS rates, 16/64/256/1024-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/k/n/r/u/v



Management



To serve a growing market for advanced management and services functionality, Cambium Networks offers cnMaestro™ in two different management tiers:

cnMaestro Essentials

License-free management that delivers a disruptive Total Cost of Ownership (TCO) for organizations of all sizes.

cnMaestro X

Paid subscription that includes:

- Advanced device management capabilities.
- Cambium Care Pro for 24x7 technical support.
- Accelerated access to L2 engineers and regular software updates.
- Upgrades for advanced features.

For More information, please visit:

cambiumnetworks.com/products/software/cnmaestro-essentials

cambiumnetworks.com/products/advanced-services/cnmaestro-x





Front Panel



Front Oblique



Back Panel



Bottom / Ports



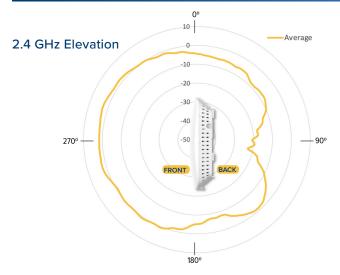
Front Panel with Mounting Bracket

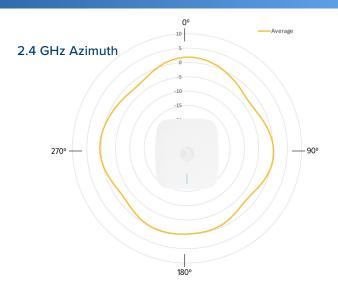


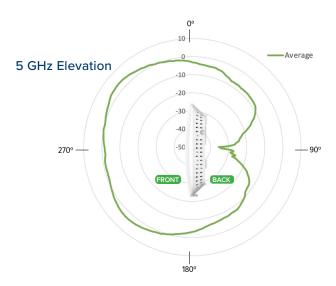
Back Panel with Mounting Bracket



Antenna Patterns







5 GHz Azimuth 5 -5 -10 -15 -15 -90°
180°

2.4 GHz Receive Sensitivity (dBm) Per Chain			
HT20		HT40	
MCS0	-95.5	MCS0	-93
MCS7	-76.5	MCS7	-74
HE20		HE40	
MCS0	-95.5	MCS0	-92.5
MCS7	-76.5	MCS7	-73.5

2.4 GHz TX Power Target	
Rate	Pout (dBm)
MCS0 HT20	27
MCS7 HT20	25
MCS8 VHT20	25
MCS9 VHT40	24
MCS11 HE40	23

5 GHz Receive Sensitivity (dBm) Per Chain				
VHT20		VHT40	VHT80	VHT160
MCS0	-95.5	MCS0 -94	MCS0 -90	MCS0 -87.5
MCS7	-77	MCS7 -74	MCS7 -71.5	MCS7 -69
HE20		HE40	HE80	HE160
MCS0	-95.5	MCS0 -93.5	MCS0 -90.5	MCS8 -65
MCS7	-76.5	MCS7 -74	MCS7 -71.5	MCS11 -57

5 GHz TX Power Target	
Rate	Pout (dBm)
MCS0 VHT20	27
MCS7 VHT20	24
MCS0 VHT40, VHT80	27, 27
MCS7 VHT40, VHT80	24, 24
MCS11, HE20, HE40, HE80, HE160	22, 22, 22, 21
MCS7 VHT40, VHT80	24, 24



Cambium Ordering Information

Regulatory Model XV2-21X

XV2-21X0A00-US XV2-21X Indoor Dual radio WiFi 6 AP, 2x2, GbE, US

XV2-21X0A00-EU XV2-21X Indoor Dual radio WiFi 6 AP, 2x2, GbE, EU

XV2-21X0A00-RW XV2-21X Indoor Dual radio WiFi 6 AP, 2x2, GbE, RW

XV2-21X0A00-CA XV2-21X Indoor Dual radio WiFi 6 AP, 2x2, GbE, CA

N000000L142A N000000L142A PoE injector, 60W, 5 GbE, Indoor, Energy Level 6 Supply

N000000L034B PoE, 30.5W, 56V, GbE DC Injector, Indoor, Energy Level 6 Supply, accepts C5 connector

N000900L017A PoE, 15.4W, 56V, GbE DC Injector, Indoor, Energy Level 6 Supply, accepts C5 connector

XA-DROPTILE15 Recessed ceiling tile Installation Kit for 15mm T-bar, 20mm drop extension. 5 Pack

XA-DROPTILE24 Recessed ceiling tile Installation Kit for 24mm T-bar, 20mm drop extension. 5 Pack

AX-E510RBKT-WW Shock mount bracket

cnMaestro X Ordering Information

MSX-SUB-XV2-21X-1 cnMaestro X for one XV2-21X AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support.

1-year subscription

MSX-SUB-XV2-21X-3 cnMaestro X for one XV2-21X AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support.

3-year subscription

MSX-SUB-XV2-21X-5 cnMaestro X for one XV2-21X AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support.

5-year subscription



Cambium Care Ordering Information		
CCADV-SUP-XV2-21X-1	Cambium Care Advanced, 1-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCADV-SUP-XV2-21X-3	Cambium Care Advanced, 1-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCADV-SUP-XV2-21X-5	Cambium Care Advanced, 3-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCPRO-SUP-XV2-21X-1	Cambium Care Pro, 1-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support and SW updates	
CCPRO-SUP-XV2-21X-3	Cambium Care Pro, 3-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support and SW updates	
CCPRO-SUP-XV2-21X-5	Cambium Care Pro, 5-year support for one XV2-21X Wi-Fi 6/6E AP. 24x7 TAC support and SW updates	
CCADV-UPG-XV2-21X-1	Cambium Care Advanced Add-on to cnMaestro X, 1-year support for one XV2-21X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW	
CCADV-UPG-XV2-21X-3	Cambium Care Advanced Add-on to cnMaestro X, 3-year support for one XV2-21X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW	
CCADV-UPG-XV2-21X-5	Cambium Care Advanced Add-on to cnMaestro X, 5-year support for one XV2-21X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW	

LIMITED WARRANTY

Cambium Networks XV2-21X Wi-Fi 6 Access Point includes a limited 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.

cambiumnetworks.com