

# 802.11ax Dual-Radio 2x2 Access Point

#### QUICK LOOK:

- Dual radios, 2x2
- 2.5 GbE uplink port, RJ45
- 1.77 Gbps aggregate data rate
- Application policy control
- EasyPass with Microsoft Azure and Google G Suite integration



#### WI-FI 6 DESIGNED FOR MOBILE DEVICES AND IOT

The XV2-2 is a dual-radio Wi-Fi 6 access point (AP) designed to deliver next generation networks with edge services at a value-based price. Wi-Fi 6 technology delivers higher network speeds and enables more connected devices at higher packet quality. Wi-Fi 6 brings a deterministic model to the radio frequency (RF) layer where the AP controls the client connections, including when to sleep, when to wake and how to transmit and receive packets. The XV2-2 is fully backward compatible with existing Wi-Fi technology and enables a massive growth of low power, low-bitrate IoT devices to add infrastructure intelligence into any market.

XV2-2 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**

XV2-2 continues the enterprise network convergence with edge-intelligent AP managed by application-intelligent Cambium Networks XMS or cnMaestro™ management system. Choose the management system that best fits your business and use the latest technology from Cambium Networks.



### **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, 149-165

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

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

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), Open

Max PHY 2.4 GHz radio: 573.5Mbps Rate 5 GHz radio: 1,201 Mbps

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

Auto sensing MDIX

Antenna 2.4/5 GHz: 5 dBi, Omni

Max EIRP 2.4 GHz: 30 dBm

**5 GHz:** 30 dBm



Power	Max power 18 W, 802.3at powered device
Dimensions	200 mm x 200 mm x 50 mm (7.87 in x 7.87 in x 1.97 in)
Weight	800 g (1.76 lbs)
Security	Kensington lock slot
LEDs	Multi-color status LEDs
Ambient Operation temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	95% RH non-condensing
Mount Options	Wall or ceiling, T-bar with included locking bracket, ceiling tile plate
Certifications (Compliance)	Wi-Fi Alliance 802.11 a/b/g/n/ac/ax, PP2.0, FCC, IC, CE, EN 60601-1-2, EN 60950-1, IEC 62368-1 Safety, EN 60601-1-2 Medical, EN 61000-4-2/3/5 Immunity, EN 50121-1 Railway EMC, EN 50121-4 Railway Immunity, IEC 61373 Railway Shock & Vibration, UL 2043 Plenum,

RoHS

EN 62311 Human Safety/RF Exposure, WEEE &



#### Management

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



**Cambium 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 architecture supports software-defined radios (SDR) to operate the XV2-2 radio in either single 5 GHz 8x8 or dual 5 GHz 4x4.

**Cambium 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 is included with the price of the equipment.

	Cambium XMS Management	Cambium cnMaestro Management
Deployment	Xirrus Management System (XMS-Cloud)	cnMaestro Cloud, cnMaestro on-premises, Standalone AP
Services	Deep Packet Inspection (DPI) Application Visibility and Control EasyPass Access Service	Monetized, cloud-managed 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  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 On-AP hosted guest portal 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/Passpoint 2.0

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



# **Network Specifications**

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

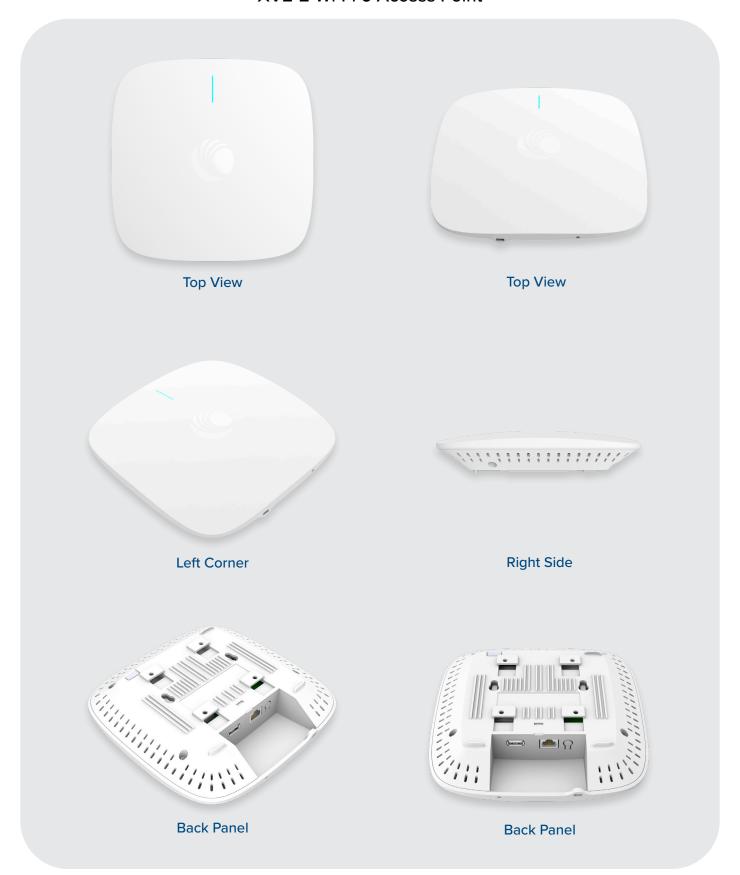
Operational Modes	Standalone Cloud managed cnMaestro or VM Cloud managed XMS
WLAN	512 clients, 16 SSIDs WPA3, WPA-TKIP, WPA2 AES, 802.1x 802.11w PMF
Captive Portal	Hosted on cnMaestro or External On-AP hosted guest portal Redirect to HTTP/RADIUS Server DNS logging
Authentication Encryption	802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS MAC authentication to local database or external 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 bitrate/time/throughput limit per SSID
Subscriber QoS	WMM
Fast Roaming	802.11r, OKC, Enhanced roaming

Mesh	Multi-hop, either band
Channel Selection	Multimodal channel selection with AutoChannel and AutoBand. Granular control of off-channel scan and channel selection
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 Data rate pruning and minimum data rates
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	NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure

### **Standards**

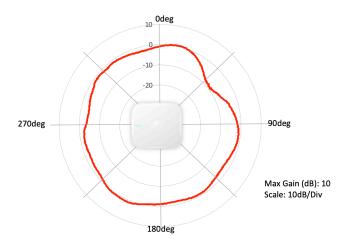
Wi-Fi Protocols	HT MCS rates, 16/64/256/1024-QAM, 20/40/80 MHz	
	TWT, Long OFDM Symbol, Transmit beamforming, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM, OFDMA, UL/DL MU-MIMO	
	IEEE 802.11 a/ac/ax/b/d/e/g/h/i/k/n/r/u/v	







### Antenna Patterns



2.4 GHz Azimuth

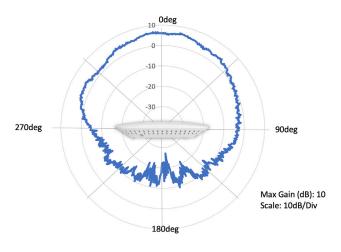


270deg

90deg

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

2.4 GHz Elevation



5 GHz Elevation



Cambium Ordering	Information
XV2-2X00A00-US	XV2-2 Dual-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 2x2, US
XV2-2X00A00-CA	XV2-2 Dual-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 2x2, CA
XV2-2X00A00-EU	XV2-2 Dual-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 2x2, EU
XV2-2X00A00-RW	XV2-2 Dual-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 2x2, RW
XMSC-SUB-2R-1	XMS-Cloud 1-year subscription: 2-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-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-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-radio AP operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-3	EasyPass 3-year subscription for a 2-radio AP operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-5	EasyPass 5-year subscription for a 2-radio AP operating with XMS-Cloud or XMS-Enterprise
CCADV-SUP-XV2-2-1	Cambium Care Advanced, 1-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-2-3	Cambium Care Advanced, 3-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-2-5	Cambium Care Advanced, 5-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCPRO-SUP-XV2-2-1	Cambium Care Pro, 1-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-2-3	Cambium Care Pro, 3-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-2-5	Cambium Care Pro, 5-year support for one XV2-2 Wi-Fi 6 AP. 24x7 TAC support and SW updates



Cambium Ordering Information	
N000000L142A	PoE injector, 60 W, 5 GbE, Indoor, Energy Level 6 Supply
N000900L031A	Cable UL Power Supply Cord Set, 720 mm, US
N000900L032A	Cable UL Power Supply Cord Set, 720 mm, US
N000900L033A	Cable UL Power Supply Cord Set, 720 mm, UK
N000900L034A	Cable UL Power Supply Cord Set, 720 mm, BR
N000900L011A	Cable UL Power Supply Cord Set, 720 mm, ANZ
N000900L012A	Cable UL Power Supply Cord Set, 720 mm, IN
N000900L013A	Cable UL Power Supply Cord Set, 720 mm, AR
N000900L015A	Cable UL Power Supply Cord Set, 720 mm, CN

#### 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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