

802.11ax, Dual-radio, 2x2, with Multi-Function Ethernet Ports

### QUICK LOOK:

Cambium Networks Wi-Fi 6 wall plate access points (AP) put personal Wi-Fi in the room where people and devices connect. Designed for discreet installation on a flat wall surface or over a wiring box.

- Wallplate 802.11ax, 2x2
- 3 x GbE Ethernet, one with PoE out
- RJ45 electrical pass-through ports
- BLE/Zigbee/Thread/Matter
- Limited Lifetime Warranty



#### **Cloud-Managed Access**

cnMaestro X is a simple, yet sophisticated cloud-first, next generation network management solution for Cambium Networks wireless and wired solutions. cnMaestro X offers elastic scalability and singlepane-of-glass management to deliver secure, end-to-end network and wireless lifecycle management with zero-touch provisioning, monitoring and troubleshooting capabilities. It simplifies operations and ongoing maintenance.

- Single console for your entire Cambium network Wi-Fi, Switching, Fixed Wireless
- Simple and easy-to-navigate user interface for fast time-to-productivity
- Powerful troubleshooting tools for drill down and rapid problem resolution
- Flexible integration via APIs and Webhooks for third party extensibility and customization
- Includes Cambium Care Pro software support with 24x7 L2 engineer access and all software updates for cnMaestro and managed devices.

For more details visit:

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



### **Do-Not-Disturb Hotel Design**

Hotel guests connect to Wi-Fi before turning on the TV. Wi-Fi is a must-have to stay connected with coworkers, family and social media. With the XV2-22H wall plate AP, the guest will be delighted with a perfect connection to all their devices. Customize the cloud-managed guest access with a fully configurable cloud portal with templates, point and click interface, or HTML CSS.

#### Designed for fast installation

XV2-22H install quickly over a standard wiring box, or to other boxes and surfaces using the optional mounting adapters. XV2-22H has three gigabit Ethernet ports. All ports support 802.1Q VLANs, IGMP, switched virtual interface layer 3 routing, DHCP, and firewall. Deliver 10 watts of operating power to an external device such as a VoIP phone, an in-room IoT hub or even another AP. VLAN and IP segmentation allows secure connections to a TV set-top box, laptop, printer, or any networked device.

#### **IoT Ready**

Integrated 802.15.4 multi-functional radio supports either BLE, Zigbee, or Thread. Easily integrate with popular Zigbee based door access control systems or temperature control or enable BLE for close point of presence location services.



### **Access Point Specifications**

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

US-FCC ISED Canada	Ch 1–11, 36–64, 100–144, 149–165 Ch 1–11, 36–64, 100–116, 149–165	Max EIRP	<b>2.4 GHz:</b> 30 dBm <b>5 GHz:</b> 28 dBm (EIRP limited by country regulations)
EU-ETSI ROW	Ch 1–13, 36–64, 100–140 Ch 1–13, 36–64, 100–144, 149–177 Individual country limits apply. Please contact sales for country specific regulations .	WLAN	16 WLAN profiles per radio 128 clients per radio
		Power	802.3af or 802.3at powered device Typical load, no power out: 10W Typical load, with 10W power out: 20W
Radios	1 x 5 GHz radio (802.11ax Wi-Fi 6), 2x2:2 1 x 2.4 GHz 802.11ax Wi-Fi 6), 2x2:2 1 x 802.15.4 or 1 x 802.15.1 IoT transceiver, multi-protocol SU-MIMO / MU-MIMO: 2 streams	MTBF	3,648,451 hours @ 25°C 2,125,972 hours @ 40°C
		Dimensions	160 mm x 105 mm x 32 mm (6.3 in x 4.1 in x 1.26 in)
Wi-Fi	802.11 ax Wi-Fi 6	Weight	417 g (0.92 lb)
	WPA3-SAE, WPA3-Enterprise, WPA2 (802.11i),	Security	Kensington lock slot, secure bracket
SSID Security	WPA2 AES, WPA2 Enterprise (802.1x/EAP), WPA PSK, Open	LEDs	Tri-color status LEDs
Max PHY Rate	2.4 GHz radio: 574 Mbps 5 GHz radio: 2402 Mbps	Ambient Operation	0°C to 40°C (32°F to 104°F)
Fals a mark	1 × GE WAN	Temperature	
Ethernet	2 x GE LAN PoE out (up to 10W)	Storage Temperature	-40°C to 70°C (-40°C to 158°F)
USB port	No	Humidity	95% RH non-condensing
Antenna	Internal omni-directional 2.4 GHz: 4.47 dBi 5 GHz: 5.56 dBi IoT Antenna Gain: 5.18 dBi	Certifications (compliance)	802.11u, HotSpot 2.0, 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



Network Spec	ifications		
Authentication Encryption	802.1x EAP-SIM/AKA/AKA'/FAST, EAP-PEAP, EAP-TTLS, EAP-TLS/MSCHAPv2, PEAPv0/ PEAPv1 MAC authentication to local database (on AP, on Controller) or external RADIUS. MAC auth fallback to guest portal	Network	NAT, NAT logging firewall, DOS protection, L2/L3/DNS ACL, DHCP server, DHCP Relay option 82 LLDP, IGMP v1, v2 VLAN Pooling, RADIUS attribute VID VLAN per SSID, per user
Scheduled WLAN	On/off by day, week, time of day		Integrated WIDS (wireless intrusion detection)
APIs	RESTful management and statistics API Presence location API Webhooks	Band Steer Load Balance	Yes
QoS	802.11e/WMM QoS. DSCP/ToS mapping	Tunnel	L2TPv2, L2GRE, PPPoE
VLAN	802.11Q, max 4096	Network and RF Management	Out-of-band RF spectrum analysis, RF monitor with channel/noise/interference.
Fast Roaming	802.11r, OKC, cnMaestro assisted roam	Tools	wired and wireless remote packet capture,
Sticky Client	Enhanced roaming with thresholds		ZapD performance tool, rogue AP detection
Mesh	Multi-hop (2), either band	IP	IPv4, IPv6
Channel Selection	Auto RF: Manual, or automatic		

### Management

Interfaces	HTTP / HTTPS web interface, SSH, Telnet SNMP V1, V2, V3 Syslog, SNMP traps, NTP	Captive Portal	<b>Portal features hosted on cnMaestro:</b> Design templates, customization tools supports 3rd party external portal
Deployment	cnMaestro Cloud, cnMaestro on-premises, XMS-Cloud, Standalone AP		RADIUS/LDAP/Click Through authentication Active Directory, Google, Facebook, Office 365, OAuth 2.0
Services	Monetized guest portal with design tools		Data Rate/Throughput limits, Time duration
Hotspot 2.0	802.11u, HotSpot 2.0	supports 3rd party externa	Portal features hosted on the AP:
Accounting	RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM		supports 3rd party external portal RADIUS/LDAP/Click Through authentication
Service Availabilty	Critical network resource monitor with SSID shutdown		Data Rate/Throughput limits, Time duration
Standards			
Wi-Fi	VHT MCS rates, 16/64/256/1024-QAM, 20/40/80/160 MHz		
Protocols	TWT, Long OFDM Symbol, Transmit beamforming, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDP		ISDU, AMPDU, RIFS, STBC, LDPC, MIMO Power

IEEE 802.11 a/ac/ax/b/d/e/g/h/i/k/n/r/u/v

Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM, OFDMA, UL/DL MU-MIMO





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## XV2-22H Wi-Fi 6 Indoor Wall Plate Access Point





2.4 GHz Receive Sensitivity (dBm) Per Chain			
HT20		HT40	
MCS0	-97	MCS0	-94
MCS7	-78	MCS7	-75.25
HE20		HE40	
MCS0	-96.5	MCS0	-94
MCS7	-77.5	MCS7	-74.5

5 GHz Receive Sensitivity (dBm) Per Chain				
VHT20		VHT40	VHT80	VHT160
MCS0	-94.5	MCS0 -91.5	MCS0 -88.5	MCS0 -85.5
MCS7	-76	MCS7 -73	MCS7 -69	MCS7 -66.5
HE20		HE40	HE80	HE160
MCS0	-94.5	MCS0 -91.5	MCS0 -88.25	MCS11 -63
MCS7	-75	MCS7 -72.5	MCS7 -69	MCS8 -55

2.4 GHz TX Power Target	
Rate	Pout (dBm)
MCS0 HT20	26
MCS7 HT20	23
MCS8 VHT20	23
MCS9 VHT40	22
MCS11 HE40	21

5 GHz TX Power Target		
Rate	Pout (dBm)	
MCS0 VHT20	23	
MCS7 VHT20	18	
MCS0 VHT40, VHT80	22, 21	
MCS7 VHT40, VHT80	18, 17	
MCS11, HE20, HE40, HE80, HE160	16, 15, 15, 14	

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XV2-22H Ordering Information		
XV2-22H0A00-RW	XV2-22H Wi-Fi 6 Wall Plate Access Point, dual-radio, 2x2, 3 x GbE, 48V PoE, BLE/Zigbee/Thread	
XV2-22H0A00-US	XV2-22H Wi-Fi 6 Wall Plate Access Point, dual-radio, 2x2, 3 x GbE, 48V PoE, BLE/Zigbee/Thread	
XV2-22H0A00-CA	XV2-22H Wi-Fi 6 Wall Plate Access Point, dual-radio, 2x2, 3 x GbE, 48V PoE, BLE/Zigbee/Thread	
XV2-22H0A00-EU	XV2-22H Wi-Fi 6 Wall Plate Access Point, dual-radio, 2x2, 3 x GbE, 48V PoE, BLE/Zigbee/Thread	
N00000L142A	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	
PL-DTSTANDB-WW	Desktop stand	
PL-WALLMNTB-WW	Mounting Adapter, mounts XV2-22H to a flush surface	
PL-SNWLGNGB-WW	Wall bracket single gang junction box	

### cnMaestro X Ordering Information

MSX-SUB-XV2-22H-1	cnMaestro X for one XV2-22H AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support. 1-year subscription
MSX-SUB-XV2-22H-3	cnMaestro X for one XV2-22H AP. Creates one Device Tier 3 slot. Includes Cambium Care Pro support. 3-year subscription
MSX-SUB-XV2-22H-5	cnMaestro X for one XV2-22H 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: 2-3 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: 2-3 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: 2-3 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-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-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-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support

XMS and EasyPass Ordering Information		
EASY-SUB-2R-1	EasyPass 1-year subscription for a 2-3 radio APs operating with XMS-Cloud or XMS-Enterprise	
EASY-SUB-2R-3	EasyPass 3-year subscription for a 2-3 radio APs operating with XMS-Cloud or XMS-Enterprise	
EASY-SUB-2R-5	EasyPass 5-year subscription for a 2-3 radio APs operating with XMS-Cloud or XMS-Enterprise	

#### **Cambium Care Support Ordering Information**

CCADV-SUP-XV2-22H-1	Cambium Care Advanced, 1-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-22H-3	Cambium Care Advanced, 3-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-22H-5	Cambium Care Advanced, 5-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCPRO-SUP-XV2-22H-1	Cambium Care Pro, 1-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-22H-3	Cambium Care Pro, 3-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-22H-5	Cambium Care Pro, 5-year support for one XV2-22H Wi-Fi 6/6E AP. 24x7 TAC support and SW updates
CCADV-UPG-XV2-22H-1	Cambium Care Advanced Add-on to cnMaestro X, 1-year support for one XV2-22H. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XV2-22H-3	Cambium Care Advanced Add-on to cnMaestro X, 3-year support for one XV2-22H. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XV2-22H-5	Cambium Care Advanced Add-on to cnMaestro X, 5-year support for one XV2-22H. 24x7 TAC support, SW updates, and NBDS advance replacement for HW

#### LIMITED WARRANTY

Cambium Networks XV2-22H Wi-Fi 6 and are covered by 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