

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

XV2-22H 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.

- Wall plate 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 single-pane-ofglass 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, Security/SD-WAN, Fixed Wireless, Fiber
- 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 thirdparty extensibility and customization
- Includes Cambium Care Pro software support with 24x7 L2 engineer access and all software updates for cnMaestro and managed devices

Do-Not-Disturb Hotel Design

Many 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, guests will be delighted with a perfect connection to all their devices. Customize the cloud-managed guest access with a fully configurable cloud portal, point-and-click interface, or integration with third-party portals.

Wi Fi

Designed for Fast Installation

Quickly install the XV2-22H over a standard wiring box or to other boxes and surfaces using the optional mounting adapters. The XV2-22H has 3 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

The 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 S	Specifications		
Radios	1 x 5 GHz radio 802.11ax Wi-Fi 6, 2x2:2	Power	802.3af or 802.3at powered device Typical
	1 x 2.4 GHz 802.11ax Wi-Fi 6, 2x2:2		load, no power out: 10W
	1 x 802.15.4 or 1 x 802.15.1 loT		Typical load, with 10W power out: 20W
	transceiver, multi-protocol	Dimensions	160 mm x 105 mm x 32 mm
	SU-MIMO/MU-MIMO: 2 streams		(6.3 in x 4.1 in x 1.26 in)
Wi-Fi	802.11 a/b/g/n/ac/ax	Weight	417 g (0.92 lb)
SSID Security	WPA3-SAE (AES), WPA3-Enterprise, WPA2	Mount Options	Standard wiring, junction, or other box
	(CCMP, AES, 802.11i), WPA2 Enterprise	Security	Kensington lock slot, secure bracket
	(802.1x/EAP), OSEN, OWE, Open	Security	Kensington lock slot, secure blacket
Max PHY Rate	5 GHz radio 2402 Mbps	Ambient Operation	0°C to 40°C (32°F to 104°F)
	2.4 GHz radio 573.5 Mbps	Temperature	
Ports	1 x GE WAN	Storage	-40°C to 70°C (-40°C to 158°F)
	2 x GE LAN	Temperature	
	PoE out (up to 10W)	Humidity	95% RH non-condensing
USB port	No	MTBF	3,648,451 hours @ 25°C
			2,125,972 hours @ 40°C
Antenna gain	Internal omni-directional	LEDs	Multi-color status LEDs, dimmable, on/off
	2.4 GHz: 4.47 dBi 5 GHz: 5.56 dBi		
	IoT Antenna Gain: 5.18 dBi		
Max EIRP*	2.4 GHz: 30 dBm	Certifications	802.11u, HotSpot 2.0, Passpoint 3.0,
	5 GHz: 28 dBm	(Compliance)	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
US-FCC	Ch 1–11, 36–64, 100–144, 149–165		
ISED Canada	Ch 1–11, 36–64, 100–116, 149–165		
EU-ETSI*	Ch 1–13, 36–64, 100–140, 149-173		
ROW*	Ch 1–13, 36–64, 100–144, 149–177		

*Individual country limits apply. Please contact sales for country-specific regulations. For Southeast Asia (SEA) countries, refer to the SEA Regulatory Details chart in this data sheet.

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/w



Network Specif		DE Maria	
Operational Modes	Controller-less standalone cloud-managed	RF Management	Multi-modal RF optimization supporting
A/I ANI	cnMaestro, VM		Auto-RF for dynamic channel selection and
WLAN	128 concurrent clients per radio, 256 per AP		dynamic power adjustment configured via
Soourity	16 SSID per AP		cnMaestro, performed in the intelligent
Security, Authentication	Open, WPA2-AES with PSK, ePSK and		edge AP
Encryption	Enterprise		RF monitor with channel utilization/packet
Encryption	WPA3 with PSK (WPA3-SAE), ePSK,		error rate/interference
	Enterprise, Enterprise-CNSA, OWE (Enhanced Open)	Band Steering	Yes
	OSEN and PMF (802.11 W)	Mesh	Multi-hop (2), either band
	MAC authentication with local database or	Scheduled WLAN	
	external database using RADIUS protocol		On/off by day, week, time of day
	802.1X with EAP-TTLS, EAP-TLS/	Data Limit	Client bitrate/time/throughput limit per SSID
	MSCHAPv2, PEAPv0/PEAPv1/EAP-	Network	TCP connection log, NAT logging firewall,
	PEAP/EAP-SIM/AKA/AKA'/FAST		DHCP server, DHCP Relay option 82, VLAN
			pooling, RADIUS attribute, VID VLAN per
	MAC auth fallback to guest portal		SSID per user, ePSK with VLAN assignment
	Hotspot WEB authentication		per PSK
			LLDP, IGMP v1, v2
Wi-Fi Quality of	802.11e/WMM (packet marking either with	Network Tools	Wired and wireless remote packet capture,
Service	802.1p or IP DSCP), WMM-PS, U-APSD		logging, WAN speed test, ZapD, remote
<u> </u>	Multicast to unicast conversion		network connectivity tools
Service Availability	Critical network resource monitor with SSID shutdown	Tunnel	L2TPv2, L2GRE, PPPoE
Fast Roaming	802.11k/r/v, OKC, cnMaestro-assisted roam	IP	IPv4, IPv6
Guest Access/		VLAN	802.11Q, max 4096
Captive Portal	cnMaestro-hosted EasyPass portal	Management	
Service (EasyPass)*	Multiple authentication methods supported to on-board guest user:	Interfaces	HTTP/HTTPS web interface, SSH, Telnet
	Radius-based authentication	Security	Rogue AP detection and termination (X),
	Click-through with simple terms and		WIDs/WIPs, DoS protection
	conditions acceptance		L2–L7 firewall with application visibility (X) &
	 Social login using Google[®], Facebook[®] 		control (X), DNS based access control (X)
	 SMS-based authentication (X) 		ACL and AirCleaner tools
	Voucher-based access	Services	Wi-Fi Calling control, NTP, Syslog, DNS
	Microsoft® Azure AD and Google		proxy, SNMP traps, SNMPv1, SNMPv2c,
	• Workspace® (X)		SNMPv3, TCP and DNS logging
	Sponsored guest access (X)		
	 Self-registration access (X) 		
	cnMaestro API support for external captive		
	portal integration		
	802.11u, HotSpot 2.0		
Accounting	RADIUS accounting, load balancing AAA		
	servers, Dynamic Authorization COA, DM		
API	RESTful management and statistics API via		
	cnMaestro X, Presence location push APIs		

* X Features available under cnMaestro X



Management

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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, NSE Service Edge, and residential service provider routers.

cnMaestro can be deployed on cloud or on-premises via a virtual machine.

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

cnMaestro X

Paid subscription that includes:

- Advanced device management capabilities
- Deep packet inspection (DPI) application visibility and Control for 2,400+ apps
- RESTful management and statistics API
- Presence location push APIs
- Graphic reports
- Webhooks
- Cambium Care Pro for 24x7 technical support
- Accelerated access to L2 engineers and regular software updates

Assists

 Assesses the network's configuration and identifies weak security settings and proposes a fix to ensure the network configuration is up to the top security industry standards

X Assurance

- Helps to quickly identify network-wide connectivity issues by isolating every element of the client's lifecycle, either radio or network related
- Gives an overview quality index of the network and highlights each element's contribution to easily identify the worst offender
- Provides insight of probable causes and proposes fixes for the administrator to apply
- Provides individual client connectivity visibility throughout the entire lifecycle of its connection to easily identify each connection's result and highlight the failure reason, should there be any

EasyPass Portal with Additional Options

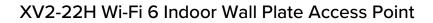
- Self-registration: Form-based access
- Sponsored guest: Guest ambassador-based access
- Paid access: Monetize the Wi-Fi access
- Microsoft Azure: Corporate user login
- Google Login: Web login using Google accounts

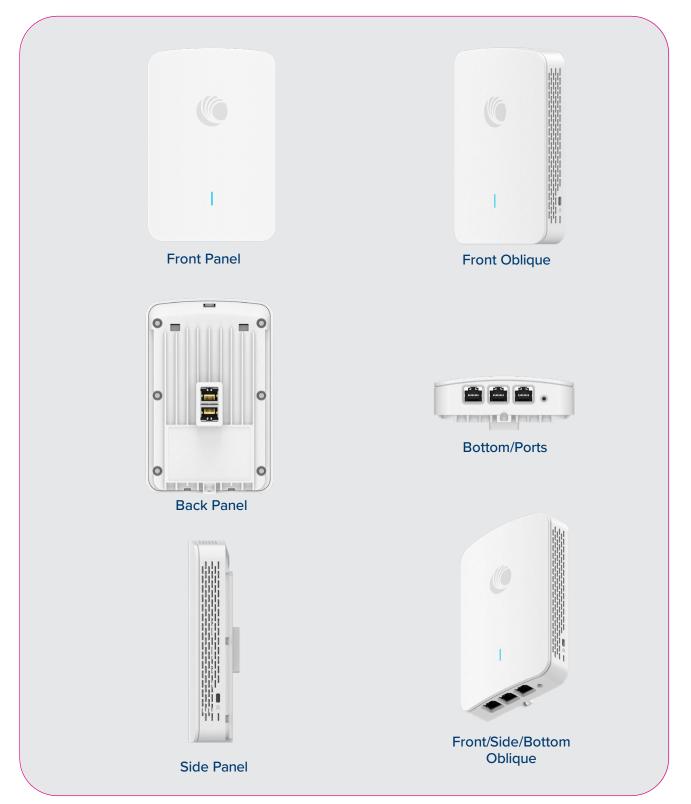
cnMaestro Essentials

License-free cloud management that delivers a disruptive total cost of ownership (TCO) for organizations of all sizes. Includes EasyPass for OneClick or voucher-based connection as well as WiFi4EU access.

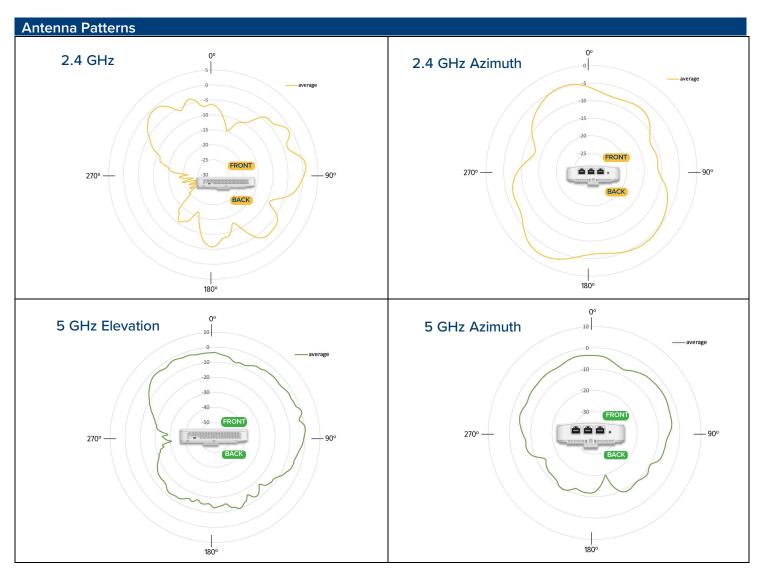
Find out more about cnMaestro











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



XV2-22H Ordering Information		
Regulatory Model	XV2-22H	
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	
C00000L141A	PoE, 60W, 56V, 10GbE DC Injector, 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		

Cambium Care Supp	port
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



EIRP is limited to the countries listed below.

SE Asia Regulatory Details					
	2.4 GHz (EIRP)	5 GHz (EIRP)			
Country	2400–2483.5 MHz	5150–5250 MHz	5250–5350 MHz	5470–5725 MHz	5725–5825 MHz
Indonesia	27 dBm (500mW) indoor 36 dBm (4W) outdoor	23 dBm (200mW) indoor	23 dBm (200mW) indoor	Not supported	23 dBm (200mW) indoor, 36 dBm (4W) outdoor
Vietnam	23 dBm (200mW)	23 dBm (200mW)	23 dBm (200mW)	30 dBm (1W)	30 dBm (1W)
Philippines	26 dBm (400mW)	26 dBm (400mW)	26 dBm (400mW)	26 dBm (400mW)	26 dBm (400mW)
Malaysia*	27 dBm (500mW)	30 dBm (1W) indoor	30 dBm (1W) indoor	5470–5650 MHz	30 dBm (1W)
		23 dBm (200mW) outdoor		30 dBm (1W)	
Singapore	23 dBm (200mW)	23 dBm (200mW)	23 dBm (200mW)	30 dBm (1W)	30 dBm (1W)
Thailand	20 dBm (100mW)	23 dBm (200mW)	23 dBm (200mW)	30 dBm (1W)	30 dBm (1W)

*Malaysia restricts the use of 5650 MHz–5725 MHz for regulatory reasons.

LIMITED WARRANTY

Cambium Networks XV2-22H Wi-Fi 6 is covered by a limited lifetime hardware warranty for a period of 5 years after end of sale.

ABOUT CAMBIUM NETWORKS

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

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