

XV3-8 Wi-Fi 6 Access Point

802.11ax Tri-Radio 8x8 Access Point with Software-Defined Radios

QUICK LOOK:

- **High-density Wi-Fi with software-defined radios (SDR)**
- **Five-radio architecture for edge services**
- **6 Gbps aggregate data rate**
- **Dedicated scanning sensor, dual band**
- **Application policy control**
- **EasyPass with Microsoft Azure and Google G Suite integration**



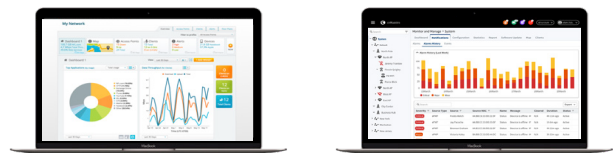
DESIGNED FOR HIGH DENSITY AND EDGE SERVICES

The XV3-8 features a total of five (5) radios to deliver a next-generation network with edge services with high capacity and high density. Three data radios can be configured as two 5 GHz 4x4 plus one 2.4 GHz 4x4, or the two 5 GHz radios can be combined into a single 5 GHz 8x8 radio with the maximum power and performance of the 802.11ax standard. A dedicated network scanning radio provides continuous network monitoring to enhance security protocols, detailed network reports, and automatic RF optimizations. Add the Bluetooth Smart 4.1 IoT radio for BLE-based location services and you get a multi-radio, high-capacity Wi-Fi 6 AP designed for the most demanding networks in enterprise, education, retail, and public venues.

OPTIMIZED WI-FI FOR DOMINANT CLIENT DEVICES

For networks dominated by legacy 802.11ac client devices, the dual 5 GHz 4x4 mode will double network capacity to maintain high-bitrate services as density increases. As the devices migrate

to the new Wi-Fi 6 standard based on 802.11ax, the XV3-8 SDR can be quickly converted into full 8x8 operating mode via a simple configuration change. No firmware change is required to support this mode.



CLOUD AND ON-PREMISES MANAGEMENT

XV3-8 operates with either the Cambium XMS management system or cnMaestro™. Choose the cloud management system that best fits your business and use the latest technology from Cambium Networks.

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Access Point Specifications

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

<p>US-FCC Ch 1-11, 36-48, 52-64, 100-144, 149-165</p> <p>ISED Canada Ch 1-11, 36-48, 52-64, 100-144, 149-165</p> <p>EU-ETSI Ch 1-13, 32-48, 52-64, 100-144, 149-165</p> <p>ROW (Individual country limits may apply) Ch 1-14, 36-48, 52-64, 100-144, 149-165</p>	<p>Power</p> <p>Max power with USB/BLE, 35 W (802.3bt) 802.3at mode with USB/BT disabled 12 VDC power, 2.1 mm (.083 in) barrel connector</p>
<p>Radios</p> <p>5 GHz radio (802.11a/n/ac Wave 2/ax), 8x8 (or configure as 2 x 5 GHz 4x4)</p> <p>2.4 GHz (802.11b/g/n/ax), 4x4 Dual-band scan radio, 1x1 BLE 4.1</p>	<p>Dimensions</p> <p>235 mm x 235 mm x 42 mm (9.25 in x 9.25 in x 1.65 in)</p>
<p>Wi-Fi</p> <p>802.11a/b/g/n/ac Wave 2/ax</p>	<p>Weight</p> <p>1,250 g (2.76 lbs)</p>
<p>SSID Security</p> <p>WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK (TKIP), Open</p>	<p>Security</p> <p>Kensington lock slot</p>
<p>Max Phy Rate</p> <p>2.4 GHz radio: 1,147 Mbps 5 GHz radio: 4,804 Mbps</p>	<p>LEDs</p> <p>Multi-color status LEDs</p>
<p>Ports</p> <p>1 x IEEE gigabit, auto sensing 1 x IEEE 5 gigabit Ethernet auto sensing (802.3bz) 1 x USB 3.0</p>	<p>Ambient Operating Temperature</p> <p>0°C to 50°C (32°F to 122°F)</p>
<p>Antenna</p> <p>5 dBi (2.4 GHz) 6.7 dBi (5 GHz), Omni dual - band sensor antenna, 5 dBi (2.4 GHz) / 6.3 dBi (5 GHz) BLE antenna, 5 dBi</p>	<p>Storage Temperature</p> <p>-20°C to 70°C (-4°F to 158°F)</p>
<p>Max EIRP</p> <p>2.4 GHz: 31 dBm 5 GHz: 36 dBm</p>	<p>Humidity</p> <p>95% RH non-condensing</p>
	<p>Mount Options</p> <p>Wall or ceiling, T-bar with included locking bracket</p>
	<p>Certifications (Compliance)</p> <p>Wi-Fi Alliance 80211a/b/g/n/ac/ax, PP2.0 FCC, ETSI, CE, EN 60601-1-2, IEC60950</p>



Back panel

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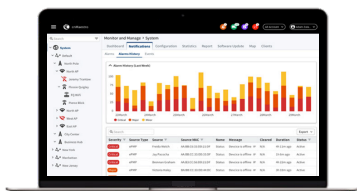
Management

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



Cambium XMS leverages intelligent access points (AP) with embedded edge controller to deliver edge services at any network density. The 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 SDR to operate the XV3-8 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
SDR	Yes SDR operation on the 5 GHz band Configure as a single 8x8 radio or dual 5 GHz, 4x4	No The 5 GHz operates as a single 802.11ax 8x8
Services	Deep Packet Inspection (DPI) Application Visibility and Control for 2,000+ apps EasyPass Access Services	Monetized, cloud-managed guest portal with design tools
APIs	RESTful management and statistics API Location API Netflow export v9, IPFIX Splunk WebSocket integration WebSockets	RESTful management and statistics API Location API Splunk WebSocket integration, WebSockets DNS, NAT, TCP connection log
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	

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Network Specifications

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

WLAN	1,024 clients, 16 SSIDs WPA3, WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF	TX Power	Manual or automatic
Authentication Encryption	802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS MAC authentication to local database or external RADIUS	Network	NAT, NAT logging firewall, DHCP server L2, L3 or DNS based access control VLAN Pooling, RADIUS attribute VID VLAN per SSID per user
Scheduled WLAN	On/off by day, week, time of day	Band Steer Load Balance	Yes
QoS	WMM, 802.11e	Tunnel	L2TP, L2oGRE, PPPoE
VLAN	802.11q	Network and RF Management Tools	Out-of-band RF spectrum analysis, radio self-test network assurance, RF monitor with chn/noise/interference, wired and wireless remote packet capture, auto logging, ZapD performance tool, rogue AP detection, ultra low power mode, honeypot control
Fast Roaming	802.11r, OKC, Enhanced roaming		
Channel Selection	Manual or automatic		

Standards

Wi-Fi Protocols	MU-OFDMA, MU-MIMO, TWT, MIMO, VHT MCS rates, 16/64/256-QAM, HT20/40/80 MHz
	Transmit beamsteering, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM
	IEEE 802.11a/ac/ax/b/d/e/g/h/i/k/r/u/v

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Top view



Top view



Left side



Right side



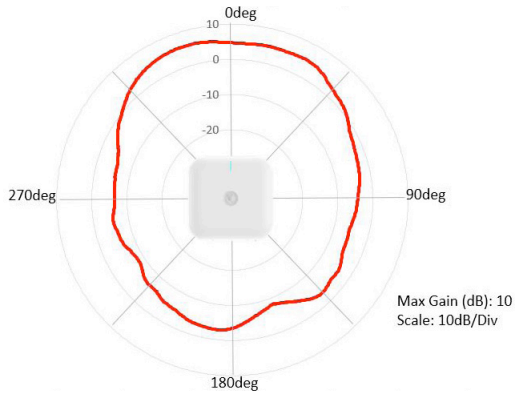
Back panel



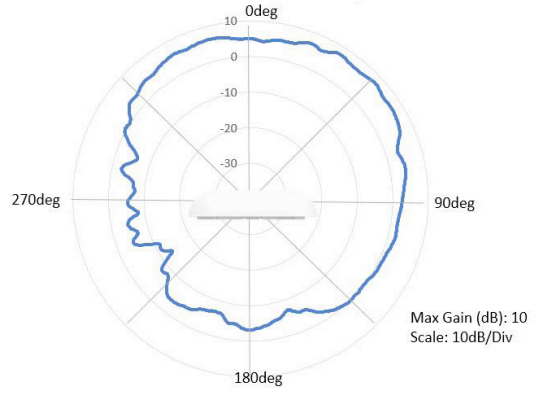
Back panel

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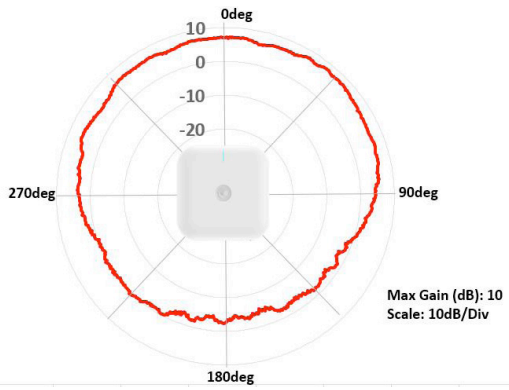
Antenna Patterns



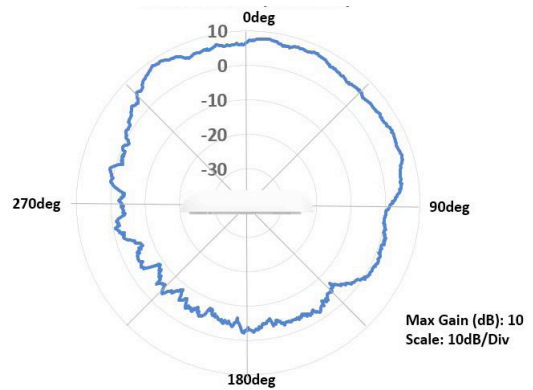
2.4 GHZ AZIMUTH



2.4 GHZ ELEVATION



5 GHZ AZIMUTH



5 GHZ ELEVATION

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Cambium Ordering Information

XV3-8X00A00-US	XV3-8 Tri-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 8x8 or Dual 4x4 5 GHz WLAN AP, scan radio, BLE, US
XV3-8X00A00-CA	XV3-8 Tri-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 8x8 or Dual 4x4 5 GHz WLAN AP, scan radio, BLE, CA
XV3-8X00A00-EU	XV3-8 Tri-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 8x8 or Dual 4x4 5 GHz WLAN AP, scan radio, BLE, EU
XV3-8X00A00-RW	XV3-8 Tri-Radio Wi-Fi 6. Indoor (FCC) SDR 802.11ax 8x8 or Dual 4x4 5 GHz WLAN AP, scan radio, BLE, 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-XV3-8-1	Cambium Care Advanced, 1-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV3-8-3	Cambium Care Advanced, 3-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV3-8-5	Cambium Care Advanced, 5-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCPRO-SUP-XV3-8-1	Cambium Care Pro, 1-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV3-8-3	Cambium Care Pro, 3-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV3-8-5	Cambium Care Pro, 5-year support for one XV3-8 Wi-Fi 6 AP. 24x7 TAC support and SW updates

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Cambium Ordering Information

N000000L142A	PoE injector, 60 W, 5 GbE, Indoor, Energy Level 6 Supply
N000900L042A	AC line cord, ANZ Type I, 1.2 m C13 connector
N000900L044A	AC line cord, BR Type N, 1.2 m C13 connector
N000900L041A	AC line cord, EU Type F angled, 1.2 m C13 connector
N000900L040A	AC line cord, US Type B, 1.2 m C13 connector
N000900L048A	AC line cord, ZA Type M angled, 0.72 m C13 connector
N000900L045A	AC line cord, UK Type G angled, 1.2 m C13 connector
N000900L043A	AC line cord, IN Type D angled, 1.2 m C13 connector
N000900L046A	AC line cord, CN Type I angled, 1.2 m C13 connector
N000900L047A	AC line cord, AR Type I, 1.2 m C13 connector

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.