XV2-2T1 Wi-Fi 6 Outdoor Access Point

802.11ax Dual-Radio, 2x2, 120º Sector Antenna, Long-Range

XV2-2T1 Wi-Fi 6 Outdoor AP Quick Look

- Dual-radio 802.11ax
- 2.5 GbE uplink Ethernet
- 1 GbE with power out
- Outdoor IP67 rated, -40ºC to 65ºC
- High-efficiency 120º sector antenna

Outdoor Wi-Fi 6 Designed for Greater Range and Speed

The XV2-2T1 is a dual radio Wi-Fi 6 access point (AP) designed for outdoor deployments in campus networks, smart city deployments, public venues, and industrial applications. Its high-efficiency antennas deliver superior long-range coverage up to 1 km distance or more, significantly reducing the amount of equipment needed to cover large outdoor areas.

The XV2-2T1 delivers 48VDC PoE or Cambium 30VDC power out via gigabit Ethernet port. This is ideal for connecting the XV2-2T1 to any IP and Ethernet device, such as a security IP camera, another Wi-Fi access point, or Cambium fixed wireless subscriber modules.

For outdoor deployments, the IEEE 802.11ax standard delivers greater range by boosting the RF frame preamble by 3dB and improved signal quality with increased guard interval vs previous Wi-Fi technology. The XV2-2T1 is fully backward compatible with existing Wi-Fi technology and prepares a network for higher growth and greater density of Wi-Fi connected devices.
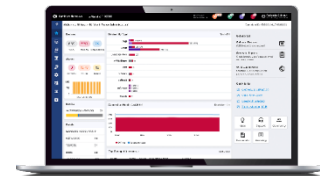
Cloud or On-premises Management

The XV2-2T1 is supported by Cambium Network's ONE Network enterprise architecture managed by the cnMaestro™ Network Management System. cnMaestro uses a distributed intelligence architecture with cloud-first management and edge-intelligent Wi-Fi that self-optimizes for the RF environment. cnMaestro delivers a single-pane-of-glass management experience for Cambium fixed wireless broadband, cnMatrix™ Ethernet switches, enterprise Wi-Fi APs, and service provider residential routers.

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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	Power	20W max
ISED	Ch 1–11, 36–48, 52–64, 100–144, 149–165		Up to 50W when powering an auxiliary device
ETSI	Ch 1–13, 36–48, 52–64, 100–144	Dimensions	582 mm x 200 mm x 80 mm (22.91 in x 7.87 in x 3.15 in)
ROW*	Ch 1–14, 36–48, 52–64, 100–144, 149–177		
	2400–2483.5 MHz, 5150–5895 MHz	Weight	1,200 g (2.64 lb)
		Security	Kensington lock slot
Radios	5 GHz: 802.11 a/n/ac Wave 2/ax, 2x2	LEDs	Multi-color status LEDs
	2.4 GHz: 802.11 b/g/n/ax, 2x2 BLE 4.1		
Wi-Fi	802.11 a/b/g/n/ac Wave 2/ax	Ambient Operation Temperature	-40°C to 65°C (-40°F to 149°F)
SSID Security	WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK (TKIP), WEP, Open	Storage Temperature	-40°C to 70°C (-40°F to 158°F)
		Humidity	95% RH non-condensing
Max PHY Rate	5 GHz radio: 1,201 Mbps	MTBF	25°C = 674,966 hours
	2.4 GHz radio: 573.5 Mbps		65°C = 197,106 hours
Ports	1 x IEEE 100/1000/2500 Mbps	Mount Options	Pole or wall mounting.
	1 x IEEE 10/100/1000 Mbps Ethernet with SW configurable passive PoE output of 30V or 48V up to 30 watts		Pole diameter: Minimum 30 mm / maximum 75 mm
Antenna	5 GHz 13.5 dBi, sector	Certifications (Compliance)	Wi-Fi Alliance 802.11 a/b/g/n/ac/ax, FCC, IC, CE, EN 60601-1-2, EN 60950-1,IEC 62368-1
	2.4 GHz 11 dBi, sector		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, EN 62311 Human Safety/RF
			Exposure, WEEE & RoHS

*Individual country limits may apply

LIMITED WARRANTY

Cambium Networks XV2-2T1 Wi-Fi 6 Access Point includes a 3-year hardware warranty.

XV2-2T1 Wi-Fi 6 Outdoor Access Point

Management

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

Deployment	Cloud, on-premises, standalone AP
Services	Monetized, cloud-managed guest portal with design tools
APIs	RESTful management and statistics API Location API Webhooks

Captive Portal	Hosted on cnMaestro or hosted on site AP	Data rate, time duration, data throughput limit
	Microsoft Azure integration, Google Workspace integration	Redirect to HTTP/RADIUS external portal/authentication
	ePSK personal PSK	Server DNS logging, Hotspot 2.0
	Facebook, Twitter, Google social login	Credit Card Merchant billing, vouchers
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 or on-premises cnMaestro	**RF Management**	Multimodal RF optimization supporting AutoCell performed in the intelligent edge AP
WLAN	1024 concurrent clients per AP, 16 SSIDs WPA3, WPA3 SAE, WPA3 Enterprise, WPA-TKIP, WPA2 AES, 802.1x,802.11w PMF		Out-of-band RF spectrum analysis, radio self-test network assurance, RF monitor with channel/noise/interference Data rate pruning and minimum data rates
Authentication Encryption	802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS MAC authentication to local database or external RADIUS	**Network**	LACP (802.3ad) ,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
Scheduled WLAN	On/off by day, week, time of day		
Guest Access	See Captive Portal section for additional details	**Band Steer Load Balance**	Yes
Data Limit	Client bitrate/time/throughput limit per SSID	**Tunnel**	L2TP, L2oGRE, PPPoE
Subscriber QoS	WMM	**Network & RF Management Tools**	Wired and wireless remote packet capture, auto logging, ZapD performance tool, rogue AP detection
Fast Roaming	802.11r, OKC, enhanced roaming		
Mesh	Multi-hop, either band	**Services**	NTP, Syslog, SNMP traps, DNS proxy
Channel Selection	Multimodal channel selection with AutoChannel and AutoBand Granular control of off-channel scan and channel selection		

Standards

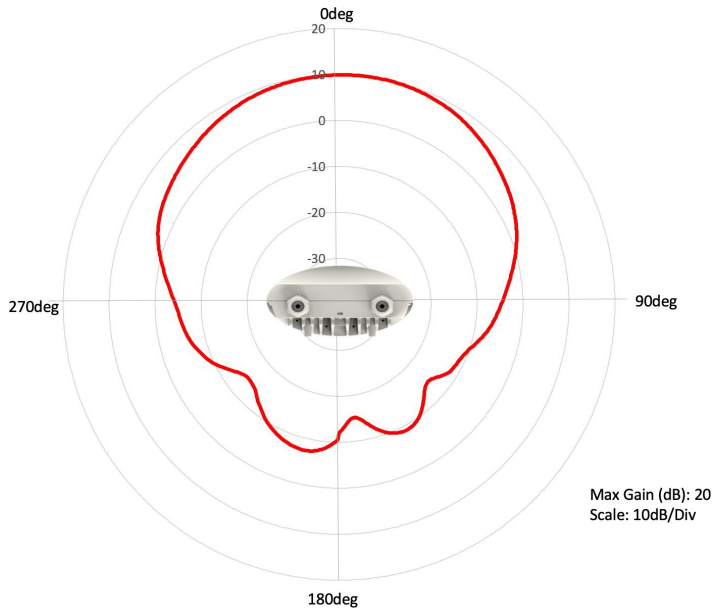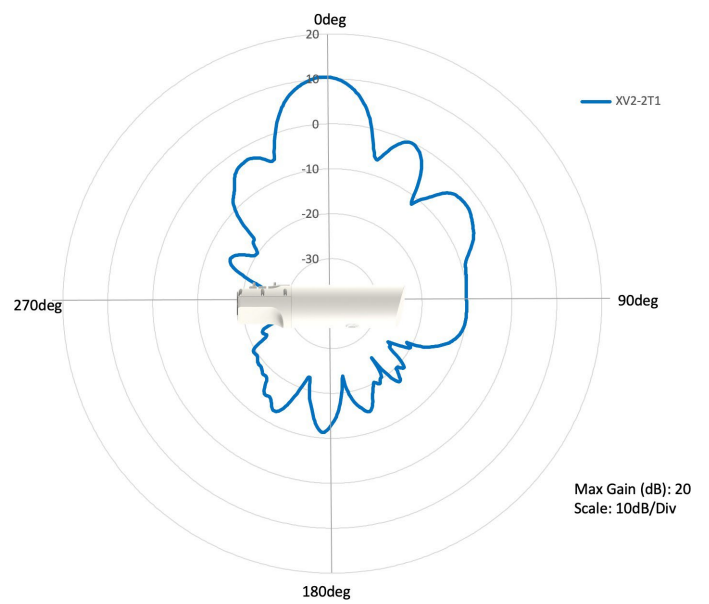| **Wi-Fi Protocols**	VHT MCS rates, 16/64/256/1024-QAM, 20/40/80 MHz
	TWT, Long OFDM Symbol, Transmit beamforming, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM, OFDMA, UL/DL MU-MIMO
	IEEE 802.11 a/ac/ax/b/d/e/g/h/i/k/n/r/u/v

XV2-2T1 Wi-Fi 6 Outdoor Access Point

Back Panel

Bottom View

Front View

Side View

Front Oblique View

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Antenna Patterns

2.4 GHz Azimuth

Max Gain (dB): 20
Scale: 10dB/Div

2.4 GHz Elevation

Max Gain (dB): 20
Scale: 10dB/Div

5 GHz Azimuth

Max Gain (dB): 20
Scale: 10dB/Div

5 GHz Elevation

Max Gain (dB): 20
Scale: 10dB/Div

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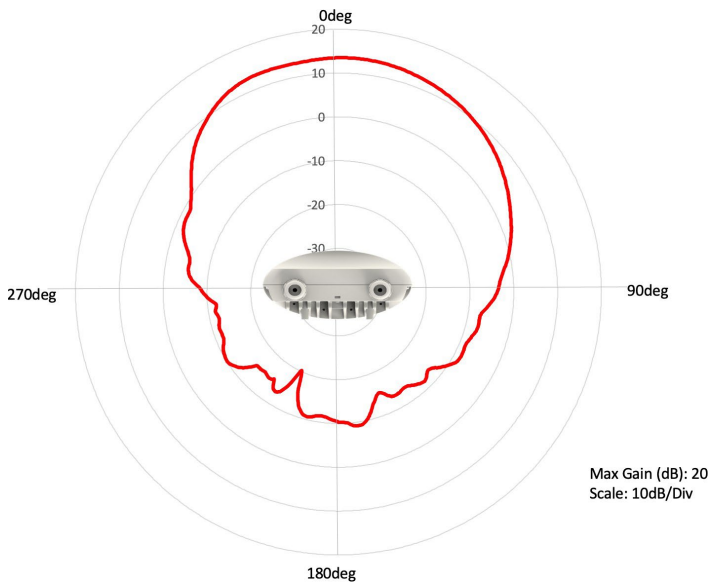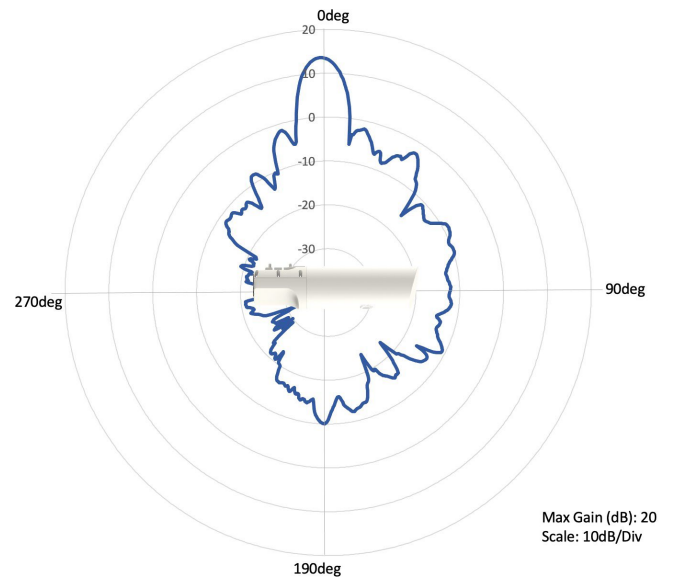
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Ordering Information

XV2-2T1	Regulatory Model
XV2-2T1XA00-US	XV2-2T1 Dual-Radio Wi-Fi 6. Outdoor (FCC) 802.11ax 2x2, 120° Sector, US
XV2-2T1XA00-CA	XV2-2T1 Dual-Radio Wi-Fi 6. Outdoor (IC) 802.11ax 2x2, 120° Sector, CA
XV2-2T1XA00-EU	XV2-2T1 Dual-Radio Wi-Fi 6. Outdoor (ETSI) 802.11ax 2x2, 120° Sector, EU
XV2-2T1XA00-RW	XV2-2T1 Dual-Radio Wi-Fi 6. Outdoor 802.11ax 2x2, 120° Sector, RW
MSX-SUB-XV2-2T1-1	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 1-year term
MSX-SUB-XV2-2T1-3	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 3-year term
MSX-SUB-XV2-2T1-5	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 5-year term
CCADV-SUP-XV2-2T1-1	Cambium Care Advanced, 1-year support for one XV2-2T1 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-2T1-3	Cambium Care Advanced, 3-year support for one XV2-2T1 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XV2-2T1-5	Cambium Care Advanced, 5-year support for one XV2-2T1 Wi-Fi 6 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-UPG-XV2-2T-1	Cambium Care Advanced Add-on to cnMaestro X, 1-year support for one XV2-2T1. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XV2-2T-3	Cambium Care Advanced Add-on to cnMaestro X, 3-year support for one XV2-2T1. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCADV-UPG-XV2-2T-5	Cambium Care Advanced Add-on to cnMaestro X, 5-year support for one XV2-2T1. 24x7 TAC support, SW updates, and NBDS advance replacement for HW
CCPRO-SUP-XV2-2T-1	Cambium Care Pro, 1-year support for one XV2-2T Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-2T-3	Cambium Care Pro, 3-year support for one XV2-2T Wi-Fi 6 AP. 24x7 TAC support and SW updates
CCPRO-SUP-XV2-2T-5	Cambium Care Pro, 5-year support for one XV2-2T Wi-Fi 6 AP. 24x7 TAC support and SW updates
N000000L142A	PoE, 60W, 56V, 5GbE DC Injector, Indoor, Energy Level 6 Supply, accepts C5 connector
N000900L031A	AC line cord, US Type B, 720 mm, C5 connector
N000900L032A	AC line cord, EU Type F angled, 720 mm, C5 connector
N000900L033A	AC line cord, UK Type G angled, 720 mm, C5 connector
N000900L034A	AC line cord, BR Type N, 720 mm, C5 connector
N000900L011A	AC line cord, AU Type I, 720 mm, C5 connector
N000900L012A	AC line cord, IN Type D angled, 720 mm, C5 connector
N000900L013A	AC line cord, AR Type I, 720 mm, C5 connector
N000900L015A	AC line cord, CN Type I, 720 mm, C5 connector
N000900L048A	AC line cord, ZA Type M angled, 720 mm, C5 connector

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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