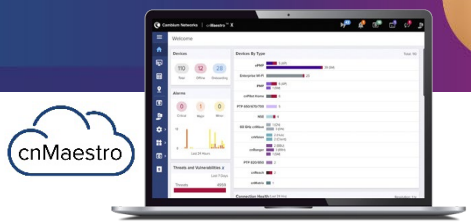
# X7-35X Wi-Fi 7 Indoor Access Point

802.11be Tri-Radio 2+2+2 Access Point with BLE/Zigbee

## X7-35X AP Quick Look

- Tri-radio/tri-band Wi-Fi 7
- 6 GHz (2x2), 5 GHz (2x2), 2.4 GHz (2x2)
- 9.2 Gbps aggregate data rate
- 2.5 GbE uplink port
- LPI (low power indoor) mode
- BLE/Zigbee®/Thread/Matter IOT radio
- Managed by cnMaestro™
- Limited lifetime warranty






### Unbeatable Value for Any Market

The Cambium Networks X7-35X Wi-Fi 7 Indoor Access Point (AP) is designed to deliver cutting-edge performance and flexibility at a price point suitable for any market. Power your network with the latest Wi-Fi technology, without breaking the bank.

### Fast Installation

The X7-35X Wi-Fi 7 AP streamlines installation, saving you time and money. Its multi-functional mounting system easily installs the access point over multiple telecom and electrical junction boxes, on a suspended drop ceiling system, or to any flat surface. The recessed Ethernet port and trim mounting bracket enables an aesthetically pleasing installation and final finish. Plus, the new Wi-Fi 7 junction box bracket is backwards compatible with the XV3-8 and XE3-4.

### Cloud and On-Premises Management

X7-35X operates using Cambium's cnMaestro Network Management, accessible on both cloud and on-premises platforms. Aligned with Cambium's ONE Network, cnMaestro facilitates the management of all devices through a user-friendly interface, streamlining control from backhaul to edge devices. This enables you to start managing your network right away, reducing training and troubleshooting time.

### cnMaestro X Assurance

Gain real-time insights into network health and troubleshoot client issues efficiently using AI-based analytics to move from reactive to proactive SLA management.

Note: cnMaestro X Assurance is available with cnMaestro X Cloud.

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# X7-35X Wi-Fi 7 Indoor Access Point

## Access Point Specifications

| | |
|---|---|
| **Radios** | 2.4 GHz 2x2:2 with 802.11 b/g/n/ax/be<br>5 GHz 2x2:2 with 802.11 a/n/ac/ax/be<br>6 GHz 2x2:2 with 802.11 ax/be |
| **BLE and Zigbee** | Built-in BLE or 802.15.4 radio<br>Max Transmit power 20 dBm with the integrated 5 dBi omnidirectional antenna gain<br>*Matter and Thread support (*Will be supported in future releases) |
| **Supported data rates** | 802.11be: 7.3 to 5765 Mbps<br>802.11ax: 7.3 to 2402 Mbps<br>802.11ac: 6.5 to 1733 Mbps<br>802.11n: 6.5 to 300 Mbps<br>802.11a/g and a: 6 to 54 Mbps<br>802.11b: 1 to 11 Mbps |
| **Max PHY Rate** | 2.4 GHz: 574 Mbps<br>5 GHz: 2882 Mbps<br>6 GHz: 5765 Mbps |
| **Antenna** | Omnidirectional internal antennas (Peak gain)<br>2.4 GHz: 5 dBi<br>5 GHz: 6 dBi<br>6 GHz: 6 dBi<br>BLE and Zigbee: 5 dBi |
| **Maximum Radio Tx Power*** (combined Tx power across all Tx chains) | 2.4 GHz: 24 dBm, max EIRP: 29 dBm<br>5 GHz: 25 dBm, max EIRP: 31 dBm<br>6 GHz: 25 dBm, max EIRP: 31 dBm |
| **MIMO Support** | 2x2 (2.4 GHz, 5 GHz, and 6 GHz) SU-MIMO<br>2x2 (2.4 GHz, 5 GHz, and 6 GHz) MU-MIMO both in UL and DL direction |
| **USB Interface** | 1 USB 2.0 type A port, max 1.5 W power supply |
| **Ethernet Interface** | 1 100 Mbps/ 1 Gbps / 2.5 Gbps PoE port |
| **Power** | Max power consumption 25.5W (802.3at)<br>Typical power consumption with BLE / 802.15.4 radio enabled: 10.6W<br>LLDP power negotiation support |
| **Dimensions** | 209.6 mm x 209.6 mm x 45 mm<br>8.25 in x 8.25 in x 1.77 in |
| **Weight** | Weight: 935 gm (2.06 lb) |
| **Mount Options** | Drop ceiling T-bar, ceiling tile, 4" square electrical box, 4" round box, NA single gang box, EU single gang box, wall mount |
| **Physical Security** | Kensington lock slot |
| **LEDs** | Multicolor status LED<br>Blue: Managed from cnMaestro<br>Green: Up and running, not managed from cnMaestro<br>Amber: Booting |
| **Ambient Operation Temperature** | 0°C - + 50°C |
| **Storage Temperature** | -20°C - + 70°C |
| **Operating Humidity** | 95% RH non-condensing |
| **Reliability** | MTBF 8,29,316 hours at +25°C operating temperature |

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# X7-35X Wi-Fi 7 Indoor Access Point

## Access Point Specifications, continued

| | | |
|---|---|---|
| **Device Management** | cnMaestro Cloud / On-Premises management (version 5.1 and above)<br>Standalone operation mode<br>Web access with HTTPs / HTTP protocol<br>CLI access with SSH / telnet protocols | |
| **Certifications** (Compliance) | FCC, IC, CE<br>E 60601-1-2<br>EN 60950-1<br>IEC 62368-1 Safety<br>EN 60601-1-2 Medical<br>EMC<br>EN 61000-4-2/3/5 Immunity<br>UL 2043 Plenum | EN 62311 Human Safety/RF Exposure<br>WEEE<br>REACH and RoHS<br>*Wi-Fi certified a, b, g, n, ac, ax, be; WMM; spectrum and regulatory; Wi-Fi agile multiband; PMF; WAP2 and WPA3 PSK personal and enterprise<br><br>*Will be supported in future releases |

## Network Specifications

| | |
|---|---|
| **Security & Authentication** | Open, WPA, WPA2-PSK AES WPA2-ePSK / WPA2-Enterprise<br>WPA3-PSK (WPA3-SAE) / WPA3-ePSK / Enterprise / Enterprise-CNSA / OWE (Enhanced Open)<br>OSEN and PMF (802.11 W)<br>MAC authentication with local database or external database using RADIUS protocol<br>EAP-TLS / TTLS / PEAP / SIM / AKA<br>Hotspot WEB authentication |
| **Fast Roaming Support** | PMK, OKC, and 802.11r for fast layer 2 roaming<br>Seamless L2 roaming for wireless and guest clients across APs in the same L2 network<br>cnMaestro-assisted roaming for the guest clients |
| **Wi-Fi Quality of Service** | WMM (packet marking either with 802.1p or IP DSCP), WMM-PS, U-APSD<br>Multicast to unicast conversion |
| **MESH Support** | Auto-discovery and self-healing Wireless MESH support on 2.4 GHz, 5 GHz, and 6 GHz band<br>MESH and Client SSIDs can co-exist on the same radio interface |
| **SSID** | 16 SSIDs per radio, 48 SSIDs per AP<br>SSID scheduling |
| **Client Capacity** | 256 clients per radio, 768 clients per AP<br>Max client connections limit per SSID / radio / device |
| **Band Steering** | Yes |
| **Sticky Client Management** | Option to disconnect the client on minimum SNR threshold |
| **Rate Limit** | Per SSID / MAC |
| **Dynamic RF Channel and Power Management** | Auto-Channel selection<br>Auto-RF dynamic channel switch based on channel utilization and Wi-Fi / non-Wi-Fi interferences<br>Auto-RF dynamic power adjustment with the neighboring APs transmit power |
| **WIDS and WIPS** | Wireless packets flood (excessive association, authentication, de-authentication, disassociation, and EAP) detection<br>Rogue AP, Honeypot AP detection and termination |
| **Wireless Users Policy Management** | Standard Radius, Accounting, WISPr, and Cambium VSA attributes support<br>COA Messages (disconnect, VLAN ID, session, etc.) support<br>User groups with RADIUS assigned filter rules |
| **Wireless Devices Policy Management** | Device grouping based on device fingerprinting with L2, L3, L4, and L7 access control rules |

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# X7-35X Wi-Fi 7 Indoor Access Point

## Network Specifications, continued

| | |
|---|---|
| **Radius and Accounting Support** | Per SSID based RADIUS and accounting server<br>Accounting interval with start, stop, and interim messages with standard / Cambium VSA accounting attributes<br>Up to 3 RADIUS and accounting server with failover and load balancing option<br>Dynamic authorization and disconnect using COA messages |
| **VLAN Assignment** | Per SSID based 802.1q VLAN tagging<br>Dynamic VLAN assignment from external RADIUS server<br>Local VLAN pool<br>Radius assigned VLAN pool<br>ePSK assigned VLAN ID |

## Network Specifications, continued

| | | |
|---|---|---|
| **ACL and Application Control Rules** | Per SSID or device level, layer 2, 3 (IPv4 and IPv6), 4 and 7 access control rules with packet marking option<br>Application recognition, packet marking, rate limiting, and option to drop and deny application / application category<br>Per SSID DNS ACL option<br>Define custom application based on IP address and monitor/control custom application traffic | |
| **Connection Logging** | Per SSID basis option to log TCP, UDP and IP connection, and DNS query<br>NAT logging to external syslog servers | |
| **IP Support** | IPv4 and IPv6 | |
| **Tunneling Protocols** | WWAN, PPPoE, L2TPv2, L2GRE, & *VXLAN (*Will be supported in future releases) | |
| **SNMP and Syslogs Support** | SNMP v2 and v3 get operational mode<br>Syslog messages to external syslog server | |
| **DHCP Client and Server** | Option to enable DHCP client on L3 VLAN interface<br>On-board DHCP server with multiple DHCP pool options | |
| **Analytics and location Service** | Option to integrate Wi-Fi and BLE radios scan results with an external location analytics server through HTTP/HTTPs post | |
| **Client Connection and Life Cycle Analytics** (available with cnMaestro X Cloud) | Exhaustive client life cycle analytics with root cause analysis<br>Connection success and failure analytics | Disconnection analytics<br>Client dashboard with roaming history |
| **Guest Access Service (EasyPass)** (X Features are available on cnMaestro X) | cnMaestro hosted captive portal service<br>Multiple authentication methods supported to on-board guest user<br>• Radius based authentication<br>• Click through with simple terms and conditions acceptance<br>• Social login using Google®, Facebook®, Twitter® (aka, X), and Office 365®<br>• SMS based authentication (X)<br>• Voucher based access<br>• Microsoft® Azure AD and Google Workspace® (X)<br>• Sponsored guest access (X)<br>• Self-registration access (X) | Guest access on-boarding using payment gateway vendors (X)<br>• PayPal®<br>• IPpay<br>• Quickpay<br>• Orange<br>• Orange Money℠<br>• mPesa<br>Integration with the third-party captive portal vendors appliance<br>On-board captive portal service<br>IP whitelist or walled garden list support<br>Option to limit guest users' session, data quota limit, speed limits supported using Radius, WISPr, Cambium VSA and cnMaestro-hosted guest portal policy |
| **Services** | L2–L7 application visibility & control, Wi-Fi calling control, WIDS/WIPS, NTP, Syslog, SNMP traps, DNS proxy, auto-off on WAN failure, Open roaming (Will be supported in future releases) | |
| **API** | RESTful management and statistics API presence location APIs | |

# X7-35X Wi-Fi 7 Indoor Access Point

## Standards

| | |
|---|---|
| Wi-Fi Protocols | 802.11 b: BPSK, QPSK, CCK<br>802.11 a/g/n: BPSK, QPSK, 16-QAM, 64-QAM<br>802.11 ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM<br>802.11 ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM and 1024-QAM<br>802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM<br>20/40/80/160/320 MHz, DSSS, OFDM, OFDMA, MIMO, MU-MIMO |
| | Multi-link operation (MLO), Multi Resource Units<br>Target Wait Time (TWT), BSS Coloring,<br>Transmit beamforming (TxBF)<br>802.11n/ac packet aggregation: A-MPDU, A-MSDU<br>Maximum ratio combining (MRC), Cyclic delay/shift diversity (CDD/CSD),<br>Space-time block coding (STBC), Low-density parity check (LDPC)<br>Passpoint 3.0 |
| | IEEE 802.11 b/g/n/ac/ax/be/d/h/i/k/r/u/w |

## Regulatory Information

| | | |
|---|---|---|
| Frequency Bands | 2.412 to 2.484 GHz ISM | 5.925 to 6.425 GHz U-NII-5 |
| | 5.150 to 5.250 GHz U-NII-1 | 6.425 to 6.525 GHz U-NII-6 |
| | 5.250 to 5.350 GHz U-NII-2A | 6.525 to 6.875 GHz U-NII-7 |
| | 5.470 to 5.725 GHz U-NII-2C | 6.875 to 7.125 GHz U-NII-8 |
| | 5.725 to 5.850 GHz U-NII-3 | |
| Channels List | 2.4 GHz channels: 1 to 13 | |
| | 5 GHz channels: 36 to 64, 100 to 144 and 149 to 165 | |
| | 6 GHz channels: 1 to 233 | |

EIRP limitations apply to the listed countries.
ROW Individual country limits may apply. Please contact your regional sales manager for country-specific regulations.

## Europe, UK, USA, and Canada Regulatory Details

| | 2.4 GHz (EIRP) | 6 GHz (EIRP) | |
|---|---|---|---|
| Band | 2400 – 2483.5 MHz | 5945 – 6425 MHz | 6425 – 7125 MHz |
| Europe | 20 dBm (100mW) | 23 dBm (200mW) indoor | not supported |
| UK | 20 dBm (100mW) | 24 dBm (250mW) indoor | not supported |
| USA | 36 dBm (4W) | 30 dBm (1W) indoor | 30 dBm (1W) indoor |
| Canada | 36 dBm (4W) | 30 dBm (1W) indoor | 30 dBm (1W) indoor |

| | 5 GHz | | | |
|---|---|---|---|---|
| Band | 5150 – 5250 MHz | 5250 – 5350 MHz | 5470 – 5725 MHz | 5725 – 5875 MHz |
| Europe | 23 dBm (200mW) | 23 dBm (200mW) | 30 dBm (1W) | 14 dBm (25mW) |
| UK | 23 dBm (200mW) | 23 dBm (200mW) | 30 dBm (1W) | 23 dBm (200mW) |
| USA | 36 dBm (4W) | 30 dBm (1W) | 30 dBm (1W) | 36 dBm (4W) |
| Canada* | 23 dBm (200mW) | 30 dBm (1W) | 30 dBm (1W) | 36 dBm (4W) |

*Canada restricts the use of 5600-5650 MHz for regulatory reasons

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# X7-35X Wi-Fi 7 Indoor Access Point

## Southeast Asia Regulatory Details

| | 2.4 GHz (EIRP) | 6 GHz (EIRP) | |
|---|---|---|---|
| Band | 2400 – 2483.5 MHz | 5925 – 6425 MHz | 6425 – 7125 MHz |
| Indonesia | 27 dBm (500mW) indoor<br>36 dBm (4W) outdoor | not supported | not supported |
| Vietnam | 23 dBm (200mW) | | |
| Philippines | 26 dBm (400mW) | | |
| Malaysia | 27 dBm (500mW) | 23 dBM (200mW) indoor | |
| Singapore | 23 dBm (200mW) | 24 dBm (250mW) indoor<br>14 dBm (25mW) outdoor | |
| Thailand | 20 dBm (100mW) | 24 dBm (250mW) indoor<br>14 dBm (25mW) outdoor | |

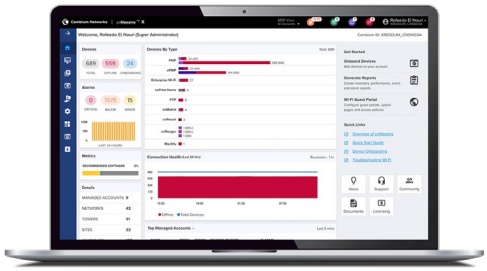
| | 5 GHz (EIRP) | | | |
|---|---|---|---|---|
| Band | 5150 – 5250 MHz | 5250 – 5350 MHz | 5470 – 5725 MHz | 5725 – 5825 MHz |
| Indonesia | 23 dBm (200mW) indoor | 23 dBm (200mW) indoor | Not supported | 23 dBm (200mW) indoor<br>36 dBm (4W) outdoor |
| Vietnam | 23 dBm (200mW) | 23 dBm (200mW) | 30 dBm (1W) | 30 dBm (1W) |
| Philippines | 26 dBm (400mW) | 26 dBm (400mW) | 26 dBm (400mW) | 26 dBm (400mW) |
| Malaysia* | 30 dBm (1W) indoor<br>23 dBm (200mW) outdoor | 30 dBm (1W) indoor | 5470 – 5650 MHz<br>30 dBm (1W) | 30 dBm (1W) |
| Singapore | 23 dBm (200mW) | 23 dBm (200mW) | 30 dBm (1W) | 30 dBm (1W) |
| Thailand | 23 dBm (200mW) | 23 dBm (200mW) | 30 dBm (1W) | 30 dBm (1W) |

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

# X7-35X Wi-Fi 7 Indoor Access Point

## Management

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 and upgrades to advanced features. Cambium Care Pro support included with 24x7 technical support with accelerated access to L2 engineers and regular software updates. |
| cnMaestro Essentials | License-free management that delivers a disruptive total cost of ownership (TCO) for organizations of all sizes. |

Click for more information.

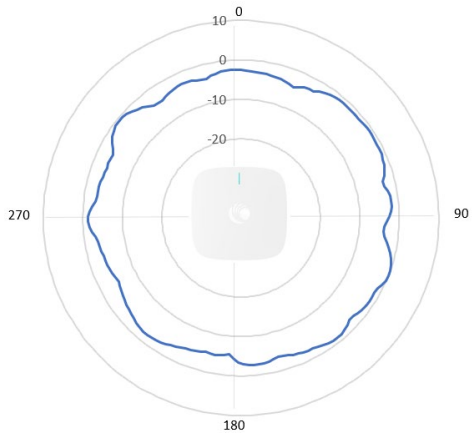
cnMaestro X

cnMaestro Essentials

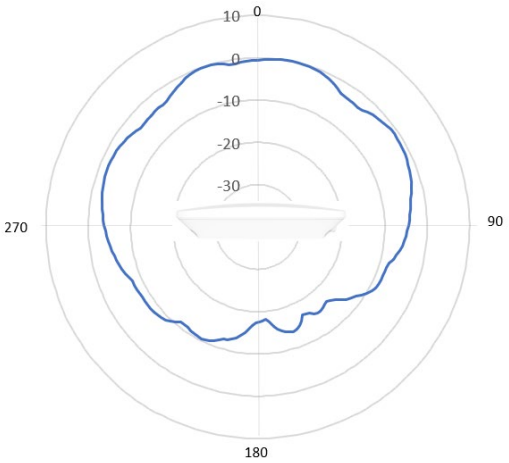
# X7-35X Wi-Fi 7 Indoor Access Point

## Antenna Patterns

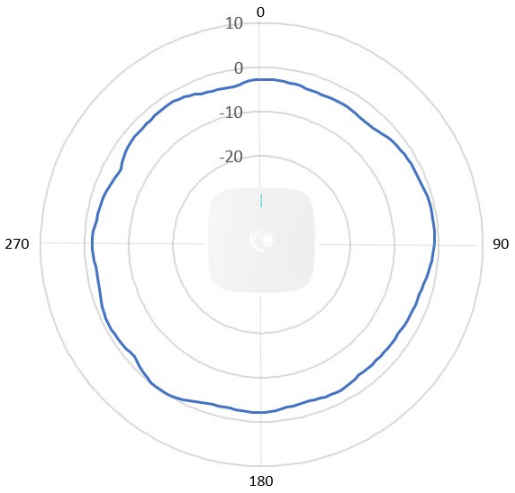
5 GHz Antenna Normalized Azimuth Gain [dB]



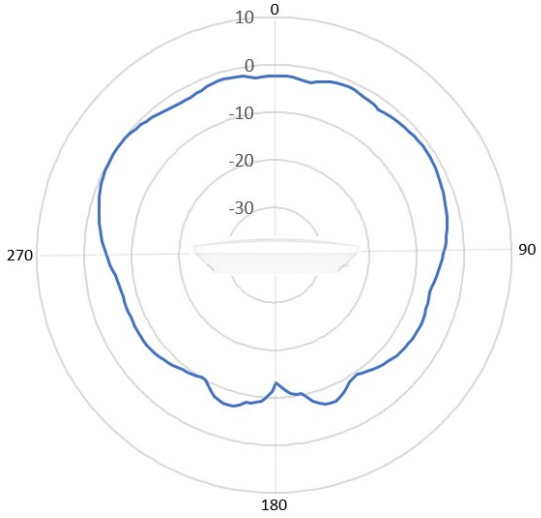

5 GHz Antenna Normalized Elevation Gain [dB]




2 GHz Antenna Normalized Azimuth Gain [dB]



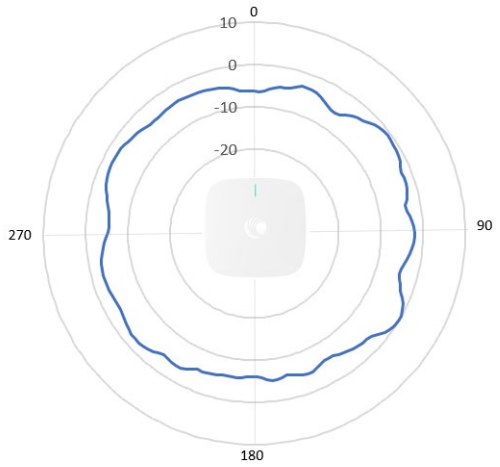

2 GHz Antenna Normalized Elevation Gain [dB]



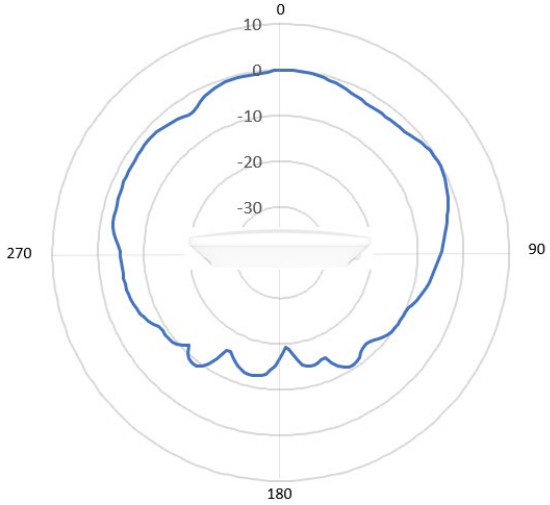
# X7-35X Wi-Fi 7 Indoor Access Point

## Antenna Patterns , continued

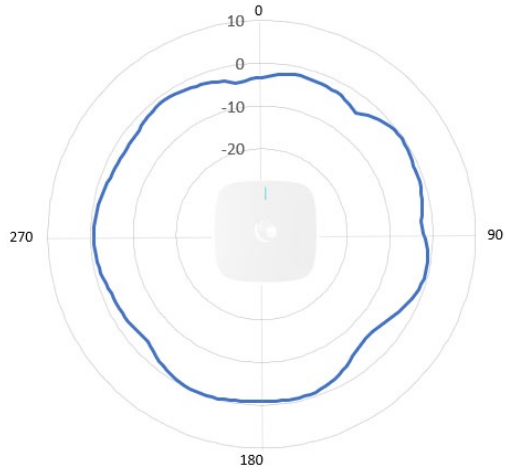
6 GHz Antenna Normalized Azimuth Gain [dB]



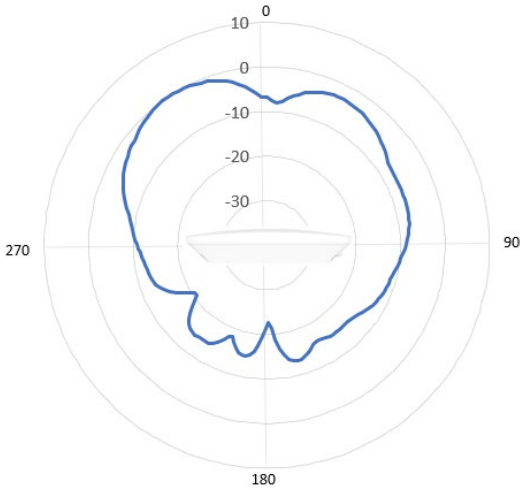

6 GHz Antenna Normalized Elevation Gain [dB]



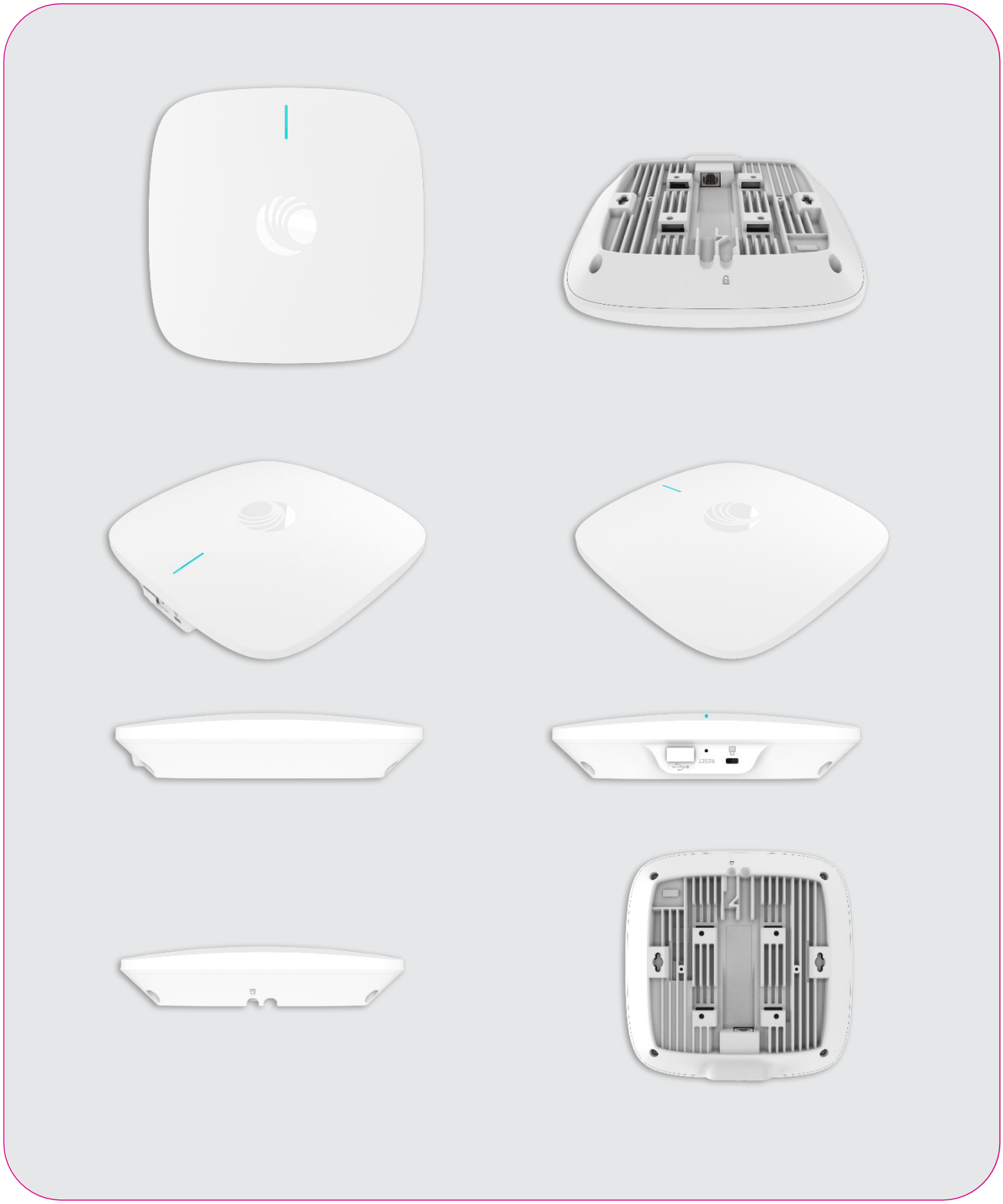

IoT Antenna Normalized Azimuth Gain [dB]




IoT Antenna Normalized Elevation Gain [dB]



# X7-35X Wi-Fi 7 Indoor Access Point



# X7-35X Wi-Fi 7 Indoor Access Point

## Ordering Information

| | |
|---|---|
| Regulatory Model | X7-35X |
| X7-35X-0A00-CA | X7-35X Indoor Tri-band Wi-Fi 7 AP 2x2. 6GHz radio enabled. 2.5GbE. CA |
| X7-35X-0A00-EU | X7-35X Indoor Tri-band Wi-Fi 7 AP 2x2. 6GHz radio enabled. 2.5GbE. EU |
| X7-35X-0A00-RW | X7-35X Indoor Tri-band Wi-Fi 7 AP 2x2. 6GHz radio disabled. 2.5GbE. ROW |
| X7-35X-0A00-US | X7-35X Indoor Tri-band Wi-Fi 7 AP 2x2. 6GHz radio enabled. 2.5GbE. US |
| X7-35X-0A06-RW | X7-35X Indoor Tri-band Wi-Fi 7 AP 2x2. 6GHz radio enabled. 2.5GbE. ROW |
| N000000L034B | PoE, 30.5W, 56V, GbE DC Injector, Indoor, Energy Level 6 Supply, accepts C5 connector |

## cnMaestro X Subscriptions

| | |
|---|---|
| MSX-SUB-X7-35X-1 | cnMaestro X 1-Year subscription for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-1 for NBD advanced replacement hardware support. |
| MSX-SUB-X7-35X-3 | cnMaestro X 3-Year subscription for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-3 for NBD advanced replacement hardware support. |
| MSX-SUB-X7-35X-5 | cnMaestro X 5-Year subscription for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-5 for NBD advanced replacement hardware support. |
| MSX-RNW-X7-35X-1 | cnMaestro X 1-Year renewal for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-1 for NBD advanced replacement hardware support. |
| MSX-RNW-X7-35X-3 | cnMaestro X 3-Year renewal for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-3 for NBD advanced replacement hardware support. |
| MSX-RNW-X7-35X-5 | cnMaestro X 5-Year renewal for one X7-35X AP. Creates one device Tier3 slot. Includes Cambium Care Pro support. Order CCADV-UPG-X7-35X-5 for NBD advanced replacement hardware support. |

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# X7-35X Wi-Fi 7 Indoor Access Point

| Cambium Care Support | |
|---|---|
| CCPRO-SUP-X7-35X-1 | Cambium Care Pro, 1-year support for one X7-35X. 24x7 TAC support, SW updates |
| CCPRO-SUP-X7-35X-3 | Cambium Care Pro, 3-year support for one X7-35X. 24x7 TAC support, SW updates |
| CCPRO-SUP-X7-35X-5 | Cambium Care Pro, 5-year support for one X7-35X. 24x7 TAC support, SW updates |
| CCADV-SUP-X7-35X-1 | Cambium Care Advanced, 1-year support for one X7-35X Wireless AP. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| CCADV-SUP-X7-35X-3 | Cambium Care Advanced, 3-year support for one X7-35X Wireless AP. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| CCADV-SUP-X7-35X-5 | Cambium Care Advanced, 5-year support for one X7-35X Wireless AP. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| CCADV-UPG-X7-35X-1 | Cambium Care Advanced Add-on to cnMaestro X, 1-year support for one X7-35X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| CCADV-UPG-X7-35X-3 | Cambium Care Advanced Add-on to cnMaestro X, 3-year support for one X7-35X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| CCADV-UPG-X7-35X-5 | Cambium Care Advanced Add-on to cnMaestro X, 5-year support for one X7-35X. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |

**Limited Lifetime Warranty**

Cambium Networks X7-35X Wi-Fi 7 Access Point includes 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.

**cambiumnetworks.com**

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