

Altai CX600 Dual-Band 2x2 Wi-Fi 6 Outdoor Access Point

Unrivalled Cost-Performance with External Antennas

The Altai CX600, with the latest Wi-Fi 6 (802.11ax) technology, is specifically designed to provide highly reliable and consistent connectivity to mobile users and IoT devices at the market's most affordable price point.

With maximum data rates of 1.775 Gbps, Altai's patented technologies, and Wi-Fi 6 features such as OFDMA and bi-directional multi-user MIMO, the CX600 delivers the capacity, coverage, and reliability to meet the challenges for medium- to high-density outdoor deployments.



Key Features and Benefits



Enhanced Capacity with Wi-Fi 6 Support

Harnesses Wi-Fi 6 features such as OFDMA and bi-directional multiuser MIMO to significantly increase capacity on both 2.4 GHz and 5 GHz radios, ensuring superior performance.

Total Data Rate	1.775 Gbps (2.4 GHz: 574 Mbps + 5 GHz: 1201 Mbps)
Max. Concurrent Users	512 (256 per Radio)



Super Dual-Band Coverage

Max. LOS Distance for Smartphones †	350 m (2.4 GHz)* 250 m (5 GHz)*
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Power over Ethernet (PoE) Support

With 802.3af/at standard PoE, the CX600 can be easily powered up by any PoE/PoE+ switches without the need for additional adapters.



Weatherproof and Dustproof Housing

Supports dual-image and fail-safe boot to minimize the risk of system file corruption caused by power supply issues or improper operations.



Seamless Mobility

Enables low-latency roaming and resolves sticky client issues with support for 802.11k/v/r and Altai's Smart Roaming and Steering algorithm.



Secure Wireless Protection

- Supports WPA3 for secure Wi-Fi access, offering advanced encryption protocols to safeguard data transmission.
- Integrates with †Check Point's Nano Agent to fend off sophisticated cyber attacks, including shell injections, memory corruption and control flow hijacking.



Ease of Deployment

Offers flexible management options through a variety of WLAN controllers, including AltaiGate, AltaiCare cloud/on-premise virtual appliance, and Insights, enabling quick and efficient network rollout regardless of the network size.

* The actual distance and performance vary depending on site conditions, device configurations and client capabilities.

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Wireless Interfaces

2.4 GHz (2x2:2) Radio

• Operating Mode	AP/CPE (STA)/Repeater #
• Standard	IEEE 802.11b/g/n/ax
• Maximum Data Rate	574 Mbps
• Operating Frequency †	2.400 – 2.484 GHz (Ch 1-13)
• Channel Bandwidth	20/40 MHz
• Transmit Power †	22 dBm (Max.), 19 dBm (Per Chain) Adjustable in 1 dB step
• Receiver Sensitivity (Typical)	
802.11b 1 Mbps	-98 dBm; 11 Mbps -89 dBm
802.11g 6 Mbps	-93 dBm; 54 Mbps -76 dBm
802.11n HT20, MCS0	-93 dBm; HT20, MCS7 -73 dBm
HT40, MCS0	-90 dBm; HT40, MCS7 -71 dBm
802.11ax HE20, MCS0	-93 dBm; HE20, MCS11 -64 dBm
HE40, MCS0	-90 dBm; HE40, MCS11 -61 dBm

5 GHz (2x2:2) Radio

• Operating Mode	AP/CPE (STA)/Bridge/Repeater #
• Standard	IEEE 802.11a/n/ac/ax
• Maximum Data Rate	1201 Mbps
• Operating Frequency †	5.150 – 5.250 GHz (Ch 36-48) 5.250 – 5.350 GHz (Ch 52-64) 5.470 – 5.725 GHz (Ch 100-140) 5.725 – 5.850 GHz (Ch 149-165)
• Channel Bandwidth	20/40/80 MHz
• Transmit Power †	25 dBm (Max.), 22 dBm (Per Chain) Adjustable in 1 dB step
• Receiver Sensitivity (Typical)	
802.11a 6 Mbps	-95 dBm; 54 Mbps -78 dBm
802.11n HT20, MCS0	-94 dBm; HT20, MCS7 -75 dBm
HT40, MCS0	-92 dBm; HT40, MCS7 -73 dBm
802.11ac VHT20, MCS0	-94 dBm; VHT20, MCS9 -71 dBm
VHT40, MCS0	-92 dBm; VHT40, MCS9 -68 dBm
VHT80, MCS0	-89 dBm; VHT80, MCS9 -64 dBm
802.11ax HE20, MCS0	-95 dBm; HE20, MCS11 -66 dBm
HE40, MCS0	-92 dBm; HE40, MCS11 -63 dBm
HE80, MCS0	-89 dBm; HE80, MCS11 -60 dBm

Other Radio Specifications

- 20 SSID (10 SSID per Radio) by default, expandable to 32 SSID
- Hidden SSID in Beacons
- Client Association Control per SSID by SNR and Data Rate
- Bandwidth Control Per SSID/Client
- Auto Channel Selection and Interference Mitigation Suite
- Dynamic Frequency Selection (DFS) in 5 GHz spectrum
- Band Steering #
- Multi-AP Steering and Stickiness Optimization (802.11k/v) #
- Fast Roaming (802.11r)
- QoS: 802.11e (WMM)
- Dual-Radio and 1+N Redundancy #
- Transmit Power Control (802.11h) #

Antennas

• 2.4 GHz Antenna	External 5 dBi Omni, 2 x RP-SMA Female
• 5 GHz Antenna	External 5 dBi Omni, 2 x RP-SMA Female

Networking

- Switch/Gateway Mode
- IPv4/IPv6 Dual-Stack
- NAT

- DHCP Client/Server
- PPPoE Client #
- VLAN per SSID
- VLAN per User (Dynamic VLAN)
- VLAN Pooling
- Multicast Rate Filter/IGMP Snooping

Security

- Authentication – Open, Shared key, WPA/WPA2/WPA3 (Personal/Enterprise), 802.1X (EAP-PEAP/TLS/TTLS/SIM/AKA)
- Encryption – WEP, TKIP, AES
- Management Frame Protection (802.11w)
- Inter/Intra-SSID Client Isolation
- MAC-based Access Control (White/Black List)
- RADIUS
- Multiple PSK
- External Captive Portal
- Trusted IP Management Access
- WIDS/WIPS #
- Check Point Nano Agent

Management

- Management Platforms: Standalone, AltaiGate, AltaiCare Cloud, AltaiCare On-Premises, Insights
- SNMP v1/v2c /v3
- MIB2/IF-MIB/Altai Enterprise MIB
- Syslog
- Remote Factory Reset #

Physical Specifications

• Dimension	190 x 124 x 47 mm
• Weight	0.7 kg
• Mounting	Pole or Wall-mounted
• Network Interface	1 x 2.5 GbE RJ-45 Port (PoE In)
• Indicator	1 x Power Status 1 x Ethernet Interface Status 2 x Radio Interface Status

Power

• Power Supply ‡	802.3af/at PoE PD, or Passive 54 – 56 VDC PoE PD
• Power Consumption	12 W (Typical)

Environmental Specifications

• Operating Temperature	-20 °C to +60 °C (Ambient)
• Storage Temperature	-40 °C to +80 °C
• Humidity	Up to 90% (Non-Condensing)
• Lightning Protection	EN 61000-4-5
• Wind Loading	Up to 220 km/h (136 mph)
• Weatherproof	IP67 Compliant

Certifications

- FCC/CE/Others
- RoHS2 Compliance

† The transmit power and operating frequency may vary according to country regulations.

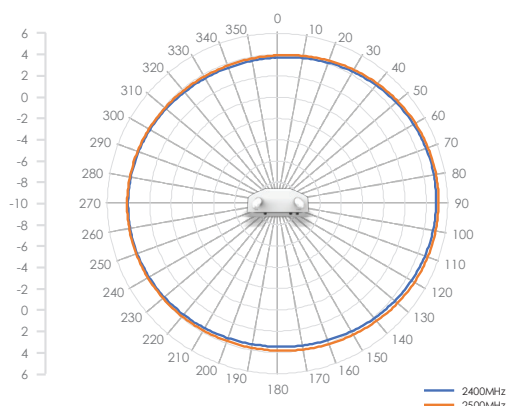
‡ Power accessories including PoE injectors are not included.

Will be available in the future.

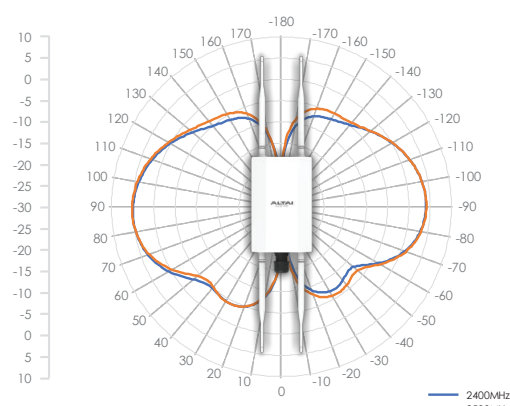
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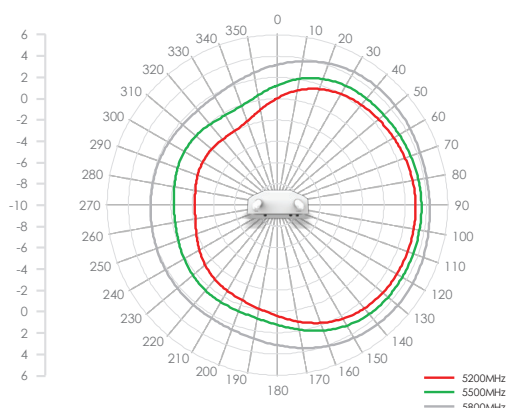
Radiation Pattern



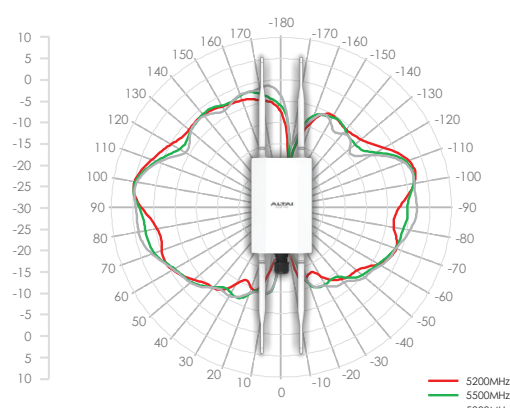
2.4 GHz Azimuth Plane



2.4 GHz Elevation Plane



5 GHz Azimuth Plane



5 GHz Elevation Plane

Product Ordering Information

Standard Package

Part No.: SD.CX600-2241-000	• CX600 outdoor 2x2 Wi-Fi 6 access point (Model No.: CX600) • 2.4 GHz 5 dBi omni antenna (2 pcs) • 5 GHz 5 dBi omni antenna (2 pcs) • Wall/pole mounting Kit
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Optional Accessories

Part No.: SD.PE-0001-EP	• Indoor 54 VDC 1 gigabit passive PoE injector
Part No.: SD.PE-0016-GS	• Indoor 56 VDC 2.5 gigabit passive PoE injector

Contact Us

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