

The Altai C260-X is a budget-friendly Wi-Fi 6 access point that delivers excellent performance and reliable wireless connectivity for indoor and outdoor use. It supports external antennas that offer the flexibility to attach a wide range of antenna types, catering to diverse coverage requirements and environmental conditions. This adaptability ensures optimal signal strength and extended range. With its affordable price point, the C260-X delivers an unbeatable high-performance price ratio, making it the ideal choice for those seeking exceptional performance, coverage flexibility, and budget-friendly options.



Features and Benefits



Enhanced Capacity with Wi-Fi 6 Support

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

Total Data Rate	2.976 Gbps <ul style="list-style-type: none"> • 2.4 GHz: 574 Mbps • 5 GHz: 2402 Mbps
Max. Concurrent Users	256 (128 for both radios)*



Super Dual-Band Coverage

Max. LOS Distance for Smartphones †	300 m (2.4 GHz)* 200 m (5 GHz)*
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Power over Ethernet (PoE) Support

With 802.3af standard PoE, the C260-X can be easily powered up by any PoE/PoE+ switches without the need for additional adapters.



Weatherproof and Dustproof Housing

Built to withstand outdoor environments, it is well-suited for various deployments from smart cities and ports to construction sites.



Secure Wireless Protection

Supports WPA3 for secure Wi-Fi access, offering advanced encryption protocols to safeguard data transmission.



Ease of Deployment

Easily managed through the Insights cloud platform, enabling quick and efficient network rollout regardless of the network size.

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

† With external 2.4 GHz 4 dBi and 5 GHz 4 dBi omni antennas



Use Cases:

») **Cost-Effective Outdoor Wi-Fi Hotspots**

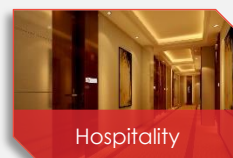
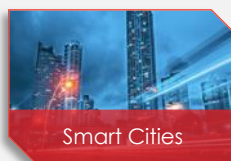
When combined with Insights, the C260-X provides a powerful advertisement engine and various login options for guest Wi-Fi access, including email sign-up and click-through.

») **City-Wide Wireless Infrastructure**

The C260-X complements Altai Super WiFi Base Stations for city-wide wireless infrastructure deployments. It enables wireless broadband services, Smart City and IoT applications.

») **Medium to High-Density Environments**

With Wi-Fi 6 support, the C260-X is an excellent choice for medium to high-density environments such as stadiums and ad-hoc events.



Wireless Interfaces

2.4 GHz (2x2:2) Radio

• Operating Mode	AP/STA #
• 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
• EIRP	100 mW (Max.)
• Modulation	CCK, BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
• Receiver Sensitivity (Typical, per chain)	
802.11b	1 Mbps -96 dBm; 11 Mbps -87 dBm
802.11g	6 Mbps -93 dBm; 54 Mbps -75 dBm
802.11n	HT20, MCS0 -92 dBm; HT20, MCS7 -73 dBm
	HT40, MCS0 -89 dBm; HT40, MCS7 -70 dBm
802.11ax	HE20, MCS0 -92 dBm; HE20, MCS11 -64 dBm
	HE40, MCS0 -89 dBm; HE40, MCS11 -61 dBm

5 GHz (2x2:2) Radio

• Operating Mode	AP/STA #
• Standard	IEEE 802.11a/n/ac/ax
• Maximum Data Rate	2402 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	20/40/80/160 MHz
• EIRP	200 mW (Max.) for 5.150 – 5.350 GHz 1000 mW (Max.) for 5.470 – 5.850 GHz
• Modulation	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
• Receiver Sensitivity (Typical, per chain)	
802.11a	6 Mbps -92 dBm; 54 Mbps -74 dBm
802.11n	HT20, MCS0 -90 dBm; HT20, MCS7 -73 dBm
	HT40, MCS0 -87 dBm; HT40, MCS7 -70 dBm
802.11ac	VHT20, MCS0 -91 dBm; VHT20, MCS8 -67 dBm
	VHT40, MCS0 -88 dBm; VHT40, MCS9 -63 dBm
	VHT80, MCS0 -84 dBm; VHT80, MCS9 -60 dBm
	VHT160, MCS0 -81 dBm; VHT160, MCS9 -56 dBm
802.11ax	HE20, MCS0 -91 dBm; HE20, MCS11 -62 dBm
	HE40, MCS0 -89 dBm; HE40, MCS11 -59 dBm
	HE80, MCS0 -86 dBm; HE80, MCS11 -56 dBm
	HE160, MCS0 -83 dBm; HE160, MCS11 -53 dBm

For both 2.4 GHz and 5 GHz Radios

- 16 SSID (8 SSID per Radio)
- Client Association Control per SSID by SNR #
- Bandwidth Control Per SSID/Client
- Auto Channel Selection

Antennas

2.4 GHz Antenna

• Type	External Omni-Directional
• Gain	Average: 4 dBi; Peak: 5 dBi
• Connector	2 x RP-SMA (AP: Female)
• Polarization	Linear, Vertical
• Horizontal Beamwidth	360°
• VSWR	2 (Max.)
• Impedance	50 Ω

5 GHz Antenna

• Type	External Omni-Directional
• Gain	Average: 4 dBi; Peak: 5 dBi
• Connector	2 x RP-SMA (AP: Female)
• Polarization	Linear, Vertical
• Horizontal Beamwidth	360°
• VSWR	2 (Max.)
• Impedance	50 Ω

Networking

- Switch/Gateway Mode
- NAT
- DHCP Client/Server
- PPPoE Client #
- VLAN per SSID
- IGMP Snooping #

Security

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

Management

- Management Platforms: Standalone, Insights, AltaiCare Private Cloud #, AltaiCare On-Premises #, and AltaiGate #
- Syslog

Physical Specifications

• Dimension	250 x 130 x 52 mm (Without Antennas)
• Weight	0.68 kg (Without Mounting Kit)
• Mounting	Pole or Wall-mounted
• Network Interface	1 x 10/100/1000Mbps RJ-45 Port (PoE In) 1 x 10/100/1000Mbps RJ-45 Port
• Indicator	1 x Power Status 2 x Ethernet Interface Status 2 x Radio Interface Status 3 x Received Signal Strength
• Reset Button	Onboard

Power

• Power Supply	802.3af PoE PD, or Passive 48 – 56 V PoE PD, or 12 VDC Jack, Ø5.5 x Ø2.1 x 10 mm
• Power Consumption	15 W (Max.)

† The transmit power and operating frequency may vary according to country regulations.
Will be available in the future.

Environmental Specifications

- Operating Temperature -20 °C to +55 °C (Ambient)
- Storage Temperature -40 °C to +70 °C
- Humidity 5% – 95% (Non-Condensing)
- Lightning Protection EN 61000-4-5
- Wind Loading Up to 216 km/h (134 mph)
- Weatherproof IP55 Compliant

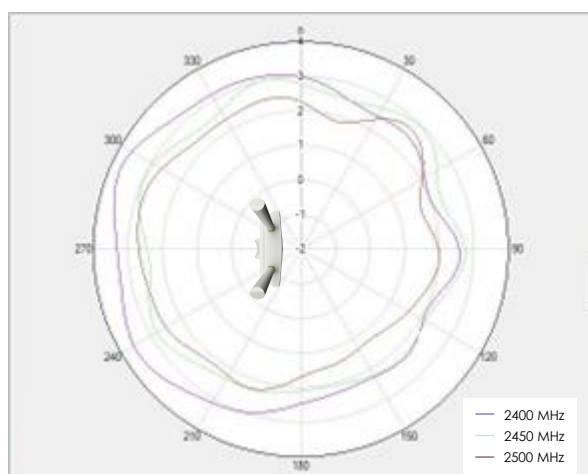
Certifications

- FCC/CE/Others
- RoHS Compliance

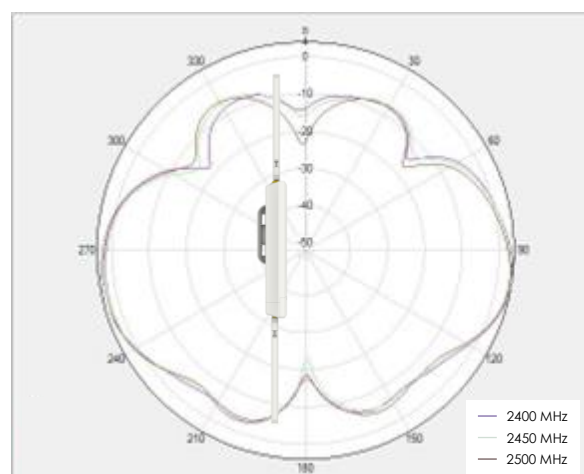
Warranty

- 1-Year Limited Hardware Warranty

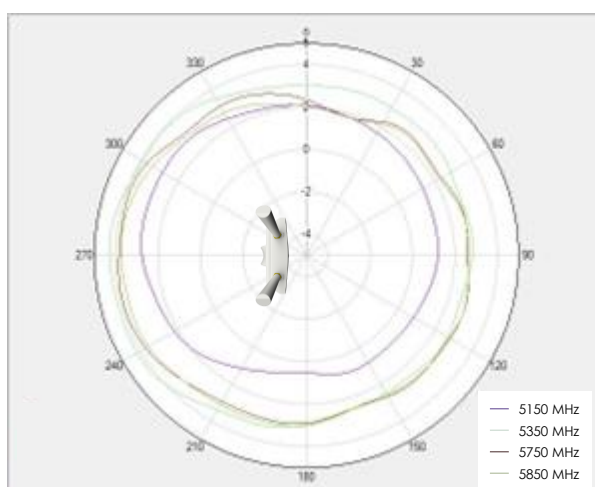
Radiation Pattern



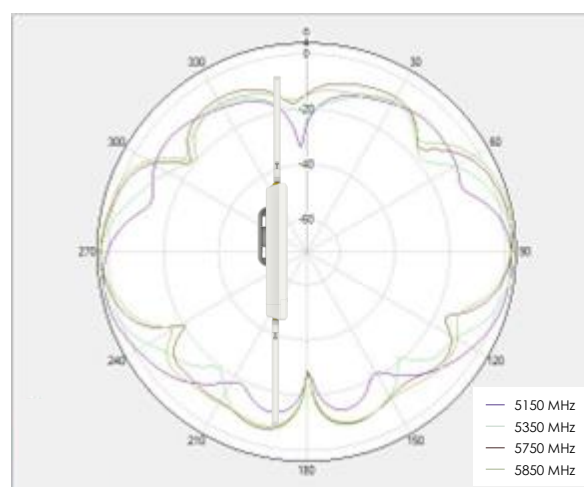
2.4 GHz Azimuth Plane



2.4 GHz Elevation Plane



5 GHz Azimuth Plane



5 GHz Elevation Plane

Product Ordering Information	
Standard Package	
Part No.: SD.C260-3241-000	<ul style="list-style-type: none"> • C260-X Outdoor Dual-band 2x2 Wi-Fi 6 Access Point (Model No.: C260-X) • 2 x 2.4 GHz 4 dBi Omni-Directional Antenna • 2 x 5 GHz 4 dBi Omni-Directional Antenna • Standard wall/pole mounting Kit
Optional Accessories	
Part No.: SD.PE-0001-EP	<ul style="list-style-type: none"> • Indoor 54 VDC 1 gigabit passive PoE injector
Warranty Extension	
Part No.: SV.HW-C2602-00	<ul style="list-style-type: none"> • 2nd Year Extended H/W Warranty for C260 Series
Part No.: SV.HW-C2603-00	<ul style="list-style-type: none"> • 3rd Year Extended H/W Warranty for C260 Series
Part No.: SV.HW-C2604-00	<ul style="list-style-type: none"> • 4th Year Extended H/W Warranty for C260 Series
Part No.: SV.HW-C2605-00	<ul style="list-style-type: none"> • 5th Year Extended H/W Warranty for C260 Series
Contact Us	
<ul style="list-style-type: none"> • Email: sales@altaitechnologies.com or info@altaitechnologies.com 	

CX260X-PB-240829

The information contained herein is subject to change without prior notice.