Unrivalled Cost-Performance with External Antenna in the Class



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 (2.4 GHz: 574 Mbps + 5 GHz: 2402 Mbps)
*Max. Concurrent Users	256 (128 for both radios)



Super Dual-Band Coverage

•	•		
	*Expected Line-of-Sight Distan		
	between †C260-X A	veen †C260-X AP and Smartphone	
	2.4 GHz	5 GHz	
Open Area	300 m	200 m	
Rural	230 m	140 m	
Suburban	130 m	70 m	
Urban	70 m	30 m	



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

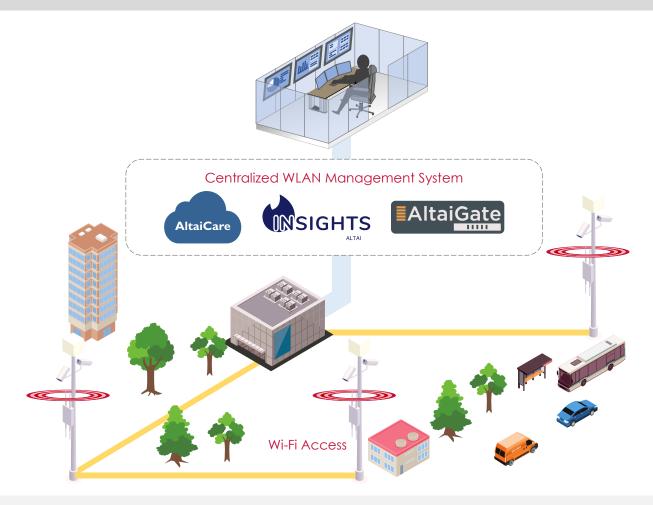
Easily managed through the Insights cloud platform, enabling quick and efficient network rollout regardless of the network size.

^{*} 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

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Use Cases:

Oost-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.

Oity-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.















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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

†Transmit Power
 Modulation
 CCK, BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM

• Receiver Sensitivity (Typical, per chain)

-87 dBm 802.11b 1 Mbps -96 dBm; 11 Mbps 802.11g 6 Mbps -93 dBm; 54 Mbps -75 dBm HT20, MCS0 802.11n -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, MCSO -89 dBm; HE40, MC\$11 -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

• †Transmit Power 26 dBm (Max.), 23 dBm (Per Chain)

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, MCSO	-91 dBm;	HE20, MCS11	-62 dBm
	HE40, MCSO	-89 dBm;	HE40, MCS11	-59 dBm
	HE80, MCSO	-86 dBm;	HE80, MCS11	-56 dBm
	HEIAO MCSO	-83 dBm	HEIAO MCSII	-53 dRm

For both 2.4 GHz and 5 GHz Radios

- 16 SSID (8 SSID per Radio)
- Hidden SSID in Beacons
- WDS Bridge via AP/STA mode
- #Client Association Control per SSID by SNR
- Bandwidth Control Per SSID/Client
- #Band Steering
- Auto Channel Selection with User-Defined Channel Pooling
- Frame Aggregation: A-MPDU, A-MSDU
- RTS/CTS Protection
- STA Association Lock by AP MAC

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 $50~\Omega$

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 50Ω

Networking

- Switch/Gateway Mode
- Spanning Tree Protocol (IEEE 802.1D)
- VLAN (Trunk/Access) per SSID
- DHCP Client/Server
- NA^T
- Port Forwarding
- # PPPoE Client

Security

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

Management

- Management Mode: Fat AP (Standalone), Thin AP
- Local Management:
 - Web User Interface (HTTP/HTTPS)
 - o Command Line Interface (SSH)
 - Secondary IP Address
- Remote Management:
 - o Insights
 - o AltaiCare Private Cloud
 - o AltaiCare On-Premises
 - o AltaiGate
 - o #SNMP v1/v2c/v3
 - o #MIB2/IF-MIB/Altai Enterprise MIB
- Syslog
- Diagnostic Tools: Channel Scanner, Packet Capture, Ping, Traceroute

 $[\]dagger$ The transmit power and operating frequency may vary according to country regulations.

[#] Will be available in the future.

Unrivalled Cost-Performance with External Antenna in the Class



-20 °C to +55 °C (Ambient)

5% - 95% (Non-Condensing)

-40 °C to +70 °C

EN 61000-4-5

Physical Specifications

•	Dimension	$250 \times 140 \times 56$ mm (Without Antennas) $546 \times 140 \times 56$ mm (With Antennas)
•	Weight	0.68 kg (Without Mounting Kit)
•	Mounting	Pole or Wall-mounted
	NI = 4 = al - l = 4 = af = a = =	1 10/100/1000\ /I D I /F D I/D - F I

 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 Connector Type A: Ø5.5 x Ø2.1

x 10 mm

Power Consumption 15 W (Max.)

Environmental Specifications

- Operating Temperature
- Storage Temperature
- Humidity
- Lightning Protection
- Wind Loading
- Weatherproof
- g Up to 216 km/h (134 mph)
 of IP55 Compliant

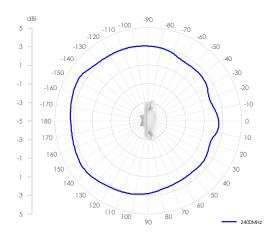
Certifications

- FCC/CE/Others
- RoHS Compliance

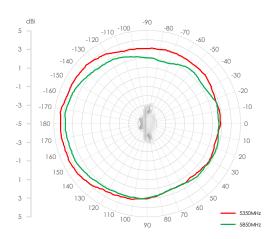
Warranty

• 1-Year Limited Hardware Warranty

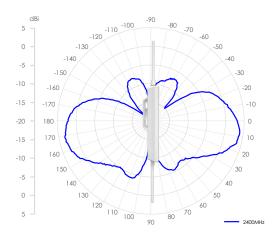
Radiation Patterns



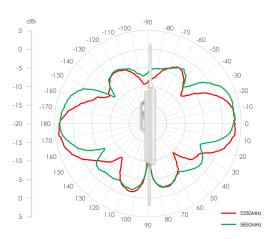
2.4 GHz Azimuth Plane



5 GHz Azimuth Plane

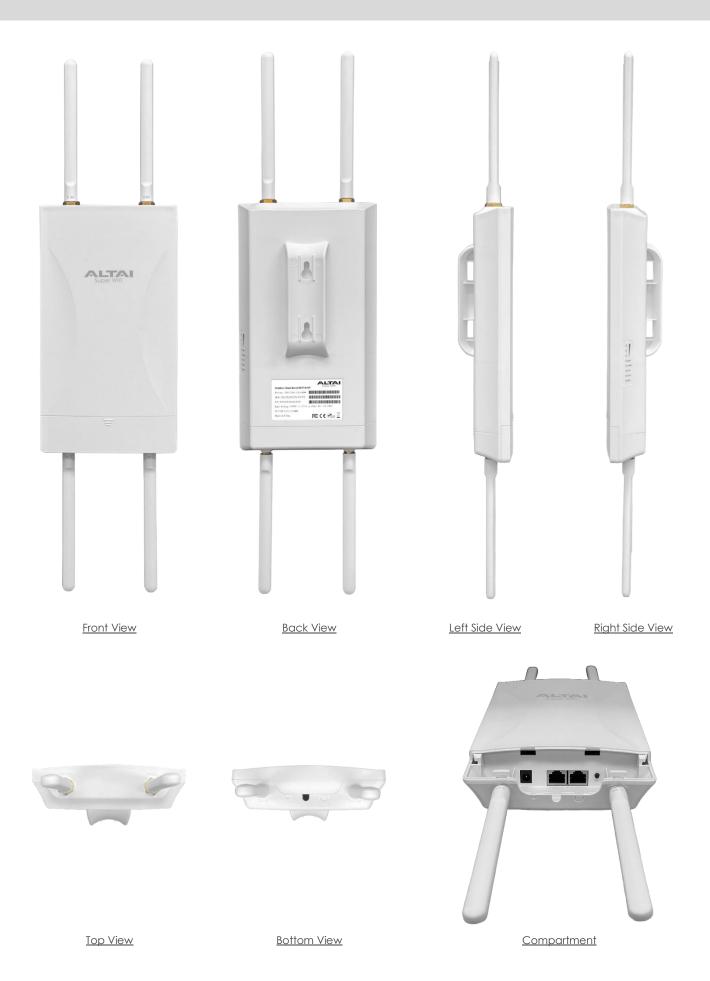


2.4 GHz Elevation Plane



5 GHz Elevation Plane





Unrivalled Cost-Performance with External Antenna in the Class



Product Ordering Information Standard Package		
Optional Accessories – PoE Injector		
Part No.: SD.PE-0001-EP	 Indoor AC to 54 VDC 1 Gigabit Passive PoE Injector No Power Cords/Wires included 	
Optional Accessories – PoE Switch		
Part No.: SD.IS120-1223-000	 MIS120P Industrial 6-Gigabit-Port Managed Layer 2+ PoE Switch Optionally used in conjunction with 1) 120 W 48 VDC Industrial Power Supply (SD.PE-0001-MW), or 2) 240 W 48 VDC Industrial Power Supply (SD.PE-0002-MW) 	
Part No.: SD.IS200-3323-000	 MIS200P Industrial 14-Gigabit-Port Managed Layer 2+ PoE Switch Optionally used in conjunction with 1) 120 W 48 VDC Industrial Power Supply (SD.PE-0001-MW), or 2) 240 W 48 VDC Industrial Power Supply (SD.PE-0002-MW) 	
Optional Accessories – Antenna		
Part No.: NS.AN-2M05-01	 2.4 GHz 5 dBi RP-SMA Male Omnidirectional Antenna Direct mount Quantity required: 2 per C260-X 	
Part No.: SD.AN-2M5F-00	 2.4 GHz 5 dBi N-Female Omnidirectional Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 2 per C260-X 	
Part No.: SD.AN-2M8F-00	 2.4 GHz 8 dBi N-Female Omnidirectional Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 2 per C260-X 	
Part No.: SD.AN-2M10-00	 2.4 GHz 10 dBi RP-SMA Male Omnidirectional Antenna Pole mount Quantity required: 1 per C260-X 	
Part No.: SD.AN-2S15-00	 2.4 GHz 15 dBi N-Female Sector Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Part No.: NS.AN-5M09-SA	 5 GHz 9 dBi N-Female Omnidirectional Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 2 per C260-X 	
Part No.: SD.AN-5M13-00	 5 GHz 13 dBi N-Female Omnidirectional Antenna Pole mount Quantity required: 1 per C260-X 	

Unrivalled Cost-Performance with External Antenna in the Class



Optional Accessories – Antenna		
Part No.: SD.AN-5S16-00	 5 GHz 16 dBi N-Female Sector Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Part No.: SD.AN-5P20-00	 5 GHz 20 dBi N-Female Panel Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Part No.: SD.AN-5P22-KB	 5 GHz 22 dBi N-Female Panel Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Part No.: NS.AN-5D32-00	 5 GHz 32 dBi N-Female Dish Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Part No.: NS.AN-5D34-00	 5 GHz 34 dBi N-Female Dish Antenna Pole mount, used in conjunction with RF cable: SD.CA-SM01-00 Quantity required: 1 per C260-X 	
Optional Accessories – RF Cable		
Part No.: SD.CA-SM01-00	1-Meter RP-SMA Male to N-Male RF Cable	
Optional Accessories – Ethernet Su	urge Protector	
Part No.: NS.MS-0001-PT	Outdoor 60 W Gigabit Ethernet Surge Protector	
Warranty Extension		
Part No.: SV.HW-C2602-00	2 nd Year Extended H/W Warranty for C260 Series	
Part No.: SV.HW-C2603-00	3 rd Year Extended H/W Warranty for C260 Series	
Part No.: SV.HW-C2604-00	4 th Year Extended H/W Warranty for C260 Series	
Part No.: SV.HW-C2605-00	5 th Year Extended H/W Warranty for C260 Series	
Annual Technical Support and Warranty Extension		
Part No.: SV.AS-0508-01	 2nd/3rd Year Extended H/W Warranty and Technical Support Quantity: 1 for the 2nd Year Extended H/W Warranty and Technical Support Quantity: 2 for the 2nd and 3rd Year Extended H/W Warranty and Technical Support 	
Part No.: SV.AS-0508-02	4 th Year Extended H/W Warranty and Technical Support	
Part No.: SV.AS-0508-03	5 th Year Extended H/W Warranty and Technical Support	
Contact Us		
Email: sales@altaitechnologies.com or info@altaitechnologies.com		

CX260X-PB-250118

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