



The Altai C260-S is an affordable Wi-Fi 6 access point that delivers excellent performance and reliable wireless connectivity for indoor and outdoor use. Equipped with a compact and efficient antenna design inherited from the highly acclaimed C1n and C1an models, the C260-S takes it a step further by minimizing its size while maximizing antenna gain for both 2.4GHz and 5GHz radios. This innovative design ensures extensive coverage and a robust wireless experience in a wide range of environments.

With its affordable price point, the C260-S offers an unbeatable high-performance price ratio, making it the ideal choice for those seeking exceptional performance without compromising on size or budget.



Key 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.

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Total Data Rate	2.976 Gbps	
	(2.4 GHz: 574 Mbps + 5 GHz: 2402 Mbps)	
Max. Concurrent Users	256 (128 for both radios)*	



Enhanced Antenna Performance in a Compact Design

The patented antenna design maximizes antenna gain for both 2.4GHz and 5GHz radios while maintaining the smallest form factor, enabling the C260-S to deliver optimal RF performance without compromise.



Super Dual-Band Coverage

	May IOS Distance for Smartphones	600 m (2.4 GHz)*	
Max. LOS DISTANCE TO	Max. LOS Distance for Smartphones	600 m (5 GHz)*	



Power over Ethernet (PoE) Support

With 802.3af standard PoE, the C260-S 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.







Use Cases:

Oost-Effective Outdoor Wi-Fi Hotspots

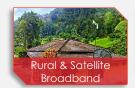
When combined with Insights, the C260-S provides a powerful advertisement engine and various login options for guest Wi-Fi access, including email sign-up and click-through.

Oity-Wide Wireless Infrastructure

The C260-S 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 and a built-in directional antenna, the C260-S is an excellent choice for medium to high-density environments such as stadiums and ad-hoc events.















Unrivalled Cost-Performance with Cutting-Edge Antenna Technology



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[†]
 26 dBm (Max.), 23 dBm (Per Chain)

• 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 -73 dBm HT20, MCS0 -92 dBm; HT20, MCS7 802.11n HT40, MCS0 -89 dBm; HT40, MCS7 -70 dBm 802.11ax HE20, MCS0 -64 dBm -92 dBm; HE20, MC\$11 HE40, MCSO -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

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

• 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, MCSO	-89 dBm;	HE40, MCS11	-59 dBm
	HE80, MCS0	-86 dBm;	HE80, MCS11	-56 dBm
	HE160, MCSO	-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

Built-in Antenna 9 dBi Sector

Polarization 2x2 MIMO ±45° Polarized

Horizontal Beamwidth 80° (-3 dB)
 Vertical Beamwidth 30° (-3 dB)
 VSWR 2 (Max.)
 Front-to-Back Ratio ≥ 20 dB

5 GHz Antenna

Built-in Antenna 13 dBi Sector

• Polarization 2x2 MIMO ±45° Polarized

Horizontal Beamwidth 60° (-3 dB)
 Vertical Beamwidth 15° (-3 dB)

VSWR 2 (Max.)
 Front-to-Back Ratio ≥ 20 dB

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

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

12 VDC Jack, Ø5.5 x Ø2.1 x 10 mm

• Power Consumption 15 W (Max.)

Environmental Specifications

Operating Temperature
 Storage Temperature
 -20 °C to +55 °C (Ambient)
 -40 °C to +70 °C

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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

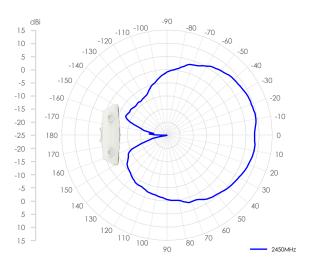
RoHS Compliance

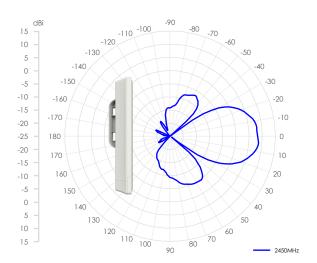
[†] The transmit power and operating frequency may vary according to country regulations. # Will be available in the future.



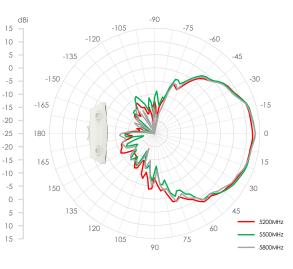


Radiation Pattern

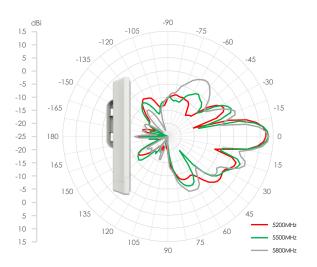




2.4 GHz Azimuth Plane



2.4 GHz Elevation Plane



5 GHz Azimuth Plane

5 GHz Elevation Plane

Product Ordering Information Standard Package		
Optional Accessories		
Part No.: SD.PE-0001-EP	Indoor 54 VDC 1 gigabit passive PoE injector	
Contact Us		
Email: sales@altaitechnologies.com or info@altaitechnologies.com		

CX260S-PB-240523

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