

# C260-S Outdoor Dual-Band Wi-Fi 6 Access Point

Unrivalled Cost-Performance with Cutting-Edge Antenna Technology



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.

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Total Data Rate        | 2.976 Gbps<br>(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

|           | *Expected Line-of-Sight Distance between C260-S AP and Smartphone |       |
|-----------|-------------------------------------------------------------------|-------|
|           | 2.4 GHz                                                           | 5 GHz |
| Open Area | 600 m                                                             | 600 m |
| Rural     | 410 m                                                             | 390 m |
| Suburban  | 230 m                                                             | 200 m |
| Urban     | 120 m                                                             | 100 m |



### 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 either cloud or on-premises WLAN controllers, including AltaiGate, AltaiCare cloud/virtual appliance, and 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.

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## Use Cases:

- » **Cost-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.
- » **City-Wide Wireless Infrastructure**  
The C260-S complements Altaï 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.



Rural & Satellite  
Broadband



Smart Cities



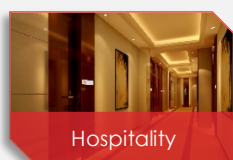
Telecom & ISP



Healthcare



Retail & SMB



Hospitality



Education

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## Unrivalled Cost-Performance with Cutting-Edge Antenna Technology



### Wireless Interfaces

#### 2.4 GHz (2x2:2) Radio

- Operating Mode AP/STA(CPE)/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 26 dBm (Max.), 23 dBm (Per Chain)
- 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(CPE)/Repeater
- 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, 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)
- Hidden SSID in Beacons
- Auto WDS Adaptation (Single SSID for WDS Links and End Clients)
- Client Association Control per SSID by SNR and Data Rate
- Bandwidth Control Per SSID/Client
- Auto Channel Selection with User-Defined Channel Pooling
- Dynamic Frequency Selection (DFS) in 5 GHz Spectrum
- Band Steering
- Fast Roaming (802.11r) for AP Mode
- IGMP Snooping and Multicast-to-Unicast Conversion
- Frame Aggregation: A-MPDU, A-MSDU
- RTS/CTS Protection
- AP Lock for STA Association

### 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
- Spanning Tree Protocol (IEEE 802.1D)
- VLAN (Trunk/Access) per SSID
- DHCP Client/Server, DHCP Option 43, 60
- NAT
- Port Forwarding
- #PPPoE Client

### 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 (IEEE 802.11w)
- Inter/Intra-SSID Client Isolation
- MAC-based Access Control (White/Black List)
- RADIUS
- External Captive Portal
- Trusted IP Management Access
- Wireless Access Traffic Right

### Management

- Zero-Touch Provisioning via Broadcast Discovery and DHCP Option 43
- Management Mode: Fat AP (Standalone), Thin AP
- Local Management:
  - Web User Interface (HTTP/HTTPS)
  - Command Line Interface (SSH)
  - Secondary IP Address

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

# Will be available in the future.

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## Unrivalled Cost-Performance with Cutting-Edge Antenna Technology



- Remote Management:
  - Insights
  - AltaiCare Private Cloud
  - AltaiCare On-Premises
  - AltaiGate
  - SNMP v1/v2c/v3
  - MIB2/IF-MIB/Altai Enterprise MIB
- Syslog
- Backhaul Connectivity Health Check and Safe Mode Access
- Ping Watchdog
- Diagnostic Tools: Channel Scanner, Packet Capture, Ping, Traceroute

### 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)<br>1 x 10/100/1000Mbps RJ-45 Port                                       |
| • Indicator         | 1 x Power Status<br>2 x Ethernet Interface Status<br>2 x Radio Interface Status<br>3 x Received Signal Strength |
| • Reset Button      | Onboard                                                                                                         |

### Power

- |                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| • Power Supply      | 802.3af PoE PD, or<br>Passive 48 – 56 V PoE PD, or<br>12 V DC Connector Type A: Ø5.5 x Ø2.1<br>x 10 mm |
| • Power Consumption | 15 W (Max.)                                                                                            |

### Environmental Specifications

- |                         |                                            |
|-------------------------|--------------------------------------------|
| • Operating Temperature | -20 °C to +55 °C (Ambient)                 |
| • Storage Temperature   | -40 °C to +70 °C                           |
| • Humidity              | 5% – 95% RH (Non-Condensing)               |
| • Lightning Protection  | EN 61000-4-5                               |
| • Wind Loading          | Up to 216 km/h (134 mph)                   |
| • Weatherproof          | IP66 Compliant (When Installed Vertically) |

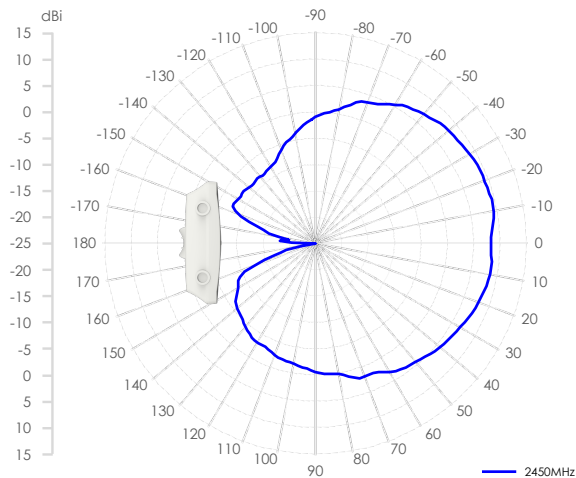
### Certifications

- FCC/CE/Others
- RoHS Compliance

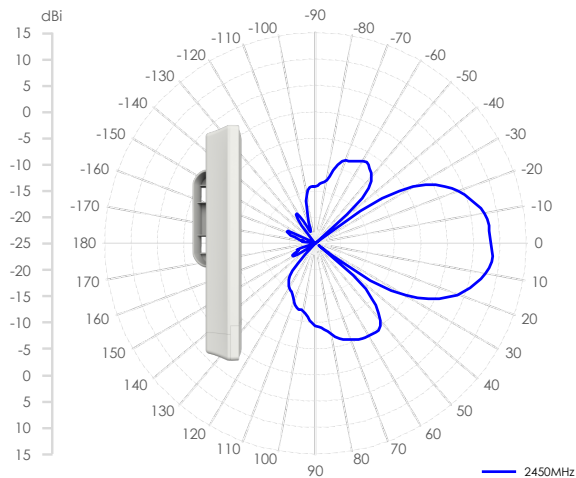
### Warranty

- 1-Year Limited Hardware Warranty

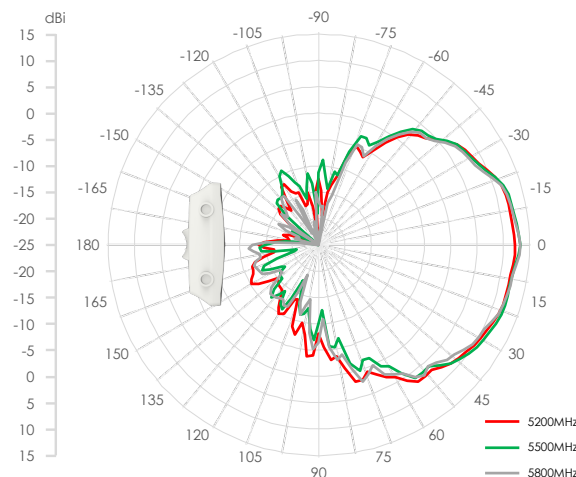
Radiation Pattern



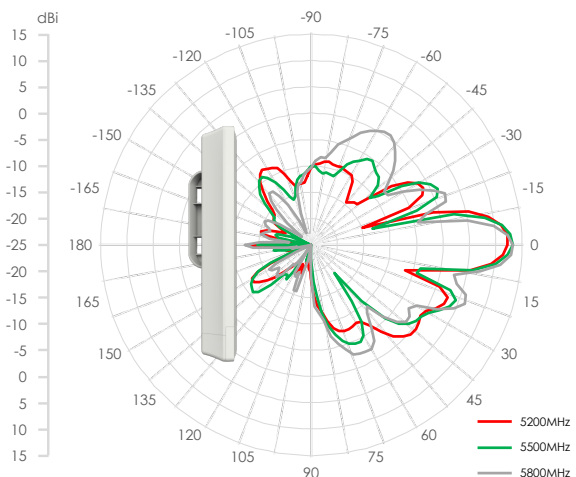
2.4 GHz Azimuth Plane



2.4 GHz Elevation Plane



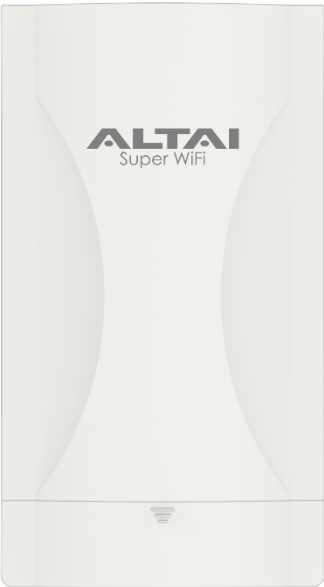
5 GHz Azimuth Plane



5 GHz Elevation Plane

# C260-S Outdoor Dual-Band Wi-Fi 6 Access Point

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Front View



Back View



Left Side View



Right Side View



Top View



Bottom View



Compartment

# C260-S Outdoor Dual-Band Wi-Fi 6 Access Point

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| Product Ordering Information                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Package                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: SD.C260-3242-000                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>C260-S Outdoor Dual-Band 2x2 Wi-Fi 6 Access Point with Integrated Sector Antenna (Model No.: C260-S)</li> <li>Standard Wall/Pole Mounting Kit</li> </ul>                                                                                                                                               |
| Optional Accessories – PoE Injector                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: SD.PE-0001-EP                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Indoor AC to 54 VDC 1 Gigabit Passive PoE Injector</li> <li>No Power Cords/Wires included</li> </ul>                                                                                                                                                                                                   |
| Optional Accessories – PoE Switch                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: SD.IS120-1223-000                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>MIS120P Industrial 6-Gigabit-Port Managed Layer 2+ PoE Switch</li> <li>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)</li> </ul>                                                              |
| Part No.: SD.IS200-3323-000                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>MIS200P Industrial 14-Gigabit-Port Managed Layer 2+ PoE Switch</li> <li>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)</li> </ul>                                                             |
| Optional Accessories – Ethernet Surge Protector                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: NS.MS-0001-PT                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Outdoor 60 W Gigabit Ethernet Surge Protector</li> </ul>                                                                                                                                                                                                                                               |
| Warranty Extension                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: SV.HW-C2602-00                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>2<sup>nd</sup> Year Extended H/W Warranty for C260 Series</li> </ul>                                                                                                                                                                                                                                   |
| Part No.: SV.HW-C2603-00                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>3<sup>rd</sup> Year Extended H/W Warranty for C260 Series</li> </ul>                                                                                                                                                                                                                                   |
| Part No.: SV.HW-C2604-00                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>4<sup>th</sup> Year Extended H/W Warranty for C260 Series</li> </ul>                                                                                                                                                                                                                                   |
| Part No.: SV.HW-C2605-00                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>5<sup>th</sup> Year Extended H/W Warranty for C260 Series</li> </ul>                                                                                                                                                                                                                                   |
| Annual Technical Support and Warranty Extension                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                               |
| Part No.: SV.AS-0508-01                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>2<sup>nd</sup>/3<sup>rd</sup> Year Extended H/W Warranty and Technical Support</li> <li>Quantity: 1 for the 2<sup>nd</sup> Year Extended H/W Warranty and Technical Support</li> <li>Quantity: 2 for the 2<sup>nd</sup> and 3<sup>rd</sup> Year Extended H/W Warranty and Technical Support</li> </ul> |
| Part No.: SV.AS-0508-02                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>4<sup>th</sup> Year Extended H/W Warranty and Technical Support</li> </ul>                                                                                                                                                                                                                             |
| Part No.: SV.AS-0508-03                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>5<sup>th</sup> Year Extended H/W Warranty and Technical Support</li> </ul>                                                                                                                                                                                                                             |
| Contact Us                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>Email: <a href="mailto:sales@altaitechnologies.com">sales@altaitechnologies.com</a> or <a href="mailto:info@altaitechnologies.com">info@altaitechnologies.com</a></li> </ul> |                                                                                                                                                                                                                                                                                                                                               |

DS-CX260S-260702-V2.0

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