

### Altai C1xn+ Super WiFi CPE/AP

The Altai C1xn+ WiFi CPE/AP is designed as an essential component in the Altai Super WiFi system. As the market's most cost-effective CPE/AP, it can operate as an AP to provide enhanced outdoor Wi-Fi coverage for low- to medium-density environments, as a repeater for range extension, or as a CPE for broadband access provisioning.

### Flexible External Antennas

The Altai C1xn+ has two RP-SMA antenna ports, which offers the flexibility to match the product with antennas with a variety of gains and beam widths for different deployment scenarios.

The C1xn+ antenna portfolio includes a 2.4 GHz 5 dBi Omni, a 10 dBi Omni, and a 15 dBi 100° sector antennas for AP and CPE applications. All custom-made high-performance antennas for facilitating quick and easy installation. Users can also select their own antennas for meeting their specific requirements.

### Super Long-Range Coverage

|                 |  |
|-----------------|--|
| Max. LOS Access | 1 km<br>(With 15 dBi Sector)                             |
| Max. LOS CPE    | 3 km to A8-Ein(ac)<br>2 km to A3-Ei<br>(With 5 dBi Omni) |
| Max. Data Rate  | 300 Mbps   |

### Control Traffic Throughput Flexibly

From day one, the C1xn+ is designed and purpose-built for service providers. Its built-in traffic shaping based bandwidth control mechanism allows the control of uplink and downlink traffic throughput on a per-client or per-VAP basis. A full set of networking and management features are available to meet carriers' requirements.



### Altai C1xn+ as Access Point

The C1xn+ can be used as a standalone Wi-Fi hotspot or as a repeater for range extension. With its large coverage, low cost, and flexible antenna options, it is suitable for low- to medium-density peri-urban or rural environments such as:

- Wi-Fi hotspots to fill mobile coverage gaps
- Alternative Internet service delivery to underserved communities
- Network expansion to rural communities

### Altai C1xn+ for Wireless Broadband

As a CPE, the C1xn+ can be installed outdoor by the side of a window, mounted to a wall, at the rooftop of a building or placed at the desktop inside for wireless broadband access provisioning.

### As an integral part of our Super WiFi Solution, the Altai C1xn+ offers a unique value proposition:

- The market's most cost-effective outdoor Wi-Fi hotspot solution due to its unique combination of large coverage, low cost, and ease of use
- Enhanced RF performance for large LOS and NLOS coverage
- A wide range of custom-made external antenna selection for facilitating quick and easy installation and meeting the coverage requirements of different scenarios
- Multiple deployment options: as a standalone AP for Wi-Fi hotspot, as a repeater for range extension, or as a CPE for broadband access provisioning
- One-piece weatherproof chassis compliant to IP55 standard for direct outdoor installation
- Flexible Management: Standalone, controller-based management with AltaiGate, or cloud-based management with AltaiCare

## Wireless Interface

### 802.11b/g/n (2x2) Radio

- Operating Mode AP/ CPE/ Bridge/ Repeater
- Standard IEEE 802.11b/g/n
- Operating Frequency 2.400 – 2.484 GHz (Ch 1-13)
- Transmit Power 29 dBm (Max.)  
26 dBm (Per Chain)
- Receiver Sensitivity (Typical)
 

|         |         |         |
|---------|---------|---------|
| 802.11b | 11 Mbps | -91 dBm |
|         | 1 Mbps  | -96 dBm |
| 802.11g | 54 Mbps | -81 dBm |
|         | 6 Mbps  | -95 dBm |
| 802.11n | HT20    | -95 dBm |
|         | HT40    | -92 dBm |
- 16 SSID (Max.)
- 802.11h, 802.11k, 802.11r, 802.11v, 802.11w
- Passpoint (Release 2)
- Fast Roaming
- Altai AirFi™ Throughput Optimization
- WMM (802.11e)

### Antenna (Optional Accessories)

- External Antenna 15 dBi 120° (-6 dB) Sector  
10 dBi Omni  
5 dBi Omni
- Antenna Connector 2 x RP-SMA Female

## Networking

- Switch (Bridge) and Gateway Mode
- IPv4/ IPv6 Dual-stack
- NAT
- DHCP Client/ Server
- PPPoE Client
- Soft-GRE
- VLAN
- Bandwidth Control Per VAP/ Client
- Multicast Rate Filter/IGMP Snooping

## Security

- Authentication – Open, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, WPA3\*, 802.1x (EAP-PEAP/ TLS/ TTLS/ SIM/ AKA)
- Encryption – WEP, TKIP, AES
- Inter/ Intra-client Isolation
- MAC-based Access Control (White/ Black List)
- RADIUS
- Active directory
- Firewall
- WIDS /WIPS
- Rogue AP Detection\*

## Management

- Management Platforms: Standalone, AltaiGate, AltaiCare
- Web User Interface
- Command Line Interface (SSH)
- SNMP v1/ v2c / v3
- MIB2/ IF-MIB/ Altai Enterprise MIB
- Syslog
- Remote Factory Reset
- Auto Channel Selection and TX Power Control
- Spectral Analysis\*
- KPI Monitoring\*
- Client OS Detection

## Physical Specification

- Dimension 240.5 x 80 x 27 mm  
(Excluding Mounting)
- Weight 240g
- Mounting Desktop, Pole, Wall or Window-mounted
- Network Interface 10/100 Mbps Ethernet Port
- LED Display Main Power Status  
Ethernet Status  
8-level Signal Strength  
(User Configurable)

## Power Supply

- Power Supply 18V Passive PoE PD or 802.3af PoE PD via PoE Adapter
- Power Consumption 6 W (Typical) / 8 W (Max.)

## Environmental Specification

- Operating Temperature -20 °C to +55 °C
- Storage Temperature -40 °C to +80 °C
- Humidity Up to 95% (Non-condensing)
- Wind Loading Up to 200 km/h (124 mph)
- Weatherproof Outdoor UV Stabilized Plastic IP55 Compliant

## Certification

- FCC\*/ CE\*/ Others\*
- RoHS2 Compliance
- Wi-Fi Alliance Certified\*

### Product Ordering Information

**C1xn+ (Part No.: SD.C1-XN01-SC/UK/US/EU)**

#### Standard Package

- C1xn+ Super WiFi CPE/AP With External Antenna Ports (Model No.: WA1011N-X)
- Cable Ties
- DC Injector
- 18 VDC AC Adaptor

#### Optional Accessories

- 802.3af to Passive PoE Adapter

#### Contact Us

- Email: sales@altaitechnologies.com

C1xn+-PB-20210331

\* Will be available in future.

The coverage range will be varied depending on NLOS and interference conditions. The transmit power may be varied according to country regulation. Although Altai has attempted to provide accurate information in these materials, Altai assumes no legal liability for the accuracy and completeness of the information. All specifications are subject to change without notice.