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 100º 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 (With 15 dBi Sector)
Max. LOS CPE	3 km to A8-Ein(ac) 2 km to A3-Ei (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)
- 1+ N Redundancy
- Multi-AP Steering*

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
- Ph: 1300 539 212
- Email: solutions@idatanet.com.au
- Web: https://idatanet.com.au/

C1xn+-PB-210830

* 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.
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