

Altai C1xan Super WiFi CPE/AP

The Altai C1xan WiFi CPE/AP is designed as an essential component in the Altai Super WiFi system to extend outdoor Wi-Fi coverage into indoor areas for broadband connectivity in 5 GHz band or use as an AP for pico coverage.

The Altai C1xan employs patented smart signal processing algorithms and antenna design to increase Wi-Fi signal strength (transmit and receive) by as much as 22 dB in areas covered by an A8n Super WiFi Base Station or A2 WiFi Access Point. It can be installed exactly where the throughput is required to boost up, and it allows the service operator to increase the coverage range of an A8n base station substantially and provides greater flexibility and cost savings to Wi-Fi deployments.

Flexible External Antennas

The Altai C1xan employed 2-external SMA antenna port design. It allows the user to choose the exact antenna gain and beamwidth as they need. Our standard antenna accessories include 5 GHz 9 dBi omni, 16 dBi 100° sector and 20 dBi panel antennas for standard AP, CPE and bridge applications. User can also equip with his own high gain antenna for longer range AP, CPE and bridge applications.

Super Long Range Coverage

Max. LOS Access	700 m (With 9 dBi Omni)
Max. LOS CPE	8 km to A8-Ein(ac) 6 km to A3-Ei (With 20 dBi Panel)
Max. LOS Bridge	50 km
Max. Data Rate	300 Mbps

Control Traffic Throughput Flexibly

From day one, the C1xan is designed and purpose-built for carriers. 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 C1xan for Wireless Broadband

The C1xan is a key component in wireless broadband access provisioning. It 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 fixed broadband access provisioning.

Altai C1xan for Access Point

The C1xan can be used as a standalone Wi-Fi access point for networks operating at 5 GHz with fast Ethernet backhaul. With its flexible external antennas, it suits for different scenarios to complement the large coverage and high throughput of an A8n Base Station and A2 Access Point to improve Wi-Fi performance.

Altai C1xan for PTP Bridge

The C1xan is perfect for use as low cost point-to-point bridge, in deployment scenarios such as commercial wireless broadband users or high definition surveillance cameras.

As an integral part of our Super WiFi network infrastructure, the Altai C1xan differentiates others with:

- Features built-in for carriers including per client/VAP based bandwidth control, remote web-based management and client association status
- External antenna ports design allows users to choose exactly the antenna gain and beamwidth they need
- Low cost AP, CPE and bridge applications for outdoor and indoor areas
- One-piece weatherproof chassis compliant to IP55 standard for direct outdoor installation
- 8-level LED for easy alignment in the strongest signal direction
- Increase signal strength for both NLOS and LOS coverage areas
- Improve data transmission rate and throughput utilization of base station

Wireless Interface

802.11a/n (2x2) Radio

- Operating Mode AP/ CPE/ Bridge/ Repeater
- Standard IEEE 802.11a/n
- Operating Frequency 5.150 – 5.350 GHz
5.470 – 5.725 GHz
5.725 – 5.850 GHz
- Transmit Power 29 dBm (Max.)
26 dBm (Per Chain)
- Receiver Sensitivity

802.11a	54 Mbps	-83 dBm
	6 Mbps	-96 dBm
802.11n	HT20	-95 dBm
	HT40	-91 dBm
- 16 SSID (Max.)
- 802.11h*, 802.11k*, 802.11r*, 802.11v*, 802.11w*
- Hotspot 2.0
- Fast Roaming
- Altai AirFi™ Throughput Optimization
- WMM (802.11e)

Antenna (Optional Accessories)

- External Antenna 20 dBi Panel
16 dBi 100° (-6dB) Sector
9 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
- VPN (IPsec)*
- VLAN
- Bandwidth Control Per VAP/ Client
- Multicast Rate Filter/IGMP Snooping

Security

- Authentication – Open system, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, 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*
- WIPS*

Management

- Cloud or Server-based Management by AltaiCare
- Controller-based Management by Access Controller
- Web User Interface
- Command Line Interface (SSH)
- SNMP v1/ v2c / v3*
- MIB2/ IF-MIB/ Altai Enterprise MIB
- Syslog
- Auto Channel Selection and TX Power Control
- Spectral Analysis*
- KPI Monitoring*
- Client OS Detection*

Physical Specification

- Dimension 280 x 80 x 27 mm (excluding mounting)
- Weight 0.4 kg
- 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 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 5 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

Standard Package

- C1xan Super WiFi CPE/AP with External Antennas Ports (Model No.: WA1011N-AX)
- Cable Ties

Accessories

- DC Injector and AC Adapter
- 802.3af to Passive PoE Adapter

Contact Us

- Email: sales@altaitechnologies.com

C1xan-PB-170810

* 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.