



## Altai C1 WiFi CPE

The Altai C1 WiFi CPE is designed to be used in Altai Super WiFi systems to extend outdoor coverage to indoor broadband connectivity.

The Altai C1 employs the concept of boosting up signal strength and thus the client's throughput in area covered by an A8/A8-E Super WiFi Base Station. It enables network operators to take advantage of the cost savings provided by the A8/A8-E Super WiFi Base Station's 10X greater coverage area when initially installing a WiFi system.

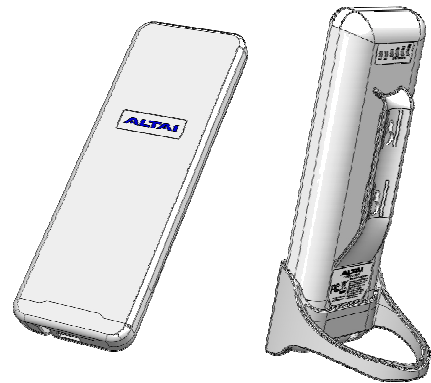
As the signal strength needs to be increased, the C1 WiFi CPE can be used to improve the link budget up to 17 dB for both uplink and downlink. The C1 can be installed exactly where the signal strength requirement is the greatest. This will increase the distance from the A8/A8-E base station substantially and create even greater flexibility and savings than to vary the radio coverage planning provided by A8/A8-E.

The C1 WiFi CPE has a high capacity 2.4 GHz broadcast radio to enable it to convert the access coverage from A8/A8-E to standard Ethernet connection for desktops.

The C1 is a key component in wireless broadband access provisioning. It can be installed for both indoor and outdoor areas. It can be installed in household desktop, window side, wall side or rooftop for fixed broadband access provisioning.

The C1 can also be used as a standalone Access Point for smaller systems with Fast Ethernet backhaul. With its high gain built-in antenna, it is a complementary solution to the large coverage of an A8/A8-E Super WiFi Base Station and the high throughput of A3 Smart WiFi AP to uphold the WiFi performance.

The Altai C1 WiFi CPE is the most cost effective versatile way to replace traditional last mile access. When combined with the A8/A8-E Super WiFi Base Station, A3 Smart WiFi AP, A2 WiFi Pico AP and the A0 WiFi Bridge, it can be used to create the most cost-effective high capacity WiFi system possible for both telecom operators and enterprises.



As an integral part of our Super WiFi network infrastructure, the Altai C1 WiFi CPE provides the following:

- Operating in CPE or AP mode
- Extend outdoor coverage of A8/A8-E Super WiFi Base Station into indoor
- Increase signal strength for both NLOS and LOS coverage areas by A8/A8-E Super WiFi Base Station
- Improve data transmission rate in client terminals and overall throughput utilization of A8/A8-E BTS
- Standard 802.11b/g access and Fast Ethernet interface
- Light weight with built-in mounting bracket
- Weather-proof design against extended temperature range and wind vibration
- Easy installation & web-based management

## Wireless Interface

- Operation Mode CPE/ AP
- Standard IEEE 802.11b/g
- Operation Frequency 2.412 – 2.472 GHz (Ch 1 – 13)
- Transmit Power
  - 802.11b
    - 1 – 11 Mbps Max. 26 dBm
  - 802.11g
    - 6 – 54 Mbps Max. 26 dBm
- Receiver Sensitivity (Typical)
  - 802.11b
    - 11 Mbps -90 dBm
    - 1 Mbps -95 dBm
  - 802.11g
    - 54 Mbps -72 dBm
    - 6 Mbps -92 dBm
- Antenna 2 x built-in 11 dBi cross-polarized patch antenna  
70° horizontal beamwidth  
30° vertical beamwidth
- Transmit and Receive Diversity
- Automatic Channel Assignment

## Networking

- DHCP Client/ Server/ Relay
- Dynamic NAT
- PPPoE Client, PPPoE Pass-through
- VPN Pass-through
- Bridge/ Router Mode
- 10/100 Mbps Ethernet Port
- WDS
- Preferred AP Association
- Site Survey/ Channel Scan
- Click to Connect
- Auto ACK Timeout Calculation by Distance Input
- WMM\*
- Bandwidth Control\*

## Security

- Authentication Open system, Shared key, WPA/ WPA-PSK  
WPA2/ WPA2-PSK  
802.11x (PEAP, TLS, TTLS)
- Encryption WEP, TKIP, AES
- MAC based Access Control
- SSID Suppression

## Management

- Web-based Administration Tool
- Remote Firmware Upgrade (HTTP)
- SNMP
- Performance Statistics
- Supported by Altai Wireless Management System (AWMS)

## Physical Specification

- Dimension 220 x 80 x 24 mm (excluding mounting)
- Weight 0.4 kg
- Mounting Desktop, Pole, Wall or Window-mounted
- LED Display Main Power Status, Ethernet Status  
8-level Signal Strength
- Beep Tone Alert 8-level Tones for Different Signal Strengths

## Power Supply

- Power Source PoE Injector
- Power Consumption 4 W (Max.)

## Environmental Specification

- Operating Temperature -10 °C to +55 °C
- Storage Temperature -40 °C to +80 °C
- Humidity 5 – 95% (Condensing)
- Wind Loading 90 mph (Operating)  
125 mph (Survival)
- Weatherproof Outdoor UV Stabilized Plastic  
IP55 Compliant

## Certification

- FCC\*
- Others



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\* Features will be available in future release

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