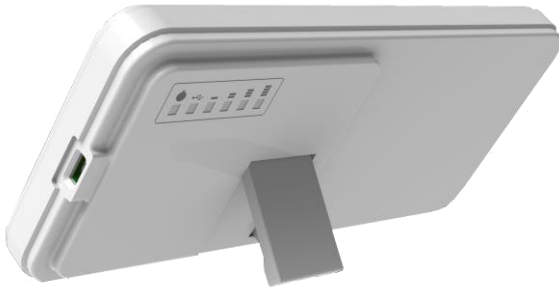


Altai U1 Super WiFi USB Client

The Altai U1 Super WiFi USB client is designed as an essential component in the Altai Super WiFi system to extend outdoor WiFi coverage into indoor areas for broadband connectivity.



The Altai U1 employs patented smart signal processing algorithms and antenna design to increase WiFi signal strength (transmit and receive) by as much as 15 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 WiFi deployments.

Super Long Range Coverage

LOS CPE	3,500 m to A8-Ein 3,000 m to A2-Ei
Data Rate	150 Mbps

Convenient USB Powered

The U1 WiFi client is designed to get power from a laptop through an external USB cable. It can be equipped whenever the greatest signal strength and throughput are required.

Altai U1 for Wireless Broadband

From day one, the U1 is designed and purpose-built for service operators. The U1 is a key component in wireless broadband access provisioning. It can be placed by the window side of a household for wireless broadband provisioning. It can also be placed just next to a laptop for mobile Internet application. No matter what application it is used for, the built-in 802.11b/g/n radio ensures the highest possible throughput supported by the WiFi base station.



Combination with A8 Super WiFi Base Station

The Altai U1 WiFi client is the most cost effective and versatile way to replace traditional last mile access. When combined with the A8n series Super WiFi Base Station and A2 WiFi Access Point, it can be used to build a high capacity WiFi system that achieves the fastest ROI for both service providers and enterprises.

As an integral part of our Super WiFi network infrastructure, the Altai U1 WiFi client differentiates others with:

- Features built-in for carriers including client performance statistics
- ±45° dual slant patch antennas are optimized to match with the Altai A8/A2 antennas. It provides 3 dB more gain as compared to other V/H polarized CPEs
- High performance antenna with 20 dB front-to-back ratio, which is on average 5 dB better than others in directional transmission without picking up unwanted signal
- The best data transmission rate and throughput available by using 802.11b/g/n radio
- Powered by laptop by using an USB cable
- Multi-level LED for easy alignment in the strongest signal direction
- Increase signal strength for both NLOS and LOS coverage areas

Wireless Interface

802.11b/g/n Radio

- Operating Mode CPE
- Standard IEEE 802.11b/g/n
- Operating Frequency 2.412 – 2.472 GHz (Ch 1-13)
- Transmit Power Up to 27 dBm (Peak)
Up to 25 dBm (Average)
- Receiver Sensitivity (Typical)

802.11b	11 Mbps	-90 dBm
	1 Mbps	-95 dBm
802.11g	54 Mbps	-72 dBm
	6 Mbps	-90 dBm
802.11n	HT20	-92 dBm
	HT40	-90 dBm

Antenna

- Built-in 2.4 GHz Antenna 10 dBi Dual Slant $\pm 45^\circ$ Patch
- Horizontal Beamwidth 30° (-3 dB)
- Vertical Beamwidth 70° (-3 dB)
- Front-to-back Ratio -20 dB (Max.)

Feature

- Auto Client Utility
- Configuration Profile Installation
- Preferred AP Association
- Site Survey/ AP Scan
- Performance statistics
- Antenna Alignment Tool
- Windows XP/Vista/7 Support

Security

- Authentication – Open system, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, 802.1x (EAP-PEAP/ TLS/ TTLS/ SIM/ AKA)
- Encryption – WEP, TKIP, AES
- RADIUS Client (PAP, CHAP)
- RADIUS Accounting
- Inter/ Intra-client Isolation
- MAC-based Access Control (White/ Black List)
- WAPI

Physical Specification

- Dimension 177 x 80 x 18 mm
- Weight 0.2 kg
- Mounting Desktop, Window-mounted
- LED Display Main Power Status
Link Status
Signal Strength Status

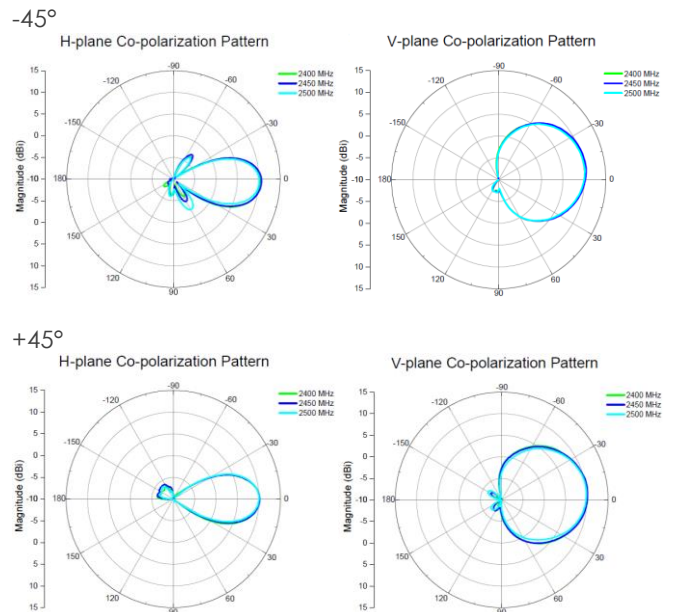
Power Supply

- Power Source USB 2.0 (5VDC)
- Power Consumption 4 W (Max.)

Environmental Specification

- Operating Temperature 0°C to $+55^\circ\text{C}$
- Storage Temperature -40°C to $+80^\circ\text{C}$
- Humidity 5 – 95% (Non-condensing)

Antenna Pattern (Built-in Antennas)



Certification

- FCC/ CE/ Others*

Product Ordering Information

Standard Package

- U1 Super WiFi USB Client (Model No.: WA1011N-GU)
- USB Cable

Contact Us

- Email: sales@altaitechnologies.com

* Will be available in future.

U1-PB-150109

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.