

Altai A2c Indoor Dual-band 2x2 802.11ac AP

The Altai A2c Indoor Dual-band 2x2 AP is specifically designed to deliver unparalleled Wi-Fi experience and highly reliable and consistent services to mobile users at the market's most affordable price point.

Altai A2c offers several powerful features to meet the challenges of today's Wi-Fi networks:

- Altai's interference mitigation algorithm offers optimal capacity and interference rejection
- Altai AirFi enhances an AP's capacity by optimizing each client's throughput based on its signal strength and traffic
- Altai's smart band steering and load balancing technologies allow Altai A2c to effectively utilize both 2.4GHz and 5GHz spectrums for supporting a large number of mobile users running bandwidth hungry applications
- Altai A2c supports a wide range of applications such as social login, hotspot authentication, guest access, firewall, and wireless intrusion detection that allow either enterprises to set up their private networks easily, or WISPs to quickly deploy and monetize hotspot services

Super Dual-band Coverage

Max. LOS Access	350 m (2.4 GHz) 250 m (5 GHz)
Max. Data Rate	300 + 867 Mbps



Applications

- In conjunction with AltaiCare and its powerful access management features, Altai A2c offers the most cost effective indoor Wi-Fi hotspot solution for MNOs and WISPs
- The low cost Altai A2c, together with the controller-less, cloud-based AltaiCare and its pay-as-you-grow subscription model, are ideally suited for enterprises and SMEs that want enterprise features such as security and performance but not the price points associated with controller-based solutions
- The Altai A2c offers a low cost solution that delivers best-in-class dual-band Wi-Fi performance and reliability for schools, hotels, and retail stores

Key Features and Benefits

- **Best value in price/performance** Dual band 802.11ac with extended coverage at the market's most affordable price point
- **Extended coverage requires fewer APs** Up to 50% larger coverage minimizes the number of APs required for any Wi-Fi network
- **Low profile housing design** Sleek, low profile design allows it to blend into any surrounding environment
- **Dual-band with 802.11ac** 802.11ac delivers total data rate of more than 1 Gbps. This, together with Altai's smart band steering and load balancing technologies, allows a Wi-Fi network to support a large number of mobile users running high bandwidth apps
- **Best-in-class performance** Altai's smart interference mitigation algorithm, offers optimal capacity and interference rejection
- **AirFi optimizes capacity** AirFi enhances Altai A2c's capacity by optimizing client's throughput based on its signal strength and traffic
- **Flexible architecture** Standalone, controller-based, or cloud-based management with AltaiCare
- **Ease of deployment** Zero configuration of AltaiCare allows a non-technical person to simply unpack and plug Altai A2c to Wi-Fi network. Furthermore, support for standard 802.3at PoE allows enterprises to use existing PoE switches

Wireless Interface

802.11b/g/n (2x2:2) 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 26 dBm (Max.)
25 dBm (HT40 @ MCS0)
21 dBm (HT40 @ MCS7)
- Receiver Sensitivity (Typical)

802.11b	11 Mbps	-89dBm	1 Mbps	-92 dBm
802.11g	54 Mbps	-72 dBm	6 Mbps	-88 dBm
802.11n	HT20	-88 dBm	HT40	-84 dBm

802.11a/n/ac (2x2:2) Radio

- Operating Mode AP/ CPE/ Bridge/ Repeater
- Standard IEEE 802.11a/n/ac
- Operating Frequency 5.150 – 5.350 GHz
5.470 – 5.725 GHz
5.725 – 5.850 GHz
- Transmit Power 26 dBm (Max.)
25 dBm (VHT80 @ MCS0)
17 dBm (VHT80 @ MCS9)
- Receiver Sensitivity (Typical)

802.11a	54 Mbps	-72 dBm;	6 Mbps	-90 dBm
802.11n	HT20	-89 dBm;	HT40	-85 dBm
802.11ac	VHT20	-88 dBm;	VHT40	-85 dBm;
	VHT80	-82 dBm		

For both 2.4 and 5 GHz

- 32 SSID (Max. 16 SSID per Radio)
- 802.11h*, 802.11k*, 802.11r*, 802.11v*, 802.11w*
- Hotspot 2.0
- Altai AirFi™ Throughput Optimization
- Band Steering
- WMM (802.11e)

Antenna

2.4 GHz Antenna

- Built-in Antenna 4 dBi Omni
- Frequency 2.4 – 2.5 GHz
- Polarization 2x2 MIMO Diversity Polarized
- Horizontal Beamwidth 360° (-3 dB)
- VSWR 2 (Max.)
- Impedance 50 Ω

5 GHz Antenna

- Built-in Antenna 4 dBi Omni
- Frequency 5.150 – 5.875 GHz
- Polarization 2x2 MIMO Diversity Polarized
- Horizontal Beamwidth 360° (-3 dB)
- VSWR 2 (Max.)
- Impedance 50 Ω

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 Diameter: 161.54mm
Height: 41.66mm
- Weight 0.28 kg
- Mounting Ceiling or Wall-mounted
- Network Interface 1 x 10/100/1000 Mbps
Ethernet Port

Power Supply

- Power Supply 802.3at PoE PD or 56V Passive PoE PD
- Power Consumption 8 W (Typical)/15 W (Max.)

Environmental Specification

- Operating Temperature 0 °C to +50 °C
- Storage Temperature -20 °C to +60 °C
- Humidity 90% or Less (Non-condensing)

Certification

- FCC* / CE* / Others*

Product Ordering Information

Standard Package

- A2c Indoor Dual-band 2x2 802.11ac AP (Model No.: A2-2221-000)
- Mounting Accessories
- Quick Start Guide

Accessories

- 56V Passive PoE Injector (Optional)

Contact Us

- Email: sales@altaitechnologies.com

A2c-PB-160803

*Will be available in the future.

The coverage or range may vary depending on environmental conditions.

The transmit power may vary according to country regulations.

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