Altai A3c Indoor Dual-band 3x3 802.11ac WiFi AP

802.11n/ac, Built-in 2.4 GHz and 5 GHz Omni Antennas

Altai A3c Indoor 802.11ac 3x3 WiFi Access Point

The Altai A3c Indoor WiFi Dual-band Access Point is designed to be used in Altai Super WiFi systems to provide the highest speed 2.4 GHz and 5 GHz dual-band dual-concurrent access coverage for indoor areas. It is capable of providing the highest possible data throughput and capacity that the 3x3 MIMO 802.11ac standards can offer.

Super High Capacity Coverage

Max. LOS Access	500 m (2.4 GHz) 400 m (5 GHz)
Max. Data Rate	450 + 1300 Mbps

Altai A3c for Dual-band Micro Coverage

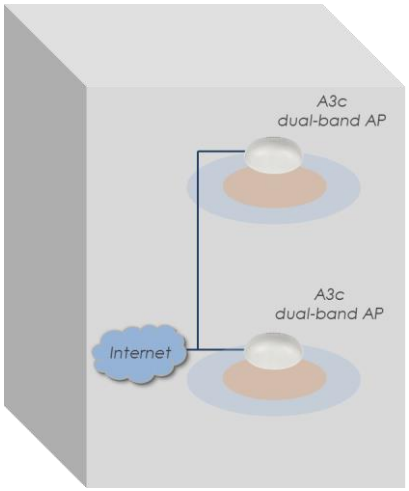
The A3c has both a 2.4 GHz (3x3:3 802.11b/g/n) radio and a high capacity 5 GHz (3x3:3 802.11a/n/ac) radio which can be operated at the same time for 2.4 GHz and 5 GHz dual-band dual-concurrent access coverage. The dual-band operation not only provides the highest capacity up to 1.75 Gbps but also performs better in the less interfered 5 GHz frequency band.

Altai A3c for System Capacity

As the indoor system capacity of an A8n network needs to increase, the A3c can be used to highly increase the user/throughput capacity at low cost. The A3c can be installed exactly at the indoor ceiling where the capacity is required.

Cost Effective Deployment

The A3c WiFi Access Point provides the most cost effective and versatile way to enhance a Wi-Fi in terms of its capacity, coverage or range. When combined with the A8n Super WiFi Base Station, it can create possibly the most cost-effective high capacity Wi-Fi network system.



As an integral part of our Super WiFi network infrastructure, key benefits of the Altai A3c include:

- Carrier grade 802.11a/b/g/n/ac AP for indoor applications
- Multi-operating modes allowed: AP, bridge, repeater mode or CPE
- 3x3 MIMO in 3 streams for both 2.4 GHz (802.11b/g/n) and 5 GHz (802.11a/n/ac) radios
- 1300 Mbps (5 GHz) + 450 Mbps (2.4 GHz) high capacity
- Built-in 2.4 GHz and 5 GHz spatial polarized high gain omni antennas
- Increase system capacity under the coverage area of A8n Super WiFi Base Station
- Easy ceiling-mounted deployment
- User-friendly web-based management

Altai A3c – Indoor Dual-band 3x3 802.11ac WiFi AP

802.11n/ac, Built-in 2.4 GHz and 5 GHz Omni Antennas

Wireless Interface

802.11b/g/n (3x3:3) Radio

- Operating Mode: Access Point/CPE/Bridge/ Repeater
- Standard: IEEE 802.11b/g/n
- Operating Frequency: 2.400 – 2.484 GHz (Ch 1-13)
- Transmit Power: 27 dBm (Max.) 22 dBm (Per Chain)
- Receiver Sensitivity (Typical)

802.11b	11 Mbps	-90 dBm;	1 Mbps	-100 dBm
802.11g	54 Mbps	-79 dBm;	6 Mbps	-92 dBm
802.11n	HT20	-92 dBm;	HT40	-88 dBm

802.11a/n/ac (3x3:3) Radio

- Operating Mode: Access Point/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: 27 dBm (Max.) 22 dBm (Per Chain)
- Receiver Sensitivity (Typical)

802.11a	54 Mbps	-79 dBm;	6 Mbps	-93 dBm
802.11n	HT20	-94 dBm;	HT40	-90 dBm
802.11ac	VHT20	-93 dBm;	VHT40	-90 dBm;
	VHT80	-87 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: 3x3 MIMO Diversity Polarized
- Horizontal Beamwidth: 360°
- VSWR: 2 (Max.)
- Impedance: 50 Ω
- Front-to-back Ratio: -20 dB (Max.)

5 GHz Antenna

- Built-in Antenna: 6 dBi Omni
- Frequency: 5.150 – 5.875 GHz
- Polarization: 3x3 MIMO Diversity Polarized
- Horizontal Beamwidth: 360°
- VSWR: 2 (Max.)
- Impedance: 50 Ω
- Front-to-back Ratio: -20 dB (Max.)

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: 230 x 230 x 66 mm
- Weight: 1.2 kg (Unit Weight)
- Mounting: Ceiling-mounted
- Network Interface: 2 x 10/100/1000 Mbps Ethernet Port

Power Supply

- Power Supply: 802.3at PoE PD or 56V Passive PoE PD
- Power Consumption: 10 W (Typical) / 25 W (Max.)

Environmental Specification

- Operating Temperature: 0 °C to +50 °C (Ambient)
- Storage Temperature: -40 °C to +80 °C
- Humidity: 5 to 95% (Non-condensing)

Certification

- FCC / CE / SRRC /Others*

Product Ordering Information

Standard Package

- A3c Indoor Dual-band 3x3 802.11ac AP with Built-in 2.4 GHz and 5 GHz Omni Antennas (Model No.: WA3311NAC-C)
- Mounting Accessories
- PoE Injector or AC Adaptor (optional)

Contact Us

- Email: sales@altaitechnologies.com

A3c-PB-170224

** 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.