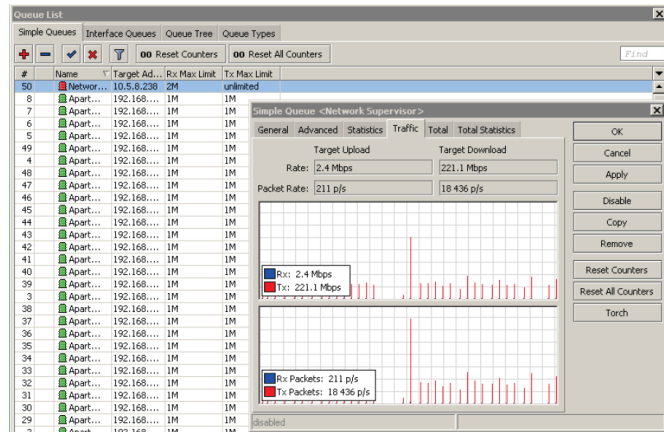


Altai Service Controller 200

The Altai service controller 200 is designed to be used in Altai Super WiFi systems as bandwidth controller, backbone router, firewall and VPN server.



The Altai service controller 200 can handle 200 Mbps throughput and 100 concurrent user capacity. For more throughput or users capacity, the Altai service controller 7000 is recommended for up to 6,000 Mbps throughput or 1,000 concurrent users.

With AR7240 CPU and 5 Fast Ethernet ports on industrial custom designed mother board and Linux-based operating system, the Altai service controller 200 provides the best-in-class bandwidth control performance. It is cost effective for up to 200 tunnels, virtually unlimited number of policy rules and queues, perfectly suit for small network startup or proof-of-concept to WISP, mobile operators and various service providers.

Convenient for PoC and Small Network

Throughput	200 Mbps
Ethernet	5 FE ports
Number of user	100

Necessary for WiFi Network

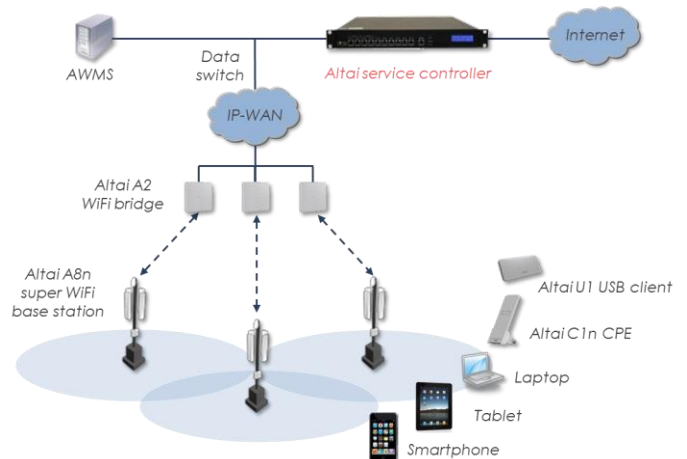
The Altai service controller 200 is an essential network element for various WiFi network deployments such as city-wide wireless broadband Internet, hotzone, hotspot, wireless DSL and 3G data offload, as well as for PoC demonstration.



Benefits of Using Altai Service Controller 200

In all these applications, our solutions offer operational cost saving benefits such as quick deployment, ease of configuration and the ability to upgrade existing capacity to cater for new requirements (i.e. "pay as you grow").

Altai service controller provides the most cost effective and versatile way for backend provisioning in terms of its functionalities and throughput capacity. When combined with the A8/A8n Super WiFi Base Station, it can create possibly the most cost-effective high capacity wireless broadband network system.



As an integral part of our Super WiFi network infrastructure, the Altai Service Controller 200 can be used as:

- Bandwidth controller – take control of your network traffic bandwidth, limit data rates for all traffic passing through
- Backhaul router – up to 200 Mbps traffic throughput
- Firewall – filter traffic by IP address, address range, port, port range, IP protocol, DSCP and many more
- VPN server – connect remote sites and users together securely using VPN through Internet with IPSec encryption

Product Specifications

• CPU	AR7240
• CPU Speed	400 MHz
• No. of Ethernet Port	5
• Max. Ethernet Speed	100 Mbps
• RAM	32 MB DDR SDRAM onboard memory
• Data Storage	64 MB NAND onboard memory chip
• mPCI Slot	0
• Serial Port	0
• USB Port	2
• LEDs	Power, NAND activity, 5 Ethernet LEDs
• Throughput (Max. Mbps)	200
• No. of Concurrent Users	100

Firmware Support

• Firmware Version	ROS v4.x, Level 4 License
• Wireless AP	Yes
• Wireless Client and Bridge	Yes
• RIP, OSPF, BGP Protocols	Yes
• EoIP Tunnel	Unlimited
• PPPoE Tunnel	200
• PPTP Tunnel	200
• L2TP Tunnel	200
• OVPN Tunnel	200
• VLAN Interfaces	Unlimited
• P2P Firewall Rules	Unlimited
• NAT Rules	Unlimited
• RADIUS Client	Yes
• Queues	Unlimited
• Web Proxy	Yes
• Synchronous Interface	Yes

Feature Highlight

Bandwidth Controller

- Network traffic control
- Limit data rate for all traffic passing through
- Hierarchical HTB QoS system with burst
- Per IP/ Protocol/ subnet/ port/ firewall mark
- PCQ, RED, SFQ, FIFO queues
- CIR, MIR, contention ratios,
- Dynamics client rate equalizing (PCQ)
- Bursts, peer-to-peer protocol limitation

Access Controller

- Captive portal
- MAC address authentication
- RADIUS support
- True plug-n-play access for network users
- Authentication of local network clients
- User accounting

Backbone Router

- Static routing, VRF
- Failover backup and load sharing
- Policy-based routing
- Interface routing
- Equal cost multi-path (ECMP) routing
- IPv4 RIP v1/v2, OSPFv2, BGPv4
- IPv6 RIPng, OSPFv3, BGP
- Bidirectional forwarding detection (BFD)

Firewall

- Stateful packet filtering; peer-to-peer protocol filtering
- Source and destination NAT
- NAT helper (H323, PPTP, quake3, SIP, FTP, IRC, TFTP)
- Classification by source MAC, IP address, address range (network or a list of network), address type, port, port range, IP protocols, DSCP
- Protocol options (ICMP, TCP and MSS); interfaces
- Internal connection, routing and packet marks
- ToS (DSCP) byte; content; matching sequence/ frequency; packet size, time

VPN Server

- IPSec – tunnel and transport mode, certificate or PSK, AH and ESP security protocols
- Point-to-point tunneling (OpenVPN, PPTP, PPPoE, L2TP)
- Advanced PPP features (MLPPP, BCP)
- Simple tunnels (IPIP, EoIP)
- 6to4 tunnel support (IPv6 over IPv4 network)
- VLAN – IEEE 802.1q virtual LAN support, Q-in-Q support
- MPLS based VPNs

DHCP and Proxy Servers

- DHCP – Per interface DHCP server; DHCP client and relay; static and dynamic DHCP leases; RADIUS support; custom DHCP options
- Proxy – HTTP caching proxy server; transparent HTTP proxy; SOCKS protocol support, DNS static entries; support for caching on a separate drive; parent proxy support; access control list; caching list

Tools

- Ping, traceroute
- Bandwidth test, ping flood
- Packet sniffer, torch
- Telnet, SSH
- E-mail and SMS send tools
- Automated script execution tools
- CALEA
- File fetch tool

Physical & Electrical Specifications

• Dimension	28 x 113 x 89 mm
• Weight	0.13 kg
• Power	100-240 VAC
• Power Consumption	Up to 3W

Product Ordering Information

Standard Package

- Service Controller 200
- Built-in Level 4 Operating System Software

Contact Us

- Email: sales@altaitechnologies.com

SC-PB-130812

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.