



AirTegrity™ 4000 Series Base Station Controllers (BSC)



Key Features:

- Processing Speeds up to 2Gbps
- Complete Security
- VLAN & VPN
- Routing –RIP & OSPF
- QoS for Voice & Video
- Modular Design
- Scalable Architecture
- Full IP Services
- AES, IPSec
- Optional GPS for Network Timestamp

Mission-Critical, Multi-protocol Base Station Controller Solution

More than simply an IP Services Management Platform, the AT4000 Series product is a next generation, secure perimeter Base Station Controller designed to address a broad spectrum of user applications. The AT4000 Series aggregates Firewall support, per-subscriber and per-link Bandwidth Management, Traffic Shaping, IP Routing, VoIP support via SIP, VPN and Encryption Services, as well as WiFi support, into a single unit. Available in a desktop or rack-mounted enclosure, this modular designed AT4000 Series uses industry standard PMC (PCI Mezzanine Card) slots for flexible configuration options. Any combination from the list of PMC card modules below can be used.

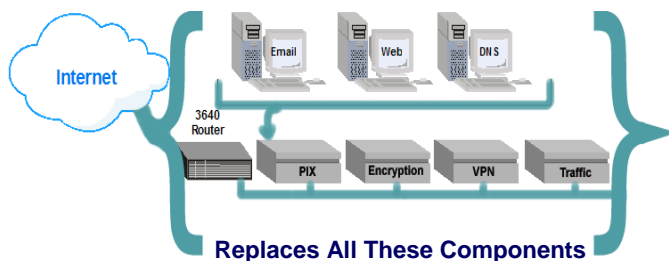
- Quad or Single 10/100 Ethernet ports PMC card
- Quad or Single Port T1/E1 External Router
- Two Port DS3/E3 clear channel PMC card

High Performance System Architecture

The AirTegrity AT4000 Series provides extensive onboard flash memory and processor capacity capable of unprecedented multi-routing performance, while maintaining more than adequate availability to handle massive loads of Tx and Rx request simultaneously. Four port Ethernet cards are used to connect up to 12 multi-frequency Access Points to an AT4000 Series device. The AT4000 Series system is ideally suited for point-to-point and point-to-multipoint edge aggregation and meshed applications.

Reduced Cost of Deployment

As an integral component of the AirTegrity family of secure wireless broadband access products, the AT4000 Series and AT3600 Series introduce a new paradigm in product capability by combining specific features and functionality from the Wireless and Wire lined fields. Combining LAN, VPN, VoIP, Security, and Management products into a single cohesive solution, negating the need for multiple devices and technologies to be configured into the network. This facilitates a dramatic shift in capital and operating expenditures, significantly reducing the cost of deployment.





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AirTegrity™ 4000 Series Specifications

Feature	AT4009	AT4005
Integrated Wire line Interface	1 x 10/100 & 1 x 10/100/1000 Ethernet	2 x 10/100 Base-T Ethernet
Management Interfaces	CLI & Web, sync terminal, USB	CLI & Web
Routing	Static RIPv1/v2 OSPFv2	Static RIPv1/v2 OSPFv2
VPN Services	AES, 3DES, DES, Blowfish, CAST, AH, ESP, PPTP; L2TP, User Defined	AES, 3DES, DES, Blowfish, CAST, AH, ESP, PPTP; L2TP, User Defined
Network Services	NAT, NATP, DHCP (Client, Server, Relay), DNS Proxy, SNMP	NAT, NATP, DHCP (Client, Server, Relay), DNS Proxy, SNMP, NTP
Diagnostics	Event Log View, IP Route Display, ARP, Ping, Trace route	Event Log View, IP Route Display, ARP, Ping, Trace route
Statistics	Link monitoring and statistics for all links	Link monitoring and statistics for all links
Operating Mode	Point to Point, Point to Multipoint, Fully Meshed Network	Point to Point, Point to Multipoint, Fully Meshed Network
Power Supply	110/240VAC Power Pack to 12VDC 30W	- 48VDC 30W
PMC (PCI Mezzanine Card) Slots	1	2
Dimensions	1U Rackmount W 12 x H 1.8 x D 8 inches Or Desktop W 6.5 x H 1.8 x D 8 inches	1U Rackmount W 12 x H 1.8 x D 8 inches Or Desktop W 6.5 x H 1.8 x D 8 inches
Temperature	-40° to +55° C, -40° to 131° F	-40° to +55° C, -40° to 131° F
Humidity	5% - 95% non-condensing	5% - 95% non-condensing
Safety	UL 60950, EN 60950, SABS IEC 950 (SA)	UL 60950, EN 60950, SABS IEC 950 (SA)
EMI / EMC	FCC part 15, EN 55022, EN 61000, and EN 301-489-1/489-3 (EU), SABS CISPR 22 and CISPR 24 (SA)	FCC part 15, EN 55022, EN 61000, and EN 301-489-1/489-3 (EU), SABS CISPR 22 and CISPR 24 (SA)
Optional GPS	Optional	Optional

AirTegrity™ 4000 Series Optional Interface Modules

9002132	Dual-Port DS3 interface module. Enables base station to connect directly to two DS3 circuits. Field upgradeable.
9002201	Single-Port 10/100 Base-T Ethernet interface module provides connection to sector controller or other Ethernet device. Field upgradeable.
9002221	Four-Port 10/100/1000 Base-T Ethernet interface module provides connection to 4 sector controllers or other Ethernet devices. Field upgradeable.



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About AirTegrity Wireless, Inc.

AirTegrity™ Wireless is a market leader providing a secure wireless broadband platform that encompasses all networking and security requirements for the delivery of voice and data services in a single cohesive product. AirTegrity award winning wireless modules operate in both licensed and unlicensed frequencies. AirTegrity™ Networks dramatically reduce the cost of network deployment, ownership and management by integrating Multi-Channel Radio and Antenna technology with powerful routing, switching and security functions into each AirTegrity™ system. Common applications include:

- Residential or business customer aggregation
- Solar Power relay Gateways Systems
- Enterprise/Campus Inter-building Connectivity
- Wireless Backhaul/Circuit Replacement
- Public Hot Spots



Reduced Cost of Deployment

As an integral component of the AirTegrity family of secure wireless broadband access products, the AT4000 Series Base Station Controllers introduce a new level of product capability by combining specific features and functionality from Wireless, Wire-line, LAN, VPN, VoIP, Security, and Management products into a single cohesive solution, negating the need for multiple devices and technologies to be configured into the network. This facilitates a dramatic shift in capital and operating expenditures, significantly reducing the cost of deployment.

Secure, Bandwidth-Managed Wireless Networks

Wireless links are managed and bandwidth usage is controlled over routed links using powerful, flexible traffic shaping and bandwidth management software. Security is assured with AirTegrity integrated IPsec based VPN functionality, which uses a hardware assisted encryption engine to support the strongest commercially available encryption techniques, including AES. VPN functionality is supported on all wireless and wire-line links and supports a total throughput of up to 40 Mbps. Subscriber access rates are configurable and allocated in 64 Kbps blocks, all with individual, powerful firewall support.

Voice Over IP

Toll quality voice is supported by AirTegrity's industry standard SIP implementation and STUN (Simple Traversal of UDP through Network Address Translation) server (RFC 3489), an implementation of the STUN protocol that enables SIP-based communication through Firewalls. The STUN protocol enables a SIP client to discover whether it is behind a NAT, to determine the type of NAT, and to cleanly traverse it while maintaining your Firewall protection.

Non-Line of Sight (NLOS) and Meshed Solutions

The entire AirTegrity product family was designed to support Non Line of Sight (NLOS) connectivity via RIP and OSPF technology, eliminating the need for each host to have direct line-of-sight access to the AT3600 Series Base Transceiver Station/Sector controllers. In addition, the AT4000 Base Station Series supports auto configuration of all AirTegrity Sector Controller, Access Points, Multi Radio Gateway Systems, and Subscriber Stations, greatly simplifying system installation.