



AirTegrity™ 3105 Dual Radio Gateway WiFi a/b/g Series
900MHz, 2.4GHz, 5GHz & 4.9GHz



Key Features:

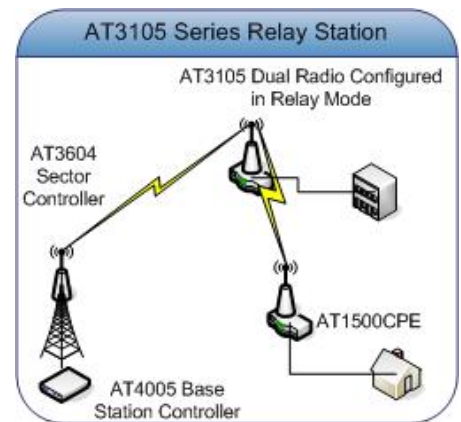
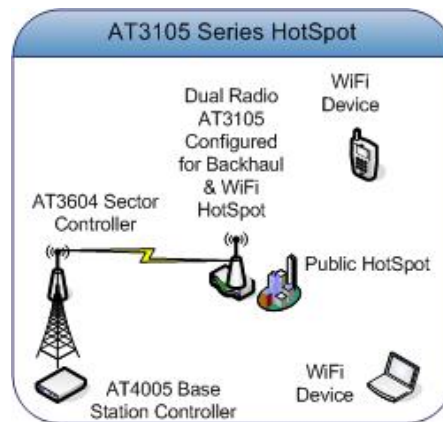
- Outdoor Enclosure
- Scalable Solutions
- Routing Support
- Local AP or SU Configuration
- Complete Security
- AES, IPSec
- QoS for Voice & Video
- VPN and VLAN Support
- Full IP Services
- LOS, NLOS Operation
- Unlicensed Frequencies 900 MHz, 2.4 GHz, 5GHz & 4.9 GHz Public Safety
- Optional GPS module for network time stamp

Relay and Hotspot Solutions—Dual Radio Architecture

The AT3105 features a combination of two 802.11 WiFi radios embedded in a single housing. Functioning with the AT4005 Series Base Station Controllers and the AT3604 Access Points, the AT3105's can function as a relay station at mid-points in a point-to-point, or point-to-multipoint network. Alternatively they can also be configured as a backhaul and local hotspot AP, all in one unit.

Backhaul to Local Hotspot

The AT3105 can function as a backhaul link to a local hotspot. In this configuration one embedded radio and the internal antenna function in the point-to-point mode, backhauling bandwidth from the base station. The second embedded radio can be configured as an 802.11b/g WiFi access point connected by a N-Type Female connector to an Omnidirectional antenna for WiFi distribution. This dual radio architecture allows operators the convenience of preconfigured backhaul and hotspot functionality in one single deployed enclosure.



Relay Subscriber/Station

The AT3105 can also function as a relay gateway using the standard internal antenna (optional external antenna) and one embedded radio configured for backhaul from a base station. The gateway system can distribute bandwidth to local subscribers via a 10/100 Base-T Ethernet Port. The second embedded radio is configured as a point-to-multipoint or point-to-point link to other devices on the edge of the network using an external antenna. The AT3105 is equipped with N-Type Female connector (s) for connections to the external antenna (s). This radio architecture enables operators to route around line of site obstructions and conserve bandwidth utilizing even distribution across a network.





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Feature	Technical Specifications	Feature	Physical Specifications
Radio Architecture	Dual WiFi 802.11 radios for relay station, mesh network, or backhaul with local hotspot See Radio Configuration Matrix Below	Dimensions Mount IEC Standard Wind Load	W 12 x H 12 x D 4 inches AZ/EL control—Pole Size 1¾"±3" ø Water Tightness IEC 529 / IP67 Front Thrust 47 Kg - Side Thrust 6 Kg
Capability	LOS, non LOS, TDD (Time Division Duplex)	Temperature	-40° to +55° C,
Modulation	Auto Select QPSK, 16 QAM, 64 QAM,	Humidity	100% condensing, Outdoor Enclosure
Encryption	DES, 3DES, AES	Regulatory	FCC Part 15 subpart C including 15.205/207 and 247, EN 300.328
MAC	Point-to-Point, Point to Multi-Point , Ad Hoc and Mesh	Power / Data	PoE 19W / (1 or 2) 10/100 Base-T Ethernet Ports
PHY	OFDM	External Antenna Connector	Up to (2) N Type Female
Data Rates	Configurable or Dynamically Auto Select 6-108 Mbps		
Latency	2-6ms	GPS	Optional

3105 WiFi Series Radio Configuration Matrix

Frequency	900 MHz	2.4-2.484 GHz	4.950-4.990 GHz Public Safety Band	5.725-5.850GHz
Protocol	802.11g	802.11b/g	802.11a	802.11a
Channel Size	5, 10, 20MHz	22MHz	5, 10, 20 MHz	20 MHz
Maximum Transmit Power	+28 dBm	+28 dBm	+26 dBm	+28 dBm
Fade Margin Included	20 dB	20 dB	20 dB	20 dB
Rx Sensitivity Data Rate, Distance.	-93 dBm, 1Mbps -92 dBm, 2 Mbps -90 dBm, 6 Mbps -88 dBm, 11 Mbps -86 dBm, 18 Mbps -82 dBm, 24 Mbps -73 dBm, 48 Mbps -70 dBm, 54 Mbps	-97dBm, 1.0Mbps -94dBm, 6.0Mbps -91dBm, 12.0Mbps -90dBm, 18Mbps -86dBm, 24Mbps -83dBm, 36 Mbps -77dBm, 48 Mbps -74dBm, 54 Mbps	-93 dBm, 6 Mbps -92 dBm, 9 Mbps -91 dBm, 12 Mbps -90 dBm, 18 Mbps -85 dBm, 24 Mbps -82 dBm, 36 Mbps -76 dBm, 48 Mbps -73 dBm, 54 Mbps	-94dBm, 6Mbps,12Mbps -93dBm, 9Mbps,18Mbps -91dBm, 12 Mbps,24Mbps -90dBm, 18 Mbps,36Mbps -86dBm, 24 Mbps,48Mbps -83dBm, 36 Mbps,72Mbps -77dBm, 48 Mbps,96Mbps -74dBm, 54 Mbps,108Mbps
Integrated Antenna Options	External Antenna	External Antenna	4.900-5.350GHz 21dBi, H-9,V-9 degree beam width flat panel or External Antenna N-Type Connector	5.725-5.850GHz 22dBi, H-9,V-9 degree beam width flat panel or External Antenna N-Type Connector
*Order optional external high-gain antennae separately				

3105 WiFi Series Ordering Options

- All radio configurations can be ordered with an N-type female connector for use with a high-gain external antenna
- Includes basic mounting hardware, POE injector, and localized power cord
- Order additional mounting hardware, external antennas and GPS modules separately
- Contact an AirTegrity representative for details on optional configurations

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™ Smart 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.