



AirTegrity™ 3205 Series
Dual Radio Ethernet
Router/Bridge Systems
900MHz, 2.4GHz, 5GHz and 4.9 GHz



Key Features:

- Speeds up to 80 Mbps
- OFDM to 64 QAM
- Complete Security
- QoS for Voice & Video
- Up to 30 Miles
- Scalable Architecture
- Full IP Services
- AES, IPSec
- 900 MHz, 2.4 GHz, 5GHz Unlicensed Frequencies
- 4.9 GHz Licensed Public Safety



High Speed Intra Network Pipes

The AirTegrity AT3205 Series™ of Ethernet combined Routers and/or Bridges are designed for network operators looking to deploy HIGH-SPEED state-of-the-art systems that provide the highest level of security and performance, while supporting carrier class QoS requirements needed for VoIP and other latency critical network data.

Using its comprehensive set of IP services, the AT3205 Routing/Bridge Series supports Bandwidth Management, Traffic Shaping, IP Routing, VPN and Encryption Services in a single pair of units. Available in a rugged NEMA 4X outdoor housing, it uses industry standard PMC (PCI Mezzanine Card) slots for flexible radio card configuration.

The AirTegrity AT3205 Router/Bridge Series provides outstanding RF performance and convenient mounting options. Units can use a combination of the optional integrated high gain internal antennas or may be connected to higher gain directional antennas for extended range. The AT3205 Router/Bridge Series is ideally suited for high-capacity point-to-point application including, backhauling service provider networks, hot spots, fiber extension, campus buildings and video surveillance systems.

These systems can be configured to operate as traditional Ethernet bridges or optionally as true IP router that supports standard RIP and OSPF routing protocols. With its wide selection of encryption protocols, including DES, DES3, IPSec and AES, you can truly deploy a secure wireless link, to feed any small, medium or large network.

High Performance Dual Radio System Architecture

The AirTegrity AT3205 Router/Bridge Series utilize OFDM modulation with standard 20MHz channels. When operating in Turbo Mode these 20MHz channels expand to 40MHz wide to offer twice the throughput -Turbo mode, allows bit-rate transfer speeds of up to 108 Mbps per radio x 2 = 216Mbps. The Dual AT3205 units come with a single 10/100 Base-T Ethernet Port.

The AirTegrity AT3205 Series Ethernet Router/Bridge systems provide outstanding RF performance and dynamically adjust the system operations to ensure link quality and system needs. Any radio interfaces card can be selected and integrated antennas are supported for the 4.9GHz & 5.8GHz frequencies only.

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Feature	Technical Specifications	Feature	Physical Specifications
Radio Architecture	WiFi 802.11a/b/g radios for backhaul 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 1¼±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, NEMA 4X
Encryption	DES, 3DES, AES	Regulatory	FCC Part 15 subpart C including 15.205/207 and 247, EN 300.328
MAC	Point to Point	Power / Data	PoE 19W / single 10/100 Base-T Ethernet Port
PHY	OFDM	External Antenna Connector	Up to (2) N-Type Female
Data Rates	Configurable or Dynamically Auto Select 6-108 Mbps	Internal Panel Antenna	Optional—21dBi (4.9) & 22dBi (5GHz)
Latency	2-6ms		

Single Radio & Channel Configurations Matrix. Any two radio combinations are configurable (Except 900MHz).

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, 1Mbps -94dBm, 6Mbps -91dBm, 12Mbps -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				

AT3205 Series Ordering Options

- All radio configurations can be ordered with applicable integrated antenna or 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 and optional external antenna 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.

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