



AirTegrity™ 3305 Series
Triple Radio WiFi & WiMAX Gateways
WiFi—900MHz, 2.4GHz, 5GHz and 4.9 GHz
WiMAX—3.5GHz & 5GHz



Key Features:

- Speeds up to 80 Mbps
- OFDM to 64QAM
- Complete Security
- QoS for Voice & Video
- Up to 30 Miles
- Scalable Architecture
- Modular Design
- Full IP Services
- AES, IPSec
- Unlicensed & Licensed Frequencies
- WiFi—900 MHz, 2.4 GHz, 5GHz & 4.9 GHz Public Safety
- WiMAX—3.5GHz & 5GHz
- Optional EV-DO & GPS



High Speed Network Pipes

The AirTegrity AT3305 Series™ of Ethernet combined Triple Radio WiFi & WiMAX Gateways are designed for network operators looking to deploy state-of-the-art systems that provide endless configuration possibilities with the highest level of security, flexibility and performance, while supporting carrier class QoS requirements needed for VoIP and other latency critical network data.

Using it's comprehensive set of IP services, the AT3305 Triple Radio Series supports Bandwidth Management, Traffic Shaping, IP Routing, VPN and Encryption Services for each individual radio card, within a single unit. Available in a rugged NEMA 4X outdoor housing, it uses industry standard PMC (PCI Mezzanine Card) slots for flexible configuration and upgrade options.

The AirTegrity AT3305 Triple Radio Series provides outstanding RF performance, frequency flexibility and convenient mounting options. Units can use any combination the optional integrated high gain internal antennas or may be connected to higher gain directional antennas for extended range and frequency disbursement. The AT3305 Series is ideally suited for multi-service, mission critical network application including and combining, WiFi or WiMAX backhauling service provider networks, hot spots, fiber extension, campus buildings and video surveillance systems. The combination flexibility of addressing multiple network functions with a single mounted unit dramatically reduces deployment, infrastructure and maintenance cost.

These systems can be configured to operate as traditional Ethernet Bridges IP routers, AP's, repeaters or CPE's 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 Network.

High Performance Triple Radio System Architecture

The AirTegrity AT3305 Triple Radio Series utilize OFDM Modulation with standard 20MHz WiFi channels. When operating in Turbo Mode these 20MHz channels expand to 40MHz wide, offering expanded throughputs, depending on radio card and frequency option selected. The AT3305's multi-radio configuration is capable of maximizing throughputs, allowing for bit-rate transfer speeds of up to 108 Mbps per Turbo capable radio. Actual TCP/IP throughput will reach well over 80Mbps.

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| Feature | Technical Specifications | Feature | Physical Specifications |
|---------------------------|--|--|--|
| Radio Architecture | Triple WiFi /WiMAX 802.11x 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 BPSK, 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, Point to Multi-Point | Power / Data | PoE 19W / (1 or 2) 10/100 Base-T Ethernet Ports |
| PHY | OFDM | External Antenna Connector | Up to (3) N Type Female |
| Data Rates | Configurable or Dynamically Auto Select 6-108 Mbps | Internal Panel Antenna | Optional—18dBi (3.5), 21dBi (4.9) & 22dBi (5GHz) |
| Latency | 2-6ms | GPS | Optional |

3305 WiFi Series Radio 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, 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 External antennas separately | | | | |

3305 WiMAX Radio Matrix

| Frequency | 3.4-3.6 GHz WiMAX | 5.725-5.850GHz WiMAX |
|--|--|--|
| Protocol | 802.16-2004 | 802.16-2004 |
| Channel Size | 3..5MHz & 7MHz | 1.75, 3..5,.7 and 10MHz |
| Maximum Transmit Power | +20 dBm | +17 dBm |
| Fade Margin Included | 20 dB | 20 dB |
| Rx Sensitivity Data Rate, Distance. | -90 dBm, 6 Mbps -89 dBm, 9 Mbps -87 dBm, 12 Mbps -85 dBm, 18 Mbps -83 dBm, 24 Mbps -80 dBm, 36 Mbps -77 dBm, 48 Mbps -73 dBm, 54 Mbps | -89 dBm, 6Mbps -88 dBm, 9Mbps -81dBm, 12 Mbps -80 dBm, 18 Mbps -79 dBm, 24 Mbps -78 dBm, 36 Mbps -65 dBm, 48 Mbps -64dBm, 54 Mbps |
| Integrated Antenna Options | 3.400-3.600GHz 18dBi, H-15,V-15 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 External antennas separately | | |

AT3305 Series Ordering Options

- All radio configurations can be ordered with internal antenna when applicable 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, 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.

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