



AirTegrity™ AT3320C
 Mobile Triple Radio Gateways
 GPS and EV-DO Standard with Optional
 900MHz, 2.4GHz, 5GHz & 4.9GHz

Key Features:

- Mobile
- Custom in Vehicle Mount
- 12V DC to DC Power Supply
- GPS Standard
- OFDM to 256 QAM
- Complete Security
- QoS for Voice & Video
- Scalable Architecture
- Full IP Services
- AES, IPsec
- EV-DO, 900MHz, 2.4GHz, 5GHz Unlicensed Frequencies
- 4.9GHz Licensed Public Safety

Triple Radio Architecture — Guaranteed & Redundant Backhaul

The AT3320C Mobile Triple Radio systems features any combination of two 802.11x Wi-Fi based radios operating at 900MHz, 2.4GHz, 5GHz or Public Safety Licensed 4.9GHz bands and one Novatel™ EV-DO radio in a single weather-proof housing. The AT3320C combines the flexibility and speed of access to existing Public Safety Networks and Public Wi-Fi Networks along with fallback to the National Access EV-DO Footprint.

Functioning as an integrated system with a network of AirTegrity AT4005 Series Base Station Controllers and AT3604 Base Transceiver Stations/AP's, the AT3320C Mobile Gateway provides a total communications platform for Public Safety and mission critical communication systems.

The communications platform acts transparently as a relay node in a mesh network or as the basis of connectivity to a Wireless Metropolitan Area Network (WMAN). When using integrated 802.11x Wi-Fi or Public Safety band radios, the links can also double as access points for communication to devices away from the vehicle. Configurations include any combination of 900MHz, 2.4GHz 802.11b/g and 5GHz 802.11a unlicensed radios, or 4.9GHz licensed radios for Public Safety. External multi-band or single band antennas are available for all four frequencies.

Using the Built-In Novatel™ Broadband Access card, the AT3320C can fall back to the ever expanding EV-DO networks to access the Internet when access to Public Safety or Public Wi-Fi networks is unavailable. The AT3320C can seamlessly use an encrypted IPsec, VPN to securely link the vehicle into the backbone of a Public Safety, DHS, or corporate network. This link is also available to devices connected to the vehicle via the integrated Wi-Fi or Public Safety HotSpots.

This multi-frequency, single platform allows first responders and emergency personnel to stay connected at all times with the ability to communicate via the licensed Public Safety spectrum, standard Wi-Fi or the highly available EV-DO networks. All mobile units are traceable via the standard built-in GPS satellite chip set. This combination and flexibility of addressing multiple network functions with a single mounted unit, dramatically reduces deployment, infrastructure and maintenance cost.





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Feature	Technical Specifications	Feature	Physical Specifications
Radio Architecture	Dual Wi-Fi 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 Custom In Vehicle Plate Mount Inside Vehicle Inside Vehicle
Capability	LOS, non LOS, TDD (Time Division Duplex)	Temperature	-40° C 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, Point to Multi-Point	Power / Data	12VDC / (1 or 2) 10/100 Base-T Ethernet Ports
PHY	OFDM	External Antenna Connector	3 TNC Type Female
Data Rates	Configurable or Dynamically Auto Select 6-108 Mbps	Internal Panel Antenna	None
Latency	2-6ms	GPS	20 Channels, High TFF

Single Radio & Channel Configuration Matrix

Frequency	900 MHz	2.4-2.484 GHz	4.950-4.990 GHz Public Safety Band	5.725-5.850GHz FCC 5.150-5350 to 5470-5725 ETSI	EV-DO
Protocol	802.11g	802.11b/g	802.11a	802.11a	CDMA 1xEV-DO, 1xRTT, IS95 CDMA 800 MHz CDMA 1900 MHz
Channel Size	5, 10, 20MHz	22,MHz	5, 10, 20MHz	20 , 40MHz	N/A
Maximum Transmit Power	+28dBm	+28dBm	+26dBm	+28dBm	N/A
Fade Margin Included	20 dB	20 dB	20 dB	20 dB	Data Speeds
Rx Sensitivity, Data Rate, Turbo	-93dBm, 1Mbps -92dBm, 2 Mbps -90dBm, 6 Mbps -88dBm, 11 Mbps -86dBm, 18 Mbps -82dBm, 24 Mbps -73dBm, 48 Mbps -70dBm, 54 Mbps	-97dBm, 1Mbps -94dBm, 6Mbps -91dBm, 12Mbps -90dBm, 18Mbps -86dBm, 24Mbps -83dBm, 36 Mbps -77dBm, 48 Mbps -74dBm, 54 Mbps	-93dBm, 6 Mbps -92dBm, 9 Mbps -91dBm, 12 Mbps -90dBm, 18 Mbps -85dBm, 24 Mbps -82dBm, 36 Mbps -76dBm, 48 Mbps -73dBm, 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	CDMA 1xEV-DO (IS-856) Uplink to 153.6 kbps Downlink to 2.4 Mbps CDMA 1xRTT (IS-2000) Uplink and Downlink speeds to 153.6 kbps
Order High-Gain, Multiple Frequency Omni-directional antennas separately	External Antenna	External Antenna	External Antenna	External Antenna	External Antenna

AT3320C Ordering Options

- All radio configurations come with TNC terminations for external antennas ONLY.
- All hardware, 12V DC to DC converters and power cord are included.
- Order additional 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.