

Understanding the WAAV AirBox™

What is the AirBox?

The AirBox is an AC or DC powered cellular broadband router (a.k.a. mobile gateway) with support for WiFi, GPS vehicle tracking, connectivity to an external cellular antenna, and remote administration. There are two models in the product line:

- AirBox CM3: single connection
- AirBox X2: dual connection (same or different networks) with load-balancing capability

Both models are elegant single-box solutions requiring little or no installation. Installation options are:

- permanent (using supplied mounting brackets)
- transportable (no brackets) so that unit may be easily moved from one vehicle or usage situation to another by simply unplugging the power supply and unscrewing the external antenna connector.



What does the AirBox do?

The AirBox uses 3G cellular broadband (EVDO or HSDPA/HSUPA) to provide Internet connectivity to multiple computers or devices via either Ethernet, WiFi or both, in situations where wired Internet is unavailable such as in vehicles, remote areas, islands, etc. Performance is dependent on cellular data signal availability and type. The AirBox does all this using a single connection (CM3) or dual connection (X2). Of course, best performance occurs when fast cellular broadband service is available.

What are the other common mobile Internet alternatives?

The two common alternatives are the cellular modem card (such as an "Aircard™***"), and the Internet-enabled cell phone tethered to a laptop. Both provide mobile Internet but only to a single computer, and both suffer from reception problems in enclosed areas and in moving vehicles. The Aircard and AirBox have different purposes. An Aircard is the right choice when the Internet source must always reside with a single computer and travel with it. It is ideal for people flying around the country with their laptop (business travelers, for example), for which the AirBox is not intended. However, there are numerous situations for which the Aircard is not well-suited, and for which the AirBox is ideal.

When is the AirBox the correct mobile Internet solution?

The AirBox is ideal under any of the following circumstances:

- When mobile Internet (Ethernet or WiFi) is desirable or required; wired Internet (Cable, DSL, etc) is unavailable or takes too long to install
- Internet should reside with the vehicle or remote location (and not with individual personnel)
- Large capacity vehicles are involved; Internet access is needed by several people or devices in a confined space (buses, RVs, construction trailers or other temporary mobile office, students, employees, family, etc)
- Multiple on-board devices need Internet access (police laptop and dash cam, for example)
- WiFi access both inside and outside of the vehicle or location is desirable
- The best possible coverage is desirable; the AirBox connects in more areas with better signal strength than an Aircard – the external antenna dramatically improves reception and better supports the use of signal boosters
- Rugged connection to external antenna is desirable (the Aircard's external antenna connection is fragile)
- More coverage area is needed than is available from any single carrier (X2)
- Moving vehicle performance matters (the AirBox handles cell tower changes better than an Aircard)
- Internet capability should not be removable from its intended location by employees (with an Aircard, if an employee is out of work, so is the Internet)
- Concern of Aircard breakage or loss (it protrudes and is removable); typical replacement cost: \$300
- Remote administration is desirable (usually the case with large companies/fleets - far easier for IT departments to support than a fleet of Aircards)
- GPS vehicle tracking is desirable (fleet tracking) and not already in place

- Fast deployment is desirable; wired Internet access cannot be readily obtained (the AirBox can be shipped fully operational; no software installation or configuration required)
- Concurrent voice and data capability is needed; smartphones (Blackberry, Treo, etc) cannot do this
- Internet is needed for laptops not equipped with a PC card slot (early models & some Macs)
- More throughput is needed than is available from a single cellular broadband modem (X2)
- Applicable telemetry situation (video surveillance camera, police dash cam, mobile ATM, etc.)
- Support for other WiFi-enabled devices is desirable (iPhone, Zune2, Slingbox, Internet radio, game device)

What are some examples of AirBox applications?

Commercial

- Limousines
- Commuter buses (including corporate); other commuter buses such as airport shuttle buses, etc
- Upscale transportation involving long distance transportation services (charter buses, etc.)
- University buses (for both WiFi and video surveillance)
- Large capacity vehicles of all types (Motor coaches, buses, trucks, trains)
- Marine (workboats and ferries)
- Ambulances
- Emergency (EMS)
- Mobile Command Vehicles
- Fleets needing Internet access, especially if WiFi, GPS tracking, and/or remote administration is desirable
- Taxis - streaming paid advertising to back seat displays and displaying GPS vehicle route to customers
- Police (laptop and/or dash cam)
- Fire
- Federal government (FBI, FEMA, etc.)
- Municipal vehicles
- Military – all divisions
- Remote areas where conventional wired Internet is not available
- Construction trailers and other temporary offices
- Video surveillance cameras
- Mobile ATMs
- Broadcast (there are many submarkets within this industry)



Consumer

- RVs - OEM, new and used RV dealerships and accessories suppliers
- Marine (yachts) – new and used yacht dealers and accessories suppliers
- Automotive, SUV, Minivan, Truck – all markets (new and used car dealerships; installation aftermarket)
- Auto rental – as an add-on service offering (like GPS)

* AirBox is a registered trademark of WAAV, Inc.

**AirCard is a registered trademark of Sierra Wireless

AirBox. Instant Wi-Fi just about anywhere.

