TURN UP THE AC: TOP 5 technical reasons to upgrade from ATG to AVANCE



Let's be honest: when it comes to inflight internet, your passengers just want it fast and reliable. They don't really care about the science and technology behind it.

But you do.

This white paper will help you see how AVANCE technology represents a quantum leap ahead from your current ATG system. A leap that will ensure your Wi-Fi can keep up with modern data and device demands. Because, unsurprisingly, the world of Wi-Fi has changed dramatically since ATG systems were launched 10 years ago.

1. 4G now, 5G when it launches

AVANCE L5

- Connects you to the Gogo Biz 4G network, which delivers greater speed + capacity + bandwidth so people can take full advantage of their favorite websites and applications.
- Is the pathway to Gogo 5G, which will launch in 2021. Just couple your AVANCE L5 with a Gogo X3 (the 5G LRU) and you'll be ready for this breakthrough network.

2. Faster tech reduces data bottlenecks

AVANCE L5

- Uses an internal **802.11ac** dual-band router which maximizes bandwidth and supercharges your incabin Wi-Fi performance. **3x3 MIMO (Multiple Input Multiple Output)**, which directs multiple streams simultaneously and can increase the overall data throughput of the entire network.
- System includes two 850MHz aircards, and two bellymount dual-directional antennas. **These antennas have more gain** and can look farther, forward, left and right for a more reliable connection.

ATG Connects to the Gogo Biz 3G network only.

ATG

- Uses an external 802.11b/g single-band router 17-year-old technology.
- System includes one 850MHz aircard, and two bellymount omni-directional antennas.

3. All-in-one solution with a bigger, more powerful brain

AVANCE L5

- 64-bit processor think Windows 10 era
- Fully integrated entertainment, information and moving maps (so you don't use bandwidth for common/popular passenger activities like movies, TV and news).
- A single LRU means less space required and less weight.

ATG

- 32-bit processor think Windows XP era.
- Requires two separate hardware boxes: ATG + UCS/CTR + cabling.
- Adding inflight entertainment or moving maps requires more boxes and cables.

4. Software-centric platform = lower operational costs, greater customization and control

AVANCE L5

- Software-centric design for easier operation and future-proofing.
- Full system and network predictive diagnostics, analytics and self-reporting resulting in greater uptime and easier maintenance/support.
- Gogo DASH self-service toolkit lets you remotely customize and control your connectivity.
- Automatic and wireless software updates via Gogo Cloudport.
- Brandable interface (It's your flight, take credit for the great Wi-Fi experience).
- Gives you a new warranty for peace of mind versus rising ATG maintenance and repair costs.

ATG

- ATG represents older "hardware-centric" design.
- Limited configuration capability.
- Manual and minimal software updates.
- Network-only analytics.

5. Get ahead of cybersecurity issues before they happen

AVANCE L5

- 64-bit system with the horsepower needed for modern security techniques and architectures, plus vendor-provided library updates and patches.
- By design, Gogo AVANCE onboard aircraft equipment offers enhanced security through physical isolation. Aircraft system intrusion security is built into every Gogo AVANCE router.
- Rapid deployment of AVANCE software updates means we can **respond more quickly to emerging threats** on a persistent basis.
- The Gogo AVANCE platform operates on our secure network via jam-resistant Code Division Multiple Access (CDMA) technology.

ATG

- Rest assured, security is in our ATG DNA. All data transmitted over the airborne network is secured through licensed spectrum with proprietary link layer encapsulation for secure air-to-ground communications.
- **32-bit system**. For reasons outside of Gogo's control, there is limited or no 32-bit system support from vendors as part of their updated software libraries or patches.

It's time to update your tech

Convinced? Then let's upgrade your Wi-Fi to modern standards. You'll gain peace of mind, while your passengers will gain a greater experience. Contact your Gogo sales expert or authorized Dealer to take the next step.