The Viasat Global Aero Terminal “GAT-5510” is a Ka-band aviation satcom terminal that enables broadband in-flight connectivity services for business and government users on our high-capacity satellite networks. Capable of delivering the industry’s highest data speeds to the aircraft, the tail, fuselage, or hatch-mounted antenna and onboard modem can be configured for a wide variety of in-flight applications and missions. The GAT-5510 easily integrates on large cabin and transport aircraft.

THE ONLY PATH TO MULTI-TERABIT NETWORK CAPACITY

The Viasat Global Aero Terminal 5510 delivers today’s fastest in-flight connectivity and the only path to Viasat’s ultra-high capacity satellite network. Viasat has the world’s highest capacity Ka-band satellites over North America. The recent launch of ViaSat-2 expands Ka-band coverage across North and Central American, Caribbean, and trans-Atlantic routes. Viasat’s GAT-5510 will work with the enhanced satellite technology of tomorrow - ViaSat-3, a global constellation of 1 Tbps Ka-band satellites, to provide in-flight internet services.

SUPPORTS BUSINESS AVIATION AND GOVERNMENT APPLICATIONS

- Business aviation internet and streaming services - stay connected to emails, web browsing, video streaming, and business applications
- Cabin and cockpit crew connectivity for insight into operations
- Secure enroute government C3 and VIP transport communications for data, VoIP, VTC, internet access, virtual collaboration, and Viasat Unlimited Streaming
- Real-Time Intelligence, Surveillance and Reconnaissance (ISR) with HD Full Motion Video and Multi-sensor/Multi-Int operations for instant situational awareness and decision making

GLOBAL AERO TERMINAL 5510 AT-A-GLANCE

- Ultra-small satellite communications shipset
- Tail, fuselage, or hatch-mounted antenna with integrated RF and ACU
- Only 3 LRUs (including power supply)
- Most flexible LRU placement (or installation) options for any aircraft

Network and Services

- Only commercial terminal supporting the full ITU Ka-band spectrum to maximize operational flexibility, throughput, and capacity
- Enables access to the highest capacity Ka-band satellites
- Operates on Viasat’s Hybrid Adaptive Network including partner and US government Ka-band constellations
- Flexible service plans with predictable monthly costs
- 24/7 global technical support

Mission Sets

- Real-Time Broadband ISR
- MedEvac/Telemedicine
- Search & Rescue
- Border/Maritime Surveillance
**SPECIFICATIONS**

**OPERATING FREQUENCY**
- Transmit: 27.5 to 31.0 GHz
- Receive: 17.7 to 21.2 GHz

**ANTENNA PERFORMANCE**
- G/T: 10.6 dB/K at 36K ft, midband frequency including radome loss
- EIRP: 49.6 dBW at 36K ft, midband frequency including radome loss
- SSPA RF Power: 10 W and 20 W modes (electronically switchable)
- Polarization: Circular, electronically switchable, all combinations of R, L, co-pol, or cross-pol
- Coverage: Azimuth 0° to 360°, Elevation 0° to 90°
- RF Electronics: Integrated and mounted at back of reflector
- Antenna Control: Built-in Antenna Control Unit (ACU) mounted to antenna azimuth deck
- Servo Motors: Ruggedized programmable servo-motors for Az over El control
- Navigation Data: ARINC-429 or custom serial

**ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS**

**Antenna**
- Weight on Tail: 26.4 lb., 12 kg
- Operating Temperature: -55° C to +70° C
- Operating Vibrations: DO-160G, section B, category S, curve E
- Operational Shock: DO-160G, section 7, category B
- Waterproofness: DO-160G, section 14, category W
- Radiated Emissions: DO-160G, section 21, category P

**Antenna Power Supply**
- Size: 8 x 10.6 x 3.4 in.
- Weight: 10 lb; 4.5 kg
- Input Voltage: +115 VAC, 300–800 Hz, or +28 VDC
- Power (Mode Dependent): 377 W for 10 W SSPA mode, 432 W for 20 W SSPA mode

**Modem**
- Size: ARINC 600 4 MCU
- Weight: 17 lb; 9.0 kg
- Input Voltage: +115 VAC input 300–800 Hz, < 150 W, or 28 VDC

**SYSTEM DIAGRAM**

[Diagram showing the system components including Radome, Antenna & ACU, 48V, ARINC 429, Modem, Ethernet, In-Cabin Network, and Power.]