Building upon Viasat’s strong history of delivering aviation SATCOM terminals, the Global Aero Terminal 5518 (GAT-5518) is the latest to join Viasat’s family of next-gen, full-ITU Ka-band terminals. The GAT-5518 enables broadband in-flight connectivity services for commercial and government users on Viasat’s high-capacity satellite network. Capable of operating on full ITU Ka-band spectrum with all polarizations and delivering the industry’s highest data rates to and from the aircraft, the GAT-5518 terminal is the best choice for manned and unmanned aircraft. Each GAT-5518 terminal is made up of a 2-axis steerable 2-way Ka-band antenna with an integrated ACU, an antenna power supply unit and a modem. The GAT-5518 easily integrates onto an aircraft with a tail, fuselage, or hatch-mounted antenna and onboard modem — for a wide variety of in-flight applications and missions.

THE LATEST PATH TO MULTI-TERABIT NETWORK CAPACITY

The GAT-5518 delivers today’s fastest in-flight connectivity and a path to Viasat’s ultra-high capacity satellite network. With the world’s highest capacity Ka-band satellites over North America, Viasat provides manned and unmanned aircraft with an unrivaled in-flight service. Viasat’s GAT-5518 will work with the enhanced satellite technology of tomorrow — ViaSat-3, a global constellation of 1 Tbit/s Ka-band satellites — as well as Viasat and partner satellites currently operating today. Whether it is a commercial or government, MEO or GEO satellite, the GAT-5518 provides the customer with orbital and frequency diversity.

SUPPORTS GOVERNMENT AND COMMERCIAL APPLICATIONS

» 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

» Internet and streaming services — stay connected to emails, web browsing, video streaming, and business applications

GLOBAL AERO TERMINAL 5518 AT-A-GLANCE

» Tail or fuselage mount antenna with integrated RF and ACU

Network and Services

» Supports 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 commercial 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

Viasat Next-Gen Full-ITU Ka Terminals

» GAT-5510 (G-12)

» GAT-5518 (G-18)

» GAT-5530 (Gen 2 KuKa)

* US Government satellite certifications in process.
**SPECIFICATIONS**

**ANTENNA**
- **Class**: Tail or fuselage mount, parabolic reflector Ka-band Tx/Rx airborne antenna
- **Aperture**: Parabolic reflector; circular polarization, electronically switchable, all combinations of R, L, co-pol, or cross-pol
- **Frequency**: Full ITU Ka, Commercial and Military
  - Tx: 27.5 – 31.0 GHz
  - Rx: 17.7 – 21.2 GHz
- **EIRP in 20W Tx mode**: 53.8 dBW at 36K ft., midband frequency including radome loss
- **EIRP in 10W Tx mode**: 50.8 dBW at 36K ft., midband frequency including radome loss
- **G/T**: 15.0 dB/K at 36K ft., midband frequency including radome loss
- **RF Electronics**: Integrated into antenna assembly
- **Antenna Control**: Integrated into antenna assembly
- **Elevation coverage**: 0° to 90°
- **Azimuth coverage**: 0° to 360° continuous
- **Swept Volume (DxH)**: Ø19.6 x 19.6 in.; Ø49.8 x 49.8 cm
- **Weight**: 35.0 lb.; 15.9 kg
- **Operating Temperature**: -55 °C to +70 °C
- **Antenna Power Supply**
  - **Power Source**: 115 VAC, 360 Hz – 800 Hz single phase, or 28 VDC
  - **Power Consumption**: 420W
  - **Dimensions (LxWxH)**: 11.0 x 8.0 x 3.3 in.; 28.0 x 20.8 x 8.3 cm
  - **Weight**: 7.9 lb.; 3.6 kg
  - **Operating Temperature**: -55 °C to +70 °C

**MODEM**
- **Form Factor**: ARINC 600 4 MCU
- **Power Source**: 115 VAC, 400 Hz, single phase, or 28 VDC
- **Power Consumption**: 175 W
- **Dimensions (LxWxH)**: 14.6 x 4.9 x 7.6 in.; 37.0 x 12.5 x 19.4 cm
- **Weight**: 17.0 lb.; 7.7 kg
- **Operating Temperature**: -55 °C to +70 °C
- **Baseband Interfaces**
  - **Data**: 1000 BASE-T Ethernet
  - **Control**: 1000 BASE-T Ethernet
- **Navigation Data**: ARINC 429, RS-422
- **External Modem Support**
  - **Transmit Frequency**: 950 – 1450 MHz
  - **Receive Frequency**: 950 – 2150 MHz

**INTERFACE CABLES**
- **Modem to Antenna**: Two IFL cables
- **Power Supply to Antenna**: One cable

**QUALIFICATIONS**
- **Environmental/EMC**: RTCA/DO-160G