The Viasat Global Aero Terminal 5530 is a 2nd generation hybrid Ka- and Ku-band aviation satcom terminal that enables global broadband connectivity services for commercial and government users on worldwide high-capacity satellite networks. Capable of delivering the industry’s highest data speeds to the aircraft, the fuselage-mounted antenna and onboard modem can be configured for a wide variety of in-flight applications and missions. This terminal integrates easily into medium and long-range airframes, plus line-fit options offer procurement flexibility.

SEAMLESS GLOBAL ROAMING ON THE BEST AVAILABLE BROADBAND NETWORK

This advanced hybrid terminal traverses our high-capacity Ka-band and global Ku-band satellite networks seamlessly to keep passengers connected as they fly.

THE ONLY PATH TO A MULTI-TERABIT SATELLITE NETWORK

The Viasat Global Aero Terminal 5530 delivers today’s fastest in-flight connectivity and the only path to an ultra-high capacity satellite network. We already operate the world’s highest capacity Ka-band satellites plus Ku-band coverage for global fleets and missions. ViaSat-2 expands Ka-band coverage across North and Central American, Caribbean, and trans-Atlantic routes. The ViaSat-3 constellation of 1 Tbps Ka-band satellites will provide the industry’s only truly global, truly broadband in-flight internet services.

A VARIETY OF COMMERCIAL AND GOVERNMENT APPLICATIONS AND MISSIONS

» High-speed internet and streaming video to everyone on board
» Cockpit and cabin crew connectivity
» Real-time transfer of aircraft operational data
» Delivery of HD video streams off the aircraft

GLOBAL AERO TERMINAL 5530 AT-A-GLANCE

High-Speed Connectivity
» Delivers the industry’s highest data speeds to the aircraft
» Supports multiple simultaneous high-quality video streams
» Ku- and full ITU Ka-band satellite connectivity, including Military and Commercial-Ka
» High-capacity coverage over key military regions and busiest passenger air routes
» Private government in-theater networks available for specific mission charters

Primary Applications
» Airline passenger access to the full internet with freedom to stream any content, including broadcast TV
» Cabin and cockpit crew connectivity for insight into operations
» Office in the Sky: enroute government C3 and VIP transport communications for data, VoIP, VTC, and internet access
» Real-Time Intelligence, Surveillance and Reconnaissance (ISR) with HD Video to monitor a mission’s progression throughout execution
» Private VVIP aviation internet and streaming media services for large number of users
**ANTENNA**

**Class**
Fuselage mount, 2nd generation medium profile dual Ku-/Ka-band Tx/Rx airborne antenna

**Ka-band**
- **Aperture**: Waveguide horn array; circular polarization, electronically switchable, cross- and co-pol.
- **Frequency**: Full ITU Ka, Commercial and Military
  - Tx: 27.5 – 31.0 GHz
  - Rx: 17.7 – 21.2 GHz
- **EIRP**: 52.5 dBW (includes radome loss)
- **G/T**: 12.5 dB/K (includes radome loss)

**Ku-band**
- **Aperture**: Waveguide horn array; linear polarization, electronic polarization tracking, cross- and co-pol.
- **Frequency**: Tx: 14.0 – 14.5 GHz
  - Rx: 10.95 – 12.75 GHz
- **EIRP**: 47.0 dBW (includes radome loss)
- **G/T**: 11.0 dB/K (includes radome loss)

**RF Electronics**
Integrated into antenna assembly

**Antenna Control**
Integrated into antenna assembly

**Elevation coverage**: 0º to 90º

**Azimuth coverage**: 0º to 360º continuous

**Swept Volume (DxH)**
Ø39.25 x 11.3 in.; Ø99.7 x 28.7 cm

**Weight**
163.0 lb.; 73.9 kg

**Antenna Power Supply**
- **Power Source**: 115 VAC, 360 Hz – 800 Hz single phase, or 28 VDC
- **Power Consumption**: 465 W max.
- **Dimensions (LxWxH)**
  - 11 x 8 x 3.3 in.; 28 x 21 x 8.4 cm
- **Weight**: 7.9 lb.; 3.6 kg
- **Operating Temperature**: -40 ºC to +70 ºC

**MODEM**

**Form Factor**: ARINC 600 4 MCU

**Power Source**: 115 VAC, 400 Hz, single phase, or 28 VDC

**Power Consumption**: 175 W max.

**Dimensions (LxWxH)**
- 14.55 x 4.90 x 7.64 in.;
- 37 x 12.45 x 19.41 cm

**Weight**
- 17.0 lb.; 7.7 kg

**Operating Temperature**: -40 ºC to +70 ºC

**Baseband Interfaces**
- **Data**: 1000 BASE-T Ethernet
- **Control**: 1000 BASE-T Ethernet

**Navigation Data**
- **Transmit Frequency**: 950 – 1450 MHz
- **Receive Frequency**: 950 – 2150 MHz

**RADOME**

**Dimensions (LxWxH)**
93 x 42 x 13 in.; 235 x 107 x 32 cm

**Weight**
90 lb.; 41 kg

**QUALIFICATIONS**

**Environmental/EMC**: RTCA/DO-160G, MIL-STD-810, MIL-STD-461

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**SYSTEM DIAGRAM**