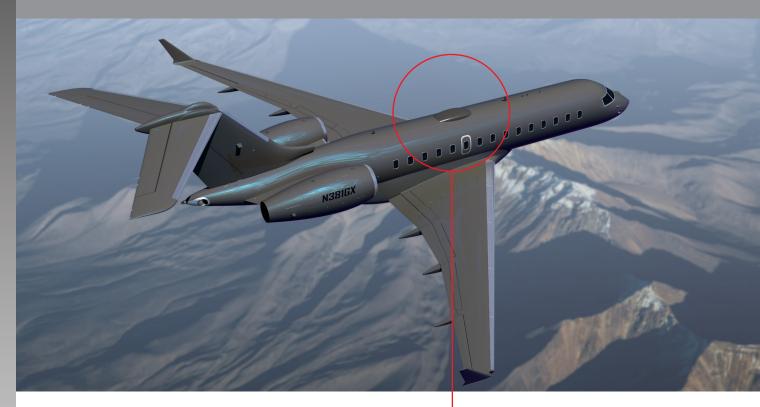




Full Spectrum Ka-band Satcom Antenna

# High Performance from Every Orbit to Every Mission





For special-mission ISR aircraft, the ThinAir GT2517 integrates years of fielded, proven technology to deliver resilient, secure and high-bandwidth communications to the warfighter.

### **Key Features**

- Multi-orbit capable system
- Full civil and extended civil Ka-band operation
- Proven reliability; highest guaranteed antenna MTBF
- Low profile and low drag delivers extended time on station
- · Low probability of intercept/detection ensures secure comms
- Highly survivable to stringent EMI/EMC/EMP requirements
- Inherent anti-jam robustness
- Wide IBW supports hopping and protected tactical waveforms



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# TECHNICAL SPECIFICATIONS



Network Certifications*			
GEO	MEO	LE0	
Inmarsat GX+ Hughes Jupiter Thales/SES-17 inFlyt Avanti-Hylas Eutelsat	03b Classic mPOWER	Telesat Lightspeed	

<sup>\*</sup>Antennas are network agnostic and capable of operating on other civil and government LEO, MEO, and GEO networks as they come online.

Physical Characteristics Includes Tx/Rx antenna, KANDU, KRFU, radome, adapter plate and fairing		
OAE Dimensions (L x W x H*)	88 in x 43 in x 7 in (2.8 m x 1.1 m x 0.2 m)	
System Weight	294 lb. (133 kg)	
Avg. System Power	450 W (15 W OAE)	

<sup>\*</sup>Above fuselage crown

### **Throughput and Performance**

(Typical, at mid-band, cruise conditions, not including radome)

Data Rates: Up to 830 Mbps down and 200 Mbps up (network dependent)

G/T: 18.5 dB/K peak (13.5 dB/K at  $20^{\circ}$  elev.)

Network Efficiency: Up to 4 bits/Hz Instantaneous Bandwidth: 500 MHz

### Typical EIRP (Psat):

- Rx: 17.7 to 21.2 GHz

WGS

27.5-30.0 GHz

56.0 dBW (51.0 dBW at 20°)

30.0-31.0 GHz

56.5 dBW (52.0 dBW at 20°)

### Transmit EIRP Spectral Density Limit:

- 36 to 41.5 dBW/MHz (40 dBW/MHz typical) over elevation and skew (per 47 CFR 25.218)
- 54 to 59.5 dBW/MHz (58 dBW/MHz typical) over elevation and skew (per MILSTD-188-164B)

Azimuth Beamwidth: 1.8° Tx and 1.7° Rx

First Sidelobe: -20 dB typical

 $\label{polarization:polarization:polarization:simultaneous dual-pol mode} Polarization: Switchable circular (co/orthogonal), simultaneous dual-pol mode$ 

Axial Ratio: <1.5 dB typical

### **Environmental**

Operating Temperature: -55°C to +74°C external Environmental Compatibility: RTCA/D0-160G

## **Tracking and Agility**

Azimuth Coverage: 360° continuous Elevation Coverage: +10° to +90°

Beam Agility: >250°/sec Tracking Accuracy: <0.2°

### **Regulatory Compliance**

WRC-19 5G Terrestrial Protection ITU Article 22 Section II

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