ThinKom

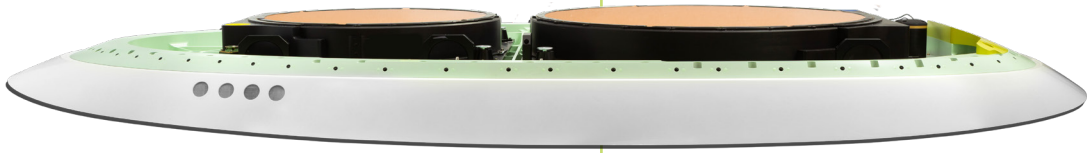
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ThinAir® Ka2517

Ka-band Satcom Antenna for Global Broadband

Delivering High Performance from Every Orbit





With high beam agility and all-orbit operation, the ThinAir Ka2517 antenna delivers exceptional network flexibility and consistently high performance for global inflight broadband.

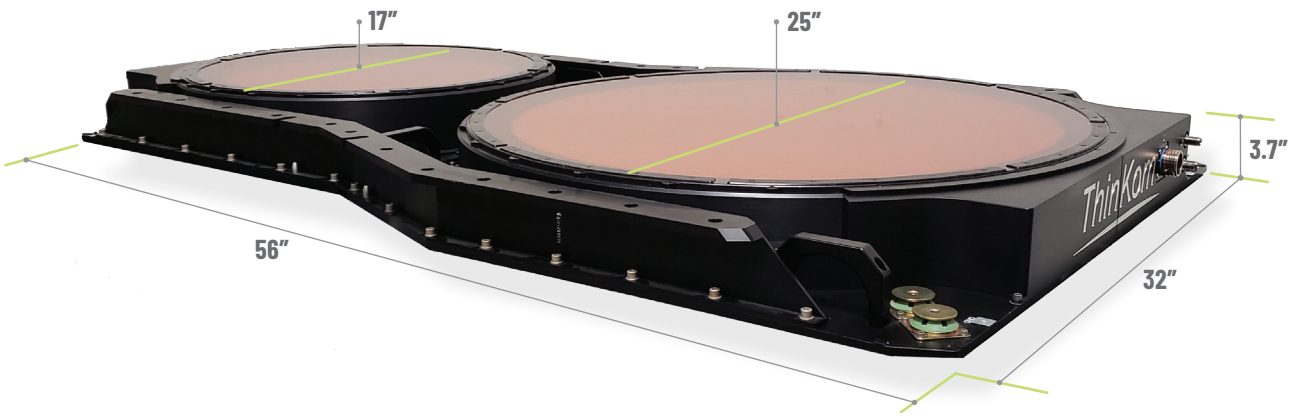
Key Features

- Pole-to-pole coverage, including at high and low latitudes
- Seamless operation on GSO and NGSO networks
- Long-term reliability with patented design and minimal active components
- Ultra-low profile, reducing drag and associated fuel costs
- Gate-to-gate operation with low prime power demands
- High throughput: Up to 800 Mbps down and 200 Mbps up
- High spectral efficiency (up to 4 bits/Hz)

ThinAir® Ka2517

Ka-band Satcom Antenna for Global Broadband

TECHNICAL SPECIFICATIONS



Compatibility

Operating Band: Ka-band

- Tx: 27.5 to 30 GHz
- Rx: 17.3 to 20.2 GHz

Constellations: LEO/MEO/GEO/HEO

Satellite Services: Agnostic; inquire for specific network certifications

Tracking and Agility

Azimuth Coverage: 360° continuous

Elevation Coverage: +7.5° to +90° (network dependent)

Beam Agility: >250°/sec

Tracking Accuracy: <0.2°

Throughput and Performance

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

Data Rates: Up to 800 Mbps down and 200 Mbps up (network dependent)

G/T: 18.5 dB/K peak (13.5 dB/K at 20° elev.)

Network Efficiency: Up to 4 bits/Hz

Instantaneous Bandwidth: 500 MHz

EIRP (Psat): 55.5 dBW (51 dBW at 20° elev., 80 W Psat SSPB);
assumes 1.5 dB SSPA-to-Tx LRU interconnect losses

Transmit EIRP Spectral Density: (per 47 CFR 25.218)

- Up to 40.5 dBW/MHz ESD at high latitudes (to 75° N/S)
- Up to 41.5 dBW/MHz ESD at low to mid latitudes (to 50° N/S)

Azimuth Beamwidth: 1.8° Tx and 1.7° Rx

Polarization: Switchable circular (co/orthogonal), simultaneous dual-pol mode

Axial Ratio: <1.5 dB typical

	Size	Weight	Avg Power
Tx Antenna	24.2 X 22.4 X 3.7 in	42 lb	7 W
Rx Antenna	30.6 X 32.4 X 3.7 in	62 lb	18 W
KRFU	18 X 9 X 3.3 in	16 lb	200 W
KANDU	18 X 9 X 5.5 in	17 lb	48 W

Regulatory Compliance

WRC-19 5G Terrestrial Protection

ITU Article 22 Section II

Environmental

Operating Temperature: -55°C to + 74°C external

Environmental Compatibility: RTCA/DO-160G

ThinKom

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TAKa2517Rev 07/24