ThinKom

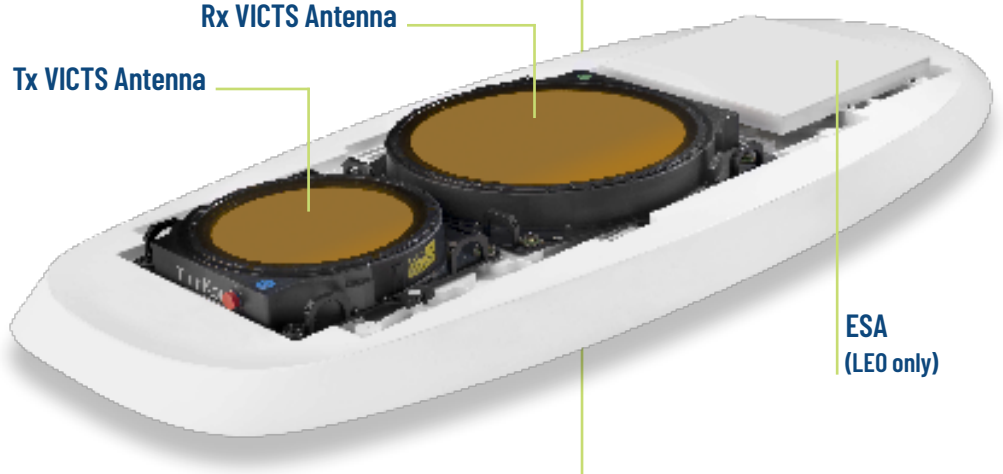
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ThinAir® | Plus

Hybrid IFC Antenna System

Next-Gen IFC from Every Orbit to Every Seat





A hybrid of two antenna systems, ThinAir Plus combines a ThinKom Ka2517 VICTS phased array with a LEO-only ESA under a single radome for ultimate redundancy, flexibility and efficiency.

Key Features

- Multi-orbit, multi-beam and multi-band capable
- Ka2517 as the primary data pipe and for high-density areas
- LEO-only ESA to fill coverage gaps and support low-latency applications
- Network agnostic maximizes flexibility
- Independent GEO and LEO capability minimizes dark tails
- Patented, proven VICTS technology for long-term reliability
- Ka2517 operation on the tarmac avoids ESA thermal limitations
- Future-proof solution with all-orbit capability

ThinAir® Plus

Hybrid IFC Antenna System

TECHNICAL SPECIFICATIONS



VICTS Antenna 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

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

Size, Weight and Power Tx/Rx antenna, KANDU, KRFU, radome, adapter plate and fairing	
OAE Dimensions (L x W x H*)	116 in x 42 in x 8 in (2.9 m x 1 m x 0.2 m)
Weight	311 lb (141 kg)
Avg. System Power	474 W

*Above fuselage crown

LEO-Only ESA

Inquire for compatiable options.

Typical Size, Weight and Power	
Dimensions (L x W x H*)	28 in x 24 in x 3.5 in (0.7 m x 0.6 m x 0.09 m)
Weight	60 lb (27.2 kg)
Avg. System Power	300 W

ThinKom

www.thinkom.com

4881 West 145th Street, Hawthorne, CA 90250 USA

1.310.371.5486

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