

ThinKom

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ThinAir® | Ku3030

Ku-band Satcom Antenna for Global Broadband

Delivering High Performance from Every Orbit



With industry-leading performance and reliability, the ThinAir Ku3030 consistently delivers a premium passenger experience 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 400 Mbps down and 100 Mbps up
- High spectral efficiency (up to 3 bits/Hz)

TECHNICAL SPECIFICATIONS



Compatibility

Operating Band: Ku-band

- Tx: 13.75 to 14.50 GHz
- Rx: 10.70 to 12.75 GHz

Constellations: GEO

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: >200°/sec

Tracking Accuracy: <0.2°

Throughput and Performance

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

Data Rates: Up to 400 Mbps down and 100 Mbps up (network dependent)

G/T: 18.5 dB/K peak (14 dB/K at 20° elev.)

Network Efficiency: Up to 3 bits/Hz

Instantaneous Bandwidth: 350 MHz

EIRP (Psat): 57 dBW at broadside (52.5 dBW at 20° elev., 100 W Psat SSPB);

assumes 1.5 dB SSPA-to-Tx LRU interconnect losses

Transmit EIRP Spectral Density: (per 47 CFR 25.227)

- 41 to 44 dBW/4 MHz ESD at high latitudes (to 75° N/S)
- 39 to 42 dBW/4 MHz ESD at low to mid latitudes (to 50° N/S)

Geo-Plane Beamwidth: 1.8° Tx and 2.1° Rx

Geo-Plane Patterns: First sidelobe -22 dB typical

Polarization: Tracking linear (co/orthogonal), simultaneous dual-pol mode

Cross-Pol Isolation: 30 dB typical

Environmental

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

Environmental Compatibility: RTCA/DO-160G

	Size	Weight	Avg Power
Tx Antenna	35.7 X 35.7 X 4.2 in	81 lb	23 W
Rx Antenna	35.7 X 35.7 X 4.2 in	83 lb	33 W
KRFU	18 X 9 X 3 in	15 lb	300 W
KANDU	18 X 9 X 5.5 in	17 lb	55 W

Other Applications

The Ku3030's design and performance characteristics are also well suited for special-mission aircraft.

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4881 West 145th Street, Hawthorne, CA 90250 USA

1.310.371.5486

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