

## Delivering High Performance from Every Orbit



ThinAir Ku3030

With high beam agility and all-orbit operation, the ThinAir Ku3030 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 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: GSO and NGSO

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

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
<b>Tx Antenna</b>	35.7 X 35.7 X 4.2 in.	81 lbs.	35 W
<b>Rx Antenna</b>	35.7 X 35.7 X 4.2 in.	83 lbs.	35 W
<b>KRFU</b>	18 X 9 X 3 in.	15 lbs.	420 W
<b>KANDU</b>	18 X 9 X 5.5 in.	17 lbs.	80 W

#### Other Applications

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

## ThinKom

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TAKu3030Rev 03/22