AEROEDGE 6000 TERMINAL
Dual-band Ku/Ka high performance airborne terminal

REVOLUTIONIZING IN-FLIGHT SATELLITE COMMUNICATIONS
AeroEdge 6000 is Gilat’s innovative airborne high-capacity satellite terminal. The integrated AeroEdge 6000 terminal includes a dual-band Ku/Ka antenna system, KANDU, a Ku/Ka KRFU, and a high performance MODMAN delivering aggregate rates of 400Mbps. This enables aeronautical real-time broadband satellite communications for Internet and multimedia applications.

INNOVATIVE DUAL-BAND DESIGN
The ER6000-A antenna has been uniquely designed as a dual-band Ku/Ka antenna system. Ideal for seamless transition between regional (Ka) and transatlantic (Ku) coverage, the system allows easy and quick electronic switching between frequency bands, without requiring any disassembly or component replacement. The antenna utilizes the best available satellite resources to provide a cost efficient superior antenna system performance.

PERFORMANCE & SPECTRAL EFFICIENCY
The SkyEdge II-c Taurus MODMAN optimizes the performance and efficiency of IFC services. To ensure fast web browsing, and ultimate high-quality passenger experience, Taurus contains a full set of embedded protocol optimization and application acceleration features. Highest spectral deficiency is delivered via wideband DVB-S2X carriers in the forward direction and fast adaptive and spread-spectrum LDPC transmission in the return direction.

OPEN ARCHITECTURE
Gilat’s flexible technology and satellite-agnostic architecture enables service providers to optimize satellite bandwidth costs. The open architecture permits our antennas and modems to operate with equipment from different vendors.

BENEFITS
- Fully integrated high performance Ku/Ka aero terminal including antenna, MODMAN, KRFU and KANDU
- Superior antenna system transmission/ reception performance and efficiency
- Maintaining application continuity with automatic beam / gateway / satellite switchover
- Designed to assure continuous gate-to-gate operation
- Open architecture enables easy third-party integration
- Compliant with ARINC-791 and RTCA/DO-160G

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ER6000-A Ku/Ka Antenna  Taurus MODMAN  KANDU  Wavestream AeroStream® Ku/Ka KRFU
# Technical Specifications: AeroEdge 6000 Terminal

## Antenna

| Receive Frequency: | Ku-Band: 10.70 – 12.75 GHz  
|                   | Ka-Band: 17.80 – 20.20 GHz  |
| Transmit Frequency: | Ku-Band: 13.75 – 14.50 GHz  
|                   | Ka-Band: 29.25 – 30.00 GHz  |
| Polarization Rx/Tx Selectable via A791 AMIP: | Ku-Band: Linear VP/HP  
|                   | Ka-Band: Circular LHCP/RHCP  |
| Receive G/T (at 30° elevation)*: | Ku-Band: 12.4 dB/K @ 12.75 GHz  
|                   | Ka-Band: 15.4 dB/K @ 20.2 GHz  |
| Transmit EIRP [dBW]*: | Ku-Band: 45.8 dBW @ 14.5 GHz  
|                   | Ka-Band: 48.7 dBW @ 30 GHz  |

## EIRP Spectral Density:

- **Ku-Band:** FCC part 25.222 and 25.227  
  ETSI EN 302 186
- **Ka-Band:** FCC Part 25.138,  
  ETSI EN 303 978

## Cross Polarization Discrimination:

- **Ku-Band:** >25 dB  
- **Ka-Band:** >21 dB

## IF Input (Tx):

- FCC 10-1700 MHz, TNC 50Ω

## IF Input (Rx):

- 950-2150 MHz, TNC 50Ω

## Antenna to Modman Interface for configuration, control and monitoring:

- Ethernet 10/100BaseT supporting ARINC A791 OPEN-AMIP

## Antenna to Inertial Reference Unit (IRU):

- Supporting ARINC 4429

## EIRP Spectral Density:

- **Ku-Band:** 12.4 dB/K @ 12.75 GHz (cruise level)  
- **Ka-Band:** 15.4 dB/K @ 20.2 GHz (cruise level)

## Transmit Antenna Patterns:

- **Ku-Band:** FCC 25.209  
- **Ka-Band:** FCC 25.209

## Azimuth (Az) Range:

- 360° continuous

## Elevation (El) Range:

- 0° to 90° (up to 80° with full performance)

## Az/El Velocity, Acceleration:

- >30°/sec; >50°/sec²

## Tracking Accuracy:

- <0.2°

## Electrical Interfaces

| Power: | 115 VAC (360 Hz to 800 Hz) |

## Environmental Compatibility

- RTCA/DO-160G

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