



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

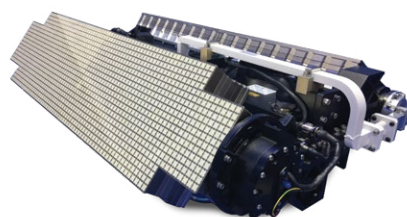
The SkyEdge II-c Taurus MODMAN optimizes the performance and efficiency of IFC services. To ensure fast web browsing, and ultimate high-quality passenger experience, Taurus contains a full set of embedded protocol optimization and application acceleration features. Highest spectral efficiency is delivered 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



ER6000-A Ku/Ka Antenna



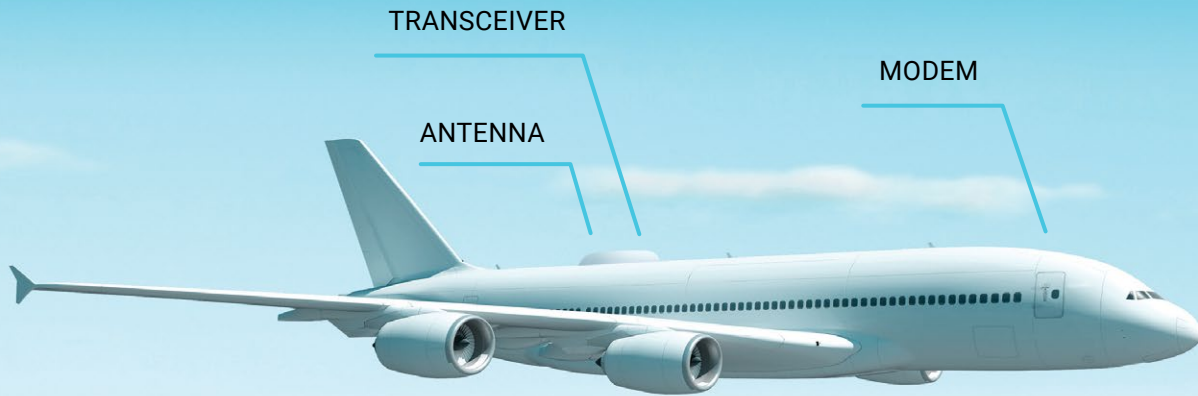
Taurus MODMAN



KANDU



Wavestream
AeroStream®
Ku/Ka KRFU



Gilat integrated airborne Ku/Ka terminal - AeroEdge 6000

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
(cruise level)

Ka-Band:

15.4 dB/K @ 20.2 GHz
(cruise level)

Transmit EIRP [dBW]*:

Ku-Band: 45.8 dBW @ 14.5 GHz

Ka-Band: 48.7 dBW @ 30 GHz

Transmit Antenna Patterns:

Ku-Band: FCC 25.209

Ka-Band: FCC 25.209

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):

950-1700 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 A429

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

Operating Temperature:

-55°C to +70°C external

Altitude:

16,800 meters (55,000 Feet)

Environmental Compatibility:

RTCA/DO-160G

TERMINAL PERFORMANCE

Acceleration Technology:

Embedded performance
acceleration (TCP / HTTP /
Cellular data)

Forward Channel:

DVB-S2X 1.5Msps-500Msps;
Dual Receiver support

Return Channel:

MF-TDMA Dynamic Channels
128Ksps-10Msps;
SCPC 1.5Msps-40Msps