C2TECH

SkyARX KU-18

AIRBORNE TERMINAL

Airborne Modem

BROADBAND SATCOM-ON-THE-MOVE

Satcom For High Data Rate Airborne Communication

OVERVIEW

The CTech SkyARX Ku-18 Terminal is a complete airborne satellite terminal with an 18"(45.72cm) antenna and lightweight equipment providing IP communications on the move.

With this Ku-band terminal corporate and government users can send live, full motion high definition video over the sky, make secure data communication and perform mission critical communications during flight.

Powered by integrated technologies and robust waveform this terminal delivers streaming data rates up to 20 Mbps.

Broadband communication on-the-move airborne terminal is national and indiginous now.

Airborne Antenna

TURKISH AEROSPACE

SUBSIDIARY

AIRBORNE TERMINAL FEATURES

Secure High Speed Communication

- Protected IP traffic with AES encryption
- Up to 10 Mbps or 20 Mbps return link
- Up to 10 Mbps forward link
- ITU-R S-728-1 Compliant
- MIL-STD-810G Compliant
- MIL-STD-461E Compliant
- Qualified for 30,000 ft altitude
- Accurate satellite tracking with 0.2° RMS
  (Openloop tracking powered by RSSI based tracking)

Userfriendly Design For Aircraft Requirements

- 45.7 cm antenna mounts on fuselage of aircraft
- Modem can be located any distance from antenna
- Accurate satellite tracking
- 28 VDC powered
- Only 3 LRUs

ENVIRONMENTAL & PHYSICAL CHARACTERISTICS

45.7cm Antenna

- Power : Supplied through ACU
- Operating Temperature : -40° to +55° C
- Storage Temperature : -55° to +70° C
- Weight : 16 kg with ACU
- MIL-STD-810G/MIL-STD- 461E

CTech Airborne Modem

- Power : <70 W @ 28VDC
- Operating Temperature : -40° to +55° C
- Storage Temperature : -55° to +70° C
- Weight : 5 kg
- Dimensions: 312x261x133mm
- MIL-STD-810G/MIL-STD- 461E/MIL-STD-704

Antenna Control Unit

- Power : <300 W @ 28VDC
- Operating Temperature : -40° to +50° C
- Storage Temperature : -55° to +70° C
- MIL-STD-810G/MIL-STD- 461E

SPECIFICATIONS

OPERATING FREQUENCY

Transmit : 13.75 to 14.50 GHz
Receive : 10.95 to 12.75 GHz

MODULATION & FEC

Forward/Return Link : Variable Coding and Modulation
Waveform : DVB-S2

TRANSMISSION RATES

Forward Link : Up to 10 Mbps
Return Link : Up to 20 Mbps

RF/TRACKING PERFORMANCE

EIRP : 48 dBW (20 Mbps)
G/T : 11dB/K
Polarization : Linear

Axes

- Azimuth 360° continuous
- Elevation 5° to 85°
- Polarization ±135°

Velocity

- Azimuth 30°/s
- Elevation 15°/s
- Polarization 20°/s

Acceleration

- Azimuth 45°/s²
- Elevation 45°/s²
- Polarization 45°/s²

Baseband Interfaces

- Data 10/100/1000 BASE-T Ethernet
- CLI RS-232/RS-422
- Encryption : AES-256 FIPS 140-2