



CTECH AIRBORNE TERMINAL DEV-KU-18

BROADBAND SATCOM-ON-THE-MOVE
Satcom for High Data Rate Airborne Communication



The CTech DEVSAT Dev-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 10 Mbps.

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

AIRBORNE TERMINAL FEATURES

Secure High Speed Communication

- Protected IP traffic with AES encryption
- Up to 10 Mbps streaming return link
- Up to 2 Mbps forward link
- ITU Compliant
- MIL-STD-810G Compliant
- MIL-STD-461E Compliant

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



Airborne Antenna



Airborne Modem



SPECIFICATIONS

OPERATING FREQUENCY

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

TRANSMISSION RATES

Forward Link : Up to 2 Mbps
 Return Link : Up to 10 Mbps

MODULATION AND FEC

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

RF/TRACKING PERFORMANCE

EIRP : 45 dBW minimum at P1 dB nominal
 G/T : 11dB/K
 Polarization : Linear

Axes

- » Azimuth 360° continuous
- » Elevation 5° to 85°
- » Polarization \mp 135°

Velocity

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

Acceleration

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

Baseband Interfaces

- » Data 10/100BASE-T Ethernet
- » Data Serial Interfaces RS-232/RS-422
- » Console RS-232/RS-422
- » Encryption : AES-256 FIPS 140-2

ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS

o 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

o CTech Airborne Modem

- » Power : <70 W @ 28VDC
- » Operating Temperature : -40° to +55° C
- » Storage Temperature : -55° to +70° C
- » Weight : 4 kg
- » Dimensions: 312x261x133mm
- » MIL-STD-810G/MIL-STD- 461E/MIL-STD-704

o 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



Airborne Modem



Airborne Antenna