

Ku27-A, Ku45-A, Ku53-A AIRBORNE SATCOM TERMINALS

#MilitaryCommunication





aselsan



## Ku27-A, Ku45-A, Ku53-A AIRBORNE SATCOM TERMINALS

With its ability of beyond line-of-sight communication and endurance to various geographical conditions, Satellite Communication Systems are indispensable communication tools by satisfying campaign/logistic requirements below, when there is no communication system left or the capabilities of the communication systems are restricted:

- Forming tactical picture and high definition photo/ video transfer
- Providing data communication between platform and command centers
- Providing monitoring and controlling the location of manned/ unmanned airborne vehicles

Airborne Satellite Communication Systems provide secure voice, video and data transfer with high data rate on the move, in all types of operations and environmental conditions. Different system configurations with reflector size and output power are available whereas customized solutions can be provided according to user requirements.

Besides, the Airborne Satellite Modem developed by ASELSAN enables secure communication with its encryption capability and utilizes high performance satellite tracking with beacon receiver. Integrated usage of beacon signal, inertial navigation system (INS) and gyro data provide superior and reliable satellite tracking and stabilization.

Precisely stabilized satellite antennas, designed with 27 cm, 45 cm and 53 cm reflectors for various platforms are indigenously developed by ASELSAN.

Light-weight, robust and compact design of the antenna systems makes it suitable for narrow spaces. It has high RF performance with its unique design. More powerful power amplifiers can be used according to the required EIRP value.

Power amplifiers with different power output levels can be used according to the required EIRP value.

## **Features**

- Lightweight and compact design
- Configurable for different air platforms according to the user requirements
- MIL-STD-810, MIL-STD-461, MIL-STD-704 tested
- Operation capability at altitudes above 40.000 ft.
- National and customized waveform design
- Efficient spectrum usage
  - Adaptive coding and modulation
  - Dynamic channel management
  - IP throughput optimization

## **Functional Features**

- Stabilization and Tracking in azimuth and elevation axes
- High tracking performance with beacon signal and/or INS data
- Satellite reacquisition time
- End to end total system latency
- QoS Management: Prioritization for services such as voice, data and video teleconferencing etc., configurable data rate according to the user requirements
- Compatible system architecture with various crypto devices
- Configurable Interfaces according to the user requirements
  - IP Based, Secure/Non-secure voice, data, video teleconferencing and fax communication
  - Serial based data communication (RS232, RS449, Link communication etc.)

## RF Features

	Ku-Band Family		
	AcroSAT Ku27-A	AcroSAT Ku45-A	AcroSAT Ku53-A
Tx Gain	>30 dB	>35.5 dB	>36.5 dB
G/T	>6 dB/K	>11.5 dB/K	>12.5 dB/K
Rx Frequency		10.95-12.75 GHz	
Tx Frequency		13.75-14.5 GHz	





