

# SATELLITE COMMUNICATION SYSTEMS

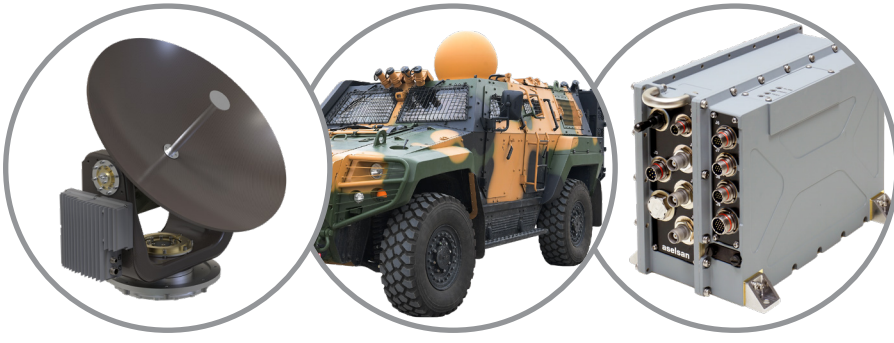
Ku-BAND LAND SATCOM TERMINAL



Satellite Communication Terminal



Satellite Modem



# SATELLITE COMMUNICATION SYSTEMS

## Ku-BAND LAND SATCOM TERMINAL

### General Specifications

- IP Based, Secure/Non-secure voice, data, video teleconferencing and fax communications via satellite
- Configurable voice/data rates according to user requirements
- Compact and lightweight (<22 kg)
- Composite pedestal and reflector
- Power Consumption: <500W (Nominal)  
<700W (Maximum)
- Environmental Conditions: MIL-STD-810G
- EMI/EMC: MIL-STD-461E

### Antenna Subsystems

- Ku-Band (Tx: 13.75-14.5 GHz & Rx: 10.95-12.75 GHz)
- EIRP (45cm) : > 48 dBW (mid of band with 40W BUC)  
(53cm) : > 49 dBW (mid of band with 40W BUC)
- G/T (45cm) : > 10 dB/K (mid of band)  
(53cm) : > 11 dB/K (mid of band)
- EIRP Mask compliant with ITU-R S.728-1 standard

### Antenna Control Subsystem

- 2 axes stabilization (Az: 360°, El: 5° - +85°)
- Polarization Tracking ( $\pm 135^\circ$ )
- High accuracy tracking with beacon signal and INS data
- Antenna Pointing Accuracy < 0.2° RMS

### Interfaces

- M/C: 10/100 Mbps Ethernet (SNMPv2), RS-232
- Maintenance: 10/100Mbps Ethernet (SNMPv2)
- Encryption: 10/100Mbps Ethernet
- INS/GPS: ARINC429/RS422
- Power: 28 VDC

### Satellite Modem

- Data transfer rate up to 50 Mbps(\*)
- Customizable Waveform Design
- Efficient spectrum usage
  - Adaptive coding and modulation
  - Dynamic channel management
  - IP throughput optimization
- DAMA / PAMA management
- Beacon Receiver
- Encryption according to user requirements
- TRANSEC
- Satellite reacquisition time: <1 minute
- End to end total system latency: <700 milliseconds

### Customized Radome Design

(\*) Data transfer rate throughout the satellite communication system may vary according to the satellite and ground station parameters.

