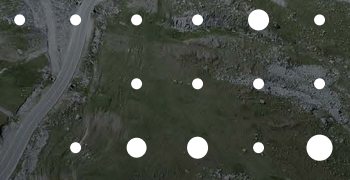




Airborne AESA SATCOM
System
ELK-1882T





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ELK-1882T airborne AESA SATCOM system is a network of SATCOM On-the-Move (SOTM) terminals, based on electronically-steered phased array antenna technology. The system provides Beyond-Line-of-Sight (BLOS) communication to airborne platforms including fighters and special mission aircraft. The system operates in either Ku or Ka-band frequencies, using geostationary satellites. The network supports hundreds of registered users. The terminal comprises a single LRU which includes a conformal electronic steering antenna, modem and High-Power Amplifier (HPA). The terminal has a low Radar Cross Section (RCS), and its conformal flat panel antenna creates minimal aerodynamic drag. The terminal is simple to integrate and can be installed on a wide range of aerial platforms.



Features

- Complies with ITU-R 524-9 spectral density regulation for small antenna using Direct Sequence Spread Spectrum technology
- State of the art Software Defined Radio (SDR) Technology using Adaptive Coding Modulation (ACM) with sophisticated Forward Error Correction (FEC) algorithms
- Seamless transmission and reception of bi-directional voice and data
- High spectral efficiency techniques using unique CDMA interference cancelling algorithm
- High MTBF and graceful degradation due to phased array technology

Descriptions	Parameters - Ku	Parameters - Ka
Frequency range	Tx: 13.75GHz - 14.5GHz Rx: 10.95GHz - 11.7GHz	Tx: 29GHz - 31.0GHz Rx: 19.2GHz - 21.2GHz
G/T (boresight)	5dbk	
Number of network users	up to 1,000	
Dynamic Performance (angular speed: 200deg/s)	Elevation: 200- 900 Azimuth: 00-3600	
Tracking System	Pointing with INS input data; pointing accuracy < 0.50	
Waveform Modulation	Inbound: CDMA over FDMA Outbound: TDMA over CDMA	
Weight	12kg	17kg
Mil-Standard Compliance	MIL-STD-704, 180 and 461	
Operating temperature range	-400C - +710C	
Speed	Mach 2.4	
Power consumption	400W	500W

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