



Dual-Band (Ka & Ku) SATCOM
System for Fighter Aircraft
ELK-1882T NC² SATCOM Network Terminal



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The Dual-Band NC² SATCOM Network Terminal (ELK-1882T), operating over Ku and Ka-band frequencies using geostationary satellites, provides fighter aircraft with secure, Beyond-Line-Of-Sight (BLOS) voice and data communications. The system features a unique, compact dual-band Ka/Ku antenna design that is optimally suited to a fighter aircraft's aggressive flight envelope. The dual-band antennas are integrated on a single pedestal and managed by a single controller.

With a high-performance and robust network design, the system connects hundreds of registered users and switches between frequency bands, at any given moment, according to the mission scenario and requirements. The NC² SATCOM Network Terminal is part of ELTA's operationally proven ELK-1882T SATCOM product range. ELTA's SATCOM systems are pioneers in the market with decades of operational experience. The systems have been deployed worldwide on hundreds of fighter jets in a variety of models.



Features

- Seamless transmission and reception of bi-directional voice and data
- State-of-the-art Software Defined Radio (SDR) technology using with sophisticated Forward Error Correction (FEC) algorithms
- High spectral efficiency techniques using unique CDMA algorithm
- Complies with ITU-R 524-9 using Direct Sequence Spread Spectrum technology

Descriptions	Parameters - Ku	Parameters - Ka
Frequencies	Tx: 13.75GHz - 14.5GHz Rx: 10.95GHz - 11.7GHz	Tx: 27.5GHz-31.0GHz Rx: 17.7GHz-21.2GHz
G/T	1dbk	7dbk
Polarization	Linear	Circular
Number of network users	up to 1,000	
Max number of simultaneous network users	V1: 48 or V2: 24*	
Network capacity	V1: 1Mbps or V2: 9Mbps	
Terminal throughput	512Kbps	
Dynamic Performance	Elevation: 0°- 90° Azimuth: 00-360° Angular speed: 200°/s	
Tracking System	Pointing with INS input data with pointing accuracy of < 0.5°	
Waveform Modulation	Inbound: CDMA over FDMA Outbound: TDMA over CDMA	
Weight	20kg	
Mil-Standard Compliance	MIL-STD-704,180 and 461	
Operating temperatures	-40°C - +71°C	
Maximum supported airspeed	Mach 2.4	
Power consumption	450W	

