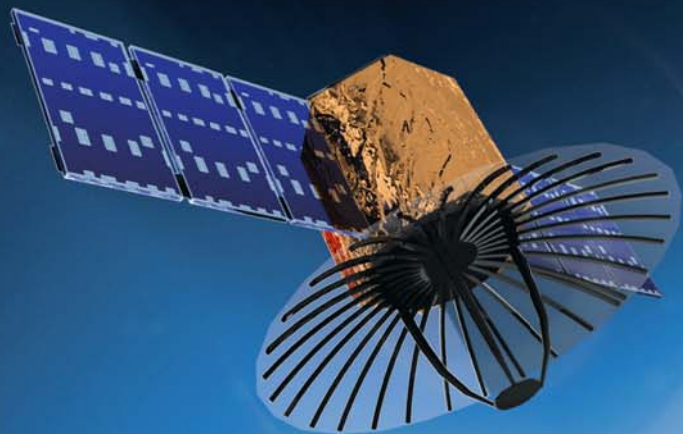


WIDEBAND SATCOM DATALINK

■ ELK-1894



Ground Vehicles



Maritime Vessels



Fixed Wing Aircraft



Unmanned Aircraft



ELTA North America
an IAI North America Company

www.eltanorthamerica.com

WIDEBAND SATCOM DATALINK

■ ELK-1894

General

The ELK-1894 "On-the-Move" SATCOM system is designed to enable bi-directional wideband communications data link for airborne, maritime and ground vehicular platforms typically deployed for government, military and commercial applications. The mobile terminal is particularly suited for special mission platforms such as: reconnaissance aircraft, maritime patrol aircraft, Airborne Early Warning & Control System (AEWCS), airborne SAR platforms, UAV's, maritime and ground vehicle applications.

The system comprises the following units:

- Variety of dish antennas of different sizes, to fit different platform installation requirements
- Compact transceiver
- Lightweight high efficiency 100W HPA

Features

- Operates in Ku frequency band via geostationary commercial communication satellites with optional frequency bands: X or Ka
- Complies with ITU spectrum density regulations, even with a very small antenna
- Complies with commercial satellite operator standards
- Employs advanced technology communication waveforms including spread spectrum
- Powerful forward error correction techniques
- Antenna with four axes tracking, able to operate above the equator with very high elevation angles onboard agile aircraft



SATCOM Transceiver

Specifications

- Ku frequency bands:
 - Transmit: 13.75 GHz to 14.5 GHz
 - Receive: 10.95 GHz to 12.75 GHz
 - Frequency Steps: 125 kHz
- Antenna Standard Sizes: 46 cm (18.1") to 83 cm (32.6")
- EIRP: 49 dBw to 54.1 dBw, (relative to antenna size)
- Transmit Power: up to 100 Watts
- G/T: 6.5 dB/k to 11.6 dB/k, (relative to antenna size)
- Waveforms:
 - Outbound - SpSp/BPSK & DVBS2 (ground station to airborne terminal)
 - Inbound - BPSK/QPSK&NDVBS2 (airborne terminal to ground station)
- Data Rates:
 - Outbound - 64 Kbps to 256 Kbps (control channel, ground station to airborne terminal)
 - Inbound - 64 Kbps to 10.7 Mbps (data channel, airborne terminal to ground station)
- Acquisition Time: Initial < 120 sec, Reacquisition < 30 sec
- Total weight: 35 kg (77 lb) to 40 kg (88.2 lb), (relative to antenna size)



SATCOM 46 cm Tracking Antenna



SATCOM 60 cm Tracking Antenna