# G·D·T·

## L/S/C Ku Band
# GROUND
# DATA
# TERMINAL



**Savronik**

**274**
MBPS

**300 km**
Line Of Sight Range

**Air Data Terminal**

**C·D·L·S·**
Common Data Link System

**Directional Antenna**

**Ground Modem**

**Ground Control Station**

**Ground Data Terminal**

**Savronik L/S/C Ku Band Data Link System** is a full-duplex, Line-Of-Sight data link solution including modem, a directional antenna with related RF units over a Tripod secured with Direct Sequence Spread Spectrum (DSSS) and Frequency Hoping Spread Spectrum (FHSS). Ground Data Terminal is compliant with NATO Interoperability Standard STANAG 7085 for ISR Platforms at Ku frequency Band.

Data Link System is a turnkey solution consists of Ground Data Terminals (GDT) and an Air Data Terminals (ADT) designed for manned and unmanned platforms. Air/Ground Data Terminal is able to capture multiple sensors, transmit HD video (raw HD video over HD-SDI interface or HD video via ethernet interface) in real time, drive directional antennas for long LOS ranges and maintain seamless direct IPconnectivity between aircraft and ground control station.

Savronik Ku Band Air/Ground Data Terminal's flexible architecture also allows user to integrate custom encryption cores which can be country specific cores as well.

Combining a 10W High Power Amplifier on the ground and Air Data Terminal with a Directional Antenna, secure **(DSSS-FHSS)**video and telemetry link is set over a LOS distance of 300 km.

| AIRBORNE | MARITIME | HANDOVER | GPS/AUTO TRACKING | AUTOMATIC SIGNAL TRACKING | SECURE RF LINK (DSSS,FHSS) | AES-256 | MIL-STD 810G CERTIFIED | MIL-STD 461E CERTIFIED |

## GENERAL SPECIFICATIONS

| | |
|---|---|
| **Datarate** | : Up to 274 Mbps<br> Support CDL Datarates for Ku Band<br> (200-400 kbps, 2-10.71-21.42-44.73-<br> 137.088-274.176 Mbps) |
| **RF Frequency** | : L/S/C (1-6 GHz)<br> Ku Band (14-16 GHz) |
| **Output Power** | : 5-10W (with PA) |
| **Link Security** | : DSSS (Direct Spread Spectrum Sequence)<br> FHSS (Frequency Hoping Spread Spectrum) |
| **Range** | : 200 km (108 nmi) 99% availability<br> 300 km (162 nmi) 95% availability |
| **Modulation and Coding** | : BPSK, QPSK, OQPSK 1/2, 2/3, 3/4 |
| **Encryption** | : AES-256 or User Type |
| **Latency** | : < 10 ms between two nodes |
| **Video** | : H.264/MPEG-4 AVC<br> HD Video: 1 x HD-SDI (Mini BNC)<br> Analog Video: 1 x SDI (Mini BNC) |
| **Multiplexing** | : IP Data, Compressed Video, Audio<br> Synchronous & Asynchronous Data |
| **Maintenance** | : JTAG and Programming Interface |
| **Network** | : Layer-3 Ethernet Switching and<br> filtering. Unicast/ Multicast/ Broadcast Flow |
| **Monitor** | : Built In Test Capabilities |
| **Interoperability** | : STANAG 7085 for Ku Band |
| **Software** | : RTCA/D0- 178B Level C certifiable |
| **Other** | : Built In Test Capabilities |

## USER INTERFACES

Military Type F/O
Ethernet
RS232/RS422
10/100 Ethernet
GPS
28 VDC Power

## APPLICATIONS

• UAV Links, ISR Applications
• Manned Fixed and Rotary Wings Aircrafts
• Unmanned and Manned Ground Vehicles
• Unmanned and Autonomous Surface Vessels
• Ship borne Application
• Search and Rescue Operations

## ENVIRONMENTAL COMPLIANCY

| | |
|---|---|
| **Operating Temperature** | : $-32^0$C, $+50^0$C Ground<br> $-40^0$C, $+55^0$C Air |
| **Storage Temperature** | : $-33^0$C, $+60^0$C Ground<br> $-55^0$C, $+70^0$C Air |
| **Low Pressure Altitude** | : Operation @ 10500ft Ground<br> Operation @ 30000ft Air<br> Storage @ 37000ft Both |
| **Vibration** | : MIL-STD-810G Method 514.6 |
| **Shock** | : MIL-STD-810G Method 516.6 |
| **Humidity** | : RH%95 ±%4 |

## ADDITIONAL SPECS

**HANDOVER and AIR RELAY**



Air Relay

UAV

GDT

## EMI/EMC

MIL-STD-461/464 Compliant