

UMTAS

ANTI-TANK MISSILE RF DATA LINK





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UMTAS RF Data Link, which is developed under Long Range Antitank Missile System Program, performs point-to-point duplex digital communication that transmits video data generated by seeker camera to the user in near-real time and transmits the user commands (target marking, target locking, seeker gimbal movement) back to the missile by using its receiver, transmitter and antennas.

Intended use of UMTAS RF Data Link is to improve command and control capabilities of the missile as part of "fire and update" concept and to transmit continuous and up-to-date target and target destruction data to the user.

Technology

UMTAS RF Data Link is the unique national design that performs digital signal processing, analog-to-digital and digital-to-analog conversion, digital modulation, noise and jammer immunity, pre-flight frequency spectrum scan, high-speed data transmission by means of its directional antennas, high-speed FPGA and microprocessors.



General Specifications

- Point-to-point duplex communication
- LOS communication ranges up to 10 km
- Missile-to-launcher video data transmission (Downlink)
- Launcher-to-missile command and control data transmission (Uplink)
- Electronic Counter-Countermeasure (TRANSEC)
- Build-in-Test

Technical Specifications

RF and Control Unit

- LOS Ranges Up To : 10 km
- Supply Voltage : 24-32 VDC
- Operating Temperature : between -35°C and +60°C
- Operating Altitude : -1.000 ft to 15.000 ft
- Environmental Conditions: MIL-STD-810F
- EMI/EMC : MIL-STD-461E

Physical Specifications

RF and Control Unit

- Dimensions : 145 mm (diameter), 25 mm (thickness)
- Weight : < 350 gr

On Missile RF Data Link Antenna

- Directional wraparound antenna compatible with the aerodynamic structure of missile.
- Dimensions : 145mm (diameter), 92 mm (length), 50 mm (connector included thickness)
- Weight : < 500 gr

On Launcher RF Data Link Antenna

- Directional antenna on the launcher
- Dimensions : 140mm x 135mm x 25mm
- Weight : < 300 gr