UFUK link DLX20

LOS DATA LINK SYSTEM SOLUTION FOR AIRBORNE PLATFORMS

Airborne Modem

Ground Modem

A COMPLETE, ROBUST & SECURE POINT-TO-POINT LINE-OF-SIGHT (LOS) DATA COMMUNICATION SYSTEM SOLUTION

CTech designs, manufactures and provides novel and complete end-to-end communication solutions for Unmanned Aerial Vehicles (UAVs). UFUK-DLX20© is intended for Line-of-Sight (LOS) data communication applications, and consists of all the components to establish a secure and robust data link for the most severe environments and conditions.

It is a complete Full Duplex (FD) communication system solution containing the paired data modems, RF blocks and antennas for both ground and airborne terminals. The up-link carries the command and control information for the real time operation of the UAV, while the down-link conveys all the onboard sensor data, video and audio payload to the ground station. The video encoder on the airborne modem processes the payload information so that the simultaneous HD and SD video transmissions are possible.

Ground Tracking Antenna

TURKISH AEROSPACE SUBSIDIARY

TECHNICAL SPECIFICATIONS

Altitude	40,000 ft
Power	Airborne Modem: 28 VDC Nominal (16 VDC min – 36 VDC max) Ground Modem: 220V AC
Video Compression	H.264, H.265 Main Profile Simultaneous HD/SD & Composite Videos
Operating Temperature	Airborne Modem: -40°C to +55°C Ground Modem: +5°C to +35°C
Modem Size	Airborne Modem Size: 187 mm x 150 mm x 82,5 mm Ground Modem Size: 19" Rack Type Chassis
Modem Weight	Airborne Modem Weight: < 2 kg Ground Modem Weight: < 8 kg

DESCRIPTION AND FEATURES

- A Complete, Fully Integrated, Secure and Robust LOS Data Link System for Military and Civil Applications
- Selectable Modcods Including FEC's of 1/2, 2/3 and 4/5
- RF Operation Capability on L/S/C Bands
- Modular Software Defined Radio (SDR) Architecture
- Full-Duplex Operation
- Internal AES-256 Data Encryption for Communication Security (COMSEC)
- External COMSEC Encryption Interface
- GBit Ethernet, RS-422 & RS-232 Interfaces for Data and Communication Lines
- Link Latency (Excludes other data processing delays): 50 msec
- Data Rates:
    - Return (Down) Link : Variable Up to: 20 Mbps
    - Forward (Up) Link : Variable Up to: 2 Mbps
- Range: 200 km Typ. (C Band)
- 3 x Serial Data Interfaces (RS-232 or RS-422 selectable)
- 2 x Serial Interface (CLI)
- 2 x Serial Interface (GPS)
- SNMP v3 Control via 100 Mbps Ethernet
- Anten Control Unit: 1 x 100 Mbps Ethernet 1 x Serial Interface
- GUI Web-based Interface over Ethernet