



Airborne Technologies

COFDM Air Data Terminal

D-ATKS System

Communications for payloads and C2

Reliable COFDM data transmission support “Intelligence, Surveillance and Reconnaissance” (ISR) mission in line of sight conditions (LoS) up to 300Km (162NM)

The system is engineered to work either within the C or the S frequency Band, belonging on specific needs

Based on a LAN Ethernet interface, enables the streaming of Video/Audio over IP, Telemetries, GPS positioning data and more

It commonly includes bi-directional capabilities (Uplink/Downlink); nevertheless it can be also customized for Downlink only or Asymmetric version (wide band COFDM downlink / narrow band FSK uplink)

According to the modulation scheme, it is able of an uplink/downlink data speed up to 20Mbit/s

Data transmission is AES standard @ 256 bit Encrypted

Main Sub-assemblies:

- ATD on-board modem
- Airborne Omni Antenna (2dBi)
(Tracking Airborne Antenna is also available for “relay” applications)



Reliable personalized solutions

All critical technologies' parts are developed produced and integrated by IPR providing an outmost degree of customization: systems can be tailored to end users' specific layout and weight requirements

IPR systems have no ITAR restrictions

Technical Features

Electrical

Encoding:

MPEG-4 (H.264)

Interface:

LAN Ethernet 10/100 bps

Capacity:

1 Ethernet network +1 config interface

Frequency Band:

On request within 1,2 - 6,4 GHz

TX/RX Modulation:

COFDM (bi-directional/symmetric version)

Data Speed

Downlink: up to 20 Mbps

Uplink: up to 20 Mbps

Bitrate:

Selectable (6-8-10-12-16-20) Mbit

Sensibility COFDM:

-92 dBm

RF Output Power:

+39 dBm

±1 dBm

Occupied Bandwidth:

8 MHz (on request)

Supply Voltage:

230 V

10 to 36 V DC

Current:

5 A (@ 28 V)

Power Consumption:

148 W

Encryption:

AES @ 256 bit

Mechanical

Weight:

8 Kg

Environmental

Storage Conditions:

-55° / +85°

Operating Conditions:

-45° / +70°

Qualified as per RTCA-DO-160-G