



Airborne Technologies

COFDM Compact HD Air Data Terminal

D-ATKS System

Communications for payloads

Law enforcement, defence, public safety as well as terrestrial video broadcasting, often needs the ability to view the tactical scenario from the air, helping time safety during mission critical operations

When receiving live, real time images, voice and data from a wide geographic area is the key to success, IPR COFDM Compact HD ADT is the solution

The modular high-powered on-board systems provides robust and reliable connections up to 200 NM LoS distance

Wide band channel size up to 20 Mb (belonging to the modulation scheme)

Integrated AES@256 standard encryption, provides an outmost safety level

Main Sub-assemblies:

- Encoder modulator with integrated power amplifier
- TX omnidirectional antenna



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

Interface:

LAN Ethernet 10/100 bps

Capacity:

1 Ethernet network

Frequency Band:

C-Band

Other on request

Modulation:

TX: COFDM

RX: OQPKS/BPSK

Data Speed

Downlink: up to 20 Mbps

Uplink: up to 1 Mbps

Sensibility:

COFDM(TX): -90 dBm

OQPKS/BPSK(RX): -94 dBm

RF Output Power:

Up to 43 dBm (customizable)

Occupied Bandwidth:

Downlink: up to 8 MHz

Uplink: up to 4 MHz

Supply Voltage:

18 to 32 V DC

Other upon request

Encryption:

AES @ 256 bit

Power Consumption:

148 W

Encryption:

AES @ 256 bit

Video Input Format:

Digital SDI

HD/SDI

HDMI

Digital Video Input:

SDI

HD-SDI - 75 Ω

BNC socket

Video Encoding:

Main profile level 3.0 - high profile level

Bitrate:

1,2,3,4,5,6,7,8,9 Mb or unconstrained

Supported Resolutions SD - HDMI:

SD 50i

NTSC SD 60p

PAL SD 50p

Minimum Latency:

≥250ms @ 4b encoding/decoding

Stream Type:

Transport stream

IP Streaming Output:

RTP: unicast/multicast

RTSP: unicast

Mechanical

Weight:

8 Kg

Environmental

Storage Conditions:

-55° / +85°

Operating Conditions:

-45° / +70°