

## 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 themodulation 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  $\Omega$ 

**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°



