



Airborne Technologies

D-ATKS HD Video Downlink

D-ATKS System Communications for Payloads

Law enforcement, defense, 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 HD Video Downlink 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 10 Mb (belonging to the modulation scheme)

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

Main sub-assemblies:

- Encoder modulator with integrated power amplifier
- TX Omnidirectional antenna

Control panel



Modulator encoder



Airborne omni antenna



Power amplifier

Reliable personalized solutions

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

IPR systems have no ITAR restrictions
RTCA-DO 160 Qualified

Technical Features

Electrical

Encoding Type:

MPEG-4 (H.264 – H265)

Supported Video:

Composite

SD

Full HD

4K (predisposition)

Metadata streaming available

Audio Coding:

Two separate channels

Compressed according to MPEG-1 / Layer II

AES EBU

Modulation:

COFDM with 2K-4K-8Ksub-carries

QPSK, 16 QAM or 64 QAM

Code rate: $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{5}{6}$, $\frac{7}{8}$

Guard interval: $\frac{1}{32}$, $\frac{1}{16}$, $\frac{1}{8}$, $\frac{1}{4}$

RF Output Frequency Bands:

Standard S-Band

Other on request

RF Output Power:

$\geq +40$ dBm ± 1 dBm

RF Occupied Bandwidth:

8 MHz

Other on request

Video Input:

Composite PAL/NTSC

Full HD-SD/SDI

Input Interface:

LAN Ethernet 10/100 Mbit/s

Audio Input:

Analogic L&R / Digital AES EBU (XLR-3)

Serial Data Input:

One RS232 channel @ 9 600 bit/s

Encryption

AES @ 256 bit

RTCA DO-160 QUALIFIED



Avda. Fuente Nueva, 12. 28703 San Sebastián de los Reyes – Madrid – España.
Tel.: +34 916588760. Fax.: +34 916588769
marketing@Cartronic.es
www.grupocartronic.com
www.linkedin.com/company/Cartronic-group