

AeroLink

HEVC 4K UHD
Airborne Transmitter



Key Features

[Dual HDR SDI Encoder
\(Independent format and codec\)](#)

[4K UHD Input](#)

[HEVC/H.264 Dual Encoding](#)

[AirRinc Frame](#)

[SRT/RTSP/RTP/UDP Streaming Output](#)

[Restful API for Integration](#)

[Asset control and monitor](#)

The AeroLink Transmission System is the next-generation component of the Vislink Airborne Video Downlink System (AVDS). It features an agile IP-based workflow that includes centralized management and distribution via the Quantum Receiver.

The AeroLink Transmission System is a full-featured 4K UHD or 2 × 1080p 60 HEVC digital encoding video downlink solution built to address the unique requirements of aircraft downlink operations. The gains from the HEVC technology enable superior quality video with reduced bandwidth — enabling wider geographical coverage and the ability to provide real-time data to decision makers. AeroLink supports custom client applications, and its flexible and modular API integrates with 3rd-party software and edge devices.

The AeroLink features IP input and wayside user data. The video-in may be HDR/UHD, HD, SD, SDI, or ASI or via Transport Stream (IP). Key data, network and penetration security features such as AES encryption are included.

Typical Applications

[Law Enforcement](#)

[ISR \(Military and LE\)](#)

[First Responders](#)

[National Security](#)

[Unmanned Aerial Vehicles](#)

[Event Coverage/Sports Coverage](#)

[Newsgathering](#)

[Ship-to-Shore](#)

Technical Specifications	
RF	
RF Frequency Bands	
Bands Available	1.7 – 2.2 GHz, 2.0 – 2.4 GHz, 4.4 – 5.0 GHz, 6.425 – 6.540 GHz
Power	8 watts
Modulation 1 (DVB-T)	
Modulation Type	COFDM DVB-T
Constellation	QPSK, 16 QAM, 64QAM
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval	1/16, 1/8, 1/4
Bandwidth	6/7/8 MHz
Bit Rate Max	31.7Mbps
Modulation Type	COFDM
ENCODING – VIDEO	
Video Encoder Profiles & Formats	
HEVC (H.265)	UHD, HDR HD & SD, Main 10 4:2:2 @ L5.1, 8 and 10bit sampling, 4K UHD (1 Service), HD (2 Service), SD (2 Service)
MPEG-4 AVC (H.264)	HD & SD, Level 4.0, High/Main 4:2:0, 8-bit sampling
Formats	480i@29.97*, 576i@25*, 720p@50/59.94/60, 1080i@50/59.94/60*, 1080p@23.98/24/25/29.97/30/50/59.94/60, 1080psf@23.98/24/25/29.97/30*, 2160p@23.98/24/25/29.97/30/50/59.94/60
Video Inputs	
Video SDI	2x SD-SDI SMPTE-259M, 2x HD-SDI SMPTE-292M, 2x 3G-SDI SMPTE-424M, 1x 12G-SDI SMPTE-2082
IP Transport Stream	10/100/1000 Base T
ASI Input/Output	MPEG-TS
ENCODING – AUDIO AND DATA	
Audio	
Audio Coding	AAC audio, MPEG1 Layer II, embedded from SD
Audio Inputs Embedded	4 x Stereo Pairs Embedded Audio over SDI
Data	
Wayside Data	2 x RS-232, 1200/1800/240/3600/4800/9600/14400/19200/28800/38400/57600/76800/115200/153600/230400 baud rate options
Connectors	
Main Video	2 x BNC 75Ω, 1 x 3G SDI input, 1x 12G SDI input
ASI Input/Output	1 x 75Ω BNC Female
Audio Embedded	2 BNC SDI
Power	26 Pin Chassis Receptacle
Ethernet	4 x RJ45 10/100
USB	USB 2.0
RF Output	50Ω N-Type Female

Note:

* interlaced video formats are not supported in H.264

AeroLink Datasheet



System	
Decryption	
Decryption Modes	<ul style="list-style-type: none">• BISS 1 and & BISS E injected• Legacy AES 128-bit and 256-bit
Test Generator	
Test Generator (Dynamic)	SMPTE CB(NTSC)/100% CB(PAL), Moving Color Bar
User Interface	
Local	Web page GUI
Remote Control Protocol	Available
Physical Remote Control	C100, HRCP, Serial Connection, Night Vision
Power	
Input Range	+28VDC
Power Consumption	<230
Circuit Breaker	20 AMPS
Physical	
Dimensions	3.56" (W) x 7.62" (H) x 12.56" (7.62), 9.6 (W) x 19.35 (H) x 32.19 (L) cm
Temperature Range	Full Range -20° to +50°C
Weight	< 13 lbs. or 6 kg
Regularity	
Compliance	FCC Parts 15, 90, 74 and 101 (version dependent), CE, RoHS, ETSI EN 300, 744
EMC	RTCA DO160G

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