

TRANSMITTER

# Aero5

5G HEVC 4K UHD
Airborne Transmitter













The Aero5 LTE/5G LEO and cellular-based system provides an extended bi-directional link using local cellular infrastructure and LEO satellites like Starlink as the transmission link. This may be used as a stand-alone cellular/LEO based downlink or combined with the AeroLink COFDM transmitter to provide a robust hybrid solution. Aero5 technology creates a reliable high-throughput connection between air and public cellular and satellite infrastructure. The Aero5 may be used for video, file transfer, data, push-to-talk coms or network connectivity.

The Aero5 is a two-box solution consisting of the Aircraft Cellular Encoder/Transceiver IDU and the Aero5 Antenna Pod. It is also possible to use the IDU encoder alone with Starlink or any other LEO data satellite provider without the cellular part. The IDU chassis design is sized to fit in a vertical ARINC mounting and has all connections on the front panel, enabling easy access and maintenance. The output connects via a MIL-Spec cable/connector to the Meeker Mount based pod on the outside of the aircraft. The Meeker Mount Aero5 Antenna Pod is DO-160 G tested and required when using cellular data connections, but can be omitted when using one or multiple LEO/ Starlink satellite data connections. Note that the satellite dish (e.g., the Starlink Mini) still needs to be mounted on the outside of a helicopter using a DO-160 certified mount. There are different options available from third party suppliers.

The Aero5 enables the aircraft to be part of the ground ecosystem, allowing tactical units to take advantage of all the mission-critical data that may be garnished. The Aero5 uses the award-winning Vislink mobile encoder, part of Vislink's bonded cellular flagship products that have long been recognized for their ability to deliver high-quality, low-latency live video streaming capabilities. This makes the Aero5 the most technologically advanced bonded cellular and LEO satellite mobile encoder solution available for airborne video downlink applications today.

#### **Key Features**

Mobile H.265/H.264 4K Encoder

Multi camera - 1 or 2 input model available

8 internal modems (3G/4G/5G), Ethernet, Wi-Fi

Bonding up to 8 modems and 2 Starlink/ LEO connections

Inputs: HD-SDI (3G); UHD-SDI (12G) on request

IP outputs: NDI, RTMP, RTSP, MPEG-TS

Internet hotspot (LAN and Wi-Fi),

**Data and Video Storage** 

**KLV Meta Data** 

**ARINC Tray Mounting** 

**Restful API for Integration** 

### **Typical Applications**

Law Enforcement

ISR (Military and LE)

First Responders

**National Security** 

**Unmanned Aerial Vehicles** 

**Event Coverage** 

Newsgathering

**Sports Coverage** 

Ship-to-Shore

## **Aero5 Datasheet**



Technical Specifications	
Video Encoder	
HEVC (H.265)	UHD, HD and SD Main, Main 10, Main 4:2:0 (8-bit) UHD (1 Service)* HD (up to 2 Service)*
MPEG-4 AVC (H.264)	HD and SD Main, High, Baseline up to Level 5.2, High 10/High 4:2:2
Maximum Bit Rate	40Mb/s
Video and Audio	
Video Input Type	2x SD-SDI SMPTE-259M 2x HD-SDI SMPTE-292M 2× 3G-SDI SMPTE-424M 1× 12G-SDI SMPTE-2082 Transport stream (IP Input) Wi-Fi
Return Video	HDMI
Formats	480i@29.97 576i@25 720p@50/59.94/60 1080i@50/59.94/60 (HEVC only) 1080p@23.98/24/25/29.97/30/50/59.94/60 2160p@23.98/24/25/29.97/30/50/59.94/60
IP Inputs	NDI SRT RTMP RTSP UDP/RTP
Audio Input	Embedded 4 Stereo Pairs
Audio Communications	Intercom and IFB COMMs via XLR-3
Coding	Advanced Audio Coding (AAC)
Connectivity	
Modems	1-8
Compatibility	Bonded 5G/LTE, OneWeb and Starlink
Ethernet Ports	2
Satellite Support	Dual Starlink or OneWeb
USB	2
System	
Local Storage	128 GB Record and Play-it-Forward
Internet Hotspot	Wi-Fi, Ethernet
Power	Aircraft Power (28vDC)
Optional License	
AERO-LICE-0001	4K UHD HEVC Encode (available upon request with hardware upgrade only)

#### Note:

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<sup>\*</sup> Variant contingent