

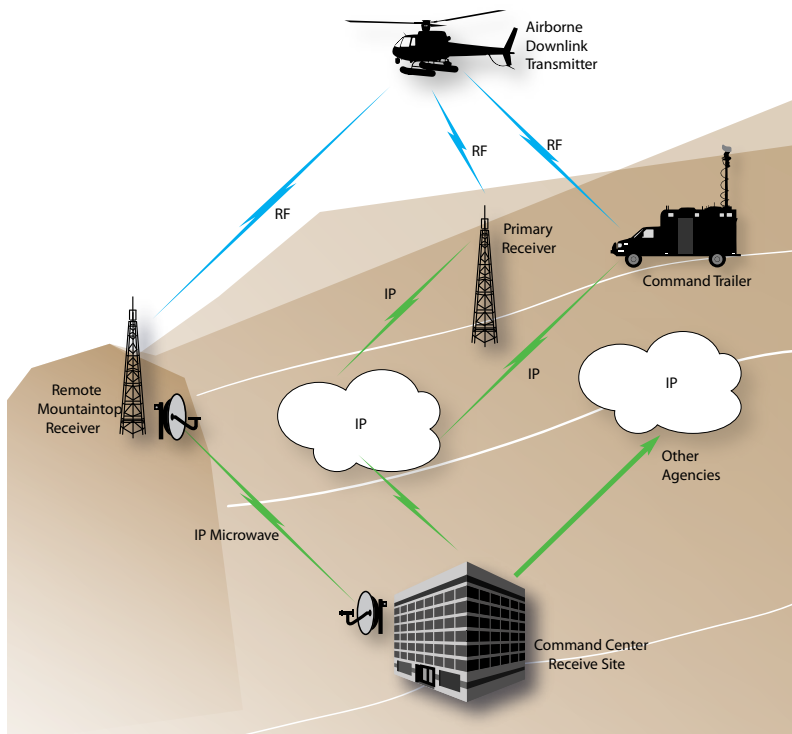


Aircraft / Downlink  
High Power  
HD / SD Transmitter

## Overview

Airborne video surveillance plays a pivotal role in law enforcement, public safety, homeland security, and defense operations. Vislink's Kamelyon™ family of products meets the challenge for top quality live video in air to ground applications under the most difficult urban, suburban, or rural environments.

The Kamelyon™ HDX-1100 is a fully integrated, high powered microwave transmitter, based on aircraft industry standards for ruggedness, size, and weight. Highly efficient H.264/ MPEG-4 Encoding is a standard feature, and MPEG-2 Encoding is an available option to provide both capabilities.



## High Performance Advanced Features

- DoubleVision™ supports dual simultaneous SD video feeds through a single HDX transmitter.
- RangeMaster™ /SCM-Q is another Vislink exclusive technique that maximizes the transmission range with no sacrifice in signal integrity. RangeMaster can send video signals up to four times farther than COFDM/DVB-T transmission.
- FadeFighter™ technology is an exclusive and unique Vislink feature that greatly reduces video break-up in dense metro area environment from a fast moving aircraft or ground based vehicle.

## Standard Features

- Minimal Weight Design (9.2 lbs.)
- Flexible Software Defined Surveillance
- Video / Audio / Data Transmission
- HD / SD Formats
- Touch Screen User Interface
- Field Upgradable Features
- Multiple Encryption Algorithms
- Up to 10 W Output Power
- H.264 AVC SD/HD Encoding BL/ML/HL Profiles
- MPEG-2 Encoding (Optional)
- Multiple Modulation Schemes
- Rugged Packaging
- Wide Range Voltage Input
- Remote Control Panel (optional) DZUS mounted or cockpit

## Applications

- Air-to-Ground Downlinks
- Tactical / Field Response
- UAV / UGV

# Specifications

## General

### Modulation

- DVB-T (standard) 6/7/8 MHz bandwidth COFDM-EN300-744, QPSK, 16QAM, 64QAM
- FadeFighter (optional) 10 MHz COFDM
- RangeMaster (optional) - Narrow Band, programmable, 1-10 MHz bandwidth QPSK

### Encryption

- AES 128/256 bit key

## Video Encoding:

### H.264/MPEG-4

- SD/HD (standard feature)

### AVC/MPEG-4 (Part 10)

Profiles supported:

- Baseline profile
- Main profile
- Hi-Profile

Video Bit Rates

- Up to 12 Mbps maximum

### MPEG-2

- SD/HD (available option)

Profiles supported:

- SP@ML, 4:2:0
- MP@HL, 4:2:0

Video Bit Rates:

- Up to 15 Mbps SD
- Up to 30 Mbps HD

## Frequency Parameters

### Frequency Stability

- 2.5 ppm

### Frequency Step Size

- 250 KHz

### Bands

Band	Frequency
L	1.7 to 1.9 GHz
S	2.0 to 2.5 GHz
C1	3.1 to 3.5 GHz
C2	4.4 to 5.0 GHz
C3	6.425 to 6.525 GHz
X	8.1 to 8.5 GHz
Optional Bands (Consult Factory)	

## Video Input Format

### Analog Composite

(1 V p/p TIA/EIA RS170)

- 720 x 480i NTSC 525
- 720 x 576i PAL 625

### SDI

(SMPTE 299M - 270 Mbps)

- 720 x 480i @ 25/30fps
- 720 x 576i @ 25/30fps

### HD-SDI

(SMPTE 292M - 1.5 Gbps)

- 1920 x 1080p @ 24, 25, 29.97, or 30 FPS
- 1920 x 1080i @ 24, 25, 29.97, or 30 FPS
- 1280 x 720p @ 50, 59.94, or 60 FPS

### ASI

- 188 byte, EN50083-9

### Wayside Data

- Up to 115.2 kbps (serial)

## Audio

### Line Level:

- 0 dbm nominal

### Line Impedance:

- 600 Ω unbalanced

## Power Output

### RF Output:

- Up to 10 W (+40 dbm)
- (Consult factory for details)

## Environmental

### Operating temperature

- +14° F to +122° F [-10° C to +50° C]

### Storage temperature

- 40° F to +167° F [-40° C to +75° C]

### Humidity

- 0 to 95% relative (non-condensing)

### Altitude

- 20,000 ft / 6,000 m

## Mechanical

### Material

- Aluminum housing

### Dimensions

- 3.56" W x 12.65" L x 7.62" H
- [9.60cm W x 32.19cm L x 19.35cm H]

### Weight

- 9.2 lbs (4.2 kg)

## Controls

### Local Interface

- Touch screen LCD - configuration and display
- Power Switch / Circuit Breaker

### Web Browser Configurator

- (RJ-45 Connection)

### Configurable Presets

- 9 user selectable configurations

## Power Source

### DC Input

- +10V to +32V

## Power Consumption

### L & S Band

- 95 Watts max.

### C-Band

- 95 Watts max.

### X-Band

- 95 Watts max.

## Available Accessories

- AC Power Supply
- Cockpit Remote Control Unit, Dzus Mount, Part No. 907621
- Night Vision Filter (optional)

## Standard Equipment

- DC Power Connector
- CD-ROM User Manual
- Multi-Conductor Breakout Cable

## Regulatory

- FCC: Parts 15,90,74
- RTCA: DO-160F

## Connections

Interface	Connector Type
<b>RF Output</b>	Type N female -50 Ω
<b>Video Input</b>	BNC Female (4)
<ul style="list-style-type: none"> <li>Video 1 - NTSC/PAL composite</li> <li>Video 2 - NTSC/PAL composite (MPEG-4 DoubleVision mode only)</li> <li>SD-SDI or HD-SDI (configurable)</li> <li>ASI - Input from external encoder</li> </ul>	
<b>DC Power / Control</b>	26 pin Chassis receptacle (Bendix PT-02-16-26P)
<ul style="list-style-type: none"> <li>DC Power Input: +10 to +32V</li> <li>RS232: I/O for remote control panel or PC interface</li> <li>Wayside Data Input</li> <li>Audio 1 &amp; 2 Input</li> </ul>	
<b>Set-up &amp; Maintenance</b> (10/100 web browser interface)	RJ-45 (10/100)



Remote Control Panel - Part No. 907621

