

# EXHIBIT 2

## HDX-1100

### Aircraft Downlink High Power Transmitter

Vislink's V-Net Solution collects, manages, and distributes mission critical actionable intelligence for crisis response. This end-to-end solution transmits video, voice, and data from the field to the decision makers who need it most.

Airborne video surveillance plays a pivotal role in law enforcement, public safety, homeland security, and defence operations. The ability to view the tactical situation from the air minimizes response time and optimizes officer safety. V-Net provides real-time images from your air support unit direct to command personnel. V-Net's advanced technology allows aircraft to operate over a wide geographic area while ground based receiver sites are automatically selected to consistently deliver the best possible imagery.

The 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

- RangeMaster™ maximizes the transmission range, and sends video signals up to four times farther than COFDM/DVB-T transmission.
- DoubleVision™ supports dual simultaneous SD video feeds through a single HDX-1100 transmitter.

### Key Features

- Minimal Weight and Rugged Packaging
- Touch Screen User Interface
- Video/Audio/Data Transmission
- Multiple Encryption Algorithms



Aircraft Downlink HD/SD High Power Transmitter

### Benefits

- Minimal Weight Design (9.2 lbs.)
- Flexible Software Defined Surveillance
- HD/SD Formats
- Field Upgradable Features
- H.264 AVC SD/HD Encoding BL/ML/HL Profiles
- MPEG-2 Encoding (Optional)
- Multiple Modulation Schemes
- Wide Range Voltage Input
- Remote Control Panel DZUS Mounted (Optional)
- User Defined Presets

### Typical Applications

- Air-to-Ground Video Downlink
- Strategic and Tactical
- Rotary and Fixed Wing
- Marine

## General

### Modulation

- DVB-T (standard) 6/7/8 MHz bandwidth COFDM-EN300-744, QPSK, 16QAM, 64QAM

## Standard Equipment

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

## Available Accessories & Options

- AC Power Supply
- Cockpit Remote Control Unit, DZUS Mount
- Night Vision Filter (optional)

## Encryption

- AES 128 & 256; BISS 1 and E; and Bcrypt1 128 & 256

## Regularity

- FCC: Parts 15,90,74,101
- RTCA: DO-160F

## 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

- 1.5 to 20 Mbps

### 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

## Video Input Format

### Analog Composite

- (1 V p/p TIA/EIA RS170):
  - 720 x 480i NTSC 525
  - 720 x 576i PAL 625

### SDI

- (SMPTE 259M - 270 Mbps):
  - 720 x 480i @ 25/30 FPS
  - 720 x 576i @ 25/30 FPS

### 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) Ethernet (option)

## Audio

### Line Level

- 0 dbm nominal

### Line Impedance

- 600Ω unbalanced

## Frequency Parameters

### Frequency Stability

- 2.5 ppm

### Frequency Step Size

- 250 kHz

## Frequency Band

- L:
  - 1.7 - 1.9 GHz
- S:
  - 2.1 - 2.5 GHz
- C1:
  - 3.1 - 3.5 GHz
- C2:
  - 4.4 - 5.0 GHz
- C3:
  - 6.425 - 6.525 GHz
- X:
  - 8.1 - 8.5 GHz

[Ask us about other options.](#)

## Controls

### Local Interface

- Touch screen LCD - configuration and display

### Power Switch/Circuit Breaker

- Web Browser Configurator (RJ-45 Connection)

### Configurable Pre-sets

- 9 user-selectable configurations

## Power Consumption

### L & S Band

- 95 Watts max.

### C-Band

- 95 Watts max.

### X-Band

- 95 Watts max.

## Power Output

### L- & S-Band

- 8W

### C- & X-Band

- 5W

## Power Source

### DC Input

- +10V to +32V

## 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)

## Environmental

### Operating temperature

- -10°C to +50°C (+14°F to +122°F)

### Storage temperature

- -40°C to +75°C (-40°F to +167°F)

### Humidity

- 0 to 95% relative (non-condensing)

### Altitude

- 20,000 ft. (6,000 m)

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

THE WORLD LEADER IN HIGH PERFORMANCE WRAPAROUND™ ANTENNAS.



# BLADE ANTENNAS

Haigh-Farr's family of rugged Blade antennas are available in frequencies ranging from UHF to upper C-band, and may be provided in either straight or rounded blade configurations. These antennas have demonstrated proven reliability in over 30 years of high-performance airborne applications. Blade antennas are also used extensively in ground-based vehicles such as race cars, trucks, tanks, and motorcycles, to name a few.

These Blade antennas exhibit quasi-uniform null-free hemispherical patterns.



## FEATURES:

- **Hemispherical Coverage**  
(see patterns on next page)
- **Frequencies from UHF to C-Band**
- **Small, Compact Footprint**
- **Aerodynamic Design**
- **Common Footprint for All Models**
- **Built to Withstand Extreme Shock & Vibration Environments**

## APPLICATIONS:

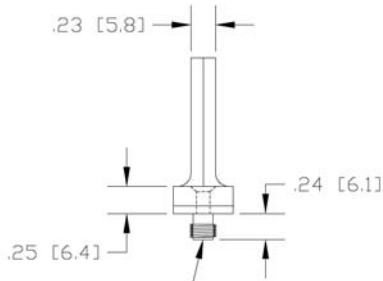
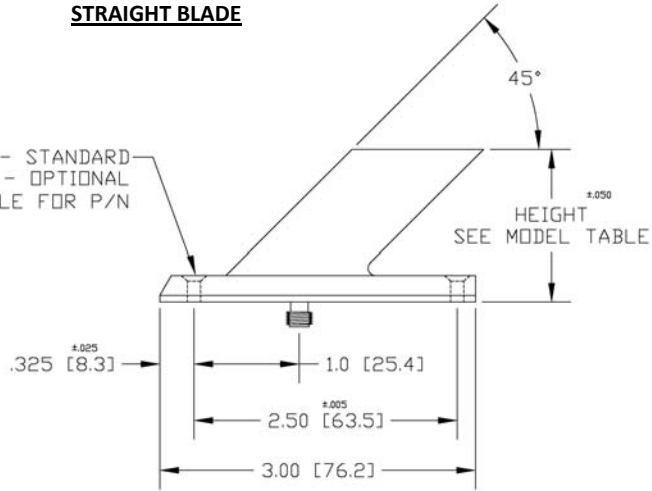
- **Data Links, Telemetry, Transponder**
- **Aircraft**
- **UAVs**
- **Helicopters**
- **Tactical Missiles**
- **Ships**
- **Ground-Based Vehicles**
- **Single or Array Implementations with Matching Power Dividers and Cables**

## DESIGN CAPABILITY

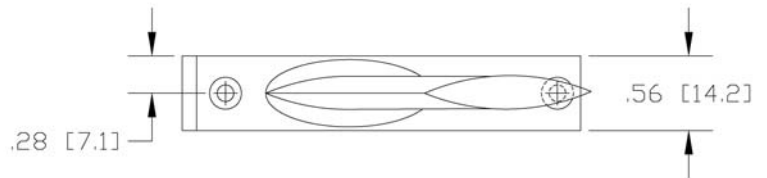
Haigh-Farr has a more than 40 year history of designing and producing exceptionally rugged, high-performance antennas. If you don't find an antenna meeting your requirements in our standard list of products, Haigh-Farr has the experience and modeling capability to customize a solution. Adaptations of existing designs can be done with very short lead times. Contact Haigh-Farr for a review of your antenna requirements.

## STRAIGHT BLADE

#4 SCREW - 82° INSERT - STANDARD  
 M3 SCREW - 100° INSERT - OPTIONAL  
 SEE TABLE FOR P/N

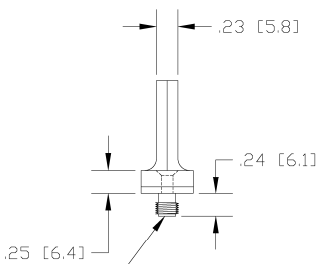
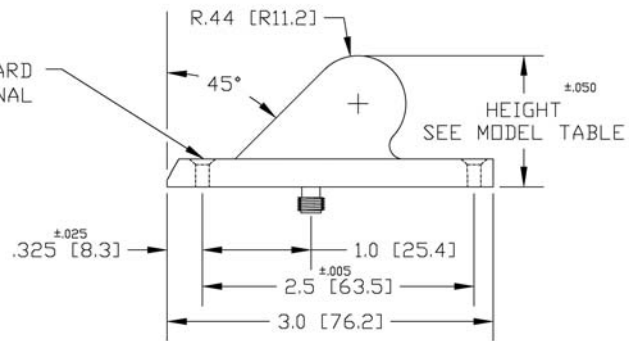


SMA IS STANDARD  
 TNC IS OPTIONAL  
 SEE TABLE FOR P/N

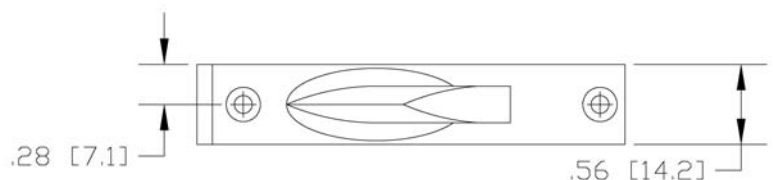


## ROUNDED BLADE

#4 SCREW - 82° INSERT - STANDARD  
 M3 SCREW - 100° INSERT - OPTIONAL  
 SEE TABLE FOR P/N



SMA IS STANDARD  
 TNC IS OPTIONAL  
 SEE TABLE FOR P/N

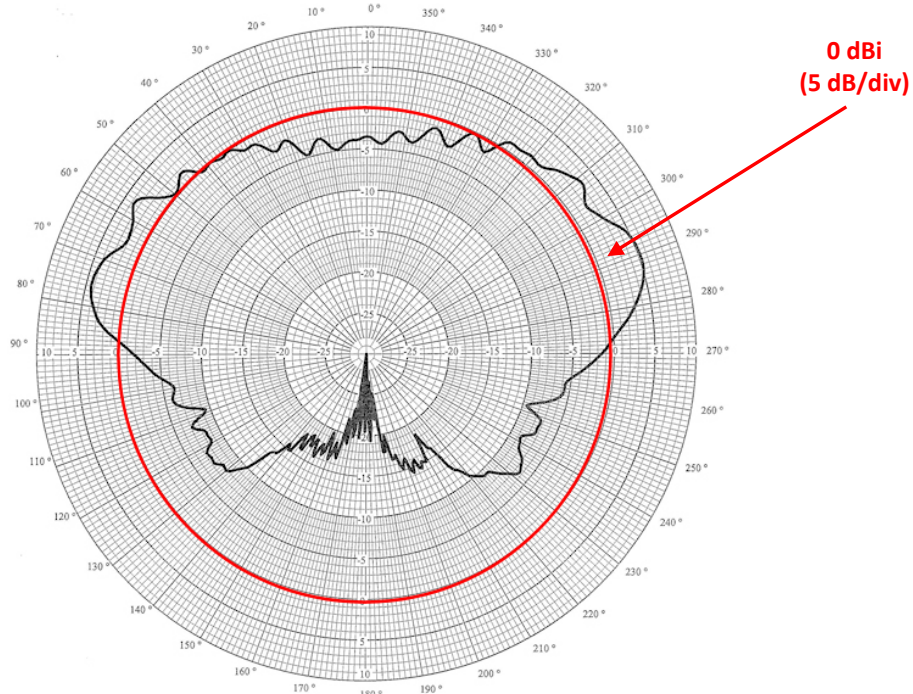


Round Blade P/N	Straight Blade P/N	Frequency Range GHz	VSWR MAX/TYPICAL	5KW <sup>1</sup> ALTITUDE	PEAK <sup>2</sup> POWER	Height Inches [mm]	Weight (SMA) OZ [grams]
6107	6007	1.060 ± .030	2.0:1/1.50:1	116	160 W	2.30 [58.4]	1.0 [28.3]
6108	6008	0.9165 ± .025	2.0:1/1.50:1	116	160 W	2.30 [58.4]	1.0 [28.3]
6109	6009	1.35 – 1.54	2.0:1/1.50:1	116	160 W	1.75 [44.3]	0.9 [26]
6110	6010	1.43 – 1.54	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-2	6010-2	1.425 – 1.525	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-3	6010-3	1.45 – 1.65	2.0:1/1.50:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-4	6010-4	1.50 – 1.80	2.0:1/1.50:1	116	160 W	1.54 [39.1]	0.8 [23]
6115	6015	1.60 – 1.70	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6120	6020	1.71 – 1.85	1.5:1/1.25:1	114	240 W	1.45 [36.8]	0.8 [23]
6125	6025	2.00 – 2.10	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6125-1	6025-1	2.00 – 2.30	2.0:1/1.50:1	110	350 W	1.19 [30.2]	0.7 [20]
6130	6030	2.20 – 2.30	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-1	6030-1	2.30 – 2.40	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-2	6030-2	2.40 – 2.50	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-3	6030-3	2.20 – 2.40	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-4	6030-4	2.30 – 2.50	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-6	6030-6	2.20 – 2.50	1.75:1/1.50:1	110	350 W	1.19 [30.2]	0.7 [20]
6135-1	6035-1	3.10 – 3.30	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6135-2	6035-2	3.45 – 3.55	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6135-3	6035-3	3.65 – 3.85	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6140	6040	4.50 – 5.00	1.5:1/1.25:1	104	1.5 kW	0.90 [22.9]	0.6 [17]
6150	6050	5.40 – 5.90	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]
6150-1	6050-1	5.25 to 5.85	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]
6150-2	6050-2	6.40 – 6.60	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]

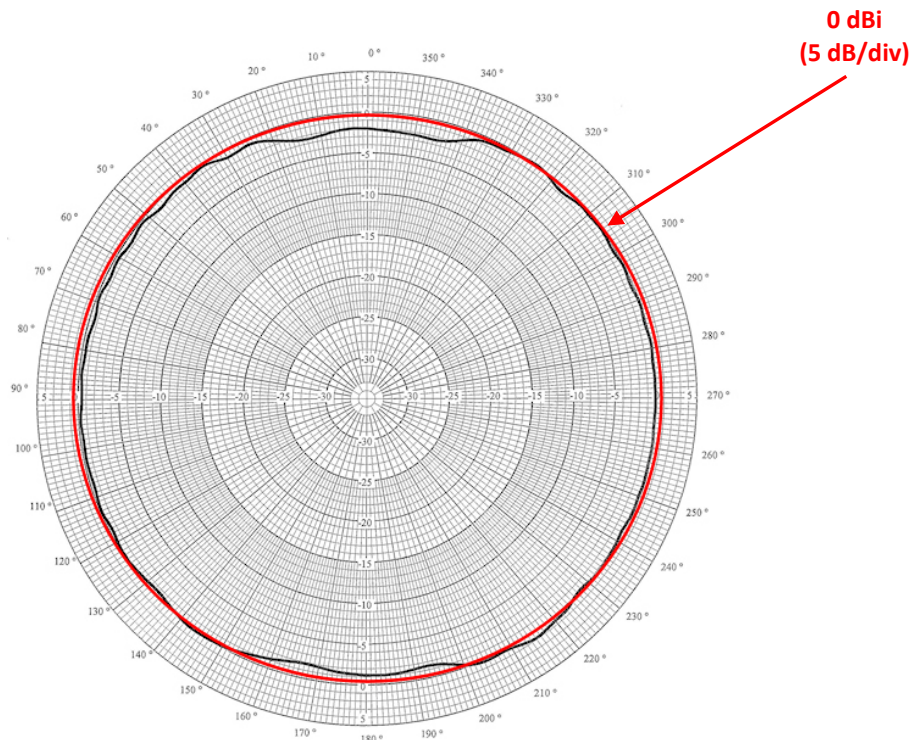
- Thermal environments: -50°C to 150°C; 300°C Transient
- Polarization: Linear, predominately vertical
- Connector: SMA (50 Ω) Standard; TNC (50 Ω) Optional
- Required Mounting Screws: 82° Flathead #4 Standard; 100° Flathead #4 or M3 optional
- UHF models are available in different configurations
- Mechanical outline drawings are available upon request

<sup>1</sup> The 5kW altitude (k ft) is the approximate altitude at which the antenna will experience external corona with 5kW peak power.

<sup>2</sup> Peak power indicates the maximum power that may be radiated without experiencing external corona at any altitude. These antennas routinely handle average power in the 25-30W CW range. Sufficient airflow is required at the higher power levels.



ELEVATION (PITCH)  
2.25 GHz



AZIMUTH (YAW)  
2.25 GHz

Note: The patterns shown above were measured with model 6130 on a cylindrical ground plane but are typical of the other Blades used. Fins and other protrusions on the vehicle will perturb the radiation pattern. The extent of any perturbations cannot be fully determined until radiation patterns are either calculated or measured on a model of the vehicle. Haigh-Farr offers engineering services, which include the calculation of radiation patterns on a specific vehicle.