



*Next Generation Diversity Receiver*

## OVERVIEW

The HDR-5000 six-input standard and high-definition (SD/HD) digital receiver meets the unique requirements for live video, audio and data reception in highly demanding tactical, airborne, mobile, and command center environments. Packed with advanced features and technology, it is the ideal choice for receiving surveillance video in command vans, tactical communications vehicles, remote and central command sites for law enforcement, public safety, homeland security, and defense applications. The HDR-5000 has been streamlined for remote receive applications where reliable video transport via IP is a major requirement.

The HDR-5000 system is a versatile platform designed to receive encrypted COFDM signals from a variety of airborne, portable, body worn and mobile transmission sources. The HDR-5000 expedites transmission at the receive site by directly demodulating the signal into a transport stream, either ASI or IP, suitable for transmission over an IP network.

The HDR-5000 supports video streaming by providing an IP signal output, via real-time transport protocol (RTP) or User Datagram Protocol (UDP) formats. For enhanced reliability when operating within the RTP configuration, the HDR-5000 provides Forward Error Correction (FEC) encoding to increase the robustness of the transmission.

The HDR-5000's maximal ratio diversity combiner provides the greatest effective range consistent with the clearest video quality under the toughest operating conditions. The available six antenna diversity system is the most effective way to insure consistent signal clarity and system sensitivity in any environment, and especially in the cement canyons of a modern metropolitan city. The small footprint (3 1/2 inches/2 RU high) of the rack mountable chassis makes for a convenient and simple installation in just about any available space.

### **The HDR-5000 was designed with enhanced features for reliability and ease of use:**

- As a key element in Vislink's software defined surveillance product suite, the HDR-5000 allows in-field feature upgrades without requiring hardware changes, in most cases.
- An interactive web browser graphical user interface (GUI) provides remote control and management enabling set up, configuration and diagnostics.
- Vislink's multi-mode digital demodulator assures the optimum in performance under the most difficult field conditions.
- Standard digital decryption modes, such as B-Crypt, are available for receiving secure transmissions.
- For environments where voltage fluctuations occur, the new fuse design is resettable and self-healing, therefore never requiring replacement.
- The HDR-5000 supports low-noise block down converters in frequency ranges between 1.7 and 7.5 GHz, serving most local, regional and federal requirements.

## Features

- Flexible Software Defined Surveillance
- Video / Audio / Data Reception
- Six Input MaxRC Diversity Inputs
- Multi-Function Outputs: ASI, IP streaming
- Multiple Decryption Algorithms
- Multiple Demodulation Support
- Multiple RF Band Support
- 2RU Rack Mounting
- Multiple User Selectable Presets
- Web Browser User Interface
- RTP Encapsulated Video Streaming
- SMPTE 2022, 2D FEC
- 2 Level Voltage Source for BDC

## Applications

- IP Diversity Receive
- Fixed Receive Sites
- Central Command
- Covert Operations
- Tactical / Field Response
- Mobile Command Van
- Crisis Management
- City-wide Video Collection
- Air-to-Ground Downlink
- Wireless Camera Systems

# Specifications

## GENERAL

- Diversity :**
- Six-Input MaxRC
- COFDM Bandwidth Support:**
- 6, 7, 8 MHz

- Demodulation:**
- DVB-T (standard) COFDM-EN300-744, QPSK, 16QAM, 64QAM

- Frequency Step Size:**
- 250 KHz

- Decryption:**
- Bcrypt1 - 128/256 bit key
  - AES 128/256 bit key
  - BISS 1/E

## FREQUENCY PARAMETERS:

- Band Support:**
- Dependant upon selected LNB

- Frequency Stability:**
- 2.5 ppm

- Frequency Step Size:**
- 250 KHz

- Sensitivity (QPSK, 1/2 FEC, 8 MHz BW):**
- -95 dBm

## VIDEO OUTPUT FORMAT

(two selectable outputs):

- ASI:**
- 188 bytes, EN50083-9

- Ethernet:**
- 10/100Base-T RTP Streaming or UDP

## CONTROLS:

- Local Interface:**
- Via webpage

- Web Accessible Parameters:**
- RF Controls (Dependent on configuration)
  - Preset number
  - Channel frequency
  - Diversity COFDM bandwidth
  - S/N
  - Pre-viterbi/Post-viterbi BER
  - LQ (Link Quality)
  - FEC (Forward Error Correction)
  - Guard Interval
  - Modulation
  - ASI Bit Rate
  - Wayside Baud Rate
  - Chroma Delay Mode
  - Encryption Key

- Remote User Interface:**
- 10/100Base-T Ethernet

## INDICATORS:

- Power
- Status
- Signal (demod lock)

## ENVIRONMENTAL:

- Operating temperature:**
- -10°C to +50 °C
- Storage Temperature:**
- -40°C to +70 °C
- Humidity:**
- 0 to 95% relative, non-condensing

## MECHANICAL:

- Mechanical Package:**
- 2 RU 19" Rack Mount
- Dimensions (to edge of connectors):**
- 17" W x 20" L x 3.5" H

- Weight:**
- 10 lbs/ 4.5 kg

## CONNECTIONS:

- RF Input (6):**
- BNC (Female) 75 Ω

## ASI Output

- Ethernet (back panel):**
- RJ-45 (10/100Base-T) x4

- Ethernet (front panel):**
- RJ-45 (10/100Base-T)

- Power:**
- 3-prong US Standard AC with serviceable fuse

- Network/System Control:**
- Via RJ45 Ethernet Connection

## HDMI - Controller Configuration Monitor

## USB - Controller Keyboard, Mouse, Etc x4

## POWER:

- AC Power Input:**
- Auto sense 100 to 130 VAC
  - 205 to 260 VAC

- Power Consumption (Less LNBs):**
- 28 Watts

## STANDARD EQUIPMENT

- AC Power Cord
- CD-ROM Manual

## OPTIONAL EQUIPMENT

- Low Noise Block Downconverter (LNB)
- Antennas

## ORDERING INFORMATION

- HDR-5000, Six-Input Diversity HD/SD

# KAMELYON DOWNCONVERTER

## GENERAL

- Antenna Input:**
- N-Type (F) 50Ω

- UHF Output:**
- BNC (F) 75Ω

- Noise Figure:**
- <3dB

- Phase Noise:**
- -90dBc/Hz @ 10kHz offset

- Spurious:**
- <-60 dBm

- OIP3:**
- >26 dBm

- OPI dB:**
- >14 dBm

- Image/Half-IF:**
- Rejection: >60dBc

## COMPLIANCE:

- CE**
- (EN302064 EN301489 & ES202239)

- FCC**
- Static Discharge (IEC61000-4-2)

## ENVIRONMENTAL:

- Temperature:**
- -10° C to +55° C IP65 (14° F to 122° F)

- Power:**
- 12.5 to 24V DC (via UHF output connector)

## PHYSICAL (Including Connectors)

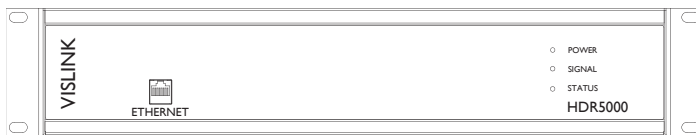
- Dimensions**
- 152mm x 60mm [ 6" x 2.36" ]

- Weight**
- 252 grams [ 0.56 lbs ]

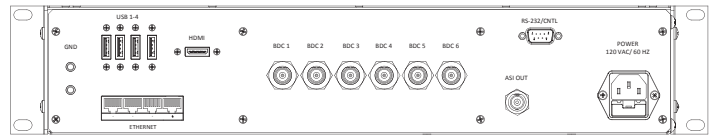


Model	Frequency	Gain Mode	
		Normal	High
L3025 - 1718	1.785 to 1.805 GHz	30 dB. (typ.)	45 dB. (typ.)
L3025 - 2024	2.0 to 2.4 GHz	26 dB. (typ.)	41 dB. (typ.)
L3025 - 1927	1.95 to 2.7 GHz	26 dB. (typ.)	41 dB. (typ.)
L3025 - 2732	2.7 to 3.2GHz	26 dB. (typ.)	41 dB. (typ.)
L3025 - 3236	3.2 to 3.6 GHz	30 dB. (typ.)	45 dB. (typ.)
L3025 - 4450	4.4 to 5.0GHz	24 dB. (typ.)	39 dB. (typ.)
L3025 - 6471	6.425 to 7.125 GHz	38 dB. (typ.)	53 dB. (typ.)
L3025 - 6875	6.8 to 7.5 GHz	38 dB. (typ.)	53 dB. (typ.)

Other bands are possible, contact us with your requirements



HDR-5000 Front Panel



HDR-5000 Rear Panel Connections