

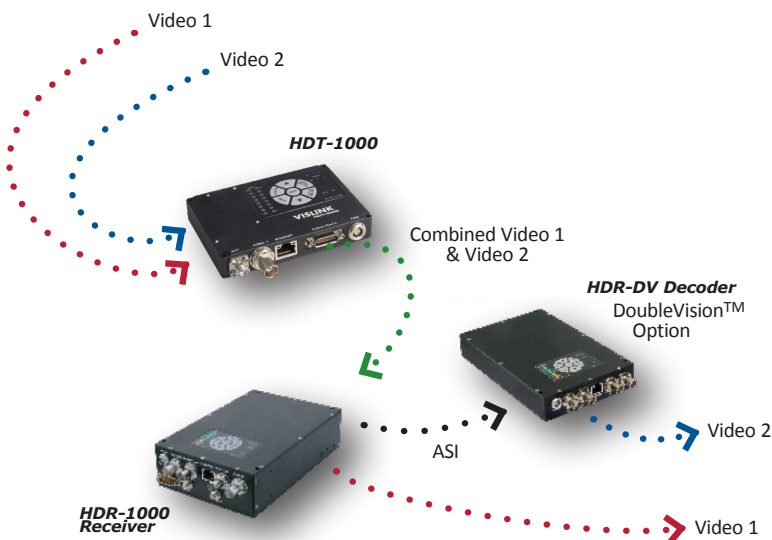


## HD/SD Digital Receiver

### Overview

The Kamelyon HDR-1000 digital receiver delivers high-quality video, audio and data reception in demanding tactical situations. Designed for rapid deployment, the rugged and compact HDT-1000 easily meets tactical requirements for covert and overt surveillance by law enforcement, public safety, homeland security, and defense operations. Kamelyon's software defined surveillance technology allows in-the-field system personality changes and upgrades without requiring hardware modification. The Kamelyon's low power consumption results in extended battery life and its small size make it ideal for concealments and portable use.

The HDR-1000 receives High Definition (HD) video with up to 1080p resolution or Standard Definition (SD) video at 480i and supports a variety of video frame rates. Highly efficient H.264/MPEG-4 decoding provides real performance advantages over legacy MPEG-2 technology, including enhanced video quality and increased signal range. Digital encryption options are available to prevent unauthorized intercepts.



### High Performance Advanced Features:

- RangeMaster™ is an exclusive Vislink feature that maximizes the video transmission range, and sends video signals up to four times farther than COFDM/DVB-T transmission.
- DoubleVision™ option supports reception of dual simultaneous standard definition video feeds from a single HDT or HDX series transmitter.
- FadeFighter™ technology is an exclusive Vislink feature that greatly reduces video break-up in dense metro area environment from a fast moving aircraft or ground based vehicle.

### Standard Features

- H.264/MPEG-4 and MPEG-2 Decoding Capability
- High and Standard Definition Decoding
- Compact, Lightweight, Rugged Packaging
- MaxRC Spatial Diversity Antenna inputs
- Flexible Software Defined Surveillance
- Video, Audio, and Data outputs
- Video Outputs for Composite, SDI, HD-SDI, ASI, IP streaming
- Multimode Demodulator; COFDM and RangeMaster™
- Choice of Encryption Algorithms
- Field Upgradable Features
- Web Browser User Interface
- User definable presets
- Wide Range Input Voltage

### Applications

- Covert Operations
- UAV/UGV
- Air-to-Ground Downlink
- Tactical/Field Response
- Crisis Management

# Specifications

## General

### RF Diversity

- Two-input MaxRC

### Packet Diversity

- Cascaded up to four HDR-1000 receivers (Consult Factory)

### Demodulation

- DVB-T (standard) COFDM-EN300-744
- RangeMaster™ (optional) SCM
- FadeFighter™ – (optional)

### Encryption

- AES 128/256 bit key

## Digital Video Decoding

### H.264/ MPEG-4: SD/HD

- Baseline, Main, and High profiles
- DoubleVision™: Supports two SD videos on one radio link.

NOTE: HDR-DV DoubleVision Expansion Unit required.

### MPEG-2: SD/HD

## Frequency Stability

- 2.5 ppm

## Frequency Step Size

- 250 kHz up to 1.0 GHz
- 500 kHz above 1.0 GHz

## Typical Threshold Sensitivity

- -95 dBm (QPSK, 1/2 FEC, 8 MHz)

## Video Output Format

### ASI

- 188 bytes, EN50083-9

### Ethernet

- 10/100Base-T UDP Unicast or Multicast

### Composite or SDI (SMPTE 259M)

- 720x480 NTSC 525
- 720x576 PAL 625

### HD-SDI (SMPTE 292M)

- 1920x1080i @ 25 fps
- 1920x1080i @ 30fps
- 1280x720p @ 50 fps
- 1280x720p @ 60fps

## Audio

### Line (Dual Channel)

- -10 to +4 dBV

### Impedance

- 600 Ω unbalanced (Consult factory for options)

## Environmental

### Operating temperature

- 14° F to 149° F [-10° C to +55° C]

### Storage temperature

- -40° F to 167° F [-40° C to +75° C]

### Humidity

- 0 to 95% relative, non-condensing

### Altitude

- 20,000 feet/ 6000 meters

## Mechanical:

### Material

- Aluminum housing, anodized

### Dimensions

- 4.5" W x 6.9" L x 1.8" H  
[11.43cm W x 17.52cm L x 4.5cm H]

### Weight

- 1.8 lbs (0.8 kg)

## Connections

### RF Input (2)

- SMA (Female) 50 Ω

### Input/Output 21-pin MDM Connector

- Audio 1 & 2
- Control: RS-232
- Wayside Data: RS-232

### Video A Output (SDI)

- BNC (Female)

### Video B Output (Composite)

- BNC (Female)

### Diversity Input

- BNC (Female)

### Diversity/ASI Output

- BNC (Female)

### Ethernet

- RJ-45

### Configuration/Control

- 10/100Base-T

## Power

- 4-pin LEMO female

## Power Consumption

### U/L/S Band

- 23 Watts max.

### C1, C2, C3-Band

- 25 Watts max.

## LED Indicators

- Preset Number
- Demod Unlock
- Encryption
- Decode Unlock
- Alarm Condition
- RSSI
- SNR

## Remote User Interface

- RS-232, 10/100Base-T Ethernet

## Configurable Presets

- 16 user selectable presets

## Controls

### Local Interface

- 7 button local interface for control

## Power Source

### DC Input

- +10V to +32V

## Options

- AC Power Supply
- Breakout Cable
- Heat Sink for extended temperature operation
- HDR-DV Double Vision Expansion Unit

## Standard Equipment

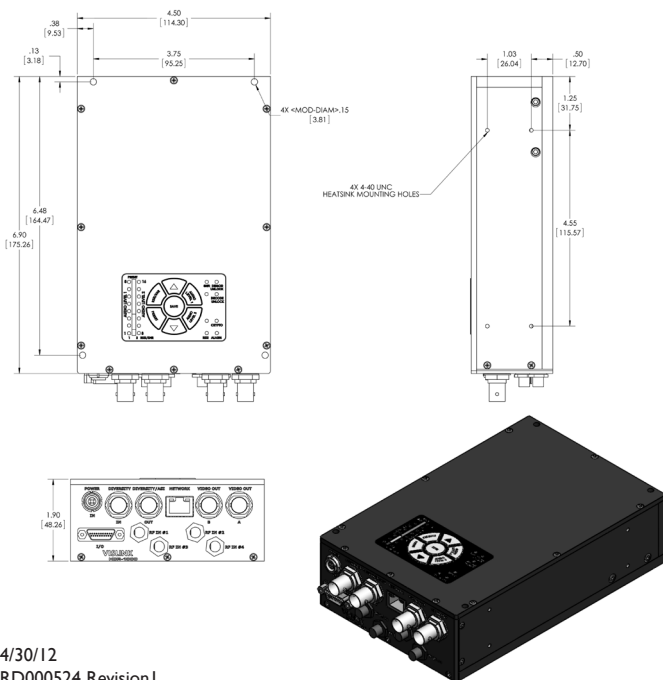
- DC Power Connector and Cable

## Frequency Parameters

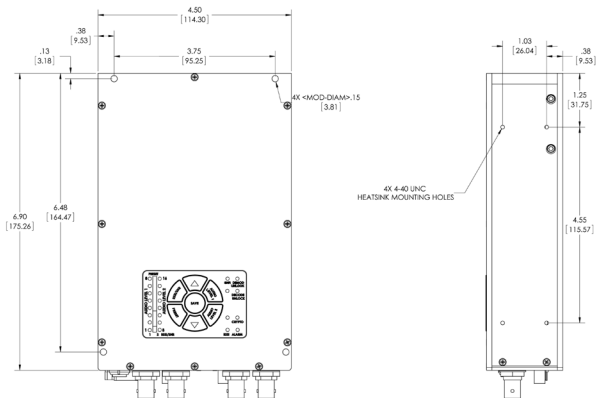
### Band Support

Model	Range
HDR-1000P	300 - 400 MHz
HDR-1000L	L Band: 1.7–1.9 GHz
HDR-1000S	S Band: 2.0 -2.5 GHz
HDR-1000C1	C1-Band: 3.1-3.5 GHz
HDR-1000C2	C2-Band: 4.4-5.0 GHz
HDR-1000C3	C3-Band: 6.4- 7.1 GHz
HDR-1000ULS	UHF thru S-Band: 60MHz – 2.7 GHz
HDR-1000LSC1	L/S Band: 1.7–2.7 GHz C1/C2 Band: 3.1 – 3.6 GHz
HDR-1000LSC2	L/S Band: 1.7–2.7 GHz C3 Band: 4.4 – 5.0 GHz
HDR-1000LSC3	L/S Band: 1.7–2.7 GHz C3 Band: 6.4 – 7.1 GHz

## HDR-1000 Dimensions and Mounting Information: LSC1, LSC2, and LSC3 Band Models (4 Inputs)



## HDR-1000 Dimensions and Mounting Information: P, L, S, and ULS Band Models (2 Inputs)



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