

# RedHawk™ HD



## **MILSPEC HD-SDI Video Recorder**

Bad Wolf Technologies LLC is proud to introduce our new COTS MILSPEC RedHawk HD™ Airborne solid state High Definition DVR. The RedHawk HD™ is built to military standards and is qualified to MIL-STD-461F & MIL-STD-810G for airborne deployment. It is a completely off the shelf (COTS) unit that is not ITAR regulated.

Record High Definition Video & Audio in full 1080p 30/60 with a true Airborne MIL-SPEC HD-SDI DVR. RedHawk HD™ is designed for military, law enforcement, and professional aircraft applications where equipment must withstand the harshest environments. Be it extreme cold, heat, vibration, shock, EMI, EMC, RF or whatever else life throws at it, RedHawk HD™ MILSPEC HD DVR is there to work. Failure is not an option with this rugged video recorder!

## **FEATURES:**

- Qualified to MIL-STD-461F EMC Electrical Compliance.
- Qualified to MIL-STD-810G for Airborne Deployment.
- Recording formats are 3G-SDI, HD-SDI and CVBS.
- Ethernet and WiFi networking capability.
- Cloud Enabled.
- Multicast and Unicast streaming with low latency.
- GPS Recording with Video Overlay.
- User Data Recording with Video Overlay.
- FLIR (forward looking infrared) cameras compatible.
- Built to military specification to withstand extreme conditions.
- 7075 Aluminum hermetically sealed CNC milled chassis.
- IP68 qualification OPTION
- High Definition MILSPEC airborne rugged video recorder.
- Single or Dual channel Recording to Solid State Media.
- Certification reports available for qualified agencies, military and defense contractors.
- NVIS qualified status indicator night vision LED OPTION

## **APPLICATIONS:**

- Mission Recon
- Flight Training
- Mission Debriefing
- Search and Rescue
- Military, Navy & Air Force
- Aerial Firefighting
- Airborne Law Enforcement



*"The Datatoys video system allowed Lockheed Martin to establish integrate sensor performance in actual flight tests by simultaneous recording of sensor video performance and the out of window situation that could be immediately compared on playback. This greatly impressed our customers and established that, real systems to overcome Degraded Visual Environments were possible, to enhance helicopter safety."*

**Kim Evans, Systems Engineer  
Lockheed Martin**



**BAD WOLF™**  
TECHNOLOGIES

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## VIDEO

|             |   |
|-------------|---|
| SDI         | 3G-SDI SMPTE 424M 1080p60/59.94/50<br>HD-SDI SMPTE 292M 1080i60 / p30<br>SD-SDI SMPTE 259M PAL/NTSC |
| COMPOSITE   | NTSC 720 x 480<br>PAL 720 x 576   |
| RESOLUTION  | MAX 1920 x 1200 60fps Progressive, Interlace  |
| COMPRESSION | h.264 AVC HIGH, MAIN, BASELINE PROFILE<br>MJPEG   |
| BITRATE     | 32Kbps – 16Mbps (h.264) 32Kbps – 55Mbps (MJPEG)   |
| FILE TYPE   | .AVI  |

## AUDIO

|              |   |
|--------------|---|
| INPUT/OUTPUT | STEREO L / R LINE LEVEL – AVIATION HEADSET<br>SDI EMBEDDED  |
| COMPRESSION  | AAC 64Kbps – 128Kbps @ 32/44.1/48kHz<br>G.711 64Kbps @ 8KHz |
| OUTPUT       | STEREO L / R LINE LEVEL                                     |

## INPUT & OUTPUT

|                |  |
|----------------|--|
| RECORD TRIGGER | RECORD BUTTON FRONT PANEL<br>REAR CONNECTOR<br>WAY-POINT REAR CONNECTOR<br>JPEG REAR CONNECTOR |
| AUDIO IN/OUT   | AUDIO REAR CONNECTOR   |
| INDICATOR      | FRONT – POWER, GPS, RECORD, FAULT<br>REAR – ETHERNET   |

## DATA I/O

|         |  |
|---------|--|
| SERIAL  | RS-232 – BAUD RATE 2400 – 115200bps  |
| GPS     | GPS GNSS NMEA 0183 GPGGA/GPRMC/GPGSA/GPVTG parsed<br>1Hz AND 5Hz<br>OVERLAY COORDINATES/SPEED/AMSL/TIME&DATE<br>CONCURRENT KML & GPX FILES |
| STORAGE | USB 2.0  |

## POWER

|         |                                |
|---------|--------------------------------|
| INPUT   | 12 – 34 VDC                    |
| WATTAGE | 4.8W [400mA @ 12VDC] UNIT ONLY |

## PHYSICAL & ENVIRONMENTAL

|             |   |
|-------------|---|
| TEMPERATURE | -34°C TO +85°C [-30°F TO +185°F]                |
| HUMIDITY    | 20% TO 80% RH                                   |
| DIMENSIONS  | 285.75 x 165.1 x 83.82mm [11.25" x 6.5" x 3.3"] |
| WEIGHT      | 9.25LB [4196gm]                                 |



| FUNCTION    | DESIGN | P/N             | MATING P/N     |
|-------------|--------|-----------------|----------------|
| POWER INPUT | J1     | MS27497E8835P   | MS24484T8B35S  |
| I/O         | J2     | MS27497E14B35S  | MS27484T14F35P |
| I/O         | J3     | MS27497E14B35SA | MS27484T14F35A |
| ETHERNET    | J4     | RJ45            | ETHERNET       |
| BNC         | J5     | NBB75DFG        | BNC            |
| BNC         | J6     | NBB75DFG        | BNC            |
| BNC         | J7     | NBB75DFG        | BNC            |
| BNC         | J8     | NBB75DFG        | BNC            |
| USB         | J9     | USBFTV22N       | USB            |
| POWER CABLE |        | M27500-20TG2T14 |                |



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