BAD WOLF
TECHNOLOGIES

AIRKNIGHT HD
AVIATION DIGITAL VIDEO RECORDER

APPLICATIONS

Rotorcraft

Fixed Wing

Naval Vessels

Flight Training

Flight Testing

Instrumentation

Aerial Firefighting

Mission Recording

Aerial Inspection

Broadcast

Security

CCTV

FEATURES

Aerial, Naval, & Ground Vehicle Use

Record Multiple Resolutions

+12V @ 150mA Power to Cameras

3G-SDI, HD-SDI, HDMI & CVBS NTSC/PAL Video

- Highest video quality available for 1080p resolution
- Supports 3G-SDI, HD-SDI, HDMI & CVBS NTSC/PAL video
- Low latency streaming with strong network capabilities
- GPS & User Data Logging via RS232 with Video Overlay
- FLIR compatible
- Output +12V @ 150mA(max) to an external camera
- Output +5V to GPS Puck
- External Storage Media – USB / SD Card

The AirKnight HD™ is a compact rugged HD video recorder designed for harsh environment use. Record directly to removable media at resolutions up to 1080p (3G-SDI, HD-SDI) and 2048 x 2048p30 (HDMI) with direct overlay GNSS (GPS) and text fields. The AirKnight HD can log user data, KML, GPX and ASCII files for video analysis using Google Earth, LineVision and other 3rd party geospatial software.

SPECIFICATIONS

VIDEO

SDI	3G-SDI SMPTE 424M 1080p60/59.94/50 HD-SDI SMPTE 292M 1080i60/p30 SD-SDI SMPTE 259M NTSC/PAL
HDMI	V.1.4 1080p
COMPOSITE	NTSC 720 x 480 PAL 720 x 576
COMPRESSION	H.264 AVC HIGH, MAIN, BASELINE PROFILE MJPEG
BITRATE	32Kbps – 16Mbps (H.264) 32Kbps – 5Mbps (MJPEG)
FILE TYPE	.AVI, .MP4

AUDIO

INPUT	STEREO L/R LINE LEVEL – AVIATION HEADSET SDI EMBEDDED; HDMI EMBEDDED
COMPRESSION	AAC 64Kbps – 128Kbps @ 32/44.1/48KHZ G.711 64Kbps @ 8KHZ
OUTPUT	STEREO L/R LINE LEVEL

INDICATOR/TRIGGER

TRIGGER	RECORD – FRONT PANEL, REAR CONNECTOR (OPTIONAL) WAY POINT REAR CONNECTOR (OPTIONAL)
STATUS LED	FRONT – POWER, GPS, RECORD, STATUS

DATA I/O

SERIAL	RS232, RS422, OR RS485 @ 2400 – 115200bps
ETHERNET	RJ45
GNSS	GPS GNSS NMEA 0183 GPGGA/GPRMC/GPGSA/GPVTG PARSED 1HZ AND 5HZ OVERLAY COORDINATES/SPEED/AMSL/TIME & DATE CONCURRENT KML & GPX FILES
OVERLAY TEXT	ASCII, TEXT1, TEXT2, TEXT3 <CR><LF>
STORAGE	USB 2.0/3.0, SSD OR HDD SD, SDHC OR MICROSD (WITH ADAPTER)

POWER

INPUT	+12 – 34VDC
WATTAGE	5.4W [450mA @ +12VDC] UNIT ONLY

PHYSICAL & ENVIRONMENTAL

TEMPERATURE	-34°C – +85°C [-30°F – +185°F]
HUMIDITY	20 – 80% RH
DIMENSIONS	4.956 x 4.900 x 1.720" [125.9 x 124.5 x 43.7mm]
WEIGHT	1.26lbs [572.8g]

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T E C H N O L O G I E S

AIRKNIGHT HD-MIL
HEAVY DUTY HIGH DEFINITION DVR

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Record Multiple Resolutions

+12V @ 1,560 mA Power to Cameras

3G-SDI, HD-SDI, HDMI & CVBS NTSC/PAL Video

- Includes all features of the AirKnight HD base model, plus
- Newly designed PSU and I/O PCB
- FLIR compatible
- MIL-locking power connectors
- **Upgraded internal FEP wiring**
- **Class 3 assembly with traceability**
- Proprietary power supply using industrial & upgraded components. Powers multiple +12VDC and +5VDC external devices, such as bullet cameras and GPS puck
- HTTP API and Active-X SDK available
- Optional image capture while recording
- Overlay Custom Text

In addition to the features of the AirKnight HD, the Airknight HD-MIL is an upgraded version of the high definition video recorder with internal hardening upgrades to handle extreme working environments. Features include locking power connector, reinforced internal FEP wiring, a re-designed PSU and I/O PCB, and front panel with a SD/USB module for enhanced reliability and longer MTBF. Record directly to removable media at resolutions of up to 1080p60 (3G-SDI).

BAD WOLF
TECHNOLOGIES

SYSTEM INCLUDES

Airknight HD-MIL

Power Cable

Mounting Brackets

Ethernet Cable

ACCESSORIES

Power Control Module

Multiview HD

GPS Puck

Remote Start/Stop

Waypoint Trigger

Image Capture Trigger

Audio Cable

Video Adapter Cable

4-Cam Video Switcher

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COMPRESSION	AAC 64Kbps – 128Kbps @ 32/44.1/48KHZ G.711 64Kbps @ 8KHZ
OUTPUT	STEREO L/R LINE LEVEL

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TRIGGER	RECORD – FRONT PANEL, REAR CONNECTOR (OPTIONAL) WAY POINT REAR CONNECTOR (OPTIONAL)
STATUS LED	FRONT – POWER, GPS, RECORD, STATUS

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ETHERNET	RJ45
GNSS	GPS GNSS NMEA 0183 GPGGA/GPRMC/GPGSA/GPVTG PARSED 1HZ AND 5HZ OVERLAY COORDINATES/SPEED/AMSL/TIME & DATE CONCURRENT KML & GPX FILES
OVERLAY TEXT	ASCII, TEXT1, TEXT2, TEXT3 <CR><LF>
STORAGE	USB 2.0/3.0, SSD OR HDD SD, SDHC OR MICROSD (WITH ADAPTER)

POWER	
INPUT	+12 – 34VDC
WATTAGE	5.4W [450mA @ 12VDC] UNIT ONLY

PHYSICAL & ENVIRONMENTAL	
TEMPERATURE	-34°C – +85°C [-30°F – +185°F]
HUMIDITY	20 – 80% RH
DIMENSIONS	4.956 x 4.900 x 1.720" [125.9 x 124.5 x 43.7mm]
WEIGHT	1.28lbs [584.4g]