

# GRIP DVR

## Rugged Digital Video Recorder



### Hardware

- Intel x86 based processor
- Hardware video compression
- Solid state SATA II hard drive 60 to 512GB

### I/O Connections

- Video Input – PAL, NTSC, or HD HDMI, HD-SDI (720P or 1080P)
- DVI-D/HDMI or VGA Output for local viewing and control (touch overlay)
- Serial – 1 RS232 / 422 / 485 capable, DB9
- USB – 2 USB 2.0 ports
- Ethernet 1 ports, 10/100/1000Base-T, RJ45, • Power – DC 10V to 32V

### Environmental

- Chassis and Connectors sealed to IP67
- Operating temperature -20°C to +60°C
- Storage temperature -40°C to +70°C
- Internal shock and Vibration isolation

### Power

- Power – DC 10V to 32V
- Automotive Power Supply Available
- Power consumption <40W

### Mechanical

- Weight 11.0lbs, 5.0Kg
- Dimensions 11.1"x8.3"x 4.3" (280mm x 210mm x 110mm)

### EMC

- EN55022 Class A, EN55024
- Part 15, Class A
- IEC 60533

### Hardware Options

- Custom connector panel
- WiFi, additional LAN + other 3 or 4G GSM modem
- 2nd SSD hard disk up to 1TB with encryption,
- Additional serial ports, USB ports



## Video Recording and Distribution

The GRIP DVR is a commercial off the shelf (COTS) rugged digital video recording and digital video distribution system.

The standard DVR configuration provides real time H.264 compression and recording of up to 4 analogue video channels at full D1 resolution or 2 channels of HD at full frame rates. Recording options include, video quality, frame size and frame rate. Internal solid state storage provides capacity for more than 110 hours of H.264 compressed video storage plus a "last 20 minute" event capture Near Visually Lossless (NVL) for evidential use.

The GRIP application software includes an IP video server. The unit can be configured to distribute 1 or more of the input video streams over 100 or 1000 Base-T Ethernet networks. In addition, by use of an internal GSM modem control can be performed remotely and the H.264 stream encrypted and sent by 3 or 4G.

The GRIP chassis provides an IP67 sealed enclosure for the internal COTS DVR hardware. Within the chassis a combination of convection and conduction cooling ensures minimal heat stress of the components. Internal shock isolation is also used to ensure reliable operation in harsh environments where the unit is subjected to shock and vibration. Application areas of this technology include security, automotive, transportation, oil and gas, nuclear, military and aerospace sectors.

## GRIP Options

### DVR Control

The GRIP DVR is controlled from the LAN via the Ethernet port. The DVR is supplied with a client application which can run on a LAN PC and provides a simple GUI for user control. The GUI also provides access to recorded video files for downloading and deletion. It also comes with a software API for control of all recording functions and display of live video streams from a remote PC. Local control can also be performed by use of a small monitor with USB 2.0 overlays.

### DVR Options

As an option multi-standard recording (H.264, MJPEG or raw) can be provided on each input channel. Additional control interfaces can be provided over RS232 / 422 serial interfaces and also through chassis mounted switches, which instigate programmable functions such as start and stop of the recording function.

### Application Software Development

The DVR function can also be supplied as part of a complete video management system. This tailored software application is designed to provide enhanced situational awareness and would typically include control of a pan and tilt platform together with a range of video sensors. Vision4ce has extensive in-house experience in the development of image processing and exploitation algorithms which bring unique capability to the video management system.

Designed and manufactured in the UK, supported in the US.

