

# STACK STACK STACK® DATA SHEET DVR2-500

ST9388 PAL / NTSC

Stack's new range of Digital Video Recorders combine ruggedness, reliability and recording quality with a slim, lightweight design that's perfect for all harsh environment applications.

Stack's digital video recorders employ broadcast standard MPEG-2 video compression to record high quality real-time video and audio direct to a Compact Flash (CF) card. The card can be removed with ease and played on a PC or laptop using a standard media player application. Recordings can be archived direct to DVD for playback on either a PC or a DVD player.

## Key Features

■ Solid-state, no moving parts, ensuring reliable operation year after year
■ 10 Fixed Bit-rates (1 Mbps Min. 20 Mbps Max.) + Variable Bit Rate (6 Quality levels up to 50 Mbps peak) *
■ Intra-frame (I-frame) only record mode
■ 3-140 Mins/Gbyte @ full resolution
■ -20 to 80°C (-4°F to 176°F) operating temp. range
■ 32 GB maximum card size
■ 9 to 20V DC powered (20V-50V DC option)
■ Fully sealed to IP67
■ Mil-type "AS" connectors
■ 20g continuous vibration rating; 50g shock rating
■ External status LED
■ Sealed memory card door (when closed)
■ 3 axis G-sensor data overlay
■ GPS data overlay option (NMEA 0183 Interface)
■ Real-Time date & time overlay
■ Up to 2 secs. (Supercaps) Brownout Production option

## Standard Components

The DVR2-500 is supplied with the following standard components:

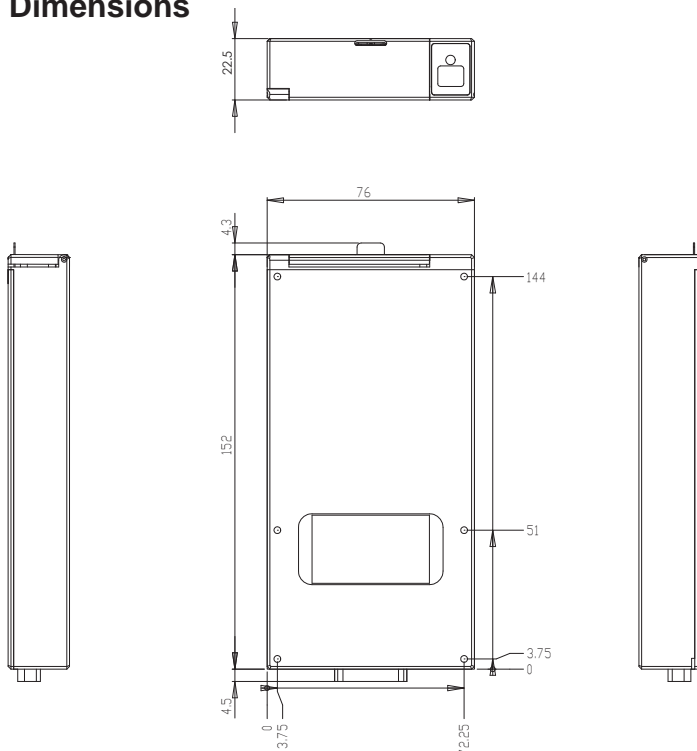
DVR2 Module	ST990063	1
DVR2 System Harness	ST918101	1
DVR2 Input Harness	ST918102	1
DVR2 PC Harness	ST918103	1
Switch & LED Harness	ST918105	1
CAM Plug to BNC Video Connector & Power Plug (2.1mm)	ST918106	1
Configuration Software	ST920039	1
DVR2 User Guide	ST542103	1

## Optional Components

The DVR2-500 may be supplied with the following optional components:

Bullet Camera- PAL, 560 TVL, 0.1 Lux	ST8393
Bullet Camera- NTSC, 560 TVL, 0.1 Lux	ST8394
Microphone	ST8397
CAM plug to BNC & Power lead	ST918106
GPS Receiver and Data Overlay Option	ST8398
20 to 50V DC Option	ST9399
Supercaps Option (Up to 2 secs brownout protection and recording after power loss)	ST9397
1 GB Harsh Environment Compact Flash memory card	ST390051
2 GB Harsh Environment Compact Flash memory card	ST390052
4 GB Harsh Environment Compact Flash memory card	ST390053
8 GB Harsh Environment Compact Flash memory card	ST390054
16 GB Harsh Environment Compact Flash memory card	ST390055
24 GB Harsh Environment Compact Flash memory card photograph</td <td>ST390056</td>	ST390056
32 GB Harsh Environment Compact Flash memory card	ST390057

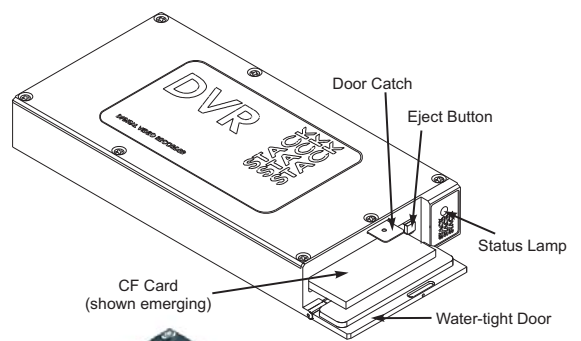
## Dimensions



## Connectors



2 x 9W DDAS plus 1 x 5W AS



## Specifications: DVR2-500

<b>RECORDING - VIDEO</b>	
Number of camera inputs	1
Video input multiplexing options	
Video Standards Supported	PAL/NTSC
Composite Video Input	Composite 1V pk-pk or S-Video
Video Frame Rate	30 fps (NTSC); 25 fps (PAL)
Video Monitor Output	1 V pk-pk Composite
Compression Format	MPEG-2 MP@ML compression Program Stream
Resolutions Supported	PAL: 720x576; 720x400; 480x576; 352x576, 352x288 NTSC: 720x480; 720x400; 480x480; 352x480; 352x240
Quality - bitrate	10 Fixed (1 Mbps Min. 20 Mbps Max.) + Variable Bit Rate (6 Quality levels up to 50 Mbps peak)
CF Record Time	3-140 Mins/Gbyte
<b>RECORDING - AUDIO</b>	
Number of audio channels	2
Input Level	Mic or Line Level +3 to -30dB
Active Gain Control (AGC)	Yes
Compression Format	MPEG1 Layer II, 2 ch. 16 bit, 48 kHz
<b>DISK INTERFACE</b>	
Disk Interface	Compact Flash; FAT32
Maximum Card Size	32GB
Maximum File Size	2GB
File Format	MPEG-2; Windows Media Player & DVD compatible
<b>MISCELLANEOUS</b>	
Power up to Record start time	<20 Sec
Record Switch to Record start/stop time (in ready to record state)	<0.1 Sec
Lost recording time between 2GB files	<0.5 Sec
Max video loss if power lost while recording	<last 1 Sec (see Brownout Protection option below to extend record time after power loss)
Brownout Protection option	Up to 2 Secs (dependant on camera load). Extends recording after power loss by up to 1 Sec
Configuration	Via USB
Real-Time Date & Time Overlay	1 Sec resolution (0.01 Sec Option)
GPS Data Overlay (Option)	1 - 20 Hz
3 axis G-sensor Data Overlay	12.5 Hz
GPS Receiver Interface (Option)	1-20 Hz (NMEA 0183 Interface)
<b>ENVIRONMENTAL *</b>	
Operating Temperature Range	-20°C to +80°C (-4°F to 176°F)
Storage Temperature Range	-40°C to +80°C (-40°F to 176°F)
Sealing	IP67
Humidity	0-100% RH Condensing
Vibration	20g 50-2000Hz swept Sin. 12hr x 3 axis
Radiated Emissions	EN55024B CiSPR25
Shock	50g, 15ms
Radiated Immunity	50V/m
Conducted Immunity	DIN40839 Cat IV
<b>GENERAL</b>	
Mechanical Size	151 x 76 x 21mm
Finish	Hard Anodised Aluminium
Weight (without memory card)	300g
Operating Voltage Range	9V to 20V DC
Reverse/Over-voltage Protection	-60 to +60V DC
Power Consumption (@ 12VDC)	-5W
Standby Battery	Life > 5 Years
Connectors	1 x 9W DDAS plus 2 x 5W AS

\*Specifications quoted dependent on use of appropriate CF cards and are guaranteed only with Stack supplied Harsh Environment cards.



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