

# DEEP SEA VIDEO RECORDER

# MD-DSVR

- A self-contained, harsh-environment, deep-water video recording system for marine research and investigation
- For use in difficult marine environments, for example, observing commercial fishing gear
- Low-light sensitive camera (0.00015 lux)
- No requirement for surface cables
- Dual 'O' ring seals rated to 1,000m sea water
- Strong attachment points and carrying handle
- Rugged cables with deep-water marine connectors; anodized & painted pressure housing
- Compact Flash® media stores MPEG2 D1 video
- Simple to operate by a non-specialist
- A cost-effective and practical alternative to a remotely operated vehicle (ROV) or divers

The MD-DSVR Deep Sea Video Recorder  
from Marine Data.



MARINE DATA

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# SPECIFICATIONS

## Physical

- **Weight:** 14kg in air; approx. 6kg in sea water
- **Dimensions:** 220mm overall width; 577mm overall length; 140mm diameter
- **Mounting:** 4x welded attachment brackets
- **Cable:** Multicore cable between DSVR and camera head; 5m & 10m lengths supplied as standard
- **DSVR housing construction:** 6082 T6 marine grade aluminium alloy cylinder pressure housing with double 'O' ring seal
- **Finish:** Hard anodised and finished with Interseal® 670 epoxy paint in yellow
- **Pressure Seal:** Two 'O' rings; in shear and compression configurations. Lid is secured by a 3-start, 120° hard-anodised thread
- **Attaching Points:** Four strong external securing brackets welded to the housing
- **Camera Head:** 6AL4V titanium alloy; weight approx. 3.2kg in air; approx. 1.66kg in sea water. Housing diameter: 88.5mm with 130mm diameter lens protector
- **Faceplate:** Optically corrected acrylic with 93°(H) x 68°(V) view. OEM manual supplied. Focus: fixed; minimum distance to lens: 30cm

## Electrical and Electronic

- **DSVR batteries and chargers:** 2 sealed lead acid batteries: 12V, 3.2Ah; Yuasa™; type NP3.2-12RS. Supplied with four batteries
- **Lead acid battery chargers:** Switch-mode type, worldwide mains AC input (110V-240V, 60-50Hz); 12V output
- **Digital Video Recorder:** Ultra-compact, harsh-environment video recorder; dimensions 75mm x 83mm x 16mm; records standard definition (SD) D1 video. Hard anodised aluminium alloy. Configuration software supplied (PC). Software configurable to either PAL (625 lines) or NTSC (525 lines). OEM manual supplied
- **Recording medium:** Compact Flash® Card. Recorder available in single card and dual card versions. Supplied with two compact flash cards. Recommended media: SanDisk Extreme® III or IV; recommended capacity >8GB
- **Video compression:** MPEG2 with software configurable bitrates; maximum bitrate approx. 8Mbits.sec<sup>-1</sup>. Configurable to small frame sizes
- **Camera Head:** Power: 8.4 watts at 24V (350mA). Sensor: monochrome 0.5" IT-CCD; 752(H) x 582(V) elements. SNR: >50dB. PAL/NTSC configurable. Long line compensator for cables <1500m. Factory configured to either PAL or NTSC. OEM manual supplied

## Operational

- **DSVR housing and chassis:** Maximum recommended operating depth of 1,000m in sea water. Operating temperature range: +4°C to +40°C
- **Camera Head:** 4000m of sea water. Minimum light level: 1.5x10<sup>-4</sup> lux (faceplate sensitivity)
- **Recording duration:** For D1 full-screen standard definition video:
  - maximum quality (variable bitrate) = approx. 7.5mins/GB;
  - very high quality = approx. 15mins/GB;
  - low quality = approx. 60mins/GB
- **Connectors:** Seacon® 55 series connectors are used at each end of the cable. These are dry-mating and are rated to approx. 6640m seawater. A wet-mating, break-apart connector is located at 1m from one end of the cable; this is a safety strain-relief device

## Additional Information

- **Recommended Lubricant:** Krytox® GPL223 grease by DuPont™. This is an inert fluoropolymer-based grease which will not harm 'O' rings or plastics
- **Note:** Different camera heads for different underwater applications can be supplied on request

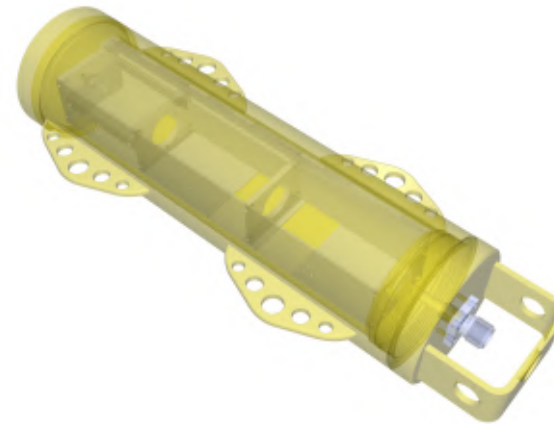
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