



STR SEAGAMMA FLOODED MEMBER DETECTION

The STR SeaGamma FMD system has been designed as a modern inspection tool to reliably determine if a subsea structure with normally sealed watertight members has sustained water ingress as a result of corrosion, weld failure or damage.

The system is based on the use of low level collimated Gamma radiation enabling reliable operation without the need to clean away marine growth build-up from the members prior to survey, meaning the results are fast and reliable.

Two system types are available:

- SeaGamma Standard System designed to work from small inspection and light work class Remotely Operated Vehicles, capable of covering member sizes up to 2 metres in diameter.
- **SeaGamma Ultra System** designed for deployment from Work Class ROVs, capable of covering member sizes up to 3 metres in diameter.







KEY FEATURES

- Mechanically robust detector and source arms
 Marine growth removal unnecessary
- Adjustable frame with rotator option
- Advanced acquisition and reporting software
- Continuous sampling and fast results
- Custom designed Tungsten collimator for improved safety
- High sensitivity detector capable of greater than 1 million counts per second

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STR SeaGamma Frame

Stainless Steel, Aluminium. **Construction:**

GRP & Acetal

Fittings: Stainless Steel **Max Member Diameter:** 2000mm

ROV skid/belly mount, rotator. **Mounting:**

manipulator

Weight in Air / Water: 13Kg / 7.4Kg Manual pre-deployment **Adjustment:**

configuration 260mm to 2100mm

source-detector separation

Safety Features: Safety retention

lanyard (Source & Detector retained to ROV)

STR SeaGamma 370MBq Collimated Source

Nuclide Type: Caesium 137 (Cs-137) **Enclosure:** Double encapsulated source

protected in a Tungsten collimator

Source Strength: 370MBq Installed within frame arms **Mounting: Safety Features:** Narrow beam, thick wall

collimator to reduce

unwanted gamma exposure.

Polarised mounting points to prohibit

incorrect assembly and mounting

STR SeaGamma 370MBq Detector

Detector Type: Scintillator Gamma

Radiation Detector

Sensitivity: Typical 1MCPS @ minimum frame

separation

Input Supply Voltage: 19 to 70V DC **Input Supply Power:** 2W Typical 5W Max

Depth Rating: 500m operational

0°C to 45°C **Operating Temperature:**

Housing Material: Acetal plastic Subconn MCBH8M Connector:

Dimensions: 400mm L x 63mm Dia.

Communications: RS232 & RS485

Circuit Protection: Reverse polarity

protection, under-voltage lockout, over-

voltage protection

STR SeaGamma Topside Acquisition System

- Simple survey setup using Import Wizard
- Unique "traffic light" video overlay giving clear representation of member integrity
- Continuous sampling prevents missed measurements
- On-the-fly processing and comprehensive reporting features

Typical PC Specification: 14" Display, Intel i5 CPU, 4GB RAM, 300GB HDD, Windows 7 64

Bit, LAN, WIFI

Software: STR SeaGamma Logger, Acronis

Image Recovery & Backup

Serial Interface: 4 port configurable

RS232/485 USB adaptor

STR SeaGamma Remote Display

Hand held display for use on deck to monitor count value prior to ROV deployment

All information contained in this brochure may be subject to change without prior notice.