



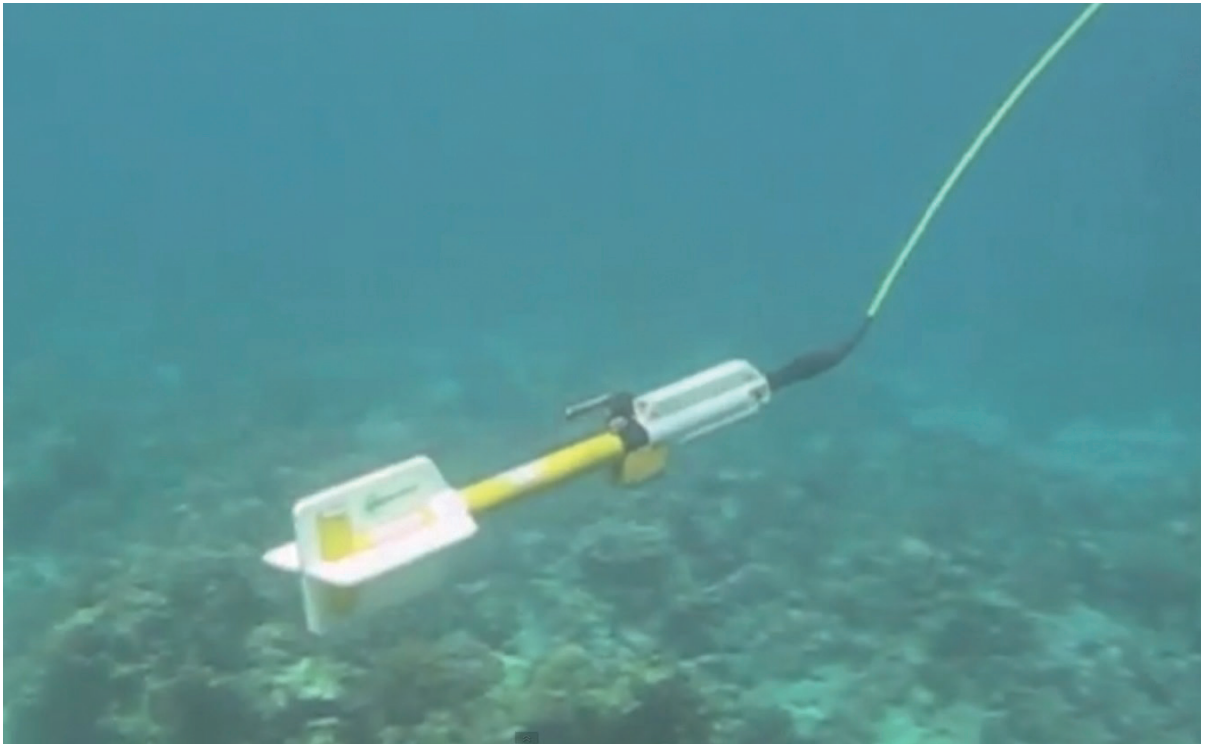
CODEVINTEC

Tecnologie per le Scienze della Terra e del Mare

45° 27' 39.384" N
9° 07' 30.145" E

G-882 Cesium Marine Magnetometer

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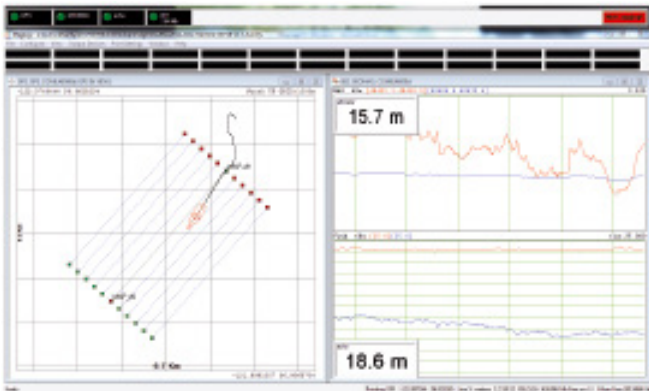
Geometrics' G-882 Marine Magnetometer is the leading marine system in the industry. The G-882 is the only system that meets the standards for UXO clearance in the North Sea.

Features & Benefits

- > **Cesium Vapor High Performance**
Highest detection range and high probability of detecting all sized ferrous targets.
- > **Streamlined Design for Tow Safety**
Low probability of fouling in fishing lines or rocks. Rugged fiber-wound fiberglass housing.
- > **Sample at up to 20Hz** – Unparalleled data density while also covering larger areas per day.
- > **Sensor can be Rotated for Optimal Signal** – Can be used worldwide.
- > **Easy Portability and Handling** – No winch required. Built-in easy-carry handle. Operable by a single man; only 44 lb with 200 ft cable.
- > **Combine Multiple Systems for Increased Coverage**
Internal CM-221 Mini-counter provides multi-sensor sync and data concatenation, allowing side-by-side coverage which maximizes detection of small targets and reduces noise.
- > **Export Version Available** – Use anywhere in the world without need for an export license (except embargoed countries). See specifications.



Specifications G-882 Cesium Marine Magnetometer



MagLogLite™ Data Logging software is included with each magnetometer and allows recording and display of data and position with automatic anomaly detection. Additional software options include: MagLog Pro™, advanced logging software; MagMap™, a plotting and contouring package; and MagPick™ post-acquisition processing software.

MAGNETOMETER / ELECTRONICS

Operating Principle	Self-oscillating split-beam Cesium vapor (non-radioactive).
Operating Range	20,000 to 100,000 nT.
Operating Zones	The earth's field vector should be at an angle greater than 10° from the sensor's equator and greater than 6° away from the sensor's long axis. Automatic hemisphere switching.
Noise	<0.004 nT/ $\sqrt{\text{Hz}}_{\text{rms}}$. (SX (export) version: <0.02 nT/ $\sqrt{\text{Hz}}_{\text{rms}}$).
Max Sample Rate	20 Hz.
Heading Error	< 1 nT (over entire 360° spin).
Output	RS-232 at 1,200 to 19,200 Baud.
Power	24 to 32 VDC, 0.75 A at power-on and 0.5 A thereafter.

MECHANICAL

Sensor Fish

DIA: 7 cm; L: 137 cm (2.75x54 in) (with fin assembly).

Weight: 18 kg (40 lb).

Includes sensor and electronics and 1 main weight. Additional collar weights are 6.4 kg (14 lb) each; total of 5 capable.

Tow Cable

DIA: 12 mm; L: 800 m (0.47 in x 2,625 ft).

Weight: 7.7 kg (17 lb) with terminations.

Break strength: 1,630 kg (3,600 lb)

Bend diameter: 30 cm (12 in).

Typical Detection Range for Common Objects

1. Ship: 1000 tons	0.5 to 1 nT at 800 ft (244 m)
2. Anchor: 20 tons	0.8 to 1.25 nT at 400 ft (120 m)
3. Automobile	1 to 2 nT at 100 ft (30 m)
4. Light Aircraft	0.5 to 2 nT at 40 ft (12 m)
5. Pipeline (12 inch)	1 to 2 nT at 200 ft (60 m)
6. Pipeline (6 inch)	1 to 2 nT at 100 ft (30 m)
7. Iron: 100 kg	1 to 2 nT at 50 ft (15 m)
8. Iron: 100 lb	0.5 to 1 nT at 30 ft (9 m)
9. Iron: 10 lb	0.5 to 1 nT at 20 ft (6 m)
10. Iron: 1 lb	0.5 to 1 nT at 10 ft (3 m)
11. Screwdriver: 5-inch	0.5 to 2 nT at 12 ft (4 m)
12. Bomb: 1000 lb	1 to 5 nT at 100 ft (30 m)
13. Bomb: 500 lb	0.5 to 5 nT at 50 ft (16 m)
14. Grenade	0.5 to 2 nT at 10 ft (3 m)
15. Shell: 20 mm	0.5 to 2 nT at 5 ft (1.8 m)

ENVIRONMENTAL

Operating Temperature	-35°C to +50°C (-30°F to +122°F).
Storage Temperature	-45°C to +70°C (-48°F to +158°F).
Altitude	9,000 m (30,000 ft).
Depth	4,000 psi (2,730 m; 8956 ft).
Water Tight	O-Ring sealed for up to 4,000 psi depth operation.

ACCESSORIES

Standard

Operation manual, shipping/storage container, ship kit with tools and hardware, power supply, MagLogLite™, MagMap™ and MagPick™ processing software, depth transducer, altimeter.

Optional

Steel tow cable to 6,000 m (19,600 ft) with telemetry, longitudinal or transverse gradiometer, plastic Pelican® case, MagLogPro™, collar weights.