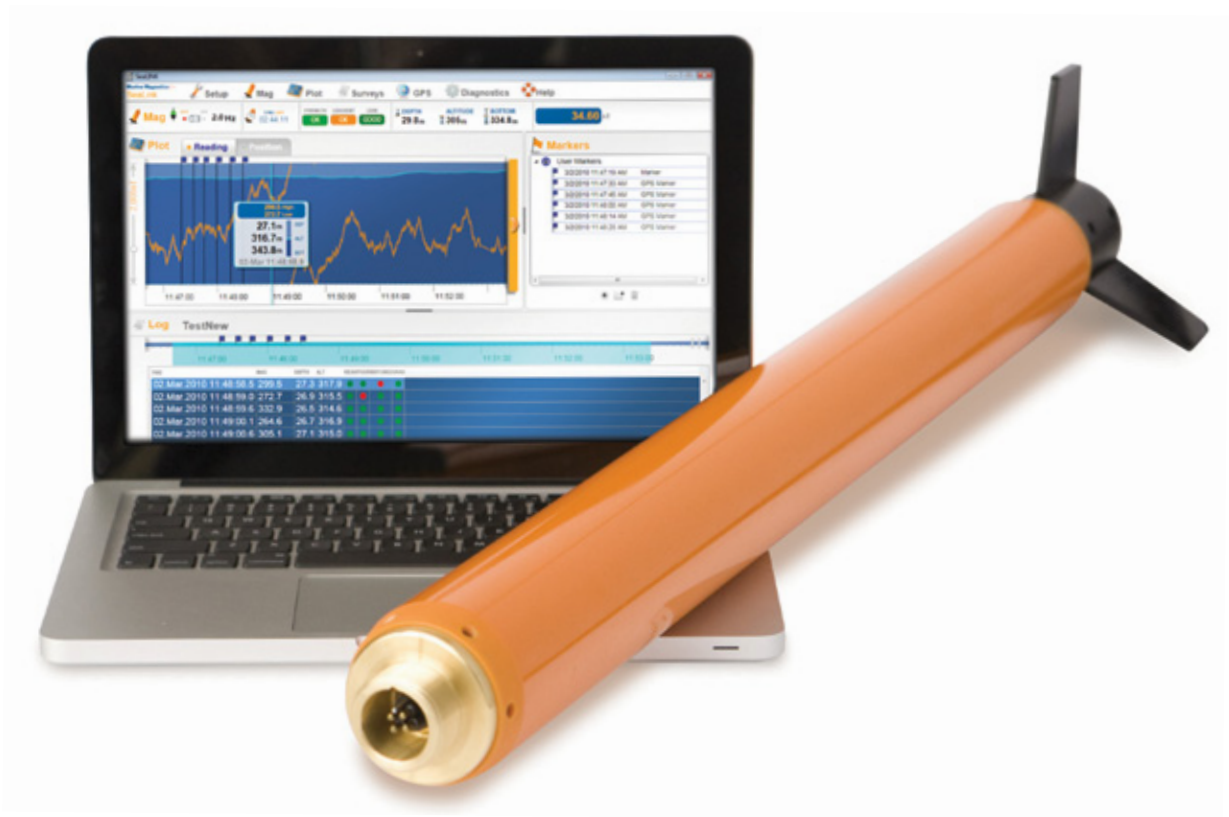


Explorer

Mini Marine Magnetometer



8.5 lbs, soaking wet.

Explorer is the world's smallest, lightest, and most efficient high-sensitivity total-field magnetometer. That's a lot of punch for a mag that packs so light.

Less Is More

Explorer is the smallest, lightest total field mag out there. At a mere 3.8kgs (8.5 lbs) for the mag and 6kgs (13 lbs) for a 50m tow cable (164 ft) Explorer fits in all those hard to reach places from your boat, to the survey area, to your budget.

High Sensitivity

Explorer sensors deliver high-resolution output with a noise level of $0.02\text{nT}/\sqrt{\text{Hz}}$; counter sensitivity is 0.001nT . That's on par with optically pumped mags, and orders of magnitude more sensitive than any proton mag.

Crystal Clear



Explorer's accuracy is 0.1nT —the highest absolute accuracy of any magnetometer on the market. No matter where you are or in which direction you are surveying, Explorer gives you consistent, repeatable data you can trust.

Ultra Low Power Consumption

Explorer's power consumption is only 2W. As a result it can be powered by a single car battery for up to 200 hours.

Plug And Play



Explorer's small size, light weight and power consumption make it ideal for towing behind side scans and deep tow platforms. All integrations enable the customer to run each system independently as well as together. Behind these platforms Explorer can be towed up to 6000m.

Survey In Any Direction, Anywhere In The World



Explorer's sensor is omnidirectional. You never have to fiddle around with it on the back deck of your boat trying to align it to the earth's magnetic field, like you would with competing sensors. Omnidirectional means that the sensor has no dead zone. A dead zone is an area where the mag can't take any readings.

No Heading Error

Because of Explorer's high-accuracy Overhauser technology, the sensor does not display heading error. No matter how the Explorer sensor is oriented in the Earth's magnetic field, successive survey lines taken in opposite directions always match up perfectly.

Ready To Deploy

There is no sensor warm up time. Just throw it overboard and it starts working instantly on power up, regardless of the water temperature.

Maintenance-Free Flexibility



All Explorer sensors are omnidirectional, maintenance free, and do not require realignment or recalibration. They do not contain any consumable parts, or toxic chemicals. In addition, all Explorer sensors are interchangeable, and with a repeatability of 0.01nT between the sensors, they are ideal for gradiometer configurations.

An Explorer Magnetometer System Consists Of:

- Explorer magnetometer including:
 - Overhauser sensor
 - Electronics module with larmour counter
 - Leak detector
 - Depth options 800m (1200psi), 3000m (5000psi), 6000 (9000psi)
- 50m (164ft) Tow cable
- Power isolator
- RS-232 cable
- 24V universal AC power supply and battery clip cable
- BOB Data acquisition and visualization software
- All enclosed in a custom laminate shipping case

Explorer Is Ideal For:

- Inshore geophysical survey
- Archaeology
- Wreck detection
- Magnetic mapping of harbours
- Ferrous target detection in lakes, rivers and estuaries

Specifications

Performance

Operating Zones	NO RESTRICTIONS Explorer will perform exactly according to spec throughout the entire range.
Absolute Accuracy	0.1nT
Sensor Sensitivity	0.02nT
Counter Sensitivity	0.001nT
Resolution	0.001nT
Dead Zone	NONE
Temperature Drift	NONE
Power Consumption	2 W
Timebase stability	1ppm, -45°C to +60°C
Range	18,000nT to 120,000nT
Gradient Tolerance	Over 10,000nT/m
Sampling Range	4Hz – 0.1Hz
External Trigger Communications	By RS-232
Power Supply	9VDC - 40VDC or 100 - 240VAC
Operating Temperature	-45°C to +60°C
Temperature Sensor	-45°C to +60°C, 0.1 step

Towfish

Towfish Length	86 cm (33.75 inches)
Towfish Diameter	6 cm (2.375 inches)
Towfish Weight in Air	3.8 kgs (8.5 lbs)
Towfish Weight in Water	1.2 kg (2.6 lbs)

Tow Cable

Conductors	Four + shield
Strength Member	Kevlar
Breaking Strength	2,500 kg (5,500 lbs)
Outer Diameter	1 cm (0.4 inches)
Bending Diameter	16.5 cm (6.5 inches)
Weight in Air	122 g/m (0.082 lb/ft)
Weight in Water	24 g/m (0.023 lb/ft)
Cable Termination	Field Replaceable

“Years of survey experience have taught me that both your Explorer and SeaSPY magnetometers are the best on the market today. In the harsh conditions associated with remote sensing surveys your magnetometers have never let me down, not once.

Anytime anyone asks me to recommend a magnetometer the answer is always ‘Marine Magnetics’.

Thanks for making my job that much easier.”

*Michael Krivor
Search Inc.*

Marine Magnetics 

+1 905 479 9727

info@marinemagnetics.com | marinemagnetics.com