



**GeoSpectrum Technologies Inc**  
Customizing Detection

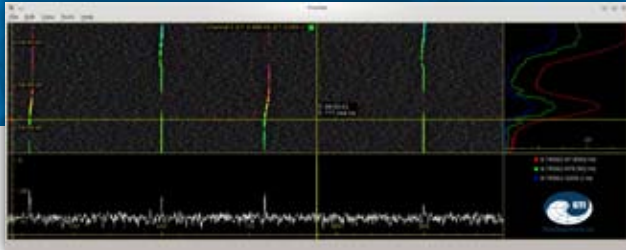
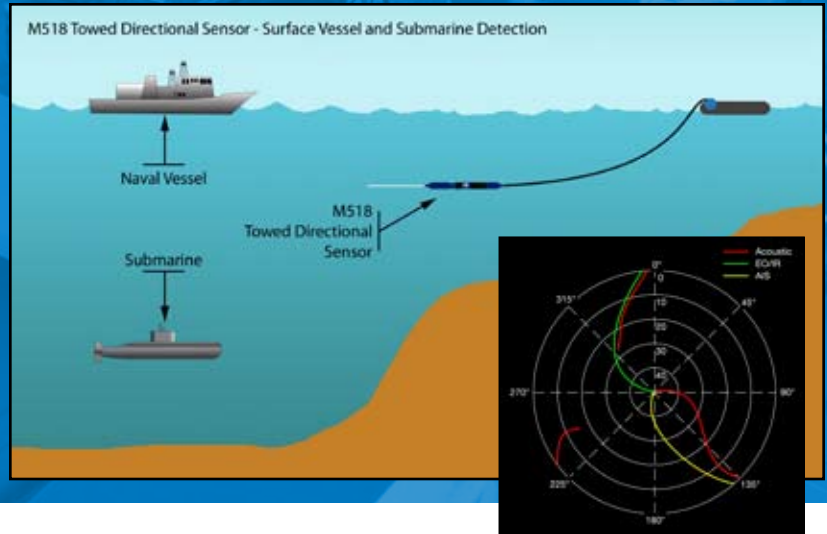
## Towed Directional Sensor (M518)

Surface Ship & Submarine Detection  
Passive Acoustic Monitoring (PAM)  
Fish Tag Tracking  
Black Box Pinger Detection  
Multi-functional Sensor System

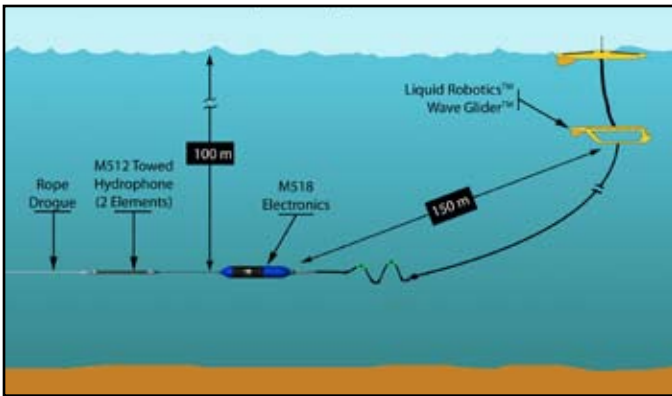


# Towed Directional Sensor (M518)

The GeoSpectrum Technologies M518 is a family of towed directional sensors with advanced capabilities for detecting surface ships, submarines, and marine mammals.



TruView Software Data Display Screen



M518-500 System Shown in Deep Water Deployment Mode

The M518 is a lightweight, low drag payload designed to be towed from low propulsion, autonomous vehicles, such as the Liquid Robotics™ Wave Glider™, and other small USVs or AUVs. The M518-101 product family supports both a direct link to the tow vehicle and self-recording using onboard storage. Automated processing combined with a direct link to the tow vehicle provides the capability to do remote detection alerts.

The M518-500 consists of the M518 towed electronics with a GTI M512, 2-element towed sensor, which provides a higher frequency bandwidth suitable for PAM applications.

M518 deployment depth can be set shallow or deep to optimize detection performance in the environment for the target of interest, including surface vessels, submarines, and marine mammals.

Specifications (M518-100 Only)	
Length	147 cm (58 in)
Mass	14 kg (31 lbs)
Buoyancy	Neutral



## General Specifications:

### Low Frequency Directional Sensor

- 5 Hz to 3,000 Hz (standard, other options available)
- 3 Acoustic Channels (X&Y Dipoles, Omni)

### Non-Acoustic Module

- Processing Electronics, Power Supply & Analog-to-Digital Converter
- Real-Time Remote Detection Alerts and/or Self-Logging
- Roll, Pitch, Yaw (Heading) Sensor
- Depth Sensor

### High Density Foam Nose Section

- Tow Cable Mechanical Termination

### Automated Processing

- Detects surface ships, submarines, and/or marine mammals
- Narrowband, broadband, and/or transient detection
- Fusion with other target data to aid in classification and discrimination

**The M518 system supports serial and ethernet communication protocols to permit integration with a variety of vehicles**



## Represented by:

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