



THE POWER OF PARTNERSHIP

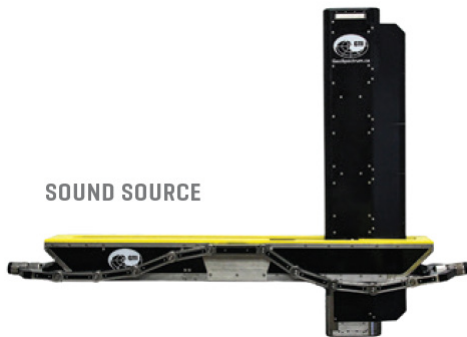
TRAPS TOWED REELABLE ACTIVE PASSIVE SONAR



GeoSpectrum Technologies Inc
Customizing Detection

TRAPS provides surface ships such as OPVs, corvettes, ships of opportunity, and USVs with concurrent, high-performance active and passive sonar capability for detection, classification, tracking and localization of underwater targets. Its compact form enables integration in a wide variety of new or upgraded naval vessels of all sizes and provides a variety of installation options, including containerization on multi-mission vessels and standard deck-mounting.

Cost-effectiveness makes TRAPS a wise, affordable choice for navies seeking high-performance anti-submarine warfare (ASW) capability for open-sea and littoral environments. **All-in-One Design TRAPS** incorporates a single tow with a Vertical Projector Array (VPA); no handling system required to deploy, retrieve, and stow. This reduces footprint, weight, and price. **Multi-Mission Capability TRAPS** is ideal for littoral operations and very useful in deep water as part of a multistatic system.



CONCEPT OF OPERATIONS

Modularity and no requirement for an overboarding system make TRAPS readily deployed for ASW operations on a large variety of host vessels. TRAPS can be operated locally from the built-in operations room or from the CIC and can be interfaced to the ship's CMS. It can be augmented by and fully interoperable with a Hull Mounted Sonar (HMS) such as GeoSpectrum's M670 HMS, enabling bi-static and multi-static operations. TRAPS can be part of an integrated ASW suite including multiple sonars, torpedo defense systems, underwater communication and bathythermograph systems.

RICARDO FLORES
BUSINESS DEVELOPMENT DIRECTOR
AMERICAS & SOUTH ASIA
ricardo@iptsb.com

TAY KAY LAI
BUSINESS DEVELOPMENT DIRECTOR
ASIA/PAC
tay@iptsb.com

MONICA SEMPERLOTTI
BUSINESS DEVELOPMENT DIRECTOR
EMEA
monica@iptsb.com

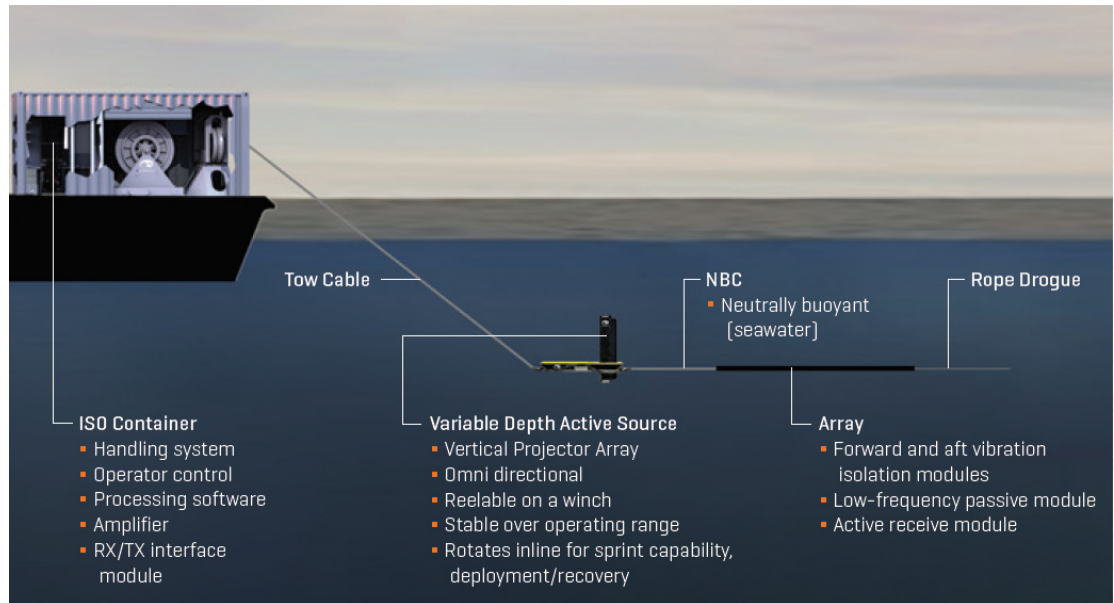
INTEGRATED PROCUREMENT TECHNOLOGIES
7230 HOLLISTER AVENUE
GOLETA, CA 93117 USA
P. 805 682 0842 F. 805 682 9434



TRAPS TOWED REELABLE ACTIVE PASSIVE SONAR

SUMMARY

Robust design, proven operational and class-leading components, and advanced, flexible and user-friendly sonar processing and display distinguish TRAPS as a highly cost-effective choice for high performance variable-depth sonar.



FEATURES

- Active and passive submarine detection
- Active and passive torpedo detection and alert
- Variable-depth operation
- Multi-target tracking
- Left-right ambiguity resolution
- Advanced user-friendly sonar processing and display with built-in analysis tool
- Ability to swap source to different frequency
- Flexible, compact deployment on Frigates, Corvettes, OPV, patrol boats and USVs
- Standalone or interfaced to CMS; integration into underwater suite
- Organic or containerized configuration
- Reelable vertical source; no dedicated launch and recovery system needed

SPECIFICATIONS

- Active sonar frequency: 2 - 10 kHz
- Source level: 216 dB re 1 μ Pa at 1 m
- 360-degree operation
- Pulse types: CW, FM, LFM, HFM, COSTAS, Custom
- Pulse length: 0.05 to 10 seconds
- Passive sonar frequency: 5 - 3000 Hz
- Passive processing: broad band, narrow band, DEMON, transient
- Min operating depth: 10 m
- Max operating depth: 300 m
- Max operational speed: 17 kts
- Max survival speed: 30 kts
- Shock: MIL-STD-901D
- Vibration: MIL-STD-167-1

OPTIONS

- Built-in simulator
- Provision for underwater communications
- Bi and multi-static processing
- Sonobuoy processing capability
- Black box pinger detection
- Continuous Active Sonar (CAS)

RICARDO FLORES
BUSINESS DEVELOPMENT DIRECTOR
AMERICAS & SOUTH ASIA
ricardo@iptsb.com

TAY KAY LAI
BUSINESS DEVELOPMENT DIRECTOR
ASIA/PAC
tay@iptsb.com

MONICA SEMPERLOTTI
BUSINESS DEVELOPMENT DIRECTOR
EMEA
monica@iptsb.com

INTEGRATED PROCUREMENT TECHNOLOGIES
7230 HOLLISTER AVENUE
GOLETA, CA 93117 USA
P. 805 682 0842 F. 805 682 9434