ELAC SPHERE INSIDE

VANGUARD

ENHANCED NAVIGATION AND DETECTION SONAR

ELAC Sphere Vanguard Enhanced is the next generation mine and obstacle avoidance for surface ships. The proven naval sonar system ELAC Sphere Vanguard has been expanded by significantly increased performance and additional features heavily requested by our customers.

ELAC Sphere Vanguard Enhanced is a forward looking 3D active sonar designed for mine and obstacle avoidance and forward looking bottom mapping. The system is designed to detect mines and other objects in the water column but also serves as a navigation aid in shallow and dangerous waters.

The forward looking bottom mapping mode enables the sonar to perform a tactical bottom survey giving the operator an indication of the terrain in front of the ship. The seafloor will be scanned and presented in form of a color coded map as well as a 3D graph for further navigational aids.

The system provides a high level of automatization. Signal processing parameters like normalization are automatically adjusted. Targets are detected and tracked automatically although the operator is able to set up target trackers manually. In addition the system features data recording and playback functionalities, an audio channel to support classification of echoes and various built-in test tools.

The system is based on an open architecture using an OpenDDS middleware. Additional features or customer specific requirements can easily be implemented by ELAC SONAR, the customer or a third party.

The system can be operated from a single dedicated console or from multiple Multi-Function Consoles already on board. COTS components for display and control can be provided on request.

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Key features of ELAC Sphere Vanguard

- ✓ **3D mine and obstacle avoidance**
- ✓ **Forward looking bottom mapping**
- ✓ **Automatic target detection and tracking**
- ✓ **Automatic alarm**
- ✓ **Open architecture based on OpenDDS middleware**
- ✓ **Optional hoisting gear available**
- ✓ **Compact design for minimum space requirement**
- ✓ **Ruggedized components meet military standards**
- ✓ **Stand-alone or fully integrated solution**
- ✓ **For new designs and refits**

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