

SOLARSUB provides wide area surveillance including surface and submarine stern, long range detection, multiple track capability and improved preclassification aids.

SOLARSUB COTS modularity, small footprint components and low power consumption allow simple installation onboard the submarine by using the Clip-on or the Winch possibility according to platform capabilities.

SOLARSUB system is built-up of the following units:

- Towed Array Sonar compose of Tow Cable and Acoustic Module.
- Signal Conditioning Unit.
- Operator Console.
- TAHS Winch with Drum, Spooling, Cutters, Flushing and Deployer.
- Junction Box in case of Clip-on.



Clip-on Installation

TECHNICAL CHARACTERISTICS

Broad Band Detection Simultaneous sub-bands with 360° coverage.

Narrow Band Detection LOFAR in four simultaneous sub-bands.

Threat Analysis ZOOMS and MULTIVERNIERS running

simultaneously in all the beams.

Analysis Beams DEMON associated to any detected contact.

Target Tracking Automatic tracking in Narrow and Broad band.

Digital Mission Data Recording Using data cartridge media.

Integration Time and Anti jamming For Narrow and Broad band.

Audio Output channels for audio

monitoring, recording,

classification and tracking.

Transient Detection In all the full beams.

Interceptions and analysis Of possible active detections.

Broad Band Detection Using cross correlation processing.

The Care

Winch

Installation

Additional Capabilities

Analog Data Recording Interactive Classification Aids On Board Training Stimulator

SOLARSUB have been successfully tested against shock & vibration, EMC and environmental tests.

SOLARSUB has been installed onboard Spanish S70 and S80 class submarine. Extensive sea trials were performed in order to validate the system and to check the full performances.



