

PASOR PORTABLE ACOUSTIC RANGE (PAR)

A complete co-operative acoustic measurement range solution

NEAR REAL-TIME RESULTS

PASOR PAR provides calibrated submarine and surface ship source level signature measurements by processing the output from multiple GPS-enabled noise measurement sonobuoys.

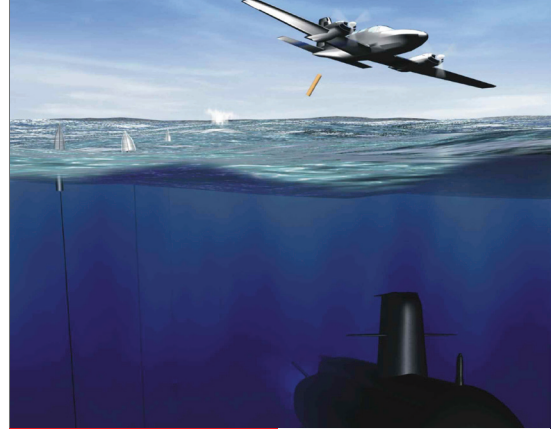
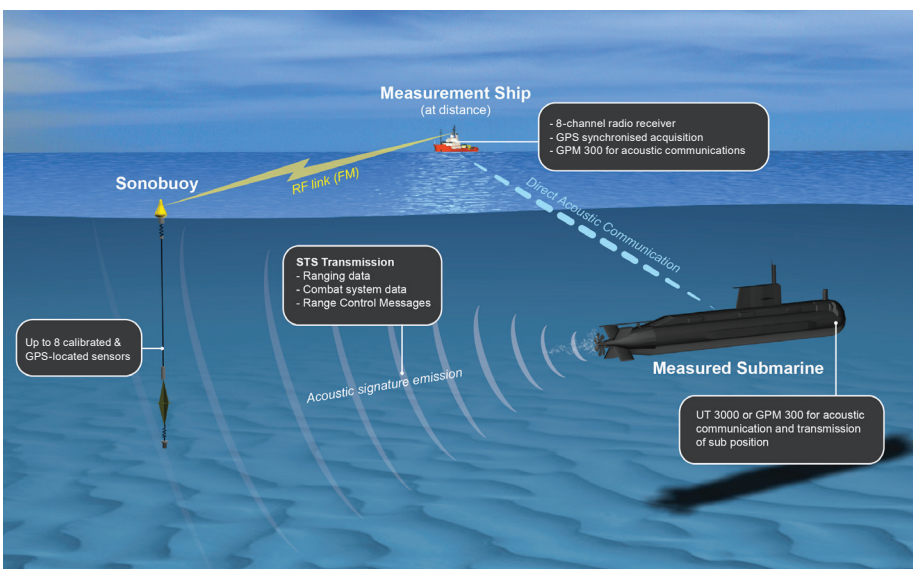
It captures and records raw acoustic data that is processed in near real-time to provide a high-resolution source level (narrow and broadband) signature of the tracked target.

PASOR PAR provides range management through bi-directional acoustic voice and data communications with submarine or surface units.

It enables real-time range measurement of underwater or surface units (submarine tracking system, UT3000 or GPS telemetry units).

PASOR PAR is highly portable and quickly deployed to provide a measurement range or to conduct self noise assessments with near real-time analysis for immediate distribution of results.

A sonobuoy-based system is allow for sensors to be deployed over-the-side of the range control vessel prior to the commencement of the activity, and remain active for 8 hours. The acoustic sensors are suspended at 30-300 m depth (typically 30-100 m depth).



**ACTIONABLE
INTELLIGENCE**

KEY FEATURES

- > **Portable and rapidly deployable co-operative acoustic measurement range**
- > **Source-level signature measurement of submarines and surface ships**
- > **High resolution, secure signature data recording and analysis**
- > **Range operational awareness and management of assets through realtime situational awareness displays**
- > **Bidirection communications with range assets (RF and underwater acoustic communications)**
- > **Uses disposable sonobuoys as well as both recoverable or station-keeping RF buoys**

SYSTEM INFORMATION

Key Components	
Take System, which includes:	<ul style="list-style-type: none"> - Software defined radio - GPS time reference unit - Signal processing hardware - Display/analysis laptop(s) - Acoustic data display software - Integrated range management software - GPS enabled sonobuoys (recoverable buoy option) - RF communications - Reverse telemetry buoys - External data disk
Target System, which includes:	<ul style="list-style-type: none"> - Submarine tracking system (subsurface vessel) - GPS rover (surface vessel)
System Performance	
PASOR Performance	<ul style="list-style-type: none"> - Maximum error of 2 dB RMS measured at 1m from the target - Measures ambient conditions down to cato sea state zero - Measures target signature in the band - 5 Hz to 40 kHz (restricted only by sonobuoy)
System Capability	
PASOR Performance	<ul style="list-style-type: none"> - Receive and display signals from up to 14 sonobuoys simultaneously - Maximum recording time limited only by available disk space - Communicates with submerged target platform via reverse telemetry buoys

OPTIONS

- > Deployable station-keeping systems provide persistent and recoverable sensors. This option addresses many of the limitations of sonobuoys, while maintaining the wideband acoustic monitoring capability. Enhancements include practically unlimited endurance, the ability to hold station or relocate the range, over-the-horizon data relay and a bidirectional communications gateway capability.
- > Shore-based operation – by including an RF-SATCOM gateway, this option eliminates the need for the Take vessel to be onsite/offshore during ranging operations, reducing cost of operations and improving safety of operational personnel.

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L3Harris reserves the right to amend specifications in the light of continuing development.

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