



## Overview

The *Sonar Tester At Site (SONTAS™)* is an easily transportable sonar tester used for testing a ship's sonar suite in the frequency range 3 kHz – 50 kHz, while the ship is dockside. Scanmatic also delivers High and Low Frequency versions of SONTAS (SONTAS HF and SONTAS LF).

The system consists of three parts:

1. SONTAS Pelicase, containing electronics to simulate underwater sonar target.
2. Hydrophones and Transducers
3. PC-based SONTAS Control Unit.

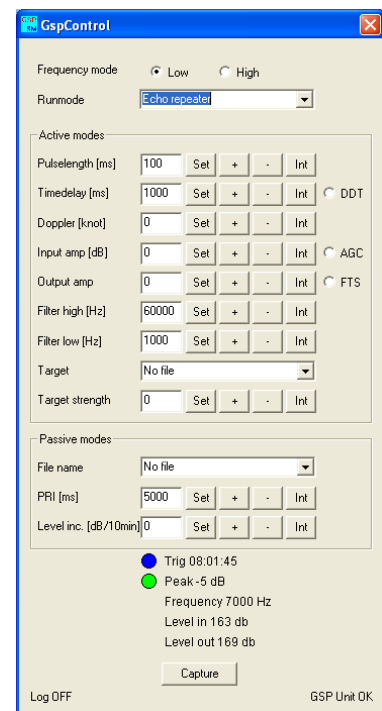
The SONTAS is commanded and report to the SONTAS Control Unit over ethernet cable. All the parameters in the General Sonar Processor, GSP, are controlled from a Windows-based application program.

## Applications

- Testing of active and passive sonars
- Calibration of sonars (distance, speed and size of target)
- Sonar operator training

## Features:

- Complete portable underwater test system
- Powerful and flexible
- Cost effective
- Proven system with long track record



SONTAS control software

## Operation

The SONTAS operates in different modes.

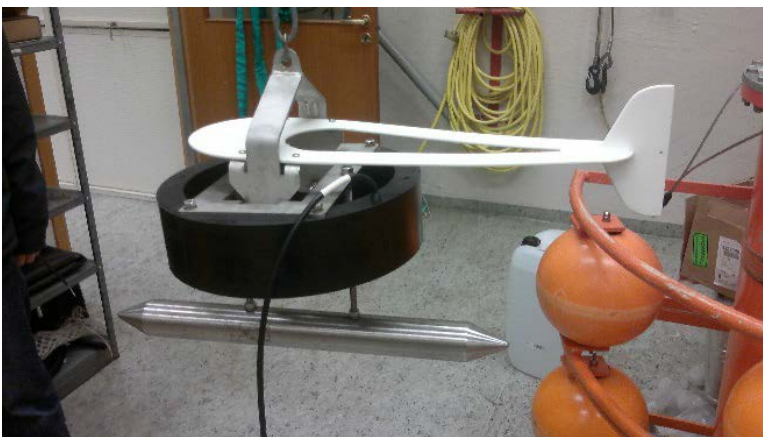
In **"Echo repeat mode"** the SONTAS will receive a sonar pulse, store the pulse in local memory and retransmit the same pulse after an operator-selected timedelay with desired doppler shift, target strength and target highlights, simulating a moving target.

The transmitted signal can be sent nearly simultaneously while receiving. The programmable delay is accurate to within 1 m for calibration of sonar range scale ( 0.3 m for SONTAS HF).

In **"Passive mode"** the SONTAS will transmit signals either continuously or at predefined intervals. The signals can be ship or torpedo noise for continuously transmission or stored or predefined sonar signals in interval transmission.

## Specifications

SONTAS	
Frequency range	SONTAS: 3 kHz – 50 kHz  Other versions of SONTAS: SONTAS HF: 60 kHz – 550 kHz SONTAS LF: 300 Hz – 5 kHz
Signal	Pulse length: 5 ms – 15 s (SONTAS HF: 0.01 ms – 300 ms)  Pulse delay: 50 ms – 16 s (SONTAS HF: 10 ms – 3 s)  Doppler: 0 - ± 60 knots, accuracy < 1 knot (SONTAS HF does not support doppler shift)  Signal shape: Any Passive signal: Any wave file
Signal levels	Dynamic range: From max receive level + 200 dB to min trig level 120 dB//1μPa  Peak output: 180dB // 1μPa (SONTAS HF: Max 170 dB//1μPa)
Target highlights	-20dB - +6dB, step 1 dB, 10 ms resolution 10 different settings
Transducer depth	5 – 30 m (other options available on request)
Battery capacity	5 hours
Powered mode	95 – 264 VAC or internal battery



Low Frequency transducer for SONTAS LF



High frequency transducer set for SONTAS HF