applied acoustics
underwater technology

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S-Boom System

Key features

- Deep penetration seismic surveys with ultra high resolution data quality, better than 0.25m
- Three AA252 boomer plates provide a single, focused beam pattern
- Deployed with fast-charging CSP-Nv for optimum results
- Maximum energy output of 1000J per pulse, firing at 3 pulses per second
- Can be used with single and multi-channel streamer hydrophone arrays
- Perfect UHR package for research, mapping and construction geological surveys.

Applications

- High and Ultra-High Resolution coastal geophysical surveys
- Single and multi-channel acquisition
- Suitable for freshwater or low salinity surveys
- Water depths of 10 to 1000m

S-Boom System Overview

The S-Boom system has been designed to provide a high power, high resolution, repeatable sound source, that can be operated at fast repetition rates.

The three plate (AA252) source array geometry, focuses sound energy into a directed beam pattern; resulting in a substantial improvement over traditional boomer sources.

The S-boom is capable of shot energy up to 1000J and provides a excellent coastal/deep-water alternative for surveys where sparkers are unsuitable or undesirable.

Technical Specification

PHYSICAL

Catamaran

Dimensions	1806mm (L) x 554mm (H) x 650mm (W) frame/1467mm (W) including floats
Weight	120.4kg (Catamaran + 3 AA252s in air)

Boomer Plates

Boomer plates (x3)	AA252
Dimensions	380mm (L) x 380mm (H)
Weight	20.7kg (air), 10kg (water)
Connector type	RMK 1/0 complete with locking collar

ELECTRICAL INPUT

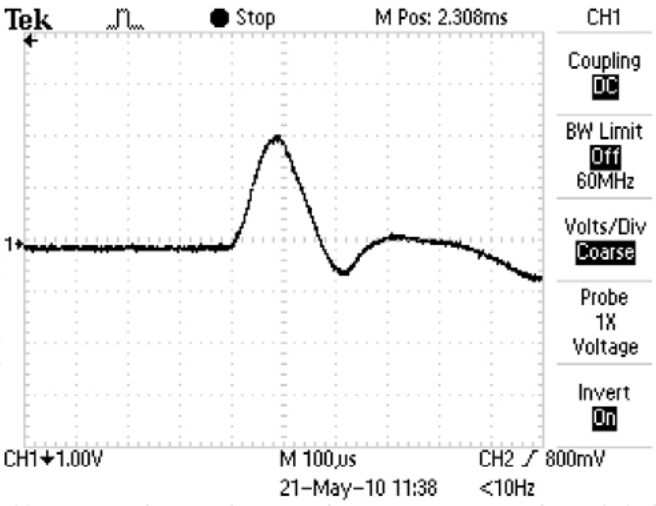
Typical operating energy	700 – 1000J (maximum) per shot
Average energy	3000J/second
Operating Voltage	3600 to 4000Vdc
Power Supply	CSP-Nv1250, CSP-Nv2400, CSP-SNv1250
HV Supply Cable	HVC3000

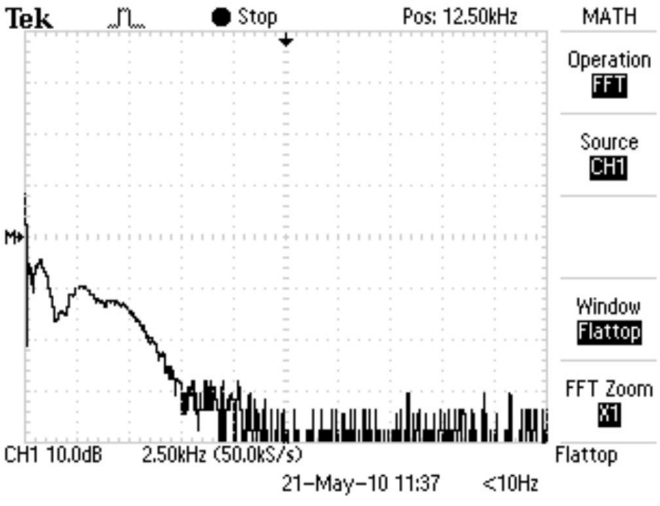
Thermal interlock protection interfaced to energy source

SOUND OUTPUT

Source level	Typically 222dB re 1µPa at 1 metre with 1000J
Pulse length	300 to 500µs depending on energy applied
Reverberation	<10% of initial pulse

TYPICAL PULSE SIGNATURE AT 1000J





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Due to continual product improvement specification information may be subject to change without notice.
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