



: Technical Specification

CSP-S Seismic Energy Source

The CSP-S is a compact 'all in one' 6000 Joule power source for marine sparker applications, specifically the Applied Acoustics' Delta Sparker. Using a modular approach and proven components, taken from existing designs, the unit can be supplied as 2000J or 4000J variants with consequent reduced cost and weight, and allows for subsequent upgrades.

The high charge rate allows for fast, high energy sound pulses from sparker sound sources.



CSP-S

Key Features

- : Replaces the CSP-6000 model.
- : New, high voltage, high current semiconductor switch used.
- : Reliability and security with global after sales service and support from the world's leading seismic power source manufacturer.
- : Meets current EC emissions regulations enabling interference-free field and laboratory use.
- : All settings externally selectable including voltage and capacitance.
- : No requirement for separate additional capacitor banks.
- : Ideal choice for portable 500 – 6000J Sparker applications where very high penetration is required.
- : 300J setting available for boomer applications.

PHYSICAL SPECIFICATION

Dimensions	Supplied in heavy duty shock-mounted Hardigg transit case of 71 cm (11U) high x 69 cm wide x 90 cm deep (including covers)
Weight	135 kg including transit case. 165 kg packed in wooden shipping container.

ELECTRICAL SPECIFICATION

Mains Input	200 - 240 VAC single phase. 45-65Hz @ 5.0kVA. Single phase 3 pin connector.
Voltage Output	2.5 –3.9kV, 4 pin interlocked connector.
Output Energy	Easy switch selectable in increments between 200 and 6000 J.
Charging Rate	2500J/second for continuous operation at 0 - 40°C ambient. 3000J/sec peak charge rate.
Capacitance	832µf, 10 ⁸ shot life. No electrical ringing which affects the sound pulse.
Trigger	+ve key opto isolated or closure set by front panel switch. BNC connector on front panel and remote
Repetition Rate	4 pps maximum. Examples are: 2 pps at 1200 Joules, or 1 pulse per 2 seconds at 5000 Joules
Earth	M8 stainless steel stud on front panel
Internal Design	A modular approach allows for easy servicing and capacitor replacement (However, for safety reasons, only factory trained technicians should attempt a repair).

SAFETY FEATURES

Main electronic control circuits and secondary layer of safety circuitry.
Specially designed HV connector.
High speed dump resistors for internal high voltage discharge when unit switched off or under fault condition.
Capacitor bleed resistors.
Open circuit shutdown.
Over-current shut-down.
Cover and connector interlocks.
Fault indicators for over temperature, low input voltage, capacitor fault and load fault.
Required 30 second safety time-out.
Remote control available for triggering and operation.

COMPATIBILITY SOUND SOURCES

Squid 500 Sparker 500 – 700J
Squid 2000 Sparker 500 – 3000J
Delta Sparker 1000 – 6000J
AA300 boomer plate at 200 & 300J only



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