



: Technical Specification

CSP-S Seismic Energy Source

The CSP-S is a compact 'all in one' 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 12000J, 6000J 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-S6000



CSP-S12000

Key Features

- : New Energy Level for increased penetration and source level.
- : 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 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 – 12000 Joule Sparker applications where very high penetration is required.
- : 300J setting available for boomer applications (CSP-S4000 & 6000 only)
- : Supplied with robust transit case, H.V.junction box, mains lead and H.V.connector plug.

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PHYSICAL SPECIFICATION

CSP-S4000/6000

Dimensions Transit case with wheels (12U) with covers in place and handles flat: H 68cms x W58cms x D 92cms
 Weight CSP-S, case and cover: 117kgs

CSP-S12000

Dimensions Transit case (21U) with covers in place and lifting eyes / handles flat: H94cms x 69cms x D 96cms
 Weight CSP-S, case and cover: 183kgs

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 of between 350 and 12000J CSP-S4000 350; 500; 750; 1250; 1500; 2000; 2500; 3000; 3500; 4000J CSP-S6000(max) 350; 1400; 1700; 2100; 2400; 3500; 3900; 5600; 6000J CSP-S12000 750; 1500; 2250; 3000; 4500; 6000; 7500; 9000; 10500; 12000J |
| Charging Rate | 2500J/second for continuous operation at 0 - 40°C ambient. 3000J/sec peak charge rate |
| Capacitance | 832µF / 1536µF, 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 | 4Hz maximum. Examples are: 0.5 seconds (2Hz) @ 1200J, 3 seconds (0.3Hz) at 6000J or 5 seconds (0.2Hz) 12000J. |
| 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
- Overcurrent 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 – 700 Joules
- Squid 2000 Sparker, 500 – 2000 Joules
- Delta Sparker, 1000 – 12000 Joules
- AA301 Boomer Plate at 300 Joules (4000J and 6000J models only)



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