

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. The unit can be supplied as a 1250J, 4000J, 6000J or 12,000J variant that allows for subsequent upgrade.

The high charge rate allows for fast, high energy sound pulses from sparker and in addition, lower power settings are available for single boomer and S-boom applications.

Key Features

- High energy level for increased penetration
- High current and voltage solid state (semi-conductor) discharge method
- Meets EC emissions regulations enabling interference-free field use
- All settings externally selectable
- No requirement for extra separate capacitor bank
- 300J setting for boomer applications (except CSP-S12000)
- Variable Input Power Circuitry for 'soft start'
- Additional safety/protection features
- CSP-S1250 designed for high performance boomer application or part of S-Boom System
- Supplied in robust transit case, with HV junction box (HVJ3000), mains lead and HV connector plug

Technical Specification

PHYSICAL

CSP-S1250/S4000/S6000

Size Transit Case with wheels (12U) with cover in place and handles flat:
68cm(H) x 58cm(W) x 92cm(D)

Weight Case and cover: S1250, 92kg S4000, 106kg S6000, 114kg

CSP-S12000

Size Transit case (21U) with covers in place and lifting eyes/handles flat:
116cms(H) x 69cms(W) x 96cms(D)

Weight Case and cover: 183kg

CSP-S Technical Specification continued...

ELECTRICAL SPECIFICATION

| | | |
|-----------------|---|---|
| Mains Input | 240Vac 45-65Hz@5.0kVA single phase | 3 pin connector |
| | Variable input power circuitry (AVIP) 'soft start' circuitry | |
| Voltage Output | 2500 to 3950Vdc, 4 pin interlocked connector. Solid state semi-conductor discharge method | |
| Output Energy | Externally selectable in Joules (20 increments) | |
| | CSP-S1250: 100-1250J | CSP-S4000: 300-4000J |
| | CSP-S6000: 300-6000J | CSP-S12000: 600-12000J |
| Charging Rate | 2500J/second for continuous operation at 0-45°C | |
| Capacitance | CSP-S1250: 176µF, 10 ⁸ shot life | CSP-S4000: 512µF, 10 ⁸ shot life |
| | CSP-S6000: 800µF, 10 ⁸ shot life | CSP-S12000: 1536µF, 10 ⁸ shot life |
| Trigger | +ve key opto isolated or isolated closure set by front panel switch, BNC connector on front panel and remote box (optional) | |
| Repetition rate | 6pps max Limited by charge rate, energy level and sound source rating | |
| Earth | M8 stainless steel stud on front panel | |

SAFETY FEATURES

- Main electronic control circuits and secondary layer of safety circuitry
- Specially designed HV connector with interlock
- High speed dump resistors for high voltage components
- Capacitor bleed resistors
- Open circuit shutdown
- Timer shutdown
- Output current monitor and shutdown
- Over temperature shut-down
- Cover and connector interlocks
- HV fault indicator for internal temperature, low input voltage or capacitor fault
- Remote control available for triggering and operation

The unit's internal design has a modular construction for ease of servicing and capacitor replacement. However, for safety reasons, only Applied Acoustics trained engineers should attempt a repair.

COMPATIBLE SOUND SOURCES

| | |
|---------------------|---|
| CSP-S1250 | AA201, AA251, AA301, Squid 501, Squid 2000, S-Boom |
| CSP-S4000/CSP-S6000 | AA201, AA251, AA301, Squid 501, Squid 2000, S-Boom, Delta Sparker |
| CSP-S12000 | Squid 501, Squid 2000, Delta Sparker |



Due to continual product improvement, specification information may be subject to change without notice.
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Applied Acoustic Engineering Ltd

T +44(0)1493 440355
F +44(0)1493 440720
E general@appliedacoustics.com
W www.appliedacoustics.com