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**

<table>
<thead>
<tr>
<th>Size</th>
<th>Transit Case with wheels (12U) with cover in place and handles flat: 68cm(H) x 58cm(W) x 92cm(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Case and cover: S1250, 92kg  S4000, 106kg  S6000, 114kg</td>
</tr>
</tbody>
</table>

**CSP-S12000**

<table>
<thead>
<tr>
<th>Size</th>
<th>Transit case (21U) with covers in place and lifting eyes/handles flat: 116cms(H) x 69cms(W) x 96cms(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Case and cover: 183kg</td>
</tr>
</tbody>
</table>

**CSP-S  Seismic Energy Source**

**APPLIED ACOUSTICS**

Underwater Technology

Applied Acoustic Engineering Ltd

Marine House, Marine Park, Gapton Hall Road

Great Yarmouth, NR31 0NB

United Kingdom
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, 10⁸ shot life
CSP-S6000:  800μF, 10⁸ shot life
CSP-S4000:  512μF, 10⁸ shot life
CSP-S12000:  1536μF, 10⁸ 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