**CSP-Nv Seismic Energy Source**

The CSP-Nv is built on the proven high voltage technology of the industry leading CSP range of power supplies. Incorporating microprocessor control and configuration for greater configuration flexibility and reliability whilst retaining a fail-safe logic design.

The CSP-Nv seismic energy source is the driving force behind Applied Acoustics’ Dura-Spark range of sound sources that have extremely hard wearing electrode sparker tips.

The CSP-Nv adds to the standard safety systems and operational functions found across the entire range of CSP energy sources, the CSP-Nv is also suitable for use with the Applied Acoustics’ S-Boom and single plate boomer systems.

**Key Features**

- Microprocessor configuration and control.
- Intuitive user interface, with LCD display and LED indicators.
- Enhanced operator system feedback
- User programmable ‘soft start’
- Master / Slave Key Support
- Additional safety/protection features
- Programmable voltage technology allows operator tuning to suit application
- All settings externally selectable
- High current and voltage solid state (semi-conductor) discharge method
- Debug log and diagnostics.
- Meets EC emissions regulations enabling interference-free field use
- Supplied in robust transit case, with HV junction box (HVJ3004) and mains lead.

**Technical Specification**

**PHYSICAL**

<table>
<thead>
<tr>
<th>Size</th>
<th>Transit Case (7U) with cover in place and handles flat: 50cm(H) x 58cm(W) x 74cm(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>CSP-Nv1200, case and cover: 61.5kg</td>
</tr>
<tr>
<td></td>
<td>CSP-Nv2400, case and cover: 63.5kg</td>
</tr>
</tbody>
</table>

**ELECTRICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Mains Input</th>
<th>240Vac 45-65Hz@ 5.0kVA single phase, 3 pin connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Input Power Circuitry (AVIP) ‘soft start’ circuitry</td>
<td></td>
</tr>
</tbody>
</table>
CSP-Nv Technical Specification

Voltage Output 2500 to 3950Vdc, 4 pin interlocked connector
Solid state semi-conductor discharge method

Output Energy Easy switch selectable in increments
CSP-Nv1200 50,100,150,200,250,300,400,450,500,550,600
700,800,900,1000,1100,1200 Joules
CSP-Nv2400 50,100,150,200,250,300,400,500,600,700,750,800,
900,1000,1250,1500,1750,2000,2250,2400 Joules

Charging Rate 2000J/second for continuous operation at 0-45°C

Capacitance CSP-Nv1200 208μF, 10⁸ shot life
CSP-Nv2400 304μF, 10⁸ shot life

Trigger User configured: External: +ve key (5-12VDC), -ve key or isolated closure
Internal: +ve key (5-12VDC), -ve key
Opto Isolated BNC connector on front panel and remote box (optional)

Repetition rate User configured: External: 6pps maximum
Internal: 166ms to 60seconds
Limited by charge rate, energy level and sound source rating

Earth M8 stainless steel stud on front panel

SAFETY FEATURES

Main microprocessor control circuits with fail-safe layer of logic circuitry
LCD display with system status information, configuration
Specially designed HV connector with interlock
High speed dump resistors for high voltage components
Capacitor bleed resistors
HV output open circuit shutdown
Trigger monitoring with time out and over clock shutdown
HV output current monitor and shutdown
Supply Voltage monitoring and shutdown
High Voltage monitoring
Over temperature shut-down
Cover and connector interlocks
Diagnostic log download for improved support
Intelligent remote control available to configure, trigger and operator remotely

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-Nv1200 Dura-Spark UHD
CSP-Nv2400 AA201, AA251 and AA301 Boomer plates. S-Boom System