

## 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 (HVJ3001), mains lead and HV connector plug

## Technical Specification

### PHYSICAL

Size	Transit Case (7U) with cover in place and handles flat: 50cm(H) x 58cm(W) x 74cm(D)
Weight	CSP-Nv1200, case and cover: 61.5kg
	CSP-Nv2400, case and cover: 63.5kg

### ELECTRICAL SPECIFICATION

Mains Input	240Vac 45-65Hz@ 5.0kVA single phase. 3 pin connector
	Variable Input Power Circuitry (AVIP) 'soft start' circuitry

## CSP-Nv Technical Specification continued...

Voltage Output	2500 to 3950Vdc, 4 pin interlocked connector Solid state semi-conductor discharge method	
Output Energy	Easy switch selectable in increments	
	CSP-Nv1200	50,100,150,200,250,300,350,400,450,500,550,600 700,800,900,1000,1100,1200 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, 10 <sup>8</sup> shot life CSP-Nv2400 304µF, 10 <sup>8</sup> shot life	
Trigger	User configured: External: +ve key (5-25VDC), -ve key or isolated closure Internal: +ve key (5-25VDC), -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 240, 400
CSP-Nv2400	AA201, AA251 and AA301 Boomer plates S-Boom System



**APPLIED ACOUSTICS**  
Underwater Technology

Due to continual product improvement, specification information may be subject to change without notice.  
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