

CSP-NP Seismic Energy Source



Key features

- Boomer and Dura-Spark compatibility
- Incorporates dual-voltage technology for exceptional versatility
- High current and voltage solid state (semi-conductor) discharge method
- Additional safety/protection features
- LED fault indicators
- Meets EC emissions regulations enabling interference-free field use
- Supplied in robust transit case, with HV junction box (HVJ 2000), mains lead and HV connector plug
- 'Automatic Variable Input Power' circuitry (AVIP) for reduced generator demand
- Remote control unit available for triggering and start/ stop

CSP-NP Overview

The CSP-NP is a compact, lightweight seismic power supply, compatible with the applied acoustics Boomer and Dura-Spark L80 and L200 sound sources.

Recently upgraded, the CSP-NP incorporates reverse voltage technology that allows compatibility with the Dura-Spark compact high resolution sound sources.

The CSP-NP is ideal for small vessel coastal geophysical surveys.

Technical Specification

PHYSICAL

Size	Transit Case (4U) with cover in place and handles flat: 29cm(H) x 56cm(W) x 56cm(D)
Weight	CSP-NP, case and cover: 35kg

ELECTRICAL SPECIFICATION

Mains Input	240VAC 50Hz@3.5kVA single phase. 3 pin connector
Voltage Output	2500 to 3950 VDC, 4 pin interlocked connector Solid state semi-conductor discharge method
Output Energy	Easy switch selectable in increments 50,100,150,200,300 and 350 Joules
Charging Rate	2000J/second for continuous operation at 0-45°C ambient
Capacitance	48µF at 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

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 shutdown Cover and connector interlocks HV fault indicator for internal temperature, low input voltage or capacitor fault Remote control available for triggering and operation
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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

- Dura-Spark L80 and L200 sparkers
- AA251 and AA301 boomer plates