



CSP-SNv 1250 Seismic Energy Source



The **CSP-SNv** 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-SNv provides a solution to the industry requirement of acquiring UHR seismic data in challenging environments with a $\leq 1\text{m}$ shot point interval. The 4000 Joule per second peak charge rate delivered from a single phase AC voltage supply allows repetition rates less than 0.4s at 1000 Joule output.

The CSP-SNv has been engineered for use with the Dual Deck 400 + 400 Dura –Spark UHD catamaran, providing Flip Flop and Fire Delay modes of operation.

Key Features

- **Microprocessor configuration and control.**
- **Intuitive user interface, with LCD display and LED indicators.**
- **4000J per second peak charge rate**
- **Fire Delay mode**
- **Flip Flop mode**
- **User programmable ‘soft start’**
- **Master / Slave Key Support**
- **Additional safety/protection features**
- **Programmable voltage technology allows operator tuning to suit application**
- **High current and voltage solid state (semiconductor) 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

Size Transit Case, 19” rack, 11U high
Weight CSP-SNv 1250, case and cover: 90kg

ELECTRICAL SPECIFICATION

Mains Input 240Vac 45-65Hz@ 6.0kVA single phase. 3 pin connector
Variable Input Power Circuitry (AVIP) ‘soft start’ control



CSP-SNv 1250 Technical Specification

Voltage Output	3536 to 3953Vdc, 4 pin interlocked connector Solid state semi-conductor discharge method
Output Energy	Easy switch selectable in increments CSP-SNv 1250 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000 Joules 125, 250, 375, 500, 625, 750, 875, 1000, 1125, 1250 Joules
Charging Rate	4000J/second for continuous operation at 0-45°C
Capacitance	CSP-SNv 1250 176µF @ 10 ⁸ shot life
Trigger	User configured: External: +ve key (5-12Vdc), -ve key or isolated closure (CSP and Remote unit) Internal: Manual: Key press Fire Delay option Flip Flop mode Opto isolated BNC connector on front panel and remote box (optional)
Repetition rate	User configured: External: 6pps maximum Internal: 200ms to 9975ms 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
- Remote unit 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.

OPTIONS

- Remote unit Allows operator to control CSP at a distance. Includes Key In and Key Out.
- Field spares kit For trained technicians only. For servicing units in the field.



Due to continual product improvement, specification information may be subject to change without notice.
CSP-SNv Seismic Energy Source/March 2019
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