



## CSP-SNv1250 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 Dura-Spark UHD 400+400 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-SNv1250, 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-SNv1250 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-SNv1250 176µF @ 10 <sup>8</sup> shot life
Trigger	User configured: External: +ve key (5-12Vdc), -ve key or isolated closure (CSP and Remote unit) Internal: User defined 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 shutdown
- Cover and connector interlocks
- Diagnostic log download for improved support
- Remote unit available to configure, trigger and operate 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-SNv1250 Dura-Spark UHD 240/400, Dura-Spark 400+400, S-Boom triple plate boomer

## 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-SNv1250 Seismic Energy Source/April 2020  
©Applied Acoustic Engineering Ltd.



## Tae Kwang Electronics Corp.

- T 02 479 2703
- F 02 479 2705
- E taekwang@tkec.co.kr
- W www.tkec.co.kr