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CSP-S12000 Seismic Energy Source

Key features

- High energy level for increased penetration
- High current and voltage solid state (semi-conductor) discharge method
- Meets EC emissions regulations enabling interference-free field use
- All settings externally selectable
- No requirement for extra separate capacitor bank
- 'Automatic Variable Input Power Circuitry' (AVIP) for reduced generator demand
- Additional safety/protection features
- Supplied in robust transit case, with HV junction box (HVJ 3000), mains lead and HV connector plug

CSP-S12000 Overview

The CSP-S12000 is a compact 'all-in-one' power source for marine sparker applications, specifically the applied acoustics' Delta Sparker.

The high charge rate allows for fast, high energy sound pulses from the sparker that is used in deep water geohazard surveys.

Technical Specification

PHYSICAL – CSP-S12000	
Size	Transit case (21U) with covers in place and lifting eyes/handles flat: 116 (H) x 69 (W) x 96 (D) cm
Weight	Case and cover: 183 kg

ELECTRICAL SPECIFICATION	
Mains Input	240 V AC 45-65 Hz @ 5.0 kVA single phase 3 pin connector Variable input power circuitry (AVIP) 'soft start' circuitry
Voltage Output	2500 to 3950 V DC, 4 pin interlocked connector. Solid state semi-conductor discharge method
Output Energy	Externally selectable in Joules CSP-S 12000: 600 – 12000 J
Charging Rate	2500 J / second for continuous operation at 0 – 45 °C
Capacitance	CSP-S 12000: 1536μF, 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	6 pps 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

The units 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-S12000: Delta Sparker

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