

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 (HVJ3000), 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: 116cms(H) x 69cms(W) x 96cms(D)
Weight	Case and cover: 183kg

ELECTRICAL SPECIFICATION

Mains Input	240VAC 45–65Hz@5.0kVA single phase 3 pin connector Variable input power circuitry (AVIP) 'soft start' circuitry
Voltage Output	2500 to 3950VDC, 4 pin interlocked connector. Solid state semi-conductor discharge method
Output Energy	Externally selectable in Joules CSP-S12000: 600–12000J
Charging Rate	2500J/second for continuous operation at 0–45°C
Capacitance	CSP-S12000: 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	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
-----------------	---

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-S12000: Delta Sparker