



APPLIED ACOUSTICS

Underwater Technology



: Technical Specification

CSP-D Seismic Energy Source

The CSP-D is a seismic energy source for boomer and sparker applications which has been developed from the proven CSP1500 and CSP2200 versions. Upgraded to 2400 Joules and with a higher rated thyristor 'switch' the CSP-D sets the new industry standard.

The unit, with the same chassis and 1500J/second HV engine, is available in three variants; the CSP-D700, CSP-D1200 and the CSP-D2400. Additional settings allow for longer boomer pulse widths with the potential of more boomer seabed penetration.



CSP-D

Key Features

- : Cutting edge power supply technology evolved from years of field use.
- : Unique dual voltage output provides exceptional versatility.
- : Contains proprietary Variable Input Power Circuitry (AVIP) enabling slow start to minimise marine mammal disturbance and operation from the smallest possible generator.
- : Reliability and security with global after sales service and support from the world's leading seismic power source manufacturer.
- : Contains proprietary pulse shaping circuitry for optimisation of high resolution boomer data.
- : Meets EC emissions regulations enabling interference-free field and laboratory use.
- : Additional safety/protection features including over current shut-down, Safety OFF button and key-switch operation.
- : All settings externally selectable including voltage/output power increments from 50 to 2400J, dependant on model.
- : LED fault indicators display Over-temperature, Low Input Voltage and Capacitor Fault warnings.
- : High current and voltage solid state (semiconductor) discharge method.
- : Supplied with robust transit case, H.V. junction box, mains lead and H.V. connector plug.

PHYSICAL SPECIFICATION

Dimensions Transit case (7U) with cover in place and handles flat: H 50cm x W 58cm x D 74cm
 Weight CSP-D, case and cover: Max 63.5kg (CSP-D2400 model)

ELECTRICAL SPECIFICATION

Mains Input 200 - 240 VAC. 115V Units available to order, 45-65Hz @ 3.0kVA Single Phase, 3 pin connector, Contains AVIP soft start circuitry to minimise marine mammal disturbance and reduce generator requirements

Voltage Output 2500 - 4000 volts DC, 4 pin interlocked connector, Solid state semi-conductor discharge method

Output Energy Three models available. Externally selectable in Joules as follows:-
 CSP-D700 50;100;150;200;250;300;350;400;500;600;700
 CSP-D1200 50;100;150;200;250;300;350;400;450;500;550;600;700;800;900;1000;1100;1200
 CSP-D2400 50;100;150;200;300;400;500;600;700;750;800;900;1000;1250;1500;1750;2000;2250;2400

Charging Rate 1500J/second for continuous operation at 0 - 45°C ambient

Capacitance 240µf, 10⁸ shot life

Trigger +ve key opto isolated or closure set by front panel switch, BNC connector on front panel and remote box (optional)

Repetition Rate 6 pps maximum. To 5 pps at 300 Joules (or 1 pps at 1500J)

Earth M8 stainless steel stud on front panel

Internal Design A Modular approach allows for easy servicing and capacitor replacement (For safety reasons, only factory trained technicians should attempt a repair)

SAFETY 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 & shutdown
 Over temperature shut-down
 Cover and connector interlocks
 Remote control available for triggering and operation

COMPATIBILITY SOUND SOURCES

CSP-D700 AA200 and AA300 Boomer Plates, Squid 500 Sparker
 CSP-D1200 As above plus Squid 2000 Sparker for high resolution operations
 CSP-D2400 As above plus Squid 2000 Sparker and Delta Sparker



Sea and Land Technologies Pte Ltd

65 Tuas Avenue 1, Singapore 639508
 Tel: +(65) 6518 0777 Fax: +(65) 6563 0366
 enquiry@sea-landtech.com.sg
 http://www.sea-landtech.com.sg



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Due to continual product improvement, specification information may be subject to change without notice.