

Dura-Spark UHD Seismic Sound Source



Key features

- Long life, durable electrodes
- Pulse stability
- High resolution sub-bottom data, up to 25cms
- Adjustable tow depth
- Tip array selection from on-board junction box
- Inter array: Flip-Flop capability
- Inter array: Fire-Delay capability
- GNSS receiver option (101G MiniPod)
- 240 tip and 400 tip versions

Applications

- High and Ultra-High Resolution geophysical surveys
- Single and multi-channel acquisition
- Water depths of 5 to >1000m

Dura-Spark UHD Overview

The Dura-Spark UHD has been designed to provide a stable, repeatable sound source for sub-bottom geophysical surveys. The long life, durable electrodes produce a consistent pulse signature and keep operational maintenance to a minimum. This provides increased survey efficiency and equipment reliability as the sparker tips rarely need replacement.

The Dura-Spark UHD consists of either 5 or 3 arrays of 80 tips that allow the operator to tune the source from the vessel to

its application. This flexibility, together with selectable source depth, allows the sound source to be used in both shallow and deep waters.

The typical operational bandwidth of the Dura-Spark UHD is 300Hz to 1.2kHz. When coupled with the CSP-Nv Seismic Power Supply the system offers 2000J/s peak discharge rate, as well as industry leading design and safety standards.

Technical Specification

PHYSICAL

| | |
|-------------------|---|
| Dimensions | Length 1854mm Height 400mm frame, 555mm including floatation Width 650mm frame, 1465mm including floatation |
| Weight | 130kg (max) |
| Connector | RMK 1/0 complete with locking collar |
| Tow depth | Surface tow- adjustable |

ELECTRICAL INPUT

| | |
|---|---|
| Typical operating energy (400 tip) | 2000J, <5J per tip to minimise bubble collapse component, 2400J maximum |
| Typical operating energy (240 tip) | 1000J, <5J per tip to minimise bubble collapse component, 1250J Maximum |
| Operating voltage | 3000-4000V |
| Tip configurations | 400 (5 x 80), 240 (3 x 80) |
| Power Supply | CSP-Nv1200, CSP-Nv2400, CSP-SNv1250 |
| HV Supply Cable | HVC-3502 |
| Junction Box | HVJ-3004 |

SOUND OUTPUT

| | |
|---------------------|---|
| Source level | 226dB re 1µPa at 1m (typical) |
| Pulse length | 0.5 to 1.5ms Dependent on power applied |

TYPICAL PULSE SIGNATURES AT 800J

