

# Dura-Spark UHD 400+400 Seismic Sound Source



## Key features

- Long life, durable electrodes
- Pulse stability
- High resolution sub-bottom data, up to 25cms
- Dual 400 tip arrays, 30cms separation
- Adjustable tow depth
- Single low loss cable
- Tip array selection from on board junction box
- Multi level Flip-Flop capability
- Fire-Delay capability (secondary bubble reduction)
- GNSS receiver option (101G MiniPod)

## Applications

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

## Dura-Spark UHD 400+400 Overview

The Dura-Spark UHD 400+400 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 400 + 400 consists of 2 decks of 400 tips that allow the operator to tune the source from the vessel to its application. Each deck can be fired independently by its seismic power supply, in Flip-Flop mode, combined with fire

delays or a Split-Fire delay. Utilising the Fire-Delay functionality the signatures from the two decks can be combined to bubble form the sound source signature. This flexibility, together with selectable source depth, allows the sound source to be used in both shallow and deep waters for multiple seismic data gathering applications.

The typical operational bandwidth of the Dura-Spark UHD 400+400 is 300Hz to 1.2kHz. When coupled with the CSP-SNV Seismic Power Supply the system offers 4000J/s peak discharge rate, as well as industry leading design and safety standards.

# Technical Specification

## PHYSICAL

<b>Dimensions</b>	Length 1806mm Height 710mm frame Width 650mm frame, 1450mm including floatation
<b>Weight</b>	160kg (typical), excluding cable
<b>Connector</b>	RMK 1/0 complete with locking collar

## ELECTRICAL INPUT (PER 400 TIP DECK)

<b>Typical operating energy (400 tip)</b>	2000J, 5J per tip to minimise bubble collapse component, 2400J maximum
<b>Operating voltage</b>	3000-4000V
<b>Tip configuration</b>	800 (2x 400 (each 400 = 5 x 80))
<b>Power Supply</b>	CSP-Nv1200, CSP-Nv2400, CSP-SNv1250
<b>HV Supply Cable</b>	HVC-3502
<b>Junction Box</b>	HVJ-4188

## SOUND OUTPUT

<b>Source level</b>	226dB re 1µPa at 1m (typical)
<b>Pulse length</b>	0.5 to 1.5ms Dependent on power applied

## TYPICAL PULSE SIGNATURES AT 600J (LOWER DECK)

