

Maintenance free negative discharge sparker specially designed for water depths up to 5000 m.

Description

INNOVATIVE PRESERVING ELECTRODE MODE

The Geo-Source 800 is designed for operation with the Geo-Spark 6kJ or the 2kJ Pulsed Power Supply with extension using the "Preserving Electrode Mode". This patented concept consists of using a NEGATIVE electric discharge pulse, instead of a positive electric discharge pulse.

Note that working with a negative pulse is NOT the same thing as reversing the polarity of an antique power supply, which is generating a positive pulse.

MAINTENANCE FREE ELECTRODES 5 YEAR GUARANTEE

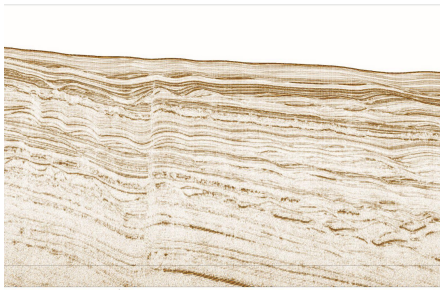
The Preserving Electrode Mode reduces the tip wear to practically zero. You can shoot day after day, week after week, month after month with practically NO tip maintenance.

OPTIMUM ACOUSTIC REPEATABILITY

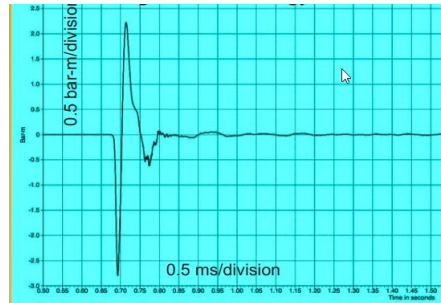
Zero tip wear is essential for the repeatability of the acoustic pulse, which depends largely on a constant, unaltered electrode surface.

Operational Features

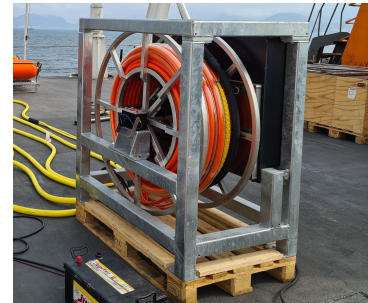
- Specially designed for water depths up to 5000 m.
- Penetration up to 400 ms below seabed depending on geology.
- Vertical resolution of 10 - 30 cm.
- You don't need to trim tips during the survey - electrodes do NOT burn off.
- Successfully employed on site and route surveys, geohazards assessment, mineral exploration, offshore engineering and others.



Geo Spark 800 and 48 ch Multi-channel streamer
- check out for more examples at our [gallery](#).



signal spectrum at 6000 J.



HV Cable electrical winch - for more information,
click [here](#).

Additional Features

HIGH VOLTAGE / POWER CABLES

The Geo-Source 800 is towed a very high quality, Kevlar-reinforced, power / tow cable, with a stainless steel Kellum towing grip. This very sturdy, special HV cable contains 4 x 10 mm² inner leads (negative) plus a 40 mm² outer braiding (ground). It is designed to have a very low self-inductance in order to preserve the high di/dt pulse output of the Geo-Sparker power supply.

The wet side of the cable is terminated with four special HV connectors to the electrode modules and a ground connector to the frame of the sparker.

COAXIAL CABLE = 100 % SAFETY + ZERO ELECTRIC INTERFERENCE

The coaxial structure of the HV power cable provides 100 % safety and reduces all electromagnetic interference to the absolute minimum.

HIGH VOLTAGE CABLE POWER WINCH + ROTATING HIGH VOLTAGE CONTACTS

The power winch with remote control and variable speed allows easy and safe deployment of the sparker source. The two axial HV connectors enables the operation of the winch without disconnecting the deck lead. Using the patch panel you can connect or disconnect the electrode modules without recovering the source to deck.

CONTROL OF THE SPARKER PARAMETERS

The electrode modules are evenly spaced in a planar array of 1.00 m x 2.00 m. This geometry not only enhances the downward projection of the acoustic energy, but also reduces the primary pulse length, since all tips are perfectly in phase electrode. Each tip has an exposed tip surface of 1.4 mm, suitable for maximum 10 J/tip. Four individually powered electrode modules of 200 tips each allow to distribute the energy over 200, 400, 600 or 800 tips.

Specification

Dimensions (cm) & Weight	210 (L) x 140 (W) x 60 (H) for 175 kg
Number of Tips	800
Operation Depth (m)	up to 5000
Dominant Frequencies	450 - 750 Hz
Better if used with	Geo-Sparker 2000 XF , Geo-Sparker 5kJ extension , Mega-Sparker 6-16 kJ , Geo Sense Mini Streamers , Geo Sense Multi-Channel Streamers
Recommended interface system	Mini-Trace II or Multi-Trace Server
Power Requirements	15 kVA generator (for the Power Supply)