

The Mini-Spark 1000

The Mini-Spark 1000 has been created to provide the portable High Voltage PPS solution, which is easy to mobilize at low cost.

Mini-Spark 1000

This new model integrates all unique features of the 2000 XF technology in a compact, lightweight design:

Main System Features

- Geo Marine's Negative Discharge Technology
- Flexible energy output from 100 to 1000 J
- Output can be varied online in steps of 100 J
- 2000 J / sec, fast charging capability
- indestructible Thyristor 10 kA-8000 V
- high repetition rates, for instance
- 4 shots of 500 J/sec ... or 6 shots of 300 J/sec
- standard connection for our HV power cables
- Electric power input: 220-240 VAC 50-60 Hz
- from16 A mains or 5 kVA generator
- lightweight (36 kg)
- compact L x W x H = $62 \, \text{cm} \times 50 \, \text{cm} \times 40 \, \text{cm}$
- can be hand carried

User friendly & Safe

System status messages and operational parameters are displayed on comprehensive **LCD**

All the connections, command buttons, switches and status LED's are intuitive and straightforward

Applications

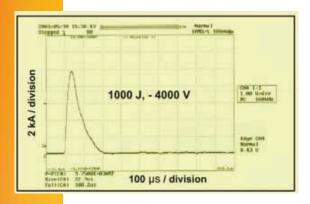
The Mini-Spark 1000 is ideal for small vessel shallow water surveys and is typically used in combination with:

- Geo-Source 200 LW marine sparker
- Geo-Source 200 FW Fresh water sparker
- Geo-Boomer (300-400 J)



Mini-Spark 1000

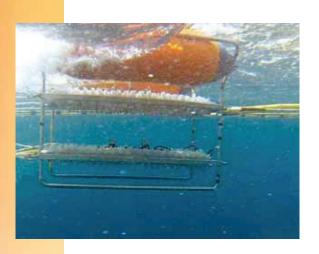
Portable HV Pulsed Power Supply



Typical Discharge Current versus Time



Small vessel operation with Fresh Water Geo-Source 200



Dual Geo-Source 200

Negative HV Discharge

The Mini 1000 is using the Negative Discharge Technology allowing to acquire Ultra-High Resolution Seismic data ...day...after...day... without wearing off the electrodes.

There is no other unit commercially available that allows you to generate a negative HV pulse with such a high dI/dt ratio.

The HV discharge pulse has NO electrical oscillations, which affect the acoustic signature.

The state-of-the-art 10 kA thyristor allows high repetition rates and a perfect zero delay synchronisation with the data acquisition system.

High Quality Single Channel Spread at Low Cost

The Mini-Spark (36 kg) in combination with the Geo-Source 200 lightweigth sparker (35 kg), a 40 m flex & floating HV umbilical (40 kg), a Mini-Trace II UHR acquisition system (10 kg), plus a short GeoSense Mini-streamer (20 kg), are all easy to handle by one person.

This basic, high quality spread is ideal for small vessel operation and can be quickly mobilized at low cost by plane and/or by car.

Mini-Spark 1000Your first step to Dual Source Technology

The innovative design of the Mini-Spark 1000 make it possible to use one, two, threePPS in parallel.

This unique feature opens effectively the way to the advanced dual... or triple source technology, which allows to acquire the ultimate broad spectrum UHR data.

Using two Mini-Spark PPS in parallel, the dual source can be fired in flip-flop mode or in a time controlled sequence to increase penetration.