



Seismic sensors to  
search oil & gas

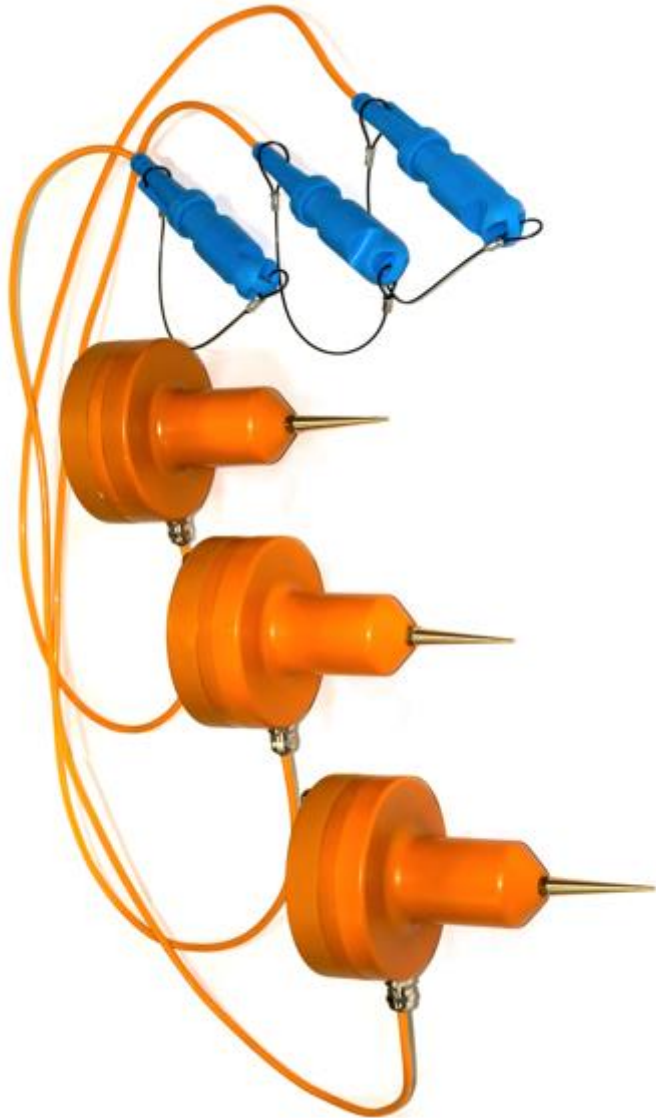
# New Generation of Sensors

Oil and gas are the basic fuel used by the mankind but most reservoirs are getting empty. Mining companies are starting to get oil in hard reachable spots. It requires the use of the cutting-edge technologies. The previous generation of technologies for electro-mechanical and MEMS sensors are inefficient and do not allow to get the satisfying results.

## **The basic problems:**

- Low sensitivity of sensors
- Low identity between sensors
- High level of noise
- Installation tilt
- Narrow bandwidth
- Low standard gain
- Different wave types unavailable to get and analyze

# Solution and Key Benefits



**IGEO** is a high-tech company which aims to develop and promote precision molecular-electronic seismic sensors for active geological exploration.

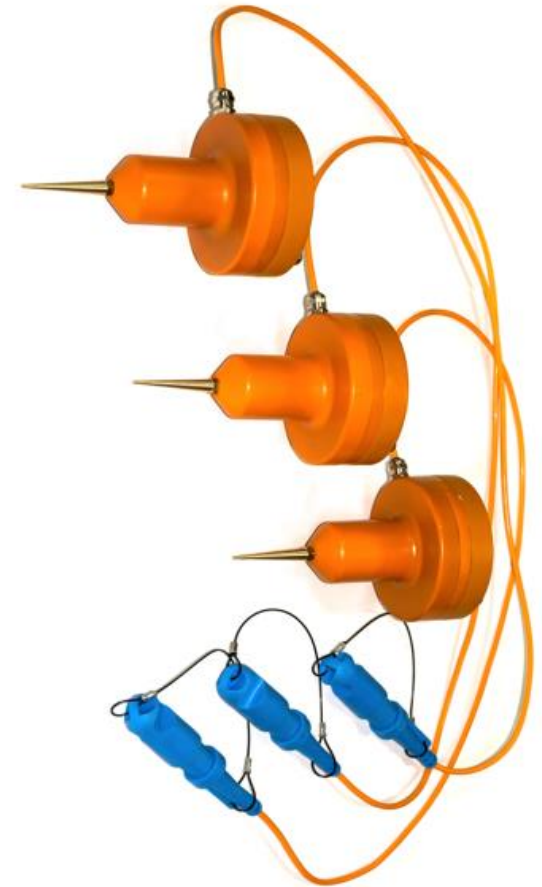
Seismic sensors developed by IGEO have brand-new output characteristics because they are based on the mass planar microelectronic technology and are capable to surpass the current solutions in terms of technical and economical characteristics including MEMS and electromechanical geophones.

The most important features of the IGEO sensors are:

- High identity of sensors
- No parasitic mechanical resonances
- Low noise level
- Wide dynamic and frequency ranges
- High sensitivity
- Long service life
- Very rugged, no springs to be broken
- Price lower than competitors

# One-component geophone

Technical Parameter	Value
Bandwidth	1 – 300 Hz
Standard gain	250 V/(m/sec)
Clip level	$\pm 7.5$ V
Integral noise in the pass band	100 nm/sec
Dynamic range	110 dB
Power supply	$\pm 12$ V DC
Temperature range	-40 .. +55 °C
Installation tilt	any



# Three-component geophone

Technical Parameter	Value
Bandwidth	1 – 300 Hz
Standard gain	250 V/(m/sec)
Clip level	$\pm 7.5$ V
Integral noise in the pass band	100 nm/sec
Dynamic range	110 dB
Power supply	$\pm 12$ V DC
Temperature range	-40 .. +55 °C
Installation tilt	any



# Completed Projects

Works completed within:  
August-October 2015

Works located at:

- Orenburg region, Spasskoye rural area
- Stavropol region, Grafskiy rural area

Works done by:

Sibgeotekhservis company, Russia



# Contact us



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