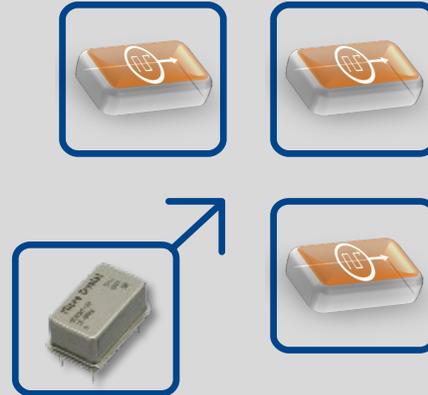




Oil exploration firms place a grid of geophysical sensors for acoustic waves deep penetration seismic surveys.

 OBNs with OCXO 16.384 MHz inside



Enabling the targeting and monitoring of submarine Oil & Gas reservoirs

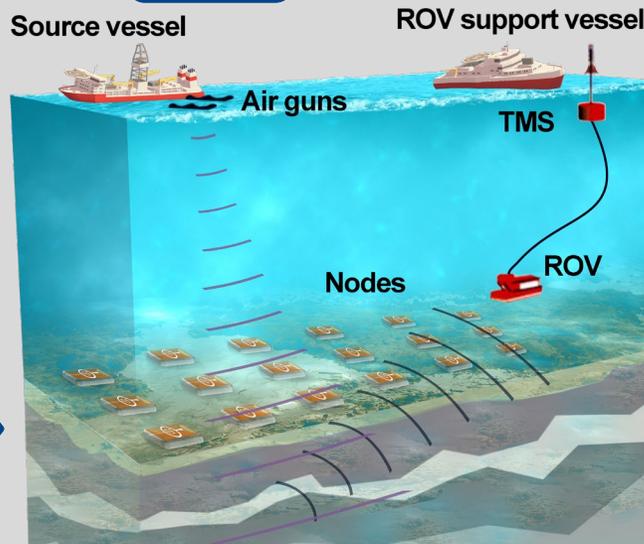
Timing from GPS is **unavailable** underwater, nodes need accurate synchronization during data acquisition.

Each hydrophone sensor module typically includes an oscillator for **underwater holdover timing.**

Rely on **ultra-low power OCXOs** for extensive battery life and long duration surveys compensating for the lack of access to external timing references.

OCXO used to **time stamp accurately and synchronize the data** of the OBN devices within the grid.

Ocean bottom nodes (OBNs) sensors are dropped over the side of a ship or laid down by a remotely piloted vehicle.



OCXOs are ideally suited for **autonomous operation in 3D or 4D surveys** for marine research, seismic monitoring and underwater exploration.

Temperature range: -10 to 50°C
Ultra-Low Power: < 90mW
Ageing: < ±0.5ppb/day