



# MicrOBS<sup>NT</sup>

SPARSE NODAL SOLUTION



# MicrOBS<sup>NT</sup>

MicrOBS<sup>NT</sup> is a proven ocean bottom node solution for seismic refraction and reflection surveys.

Equipped with three QuietSeis<sup>®</sup> MEMS accelerometers and a high performance hydrophone the MicrOBS<sup>NT</sup> is a 4C node that is capable of operating in water depths down to 6,000 meters for periods of up to 50 days between battery re-charges.

MicrOBS<sup>NT</sup> is ideally suited for hybrid surveys when used in combination with seismic streamers or for sparse OBN surveys.

A key advantage when compared to conventional geophone based OBN, MicrOBS<sup>NT</sup> is capable of accurately recording the low frequency signals necessary for velocity modeling.



## SIMPLIFIED & EFFICIENT OPERATIONS

### Free fall node

Another key advantage of the MicrOBS<sup>NT</sup> node is its simplicity of use.

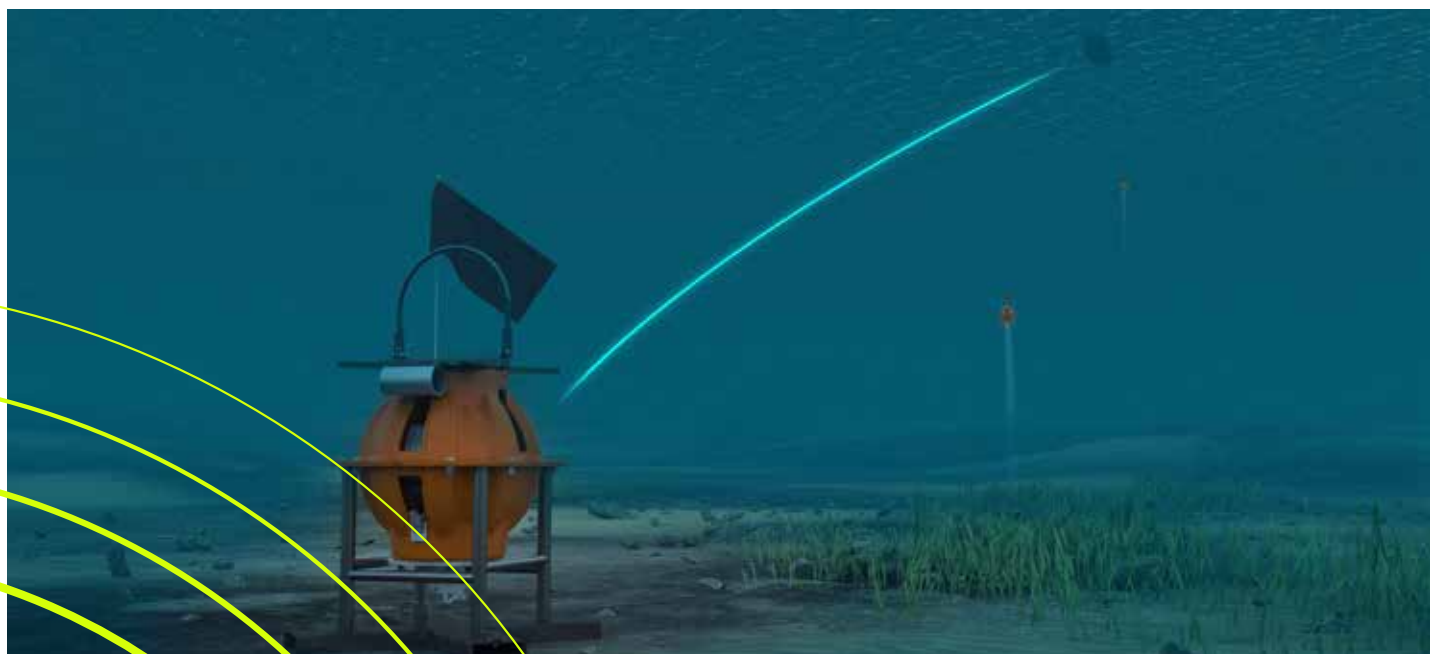
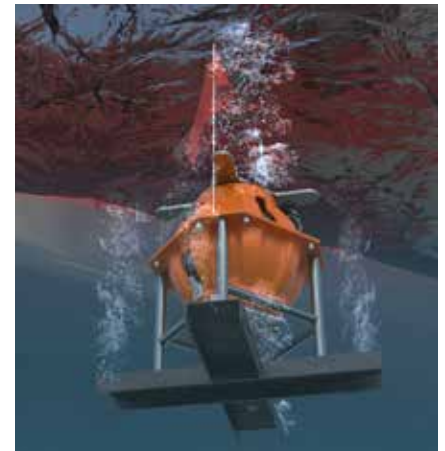
Compact and easy to deploy, MicrOBS<sup>NT</sup> was specifically designed to be dropped from a vessel's deck and to free-fall to the ocean floor.

This also means that MicrOBS<sup>NT</sup> can be operated from any vessel without the need for costly modifications.

### Self popup

After completion of the survey, and on receiving a command signal from the recovery vessel, the MicrOBS<sup>NT</sup> releases its anchor and returns to the surface.

It then sends its GPS position through a satellite link in order that it can be quickly located and retrieved aboard ship for data harvesting.



# HIGH-PRECISION IMAGING



## High sensitivity & digital fidelity

MicrOBS<sup>NT</sup>'s integrated 3C QuietSeis<sup>®</sup> sensors provide a completely flat amplitude and phase response from DC to 400Hz in the acceleration domain. Together with exceptional noise performance, QuietSeis<sup>®</sup> provides much better low frequency performance than conventional geophones arrangements.

Unaffected by temperature, component aging or manufacturing tolerances, the QuietSeis<sup>®</sup> sensors provide a recorded signal that is accurate in both phase and amplitude across the entire seismic bandwidth.

## Omni-tilt 3C recording

MEMS accelerometers are fitted with a feedback loop that enables the direct measurement of the Earth's gravity. As a result, the sensor package inclination can be very accurately measured and compensated for in the field.

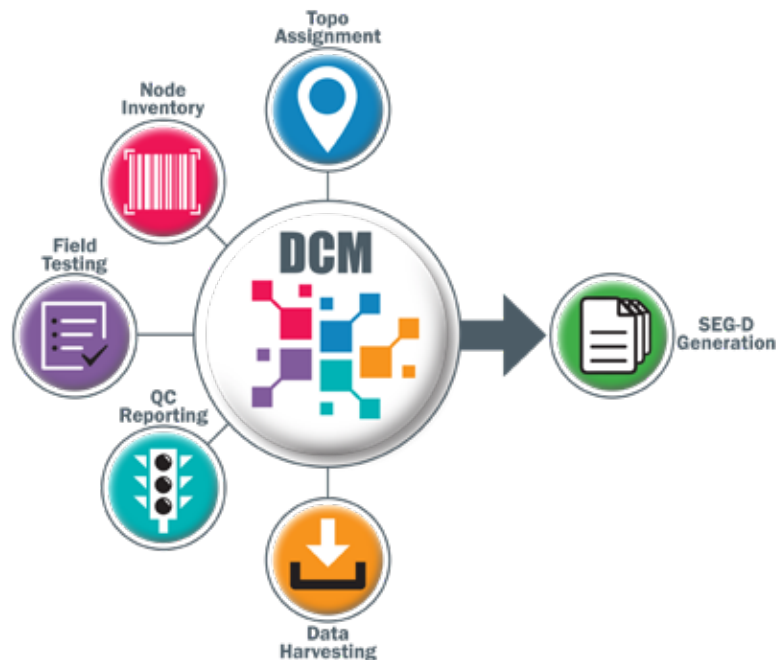


# SYSTEM CERTIFIED DATA

## Operation monitoring environment

At the heart of Sercel's new nodal systems is the DCM – Data Completion Manager, a platform supporting a single integrated environment from which all operational aspects of your nodal survey can be monitored. The DCM collates the information obtained from the MicrOBS<sup>NT</sup>, survey and source control. Once aboard the vessel MicrOBS<sup>NT</sup> nodes undergo simultaneous rapid data harvesting and battery recharging to ensure a quick turnaround.

SEG-D files are output by the DCM immediately, providing operators with seismic data and meta-data in one location and in one format.



## Proven reliability

The design of the new nodal system was undertaken using Sercel's internal quality assurance program, which has been delivering industry-leading products for decades. Sercel's unrivalled reputation is backed by our desire to guarantee the delivery of the best seismic data in the industry. To achieve this, we have focused our efforts on combining the highest technology solutions with the best in-sea mechanics.

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