

SeaSPY2 L-Grad



Longitudinal Gradiometer

Longitudinal gradiometers offer the largest variation in available baselines, from 1.5m to more than 500m. Long baselines provide superior gradient measurement sensitivity and increased detection ranges. They're also hydro dynamically stable when deployed. Each towfish can be used as a single magnetometer.

Applications

Shipwreck, Search and Salvage

Medium baseline measurement with a longitudinal gradiometer eliminates interference from deeper geological bodies, while highlighting near-surface magnetic sources like steel hulls, boilers or engines.

Smaller sources such as anchors or cannons will require a shorter baseline, and lower towing altitude.

Environmental Survey

Medium baseline measurement with a longitudinal gradiometer can highlight shallow magnetic sediments, while eliminating deeper geological influences.

The baseline should be on the order of magnitude of the expected towing altitude.

Exploration Geophysics

Long-baseline measurement with a longitudinal gradiometer is ideal since the bodies of interest are often far from the sensor, and produce very small gradients.

The baseline should be on the order of magnitude of expected depth-to-source.

Above: Towfish designed for longitudinal gradiometer configuration have an addition tow connector at the tail, to allow for interfish cable.