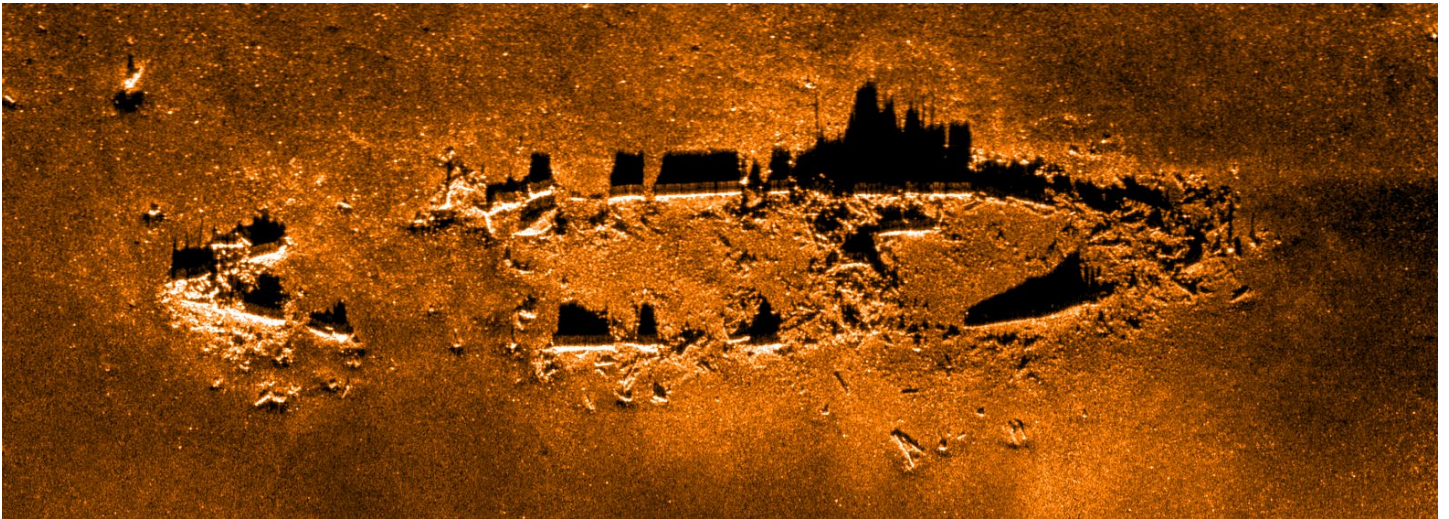


Datasheet

Equinox: integrated solution for MCM and hydrography



Equinox is an integrated solution from Sonardyne Group companies, EIVA and Sonardyne International, jointly developed and offered for Search, Classify and Map (SCM) and Hydrographic operations.

The system consists of Sonardyne's state-of-the-art SPRINT INS, Mini-Ranger 2 USBL and Solstice Multi Aperture Sonar (MAS) mounted on EIVA's renowned ScanFish 3D, a steerable remotely operated towed vehicle. EIVA's NaviSuite Kuda user interface is used to plan, autopilot and display the data in real-time.

The imagery produced by Solstice is very detailed, helping make for better operational decisions in less time. The along-track resolution of 0.15° is unrivalled for this application.

Onboard processing produces geo-coded side-scan imagery which is available for onboard automatic target recognition and post-mission analysis. Equinox offers Computer Aided Detection and Classification (CAD/CAC) from EIVA.

The navigation solution used to geocode the image offers an absolute accuracy better than 1 m (DRMS) making target relocation more effective.

The ScanFish 3D offers a proven stabilised platform capable of keeping at a constant altitude from the seafloor while keeping the amount of tether paid out constant. ScanFish 3D offers optimal stability for sonar data acquisition.

The result is a wide swath (200 m) of geo-located, high-resolution imagery suitable for simultaneous search and classification helping to reduce sailing times and increasing area coverage.

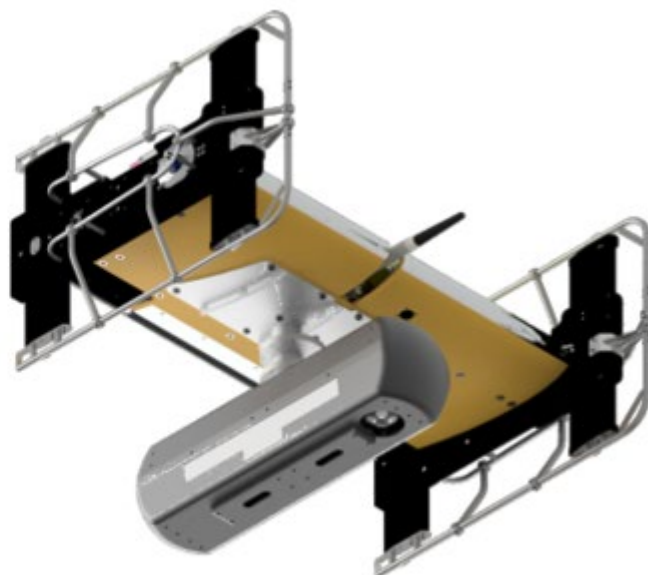
Solstice produces high quality bathymetry data from a vertical hydrophone array on each flank. The bathymetry data is co-registered onto the same pixel grid as the side-scan imagery, and therefore can produce stunning digital terrain maps, with the side-scan imagery accurately wrapped over the bottom topography.

Key features

- Commercial-off-the-shelf solution supplied and supported from one group of companies
- Pre-configured before delivery meaning faster, more efficient operations; get straight to work
- Combination of Mini-Ranger 2 USBL and SPRINT INS provides highly accurate positioning
- ScanFish 3D provides stable host platform for optimal Solstice performance
- Solstice sonar delivers real-time co-registered side-scan imagery and bathymetry
- NaviSuite Kuda software reduces planning time and improves efficiency
- Full Dynamic Focus and ultra-high along-track resolution 0.15° , over the full 200 m swath

Specifications

Equinox: integrated solution for MCM and hydrography



Feature	Equinox specification
Depth rating	300 m
Swath	200 m
Bathymetry	Yes
Output formats	.SWF8 and .XTF
Position accuracy	Better than 1 m (DRMS)
Pitch & roll stabilisation	Auto
Altitude following	Auto (fixed 7.5 m from seafloor)
Survey speeds	3-6 knots
Typical tether out	Constant at 3-5 x depth (depending on the environment)
Fibre telemetry	1 Gb/s
Payload	Other sensors can also be mounted
Software	NaviSuite Kuda (autopilot, runlines, real-time display and mosaics)
CAD/CAC	NaviSuite Deep Learning
Environmental	
Dimensions (length x width x height)	1,210 x 1,858 x 1,049 mm
Weight in air/water ¹	220/73 kg

Choice of winches to meet the exact frame.

Automated and manual Launch and Recovery Systems can be provided on request.

¹ Estimated weights.