

QINSy

Total hydrographic solution



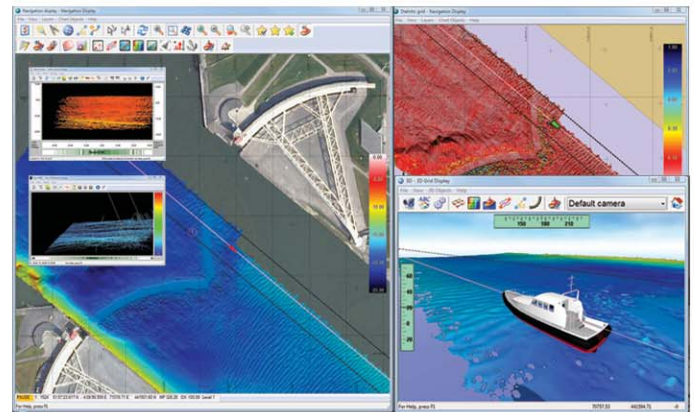
In a world where everything seems to get faster and bigger, software needs to be even better. The ideal software package needs to be as flexible as the people who use it, and most importantly it must be easy to operate. QINSy provides a total hydrographic solution to serve the small as well as the large survey companies. Its modular design and inherent flexibility makes QINSy perfect for a wide variety of applications.

- Inland Surveys
- Hydrographic & Oceanographic Surveys
- Laser Scanning for Land & Maritime applications
- Complete offshore construction and survey applications
- Barge, Tug and Fleet Management
- Dredging Monitoring & Navigation
- Electronic Navigation Chart production

Since its launch in 1996, QINSy has become the standard in marine surveying, bathymetric chart and ENC production.

For this purpose QINSy makes use of a “project template” database which contains all survey configuration parameters relevant to the project. QINSy supports most of the world’s datums and projections, multiple units and geoidal models used world-wide. The project template also contains vessel shapes, administrative information, as well as vessel offsets and I/O parameters.

Using real-time depth measurements, sound velocity profiles, tide levels, RTK heights etc. QINSy calculates the final foot print positions on-the-fly and visualizes these on various displays.



Typical QINSy displays

Real-time DTM production is the dream of every surveyor. In QINSy all computations are performed in 3D. Together with accurate RTK heights or real-time tide gauges, all depth observations are immediately available in absolute survey coordinates. This unique technique is called ‘on-the-fly DTM production’.

Accurate timing is imperative in the survey industry. QINSy uses a sophisticated timing routine based on the PPS option from the GNSS receiver. All incoming and outgoing data is accurately stamped with a UTC time label. Internally QINSy uses ‘observation ring buffers’ so that data values can be ‘placed’ for the exact moment of an event or ping. This combination gives QINSy a proven accuracy of 1 msec.





Online Data Acquisition

- Real-time calculation of footprint positions and on-the-fly DTM production.
- Accurate Timing: Combination of ring buffers and PPS gives QINSy a proven accuracy of 1 msec.
- Storage of Raw sensor data enables total replay of performed survey in the office with different settings.
- Total Propagated Uncertainty (error budget) calculation in real-time which can be used for on-line data clipping.
- Multi-layer sounding grid used for on-line visualization of on the fly DTM, SSS draping, layer differences etc.
- Support for Anchor handling & Tug management.
- Advanced Dredging functionality.
- Multiple ROV positioning & monitoring.
- Side Scan Sonar support for targeting and mosaicking.
- Great flexibility in sensor support which ensures interfacing of almost all sensors.
- Survey planning tool enables you to prepare your project in the office.
- Visualization of project using powerful 2D and 3D visualization techniques together with flexible user defined information displays.
- Ocean Bottom Cable & 2D seismic support.

Post Processing

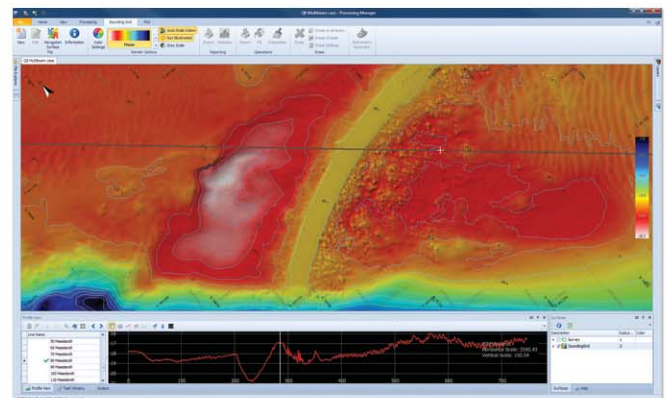
- Powerful Data Processing & Validation techniques
- Export to all popular formats and more.
- Sound velocity manager which enables time & spatial processing of SVP casts.
- Plotting of engineering charts with bathymetric data, cross and long profiles.
- Different volume calculation methods.
- S-57 ENC production, both file based and spatial database solutions, incl. notice to mariners, updates.
- S-57 ENC distribution.

Qloud

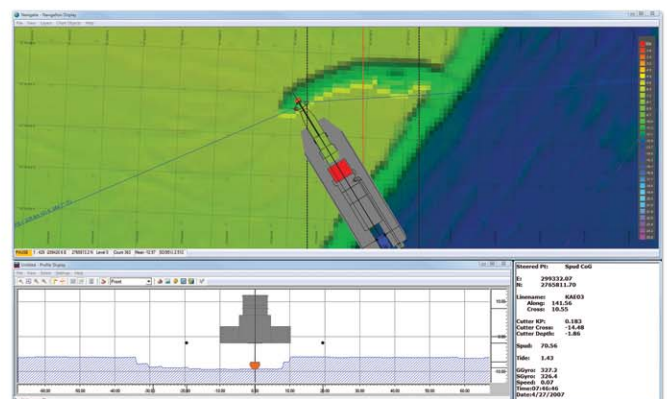
- Fast area based data cleaning tool.
- Ideal for processing of large multibeam data sets.
- Reliable automatic cleaning methods.
- Manual data clipping.
- Easy to search for problems in the bathymetric data using statistical information.
- Combination of sounding grid and DTM points.
- CUBE support.
- 3D spot sounding generation.
- TIN reduction.



3D View



Processing Manager



Advanced Dredging functionality