Qinertia

Qinertia

THE NEXT GENERATION INS/GNSS POST-PROCESSING SOFTWARE

For all mobile surveying applications

Survey Efficiently, Survey Anywhere, Survey Serenely. QINERTIA has been designed to help surveyors get the most of their surveys with simplicity.

SBG SYSTEMS

Qinertia

The Next Generation INS/GNSS Post-processing Software

Qinertia is the SBG Systems in-house post-processing software. Full-featured, Qinertia enhances SBG inertial navigation systems performance by post processing inertial data with raw GNSS observables.

Qinertia

ALL-IN-ONE SOLUTION

INS/GNSS Tight Coupling Post-processing

Static and Kinematic GNSS Post-processing

Image Geotagging for Photogrammetry

KEY FEATURES

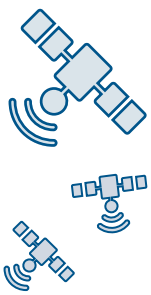
- Centimetric position using offline RTK corrections or Precise Point Positioning
- Seamless Integration of Odometer and Dual Antenna GNSS
- Multi-Constellation Support (GPS, GLONASS, GALILEO, BEIDOU)
- Support of third-party IMUs and any GNSS receivers
- Photogrammetry : unleash full photogrammetry potential with easy image geotagging

Qinertia, the PPK Software for All your Projects

Open to third-party IMUs

Qinertia has been designed to help surveyors get the most of their survey very easily with a simple workflow. Because park of sensors could be heterogeneous, Qinertia supports third-party Inertial Measurement Unit (IMU). Several IMU and INS have already been successfully integrated with Qinertia including LN-200, LCI-100 and µIMU. You can contact us to study how you can integrate your IMU in Qinertia's workflow.

Open to all GNSS receivers



Qinertia post-process data from any GNSS receiver through RINEX, and with binary files from Novatel, Septentrio, Trimble and Ublox for a straight-forward workflow. In the same way, the VBS feature is able to compute virtual networks from various GNSS receivers, including different models, configurations or constellations, and even with different coordinate systems. Qinertia automatically adjusts the VBS network to compensate for any base station position inaccuracy and provides full quality control indicators to assess the expected accuracy and reliability.

Powerful Base Station Management

- 2 modes available:
  - Single Base Station
  - Virtual Base Station
- Drag & drop user's base station (binary or RINEX format)
- Preview trajectory and base stations on a map
- Virtual Base Station computation using both permanent and user's base stations
- Visualization of expected accuracy and quality
- Base station position review with PPP computation

Intuitive Base Station Explorer

- Access to more than 8,000 base stations over 164 countries
- Always up-to-date database
- Automatic download and quality check
- Web-based pre-mission visualization

Fast and Simple Workflow

IMPORT

Easily import SBG inertial data
Compatible with industry standard GNSS receivers (RINEX , RTCM)
Native support of Septentrio, Novatel, Trimble, and Ublox
DJI Flight Data (MRK)

1 Download or import Base stations

2 Review mechanical installation

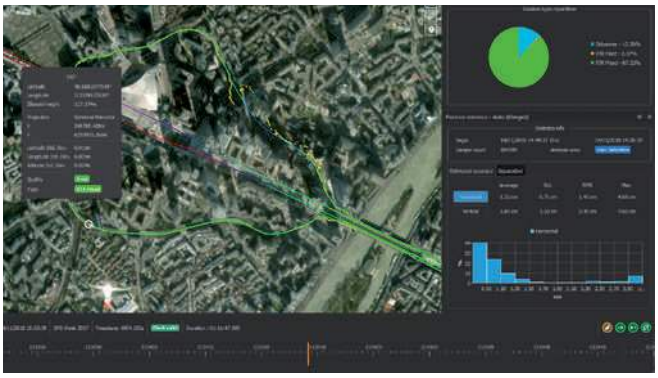
3 Launch Processing

Processing Made Easy

» Motion Profiles selection to tune sensor behavior to the application dynamics
» Seamless Integration of aiding equipment with specific error models
» Advanced multipath and rejection filters
» Automatic Lever arm and alignment estimation

Fast & Modern Technology

» Fast processing even for large logs thanks to modern 64-bits design
» Create complex and automated workflows with Qinertia Command Line Interface (CLI)
» Designed for integrators with pay as you go licensing & cloud friendly API (Unix, Docker, JSON)



Extensive Quality Indicators

» Interactive quality indicators assessment
» Display of advanced parameters (separation, standard deviation, bias, scale factor, lever arm)
» Statistics report generation (RMS, min/max)
» PDF and JSON processing reports

4 Review Quality Indicators

EXPORT

Define and export your own custom text format
Open to industry standards (SBG, SBET, Google Earth)
JPEG files with updated position and orientation

Handle datum & projections
Export based on different events:
- Time interval
- Distance interval
- Event markers

Create and re-use your own export preset

Qinertia - Your Full-featured Post Processing Solution

Qinertia *GNSS*

GNSS ONLY

All applications

Post-processing of GNSS Static and Kinematic data.

Qinertia *UAV*

ECONOMICAL PPK FOR UAV*

UAV applications

Processing trajectory within a 3km radius limit.
GNSS Only included.

Qinertia *LITE*

ENTRY-LEVEL PPK WITH ELLIPSE SENSORS

Land/Air applications

Full processing with Ellipse sensors in Land/Air applications.
GNSS Only included.

Qinertia *PRO*

FULL-FEATURED PPK

All applications

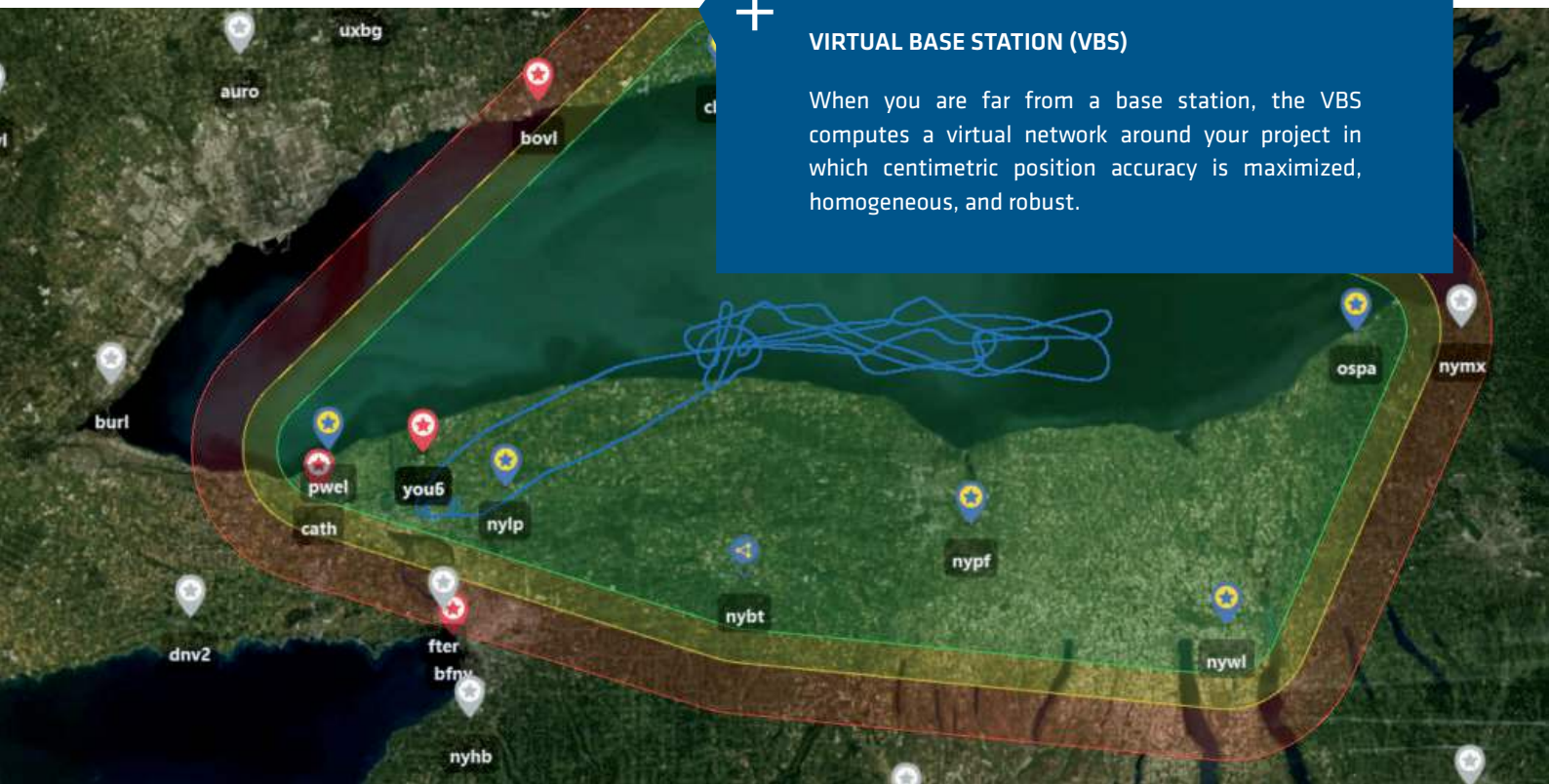
Full processing with any IMUs and GNSS receiver.
GNSS Only included.

FLEXIBLE LICENSING

Easily share your floating license with your team. We offer flexible licensing options (perpetual or subscription) to best fit your needs.

PERPETUAL LICENSE	SUBSCRIPTION	
Initial purchase + yearly maintenance	1 Month	12 Months

** Processing trajectory within a 3km radius limit. 1 year free subscription when buying a Quanta solution.*



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VIRTUAL BASE STATION (VBS)

When you are far from a base station, the VBS computes a virtual network around your project in which centimetric position accuracy is maximized, homogeneous, and robust.

SBG Systems is a leading supplier of inertial motion sensing solutions. The company provides a wide range of inertial solutions from miniature to high accuracy. Combined with cutting-edge calibration techniques and advanced embedded algorithms, SBG Systems products are ideal solutions for industrial & research projects such as unmanned vehicle control, surveying applications, antenna tracking, and camera stabilization.

SBG Systems EMEA (Headquarters)
Phone: +33 1 80 88 45 00
E-mail: sales@sbg-systems.com

SBG Systems North America
Phone: +1 (657) 845 1771
E-mail: sales.usa@sbg-systems.com

SBG Systems Singapore
E-mail: sales.asia@sbg-systems.com

www.sbg-systems.com