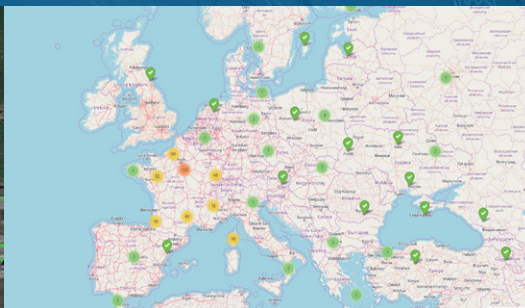
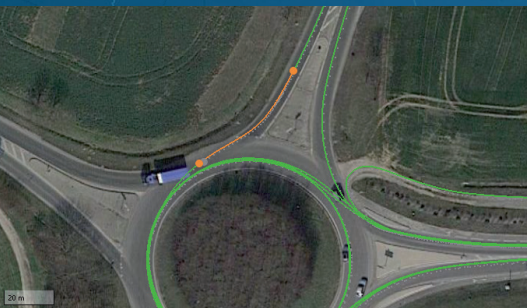


# Qinertia



## 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.



# 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.



### ALL-IN-ONE SOLUTION

INS/GNSS Tight Coupling  
Post-processing

Static and Kinematic GNSS  
Post-processing

### KEY FEATURES

- » Tightly coupled solution for unmatched accuracy and reliability
- » Centimetric position using offline RTK corrections or Precise Point Positioning
- » Seamless Integration of Odometer and Dual Antenna GNSS Receiver
- » Multi-Constellation Support (GPS, GLONASS, GALILEO, BEIDOU)
- » Support of third-party IMUs and any GNSS receivers

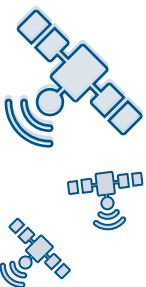
## Qinertia, the PPK Software for All your Projects

### Open to third-party IMUs

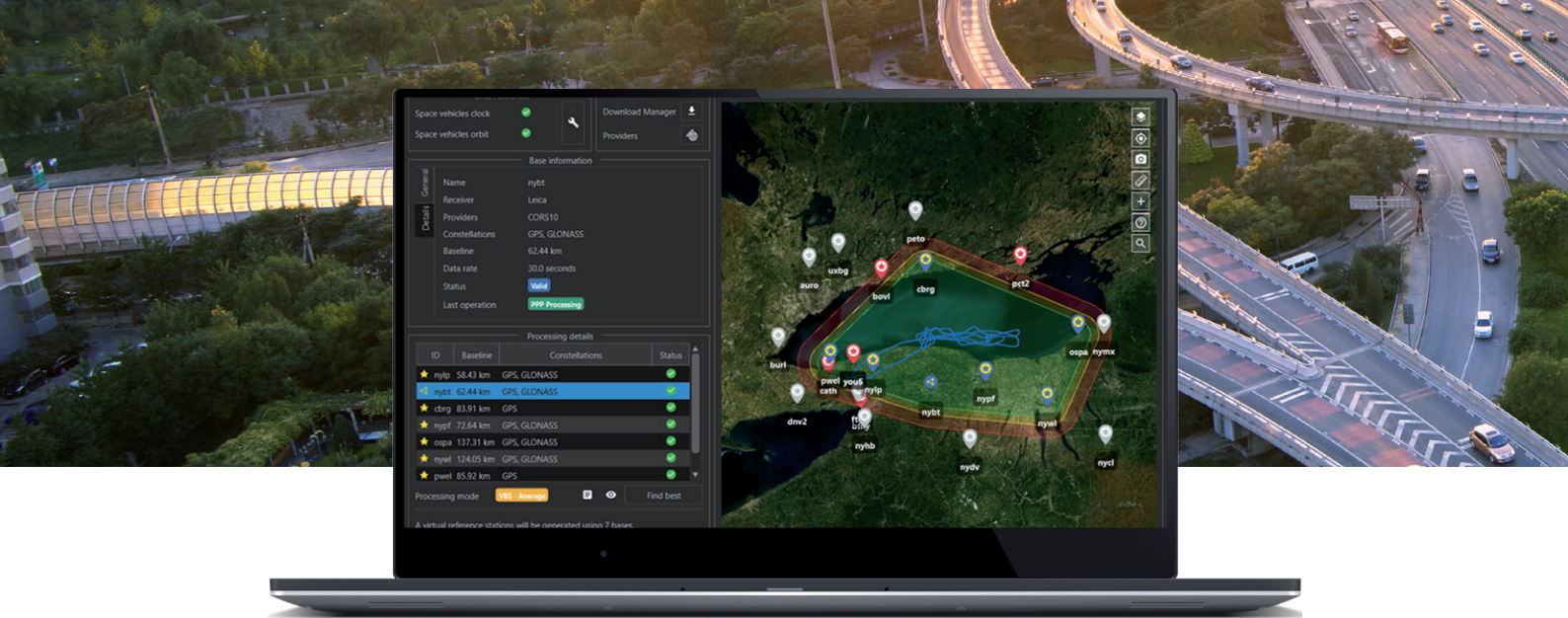


Qinertia has been designed to help surveyors get the most of their survey very easily with a simple workflow. Because park of sensors could be heterogeneous, Qinertia supports third-party Inertial Measurement Unit (IMU). Several IMU and INS have already been successfully integrated with Qinertia including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

### Open to all GNSS receivers

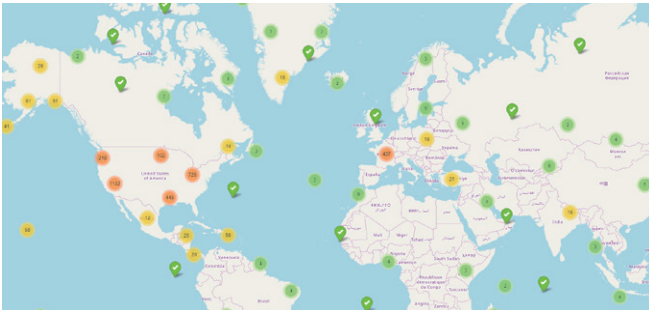


Qinertia post-process data from any GNSS receiver through RINEX, and with binary files from Novatel, Septentrio, Trimble and Ublox for a straight-forward workflow. In the same way, the VBS feature is able to compute virtual networks from various GNSS receivers, including different models, configurations 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 7,000 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 SBC inertial data  
 Compatible with industry standard  
 GNSS receivers (RINEX) <sup>01</sup>  
 Native support of Septentrio,  
 Novatel, Trimble, and Ublox.

1 Download  
or import  
Base stations

2 Review  
mechanical  
installation

3 Launch  
Processing

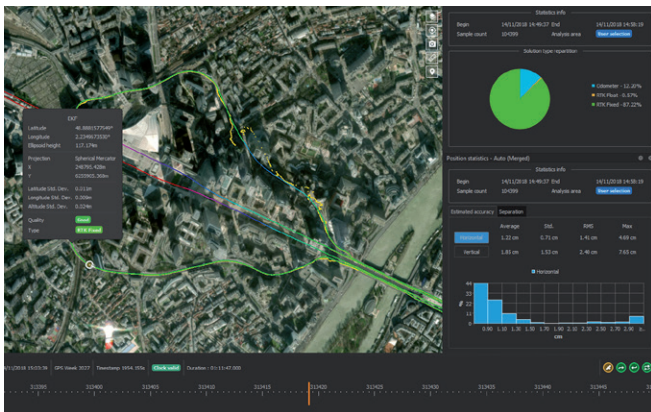


## Processing Made Easy

- » 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

- » Less than 3 minutes for a 6-hour log thanks to Forward and Backward computation at the same time
- » Handle very large logs thanks to modern 64-bits design
- » Cross-platform support:
  - Windows
  - Mac OS X\*
  - Linux\*



## 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)

\* Will be available in the next major update for users under valid maintenance plan

## 4 Review Quality Indicators

## EXPORT

Define and export your own custom text format

Open to industry standards (SBG, SBET, Google Earth)

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

**Qinertia**  
UAV

**Qinertia**  
LITE

**Qinertia**  
PRO

## GNSS ONLY



All applications  
Post-processing of  
GNSS Static and  
Kinematic data.

## ECONOMICAL PPK FOR UAV\*



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

## ENTRY-LEVEL PPK WITH ELLIPSE SENSORS



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

## 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

Initial purchase  
+ yearly maintenance

### SUBSCRIPTION

1 Month

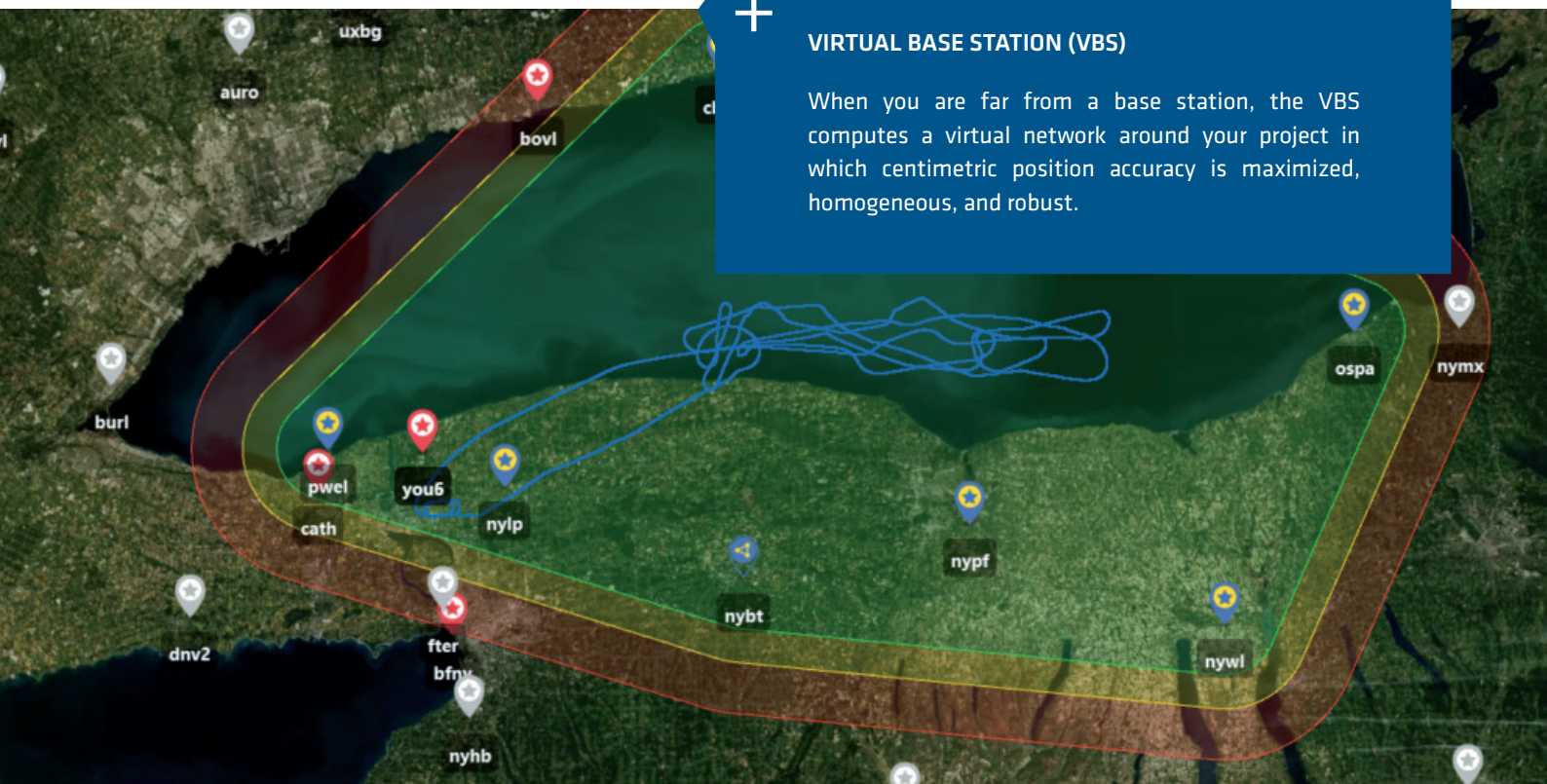
12 Months

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



### 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.

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