

# **Opinertia** THE NEXT GENERATION INS/GNSS POST-PROCESSING SOFTWARE





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.



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\* Precise Point Positioning available in 2018

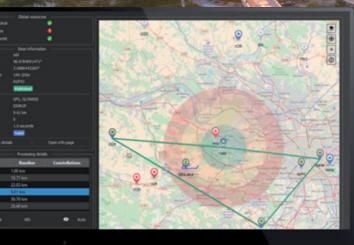
#### The Best Achievable Orientation and Position Accuracy

					CO P	
	Ellipse Series		<b>Ekinox Series</b>		Apogee Series	
	RTK	РРК	RTK	РРК	RTK	РРК
Roll, Pitch	0.1 °	0.05°	0.02 °	0.015 °	0.008°	0.005°
Heading	0.2 °	0.1°	0.05 °	0.03°	0.025°	0.02 °
Position (+1ppm)	2 cm	1 cm	2 cm	1 cm	1 cm	1 cm
Outage 10 seconds	1m	10 cm	30 cm	5 cm	17 cm	3 cm
Heave	5 cm	5 cm	5 cm	2 cm	5 cm	2 cm

RTK = Real-time Kinematic PPK = Post Processing Kinematic Heading with a 4-meter baseline

RMS values for typical survey trajectories. Preliminary version. All specifications subject to change without notice.







#### 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

\* Available Q3, 2018



- » 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

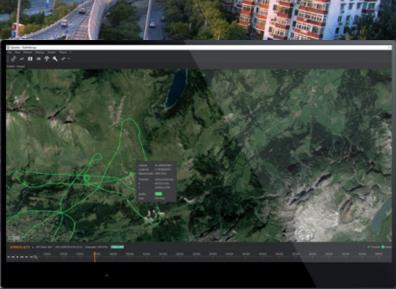
#### Intuitive Base Station Explorer

- » 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

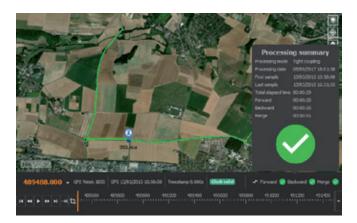






### Processing Made Easy

- » 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\*
- » Personalized themes and layouts\*

\* Available in 2018

#### 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)

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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

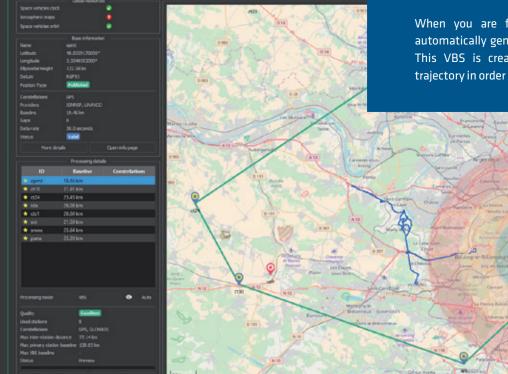
### **Qinertia** - Your Full-featured Post Processing Solution



#### 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	



#### VIRTUAL BASE STATION (VBS)

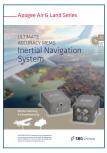
When you are far from a base station, Qinertia automatically generates a Virtual Base Station (VBS). This VBS is created at the nearest place of your trajectory in order to achieve the best position accuracy.



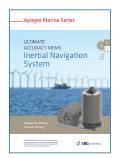
## **SBG** SYSTEMS

SBG Systems is a leading supplier of MEMS-based 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.

#### PRODUCTS







Apogee Marine

Ekinoz 2 Series

Ekinox 2 Series



Ellipse 2 Series

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