Qinertia Software

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

TWO MODES

INS/GNSS Tight Coupling Post Processing

INS/GNSS real-time acquisition reprocessing

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)
- Open to all Industry Standards

** Precise Point Positioning available in 2018*

The Best Achievable Orientation and Position Accuracy

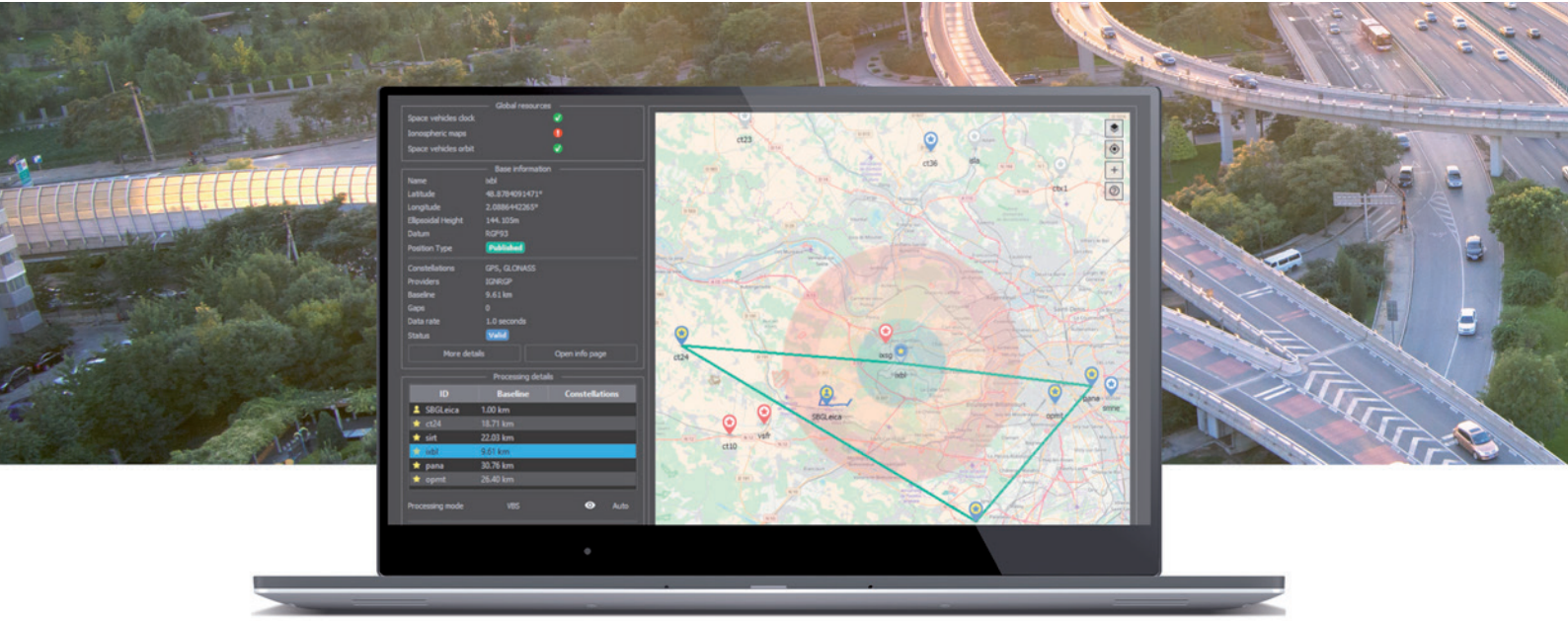
Ellipse Series

Ekinox Series

Apogee Series

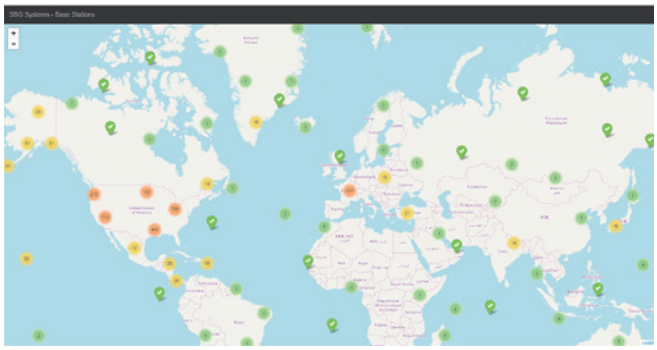
	Ellipse Series		Ekinox Series		Apogee Series	
	RTK	PPK	RTK	PPK	RTK	PPK
Roll, Pitch	0.1 °	0.05 °	0.02 °	0.015 °	0.008 °	0.005 °
Heading	0.2 °	0.1°	0.05 °	0.03 °	0.025 °	0.02 °
Position (+1ppm)	2 cm	1 cm	2 cm	1 cm	1 cm	1 cm
Outage 10 seconds	1m	10 cm	30 cm	5 cm	17 cm	3 cm
Heave	5 cm	5 cm	5 cm	2 cm	5 cm	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 fromat)
- 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 SBG inertial data

Compatible with industry standard GNSS receivers (RINEX)

Native support of Septentrio, Novatel & Trimble

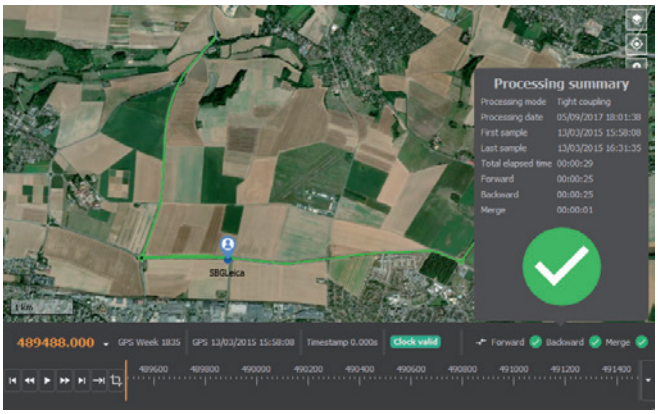
1 Download or import Base stations

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*
» 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)

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 LITE

- ✓ Ellipse sensors
- ✓ Land and air applications
- ✓ All Post-processing modes:
  - Single Base Station
  - Virtual Base Station

QINERTIA PRO

- ✓ All SBG sensors
- ✓ All applications
- ✓ All Post-processing modes:
  - Single Base Station
  - Virtual Base Station

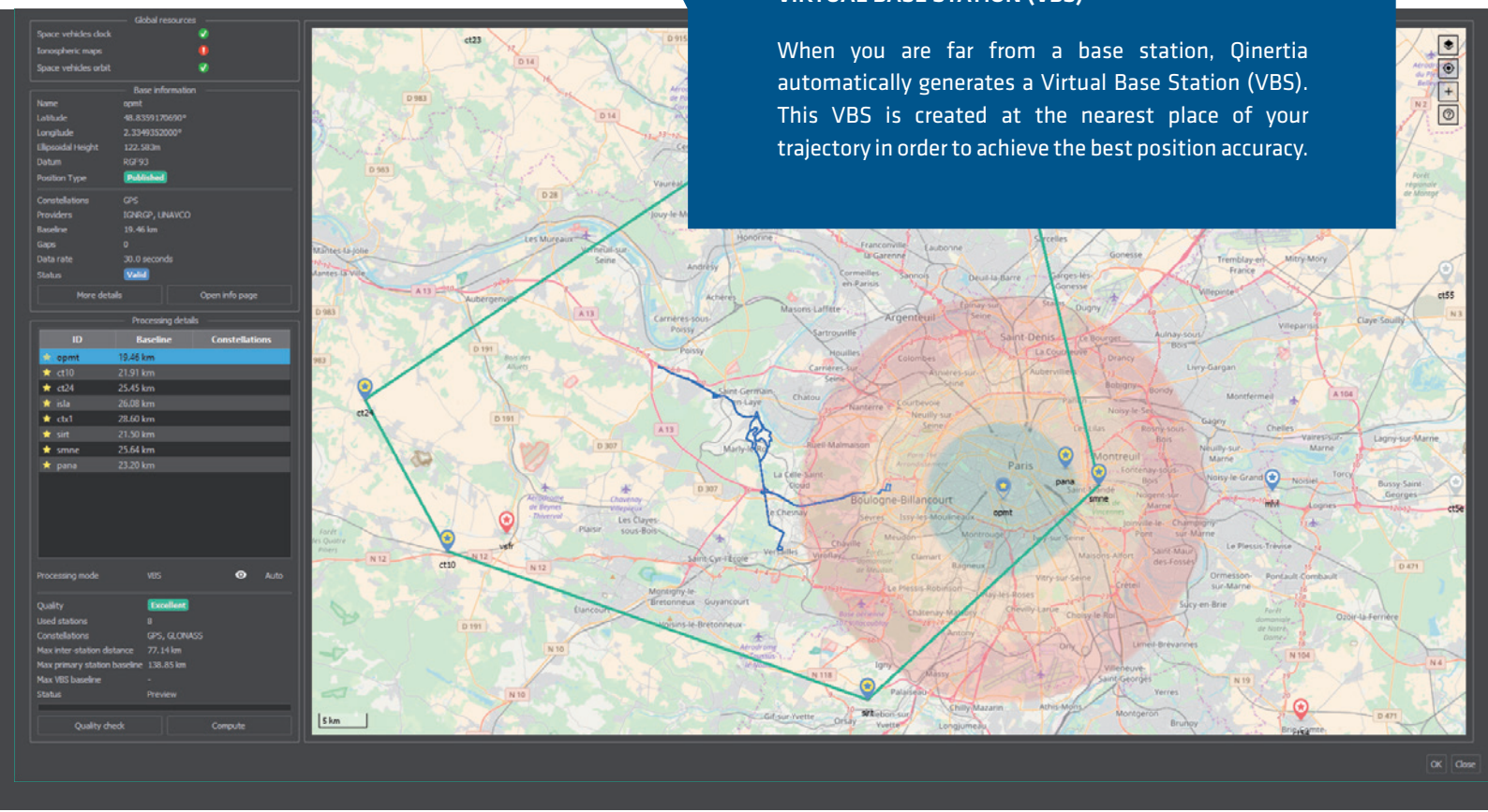
FLEXIBLE LICENSING

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)

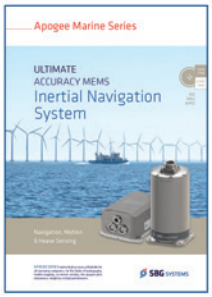
When you are far from a base station, Qinertia automatically generates a Virtual Base Station (VBS). This VBS is created at the nearest place of your trajectory in order to achieve the best position accuracy.



SBG Systems 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

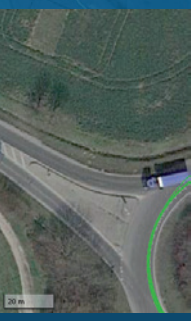
Apogee Land & Air



Apogee Marine

Ekinox 2 Series

Ellipse 2 Series



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

www.sbg-systems.com