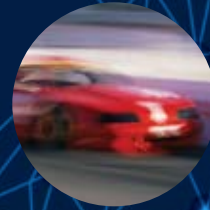


# WAYPOINT

## PRODUCTS GROUP



## GrafNav/ GrafNet

### Features

Multi-base (MB) processing for up to 8 base stations

Contains built in Precise Point Positioning (PPP) module

Robust processing engine for challenging kinematic environments

Effective yet easy to use static network processing package

### Benefits

Larger projects are made possible with Multiple Base processing

Using PPP, 10-40 cm can be obtained in airborne without the need for base stations<sup>1</sup>

Forward, reverse and combined processing capabilities to improve accuracy over real-time results

Intuitive User Interface for non-expert and power users to do either simple processing or exercise high-level control settings

**Industry leading GNSS post-processing software provides powerful kinematic trajectory determination, static network processing and support for most receivers.**

### Accurate Kinematic Trajectory Determination

The airborne mapping industry worldwide relies on GrafNav to produce accurate maps and DEMs. These applications require reliability, high accuracy and rigorous quality control. GrafNav delivers on all points. Airborne applications involve a difficult environment, often with long baseline separations. The Multiple Base station processing feature allows data over large survey areas to be easily processed without involving a complex processing procedure.

### Receiver Independent Processing

As worldwide users often employ various types of GPS/GLONASS receivers, GrafNav/GrafNet supports 28 different raw data formats, including RINEX. A flexible data conversion utility automatically detects most of these formats. For those users without local base stations, the included download utility permits access to several thousand continuously operating stations from networks such as CORS, IGS, IGN (France), GSI (Japan), ARGN (Australia) and more.

### Support for Special Applications

GrafNav/GrafNet can be provided as a developer's kit that permits users to access the processing DLLs. For a more simple software interface, GrafNav has an extensive number of command line functions that makes it possible to completely automate processing. The GPS internet data download utility and the raw data conversion utility also has command line options to enable automation of the entire process.



Precise thinking

# GrafNav/GrafNet

## GrafNav

- Kinematic trajectory processing software
- Multiple base processing for up to 8 base stations
- Reliable centimeter level Kinematic Ambiguity Resolution (KAR) utilizing GPS and GLONASS
- Long-range dual frequency Ionospheric processing
- Forward, reverse and combined data processing options
- Simultaneous forward and reverse processing on dual-core (XEON) and dual-CPU machines
- GPS+GLONASS data processing that supports both fixed and float integer ambiguities<sup>2</sup>
- Precise Point Positioning (PPP) Module<sup>2</sup>
- Precise ephemeris and clock (needed for PPP) can be automatically downloaded as soon as the next GMT Day<sup>2</sup>
- Visual Quality Control via extensive plotting capabilities
- Support for popular datums and map projections as well as user defined ones
- Powerful export tool to build user defined output or to reproduce most ASCII formats
- Automatic snapshots of settings and results for every program run
- Track coordinates for station markers and camera events
- Full geoid support for the US, Canada, Japan, Australia, Mexico, France, UK, Ireland and the world with EGM-96. Other geoids can easily be imported
- Includes GPS and GLONASS mission planner that downloads almanac files automatically<sup>2</sup>

## GrafNet

- Static network processing
- Data Manager for easy project manipulation
- Accurate fixed static solutions and long-range iono-free processing
- Included network adjustment
- Trivial baseline removal
- Manual and automatic loop closure computation
- Results plots for individual baselines
- Final results exported in a similar manner to GrafNav
- Full support for combined scale factor

## GrafNav Batch

Can be used to batch process multiple remotes or combine individual trajectories from multiple base stations. Support for up to 128 bases or remotes and has most of the same features as GrafNav.

## AutoNav

One step function to automatically convert raw data, select and download nearest base stations from the internet, resample base data to proper interval, and then process and export results. GrafNav compatible configuration files are created to ease quality control.

## Datalogger

A real-time data logger is included for Windows<sup>®</sup> and WinCE. It permits users to log Waypoint or receiver native formats, while stations can also be marked and logged.

## Additional Features

### Utilities

- IGS, CORS, IGN, GSI, ARGN, CDDIS, OLG and ASI GPS data services can be downloaded and resampled from the internet
- Raw GPS data can be resampled, concatenated and spliced
- Raw data can be converted to RINEX
- Local datums/coordinate systems transformation

### Supported Formats

- CSI DGPS Max
- Javad GRIL/OEM
- Leica MX/SR/System 500/System 1200/MC1000
- Magellan CAR/MOB
- NAVCOM OEM
- NovAtel OEM2/OEM3/OEM4/OEMV/CMC
- RINEX 2.0/2.1
- Septentrio SBF
- Sirf Star II
- Thales RT/B-File/DSNP
- Trimble DAT/RT/TSIP/TIPY
- U-Blox Antaris

## Upgrade/Support

Any versions available within one year from purchasing will be made available at no charge. Technical support by phone, fax and email is also free for one year after date of purchase.

<sup>1</sup> Quoted accuracy assumes minimal loss of lock, good satellite geometry, dual frequency data and minimum 3 hours of data collection.

<sup>2</sup> New for version 7.80.



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