



## **Benefits**

Accurate position, roll, pitch, heading and heave from a standard range of GNSS systems

Continuous output during GNSS outages

Protects investment in existing equipment

Post processing option

Highly competitive price

Expert 24x7 Technical Support



## Enhance a standard range of GNSS systems with accurate, integrated MOTION data

Designed with ease of use in mind and targeted at the marine industry, the F175-S extends the functionality of a standard range of GNSS systems to provide very accurate roll, pitch, heading and heave for hydrographic survey applications.

Drawing on the technology of the industry-standard F180 series, the F175-S offers a robust, reliable solution at a highly competitive price, all backed by our renowned 24x7 technical support and software maintenance service, TEAM.

In addition to extending the accuracy and feature set of your GNSS system, the F175-S greatly improves robustness to GNSS dropouts and multipath, so it is ideal for harbour and coastal areas or for working around large structures. This protects your investment in existing survey-grade GNSS positioning systems while upgrading your capabilities.

Our innovative INSight software is also available to generate post processed position and motion information, fully benefiting from the blending of GNSS and inertial sensors.

## **Features**

- Tightly integrated position, heading, attitude and motion data results in increased accuracy when compared to outputs from separate sensors
- Ability to connect any GNSS receiver to extend functionality and enhance accuracy
- Continuous output during GNSS outages
- Compatible with HYPACK, QINSy and other navigation packages
- Optional INSightsoftware allows for generation of post processed blended solution
- iHeave (intelligent heave processing) available as standard for improving heave accuracy
- Intuitive marine-centric MOTION™ Control software:
  Fully revised interface for improved usability
  Extended range of NMEA strings

## **Applications**

- Hydrographic survey
- Bridge, dam, harbour inspection
- Marine construction
- Offshore wind
- Dredging
- Shipping channel survey
- Environmental survey

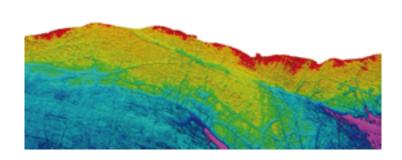






| Dynamic Performance       | F175-S   |
|---------------------------|--|
| Positional Accuracy (CEP) | Up to 0.01m (dependent on external GNSS)   |
| Roll/Pitch (1σ)           | 0.025° (RTK)   |
| Heading (1 $\sigma$ )     | 0.1° (2m baseline)   |
| Heave (1σ)                | 5cm or 5% (real-time)<br>3.5cm or 3.5% (iHeave™)   |
| Velocity (1σ)             | 0.05km/h   |
| Receivers                 |  |
|                           | C-Nav 3050, Leica GS50, Marinestar/Omnistar 4305HP, NavCom SF-3050, NovAtel OEM3, OEM4, OEMV and OEM6, Topcon GB-500, Generic NMEA                                   |
| Upgrade options           | Upgrade from 175-S model to models T1, T2, H and O are available   |
| Physical                  |  |
| Weight                    | 2.3kg  |
| Dimensions                | 234x120x76 mm  |
| Power 9-18Vdc;            | 15W (110-220Vac adapter supplied)  |
| Operating Temperature     | -10 to 50°C  |
| Antenna Cables            | 15m standard (30m optional)  |
| Interfaces                |  |
| Ethernet 100MBit          | Full control and configuration, high speed full functionality data output (MCOM)   |
| Serial Port 1             | User configurable for position, heading, attitude and timing strings. TSS1, TSSHHRP, EM1000, EM3000, MCOM, PASHR, PRDID, GGA, GGK, GSV, GST, HDT, ROT, VTG, UTC, ZDA |
| Serial Port 2             | As Serial Port 1   |
| Serial Port 3             | External GNSS input  |
| Other                     | 1 PPS output on BNC  |
| PC System Requirements    | MOTION Control Software  |
| Operating System          | Windows® 8 / 7 both 32 and 64 bit  |







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