



TRIMBLE PRECISION GNSS RECEIVER MODULES

HIGH-PRECISION POSITIONING SOLUTIONS FOR THE SYSTEMS INTEGRATOR

PRODUCT BROCHURE



INTRODUCTION

Pacific Crest offers Trimble's latest centimeter-level positioning technology to system integrators for a variety of guidance and control applications. The Trimble GNSS receiver modules harness GPS L1/L2/L5 and GLONASS L1/L2 signals and are easy-to-integrate into specialized or custom hardware solutions to provide fast RTK initialization with proven low-elevation tracking. Configurations include a single-board solution for precise position and heading; decimeter positioning with OmniSTAR XP/HP support; and tracking the experimental Galileo GIOVE-A and GIOVE-B test satellites for signal evaluation and test purposes.

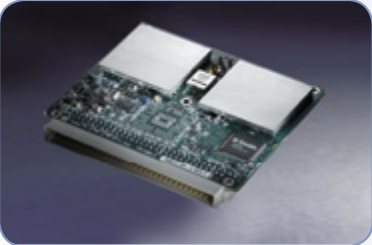
Trimble's GNSS receivers from Pacific Crest are designed for easy integration and rugged dependability. Just like other Trimble embedded technologies, easy to use software commands simplify integration and reduce development times. All software features are password-upgradeable, allowing functionality to be upgraded as your requirements change. Industry professionals trust Trimble embedded positioning technologies as the core of their precision applications. The latest Trimble-precise Maxwell™ technology provides assurance of long-term future-proofing and trouble-free operation.



BD950

The Trimble® BD950 GPS receiver provides an exceptional level of accuracy, ease of integration, and component life. Following the Eurocard form factor, the receiver is specifically designed to allow easy integration into specialized or custom hardware solutions. Accurate to the centimeter, the BD950 provides outstanding reliability in a wide range of guidance or control applications. The receiver's small size and low power requirements make it especially suitable for portable solutions.

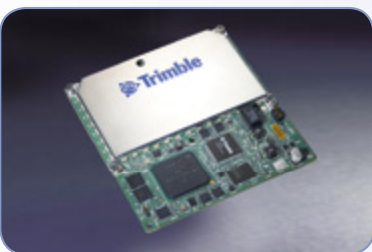
This 24-channel dual-frequency GPS/WAAS/EGNOS receiver achieves horizontal accuracies of 20 mm and vertical accuracies of 30 mm. This accuracy is matched with extremely fast responsiveness. The BD950 delivers positions to guidance or control loop software with a latency of less than 20 milliseconds at 20 times per second. For the most precise applications, it provides horizontal accuracies of 10 mm at a 10 Hz rate with a small increase in latency.



BD960

The Trimble® BD960 GNSS system is a multi-channel, multi-frequency, OEM GNSS receiver, in a compact Eurocard form factor. The latest, Trimble centimeter-level positioning technology is an easy-to-integrate module. With the Trimble BD960, OEMs and integrators can easily harness both the modernized GPS L2C and L5 signals and GLONASS L1/L2 signals. For land and air applications where decimeter-precision is required, onboard OmniSTAR satellite service is a convenient option. The Trimble BD960 supports the three levels of Differential GPS Service provided by OmniSTAR: VBS, HP, and XP.

Customers benefit from the Ethernet connectivity available on the board, allowing high speed data transfer and configuration via standard web browsers. The compact, Eurocard form-factor is suitable for many of the most ambitious designs and easy to use software commands simplify integration and reduce development times.



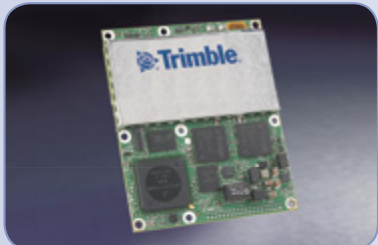
BD970



The Trimble® BD970 GNSS system is a compact multi-constellation receiver designed to deliver centimeter accuracy to a variety of applications. With the Trimble BD970, OEM's and integrators can be assured their investment is sound today and into the future. The Trimble BD970 GNSS supports a wide range of satellite signals, including GPS L2C and L5 and GLONASS L1/L2 signals. In addition, Trimble is committed to the next generation of modernized GNSS configurations by providing Galileo-compatible products available for customers well in advance of Galileo system availability. In support of this plan, the new Trimble BD970 is capable of tracking the experimental GIOVE-A and GIOVE-B test satellites for signal evaluation and test purposes.

With the latest Trimble-precise Maxwell 6 technology, the BD970 provides assurance of long-term future-proofing and trouble-free operation. Moving the industry forward, the Trimble BD970 redefines high-performance positioning: on-board multipath mitigation; proven low-elevation tracking technology; and dramatically improved RTK initialization.

BD982



The Trimble® BD982 GNSS system is a single board solution for precise position and heading. The product delivers the latest in GNSS signal support delivering multi-constellation RTK baselines between the two connected antennas and to a remote base station. With the Trimble BD982, OEM's and integrators can be assured their investment is sound today and into the future. The Trimble BD982 GNSS supports GPS L1/L2/L5 and GLONASS L1/L2 signals. In addition, Trimble is committed to the next generation of modernized GNSS configurations by providing Galileo-compatible products available for customers well in advance of Galileo system availability. In support of this plan, the new Trimble BD982 is capable of tracking the experimental GIOVE-A and GIOVE-B test satellites for signal evaluation and test purposes.

With the option of utilizing OmniSTAR VBS, XP, G2 and HP services, the BD982 delivers varying levels of GNSS performance right down to the sub-decimeter level, even without the use of a base station

BX960



The Trimble® BX960 GNSS receiver enclosure is a multi-channel, multi-frequency, OEM GNSS receiver. Harnessing the power of the Trimble BD960 module, the receiver allows OEM's and system integrators to rapidly integrate centimeter-level positioning into their application. Industry standard D-sub connectors provide access to all power and communications. Both serial and Ethernet connectivity are supported. Multiple configurations are available from L1 DGPS to the fully loaded RTK unit tracking GPS L1/L2/L5 and GLONASS L1/L2 signals.

The Trimble BX960-2 GNSS receiver packages two Trimble BD960 modules in a single rugged enclosure. This allows a Moving Baseline RTK solution to be calculated between two antennas. The resulting centimeter accurate vector and heading information can be output to the serial port in ASCII or binary format. This addresses a range of precise navigation applications where both centimeter accurate positions and precise heading is required.

WHY TRIMBLE?

For over 30 years, Trimble has worked with OEM's around the world to develop reliable and innovative products and solutions. As an industry leader, Trimble manufactures and ships over 1 million GPS/GNSS receivers each year. Trimble delivers cost-effective, scalable, high-quality products and services to our diverse base of customers worldwide. Leverage the power of working with a single company that offers comprehensive capabilities for all applications.

QUALITY

At Trimble, delivering our products and services with quality is an integral part of how we do our work and how our products work for our clients. Quality is a commitment that is woven through every aspect of our business in order to provide our customers with the best in class products and solutions.

INNOVATION

Innovation remains at the core of Trimble's identity, as it has from the beginning. Our high level of R & D expenditures ensure we continue to push the frontiers of what is possible.

PRECISION

Trimble delivers industry-leading, centimeter-level positioning technology for applications that require high levels of precision. Customers can rely on the accuracy of measurements, positioning, or orientation.

INTEGRATION

Trimble products and solutions provide seamless integration for OEMs, whatever the application, with complete product integration no matter how complex. Trimble offers comprehensive, integrated solutions for specialized or custom hardware solutions.

PERFORMANCE

Trimble supplies comprehensive solutions that maximize performance. Our solutions offer specialized design and greater performance required to support a broad range of equipment and applications required by our customers and partners.

RELIABILITY

Trimble offers outstanding reliability in a wide range of guidance or control applications. Built on a solid framework of achievement, accuracy and consistent dependability of performance, customers can trust Trimble solutions.

FLEXIBILITY

Trimble products and solutions are easily adaptable to a diverse range of applications. Our customers benefit from advanced technology that is customizable to fit their specific business requirements. Interoperability provides a mix and match approach to solving customer's needs.

CUSTOMER FOCUS

At the center of Trimble's past, and future, success is an intimate knowledge of the user requirements that can be translated into practical and successful outcomes for the user.

SERVICE & SUPPORT

Quality, technology and service are the hallmarks of Trimble. With easy access to customer service, our customers are able to keep running continuously and efficiently. Our goal is your satisfaction, plain and simple.



www.trimble.com/GNSS-Inertial

AMERICAS & ASIA-PACIFIC TRIMBLE NAVIGATION LIMITED

510 DeGuigne Drive
Sunnyvale, CA 94085
USA
+1-408-481-8000 Phone
+1-408-481-8984 Fax

EUROPE & MIDDLE EAST TRIMBLE NAVIGATION LIMITED

HAL Trade Center
Bevelandseweg 150
1703 AX Heerhugowaard
Netherlands
+31-725-724-408 Phone
+31-725-348-288 Fax