TRIPLE FREQUENCY GPS/GLONASS/GALILEO/BEIDOU RECEIVER WITH INTEGRATED COMMUNICATIONS SPEEDS DEVELOPMENT OF MOBILE POSITIONING APPLICATIONS

THE LATEST IN GNSS AND COMMUNICATION TECHNOLOGY FROM TRIMBLE IS NOW AVAILABLE TO ORIGINAL EQUIPMENT MANUFACTURERS (OEM) AND SYSTEM INTEGRATORS.

GNSS AND COMMUNICATION TIGHT INTEGRATION
Taking advantage of Trimble’s expertise in both GNSS and UHF communications the Trimble BD930-UHF module has been designed for applications requiring centimeter accuracy in a compact package. By integrating wireless communications on the same module the task of receiving RTK corrections is greatly simplified. A single intuitive web interface allows a variety of use cases to be supported.

Both GNSS and communication components are fully shielded. This design ensures the high quality signals are protected from the sources of EMI on the host platform. It also significantly reduces radiated emissions which speeds compliance certification and time to market.

MULTI CONSTELLATION GNSS
The Trimble BD930-UHF supports both triple frequency from the GPS and GLONASS constellations plus dual frequency from BeiDou and Galileo. As the number of satellites in the constellations grows the BD930 is ready to take advantage of the additional signals. This delivers the quickest and most reliable RTK initializations for 1-2 centimeter positioning. For applications that do not require centimeter accuracy the BD930 contains an advanced kalman filter PVT engine that delivers high accuracy GNSS, DGNSS positions in the most challenging environments such as urban canyons. Different configurations of the module are available. These include everything from a DGPS L1 unit all the way to a four constellation triple frequency RTK unit. Choose the receiver that suits your application and price point. All features are password-upgradeable, allowing functionality to be upgraded as your requirements change.

The receiver also supports Fault Detection and Exclusion (FDE) and Receiver Autonomous Integrity Monitoring (RAIM) for safety-critical applications.

HIGH PERFORMANCE INTEGRATED UHF RECEIVER
The Trimble BD930-UHF integrates the latest generation of UHF receiver modems allowing the system to instantly receive corrections from a large installed base of GNSS reference stations. With the BD930-UHF you are buying a solution, not just a GNSS receiver. Key features include:

- 70 MHz Bandwidth (403-473 MHz)
- High Over-the-Air Link Rates
- Industry standard link protocols

FLEXIBLE INTERFACING
The Trimble BD930-UHF was designed for easy integration and rugged dependability. Customers benefit from the Ethernet connectivity available on the board, allowing high speed data transfer and configuration via standard web browsers. USB and RS-232 are also supported. Just like other Trimble embedded technologies, easy to use software commands simplify integration and reduce development times.
TRIMBLE BD930-UHF GNSS RECEIVER MODULE/COMMUNICATION MODULE

TECHNICAL SPECIFICATIONS

- 3 x RS232 ports
- 1 LAN Ethernet port:
  - 1 USB 2.0 Device port
- Supports Fault Detection & Exclusion (FDE), Receiver Autonomous Integrity
- Event Marker Input Support
- 1 Pulse Per Second Output
- Very low noise GNSS carrier phase measurements with <1 mm precision in a
- All functions are performed through a single IP address simultaneously—
- Supports links to 10BaseT/100BaseT auto-negotiate networks
- Galileo: E1, E5A, E5B, E5AltBOC2
- BeiDou B1, B2
- SBAS: L1 C/A, L1/L2 GPS + L1/L2 GLONASS
- QZSS: L1 C/A, L1 SAIF, L2C, L5
- RTK initialization reliability: typically <10 seconds
- Random 8 gRMS survival

PHYSICAL AND ELECTRICAL CHARACTERISTICS

- 60 mm x 55 mm x 15 mm
- 5 V DC 28 V DC
- Temperature:
  - Operating: –40 °C to +80 °C
  - Storage: –55 °C to +85 °C
- Vibration.
  - MIL-810D, Level 2, Random 6.2 g RMS operating
  - 44-pin header
  - MMIC receptacle
  - Random 8 g RMS survival
- Mechanical shock:
  - MIL-810D Level 2
  - ±75 g survival
- Operating Humidity: 5% to 95% R.H. non-condensing, at +60 °C

ORDERING INFORMATION

Module 

Specifications subject to change without notice.

© 2014, Trimble Navigation Limited. All rights reserved. Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited. All other trademarks are the property of their respective owners. (05/14)