



# Trimble BX982

## DUAL ANTENNA GNSS MODULE FOR PRECISE POSITION AND HEADING APPLICATIONS

### BX982 GNSS RUGGED RECEIVER ENCLOSURE

The Trimble BX982 GNSS receiver enclosure is a multi-channel, multi-frequency OEM GNSS receiver which allows OEM's and System Integrators to rapidly integrate centimeter level positioning and precise heading into their application. The Trimble BX982 supports GPS L1/L2/L5, GLONASS L1/L2/L3 and BeiDou B1, B2 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 becoming operational. In support of this, the Trimble BX982 is capable of tracking Galileo signals for evaluation and test purposes.<sup>2</sup>

### DUAL ANTENNA INPUT

Single antenna GNSS systems have difficulty determining where the antenna is positioned relative to the vehicle and object of interest, especially when dynamics are low. External sensors can be used to augment this however these tend to drift when static. Heading derived from dual antenna GNSS measurements overcomes these issues and is now economically the right choice. The BX982 harnesses the power of the 220 channel Trimble Maxwell™ 6 Technology with dual chips supporting two antennas connected to the board. Independent observations from both antennas are passed to the processor where multi-constellation RTK baselines are computed. A single connection to the BX982 via RS232, USB, Ethernet or CAN delivers both centimeter accurate positions and less than a tenth of a degree (2 meter baseline) heading accuracy.

### FLEXIBLE INTERFACING

The Trimble BX982 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. 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.

### HIGH INTEGRITY

The BX982 supports Fault Detection and Exclusion (FDE) and Receiver Autonomous Integrity Monitoring (RAIM) for safety-critical applications.

### RUGGED RECEIVER ENCLOSURE

The Trimble BX982 packages a single BD982 receiver module in a rugged enclosure. The unit comes in an environmentally sealed enclosure that is very easy to install. The BX982 is rigorously tested to perform in harsh environmental conditions with the reliability you expect from Trimble.

## Key Features

- ▶ Easy to integrate rugged package
- ▶ Two 220 channel Maxwell™ 6 chips for multi-constellation GNSS support
- ▶ OmniSTAR VBS / XP / G2 / HP support
- ▶ Dual antenna inputs for precise heading calculation
- ▶ Centimeter-level position accuracy
- ▶ Convenience of ethernet connectivity
- ▶ Supports FDE and RAIM



