

Applanix POS LVX+ 500

GNSS-Inertial solutions for reliable, efficient and high-accuracy positioning and mapping powered by CenterPoint RTX

The Applanix® POS LVX+ 500 represents a significant advancement in GNSS-Inertial technology. It is specifically engineered to enhance the efficiency and precision of mapping operations in real-time and post-processed environments. This advanced solution is particularly well-suited for projects utilizing LiDAR sensors or cameras, as well as for fleet management and automotive applications. The power of Trimble® CenterPoint® RTX correction service enables high real-time positioning without the need for an RTK network, thereby reducing operational costs and enhancing productivity.

This system comprises a robust enclosure, integrating a high-precision dual GNSS receiver, embedded inertial sensor unit (IMU Type 79), external inertial sensor unit (IMU Type 95), and data logging capabilities with comprehensive interface support. In addition, the system fully supports odometry (DMI) input.

The Applanix POS LVX+ 500 is fully supported by Applanix POSPac™ Complete, factory enabled powerful GNSS-Inertial processing software featuring the advanced Applanix IN-Fusion®+ with PP-RTX technology for supreme productivity.

Cost effective and high performance

The Applanix POS LVX+ solution leverages POSPac Complete to deliver significant operational advantages, such as:

- Mapping without a base station
- LiDAR payload calibration
- SLAM-aided trajectory adjustment
- Trimble IonoGuard™ Support
- 1-year factory enabled POSPac Complete and real-time CenterPoint RTX subscription



Key Features

- **Optimal Productivity:**
Engineered to significantly boost operational efficiency by minimizing reliance on ground infrastructure for real-time corrections
- **Centimeter-Level accuracy:**
Achieve uncompromised performance with real-time and post-processed centimeter-level position accuracy, combined with high accuracy orientation, powered by Trimble RTX® technology.
- **Integrated Applanix IN-Fusion+:**
Leveraging advanced GNSS-Inertial integration with Applanix SmartCal™ compensation technology for superior position and orientation performance.
- **Seamless Workflow:**
Supported by Applanix POSPac Complete, the industry-leading software for Direct Georeferencing of mobile mapping sensors.
- **Out-of-the-Box Ready:**
Includes 1-year factory-enabled real-time Trimble CenterPoint RTX correction service and POSPac Complete post-processing, allowing for immediate mapping operations without additional license or cost.
- **Dual IMU:**
Onboard and external IMU for quick installation, troubleshooting, and redundancy.

