

Septentrio Enters into Partnership with XenomatiX



Septentrio and XenomatiX are starting a partnership enabling high-quality Lidar solutions. Septentrio is a leader in advanced GNSS/INS positioning solutions, while XenomatiX is a provider of true-solid-state-Lidar technology for autonomous applications and road management solutions.

XenomatiX will be using the compact and robust GNSS/INS receiver from Septentrio, AsteRx SBI3 Pro+, to provide millimetre-accurate analysis of pavement conditions using global positioning coordinates.

Septentrio's GNSS/INS will be a part of XenomatiX's Road Lidar called XenoTrack, which has been the solution of choice for road surveyors and road management companies. Septentrio's [AsteRx SBI3](#), high-performance RTK GNSS/INS receiver with a dual antenna setup, ensures cm-accurate geotagging of the XenoTrack point cloud frames for relative and global millimetre accuracy over large distances. Moreover, the inertial GNSS – IMU integration algorithm enables dead-reckoning, which means continuous positioning in environments of low satellite visibility where GNSS outages occur.

□ Septentrio GNSS/INS receiver AsteRx SBI3 Pro+ provides accurate positioning and orientation to the Lidar system from XenomatiX.

3D topography in a single shot

While traditional road scanning based on laser profilers rely solely on extremely accurate GNSS/INS to stitch consecutive profiles together, the [XenoTrack](#) captures a 3D topography of an entire area in a single shot. XenomatiX's sensor fusion algorithms combine visual SLAM techniques with GNSS, IMU and CAN to obtain a seamless map of the road shape. Moreover, Septentrio and XenomatiX's technologies consider themselves as perfect partners for safe ADAS solutions. XenoLidar-X, XenomatiX's Lidar designed for advanced driving assistance systems (ADAS) applications, and Septentrio's high-precision GNSS receiver can optimize vehicle perception in localization and SLAM applications.

XenomatiX offers a complete mapping system as well as services including data from the XenoTrack sensor, camera and RTK GNSS/INS receiver with dual antenna – all delivered in an easy-to-install solution on a standard vehicle.

[Join XenomatiX's Next-generation Road Survey & Analysis Webinar](#)

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