

# SPAN GNSS+INS Technology

Integrating GNSS and Inertial Navigation System measurements for 3D position, velocity and attitude in hydrographic survey applications.

## World-Leading GNSS+INS Technology

SPAN technology brings together two different but complementary technologies: Global Navigation Satellite System (GNSS) positioning and inertial navigation. The absolute accuracy of GNSS positioning and the stability of Inertial Measurement Unit (IMU) gyro and accelerometer measurements are deeply coupled to provide an exceptional 3D navigation solution that is accurate, stable and continuously available, even during periods when satellite signals are blocked.

## Overview

SPAN GNSS+INS technology has delivered assured positioning for over 15 years. Now optimized for the marine environment and in particular hydrographic survey applications, this technology provides accurate positioning and heave measurements in challenging marine environments. By deeply coupling GNSS and inertial measurements, the SPAN solution delivers reliable and stable positioning and orientation in all conditions. The deeply coupled architecture aids in the tracking of GNSS through rapid acquisition or reacquisition of satellite signals.

## Advantages of SPAN Technology for Hydrographic Survey Applications

By integrating GNSS and INS measurements, SPAN technology produces an assured 3D position as well as velocity, attitude, heading and heave measurements. The resulting precise data is used by survey sensors onboard marine vessels in hydrographic surveys or construction activities. The technology is scalable with different IMUs like our IMU-ISA-100C and IMU- $\mu$ IMU-IC offering easy integration with the Hexagon | VERIPOS LD900 receiver and Quantum visualization software.



## Key Features & Benefits

- Accurate position, attitude, heading, velocity and heave measurements for hydrographic survey operations
- Deeply coupled INS integration through SPAN technology offers robust and accurate 3D positioning solution
- Range of IMUs for scalable performance as positioning requirements change
- Easy integration of IMUs with the VERIPOS LD900 GNSS receiver
- Visualization with VERIPOS Quantum Software
- SPAN technology with more than 15 years of proven accuracy optimized for hydrographic survey applications
- Non-ITAR and commercially exportable IMUs

## Contact Hexagon | VERIPOS

[sales@veripos.com](mailto:sales@veripos.com) +44 1224 965800

For the most recent details of this product visit [veripos.com](http://veripos.com)

©2020 VERIPOS. All rights reserved. VERIPOS is part of Hexagon. All trademarks or servicemarks used herein are property of their respective owners. VERIPOS makes no representation or warranty regarding the accuracy of the information in this publication. This document gives only a general description of the product(s) or service(s) offered by VERIPOS, and, except where expressly provided otherwise, shall not form part of any contract. Such information, the products and conditions of supply are subject to change without notice.