



KVH and VectorNav collaborate to offer precision inertial navigation system

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VectorNav's Tactical Series line of inertial navigation systems now supports KVH's high-performance fiber optic gyro-based 1750 IMU and 1775 IMU.

Inertial sensor companies [KVH Industries Inc.](#) and [VectorNav Technologies LLC](#) have announced that KVH's fiber optic gyro (FOG)-based [1750 IMU](#) and [1775 IMU](#) will now be offered to enhance the operation of VectorNav's [VN-210](#) and [VN-310](#) Tactical Series GNSS-aided inertial navigation systems.

The products are on display in KVH's (#2600) and VectorNav's (#2214) booths at the [AUVSI Xponential conference](#) in Denver, Colorado, taking place April 30-May 3.

The VectorNav Tactical Series products with KVH's FOG-based inertial measurement units (IMUs) combine the precision and reliability of KVH's FOG technology with the robust filters and high-performance navigation algorithms of VectorNav's inertial navigation systems.

The combined capabilities represent an affordable, effective alternative to larger, higher-cost inertial navigation systems and provide improved accuracy in challenging environments, the companies said.

VectorNav's Tactical Series includes an onboard micro-electromechanical systems (MEMS)-based IMU, which provides some advantages for customers who have constraints in terms of size and weight in their navigation and stabilization applications.



However, in terms of inertial accuracy, the most demanding applications require performance that can only be delivered by FOG-based IMUs, for which KVH is a leading provider.

The VectorNav Tactical Series products with KVH FOG-based IMUs are designed for such applications as:

- Satcom On The Move
- gimbal and camera pointing and stabilization
- weapons systems targeting and stabilization
- autonomous vehicle navigation
- lidar mapping
- georeferencing

or any application where MEMS-based solutions are unable to deliver sufficient accuracy and precision.

Watch this video from [Xponential 2018](#) to learn more about the partnership.