

KVH Sensors

Delivering the precision and performance autonomous trucks and shuttles need for accurate navigation



New Photonic Technology and High-Performance Accelerometers

Only KVH offers precise fiber optic gyro (FOG)-based inertial sensors with PIC Inside™ photonic integrated chip technology that improves reliability and repeatability – essential to accurate autonomous truck and shuttle navigation. Now you can get affordable navigation data in all environments and weather conditions even if GPS/GNSS is unavailable.

More Performance You Can Rely On

KVH's PIC Inside replaces fiber components with an innovative integrated planar chip. This produces a FOG that is even more reliable and delivers superior repeatability unit-to-unit, essential for safe, accurate autonomous vehicle performance.

KVH has also added new, high-performance Colibrys accelerometers to bring even more outstanding performance with:

- Greater Velocity Random Walk
- Better Input Range
- Improved Bias Instability
- Greater Scale Factor vs. Temperature
- Enhanced Scale Factor Non-Linearity

Offered with either 30g and 10g accelerometers, the KVH FOG-based inertial systems with PIC Inside and high-performance accelerometers deliver superior, dependable performance in the specs you need on the road.



MEMS Fail While FOGs Succeed

Low-cost MEMS cannot deliver performance for the price. MEMS are not accurate enough to reduce safety risks adequately, nor can they provide true situational awareness, despite the appeal of their cost and size.

KVH's solid-state FOG-based inertial systems overcome MEMS' issues with vibration, shock, weather, and road conditions to deliver superior performance for improved safety for autonomous trucks and shuttles. KVH sensors are highly resistant to vibration, shock, and environmental conditions such as weather and temperature, making them ideal for safe, reliable autonomous vehicle navigation.



Enhancing GPS/GNSS to Deliver Autonomous Navigation Accuracy

FOG-based inertial systems enhance GPS/GNSS using integrated gyros and superior accelerometers for unjammable, unblockable, and highly accurate navigation. That's why KVH FOG-based inertial navigation systems are the preferred navigation sensors for vehicles that have driven millions of autonomous miles.



Your Fleet Deserves KVH Performance

KVH delivers the accuracy, reliability, repeatability, and performance that successful autonomous trucks and shuttle navigation require.

Contact KVH Inertial Navigation Sales for more information on how to get KVH's reliable, high performing FOGs and FOG-based inertial systems working in your next project.

kvh.com/P1775



KVH Industries, Inc
50 Enterprise Center, Middletown, RI U.S.A.
+1.401.847.3327 · info@kvh.com



Sean McCormack
Director, Global Inertial Navigation Sales,
+1.401.845.2413 · smccormack@kvh.com