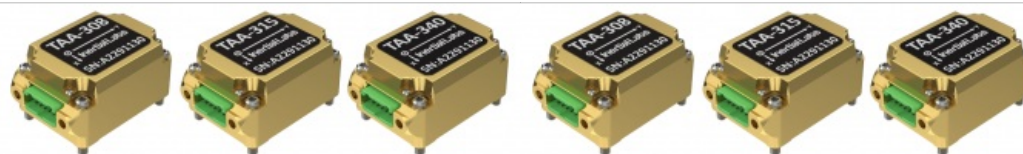


# Inertial Labs presents new high-precision three-axis accelerometers



Inertial Labs has unveiled its latest innovation: high-precision three-axis accelerometers (TAA). These compact, self-contained devices mark a significant leap forward in navigation-grade accelerometers, promising unmatched precision in measuring linear accelerations. Developed over two decades, the TAA series reflects Inertial Labs' commitment to delivering high-end

solutions.

The MEMS TAA-308, TAA-315, and TAA-340 are presented as revolutionary, compact, self-contained, strap-down, navigation-grade accelerometers designed to measure linear accelerations with exceptional precision. The result of two decades of development work, these accelerometers showcase Inertial Labs' significant knowledge and techniques in calibrations of inertial sensors. TAA accelerometers measure accelerations with low noise and excellent repeatability for both motionless and dynamic applications.

## Enhancing navigation of UAVs, AUVs and ROVs

The TAA-308, TAA-315 and TAA-340 are all advanced integrated inertial sensors that leverage the latest MEMS sensor technology. With the capability to measure accelerations within ranges of  $\pm 8g$ ,  $\pm 15g$  and  $\pm 40g$ , these accelerometers undergo thorough calibration and temperature compensation. Mathematically aligned to an orthogonal coordinate system, they ensure precision. The TAA accelerometer series boasts a bias in-run stability as low as  $0.005mg$  at a  $\pm 8g$  dynamic range, characterized by minimal noise and high reliability. Inertial Labs' TAA accelerometers are user-friendly and suitable for diverse advanced integrated system applications, featuring continuous built-in test (BIT), adaptable communication protocols and versatile power input options.

These advanced accelerometers have been engineered to enhance the performance and reliability of various applications, including critical areas such as autonomous vehicles, antenna and line-of-sight pointing systems, passenger trains, marine and subsea domains, and stabilizing gimbals for EOC/IR platforms. Integration into GPS-aided inertial navigation systems (INS), attitude and heading reference systems (AHRS), and various guidance and navigation systems marks a significant advancement in navigational technology. Moreover, these accelerometers play a crucial role in enhancing the navigation and control of uncrewed aerial vehicles (UAVs or 'drones'), autonomous underwater vehicles (AUVs) and remotely operated vehicles (ROVs).

Jamie Marraccini, president and CEO of [Inertial Labs](#), stated: "The TAA accelerometer models represent a significant leap forward in navigational and motion sensing technology. They are a testament to our commitment to precision, reliability and advancement in the field of inertial sensors. Our focus remains steadfast on providing solutions that are not just cutting-edge, but also practical and transformative for industries worldwide."



Inertial Labs' MEMS TAA-308, TAA-315, and TAA-340. (Image courtesy: Inertial Labs)