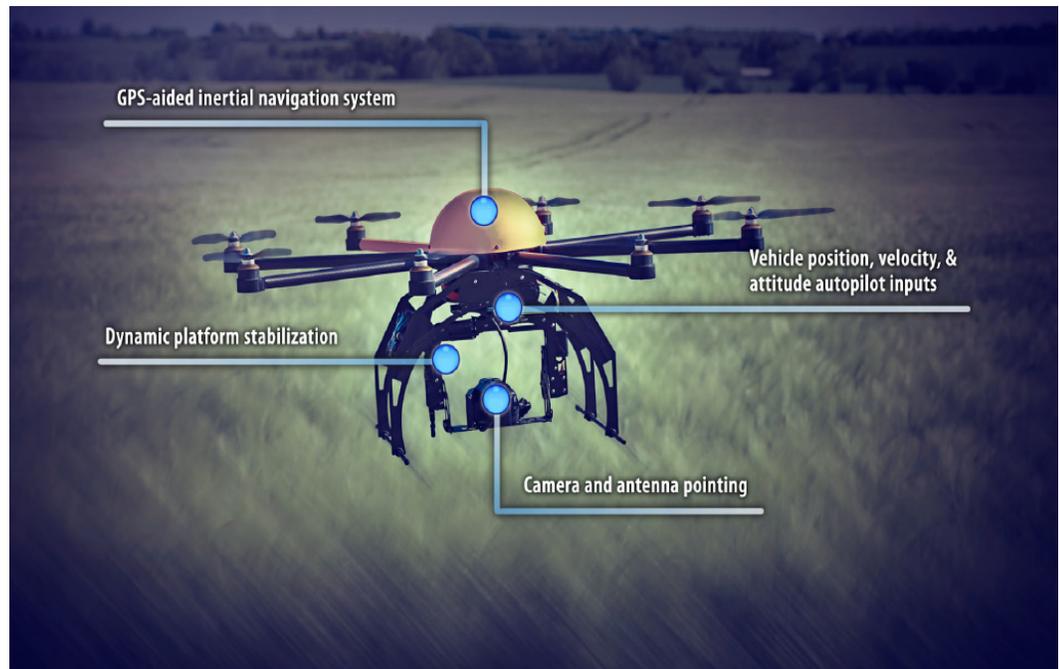


# Unmanned Aerial Vehicles

## MicroStrain miniature inertial sensors for UAV systems

**High-Performance Sensing Systems:** Unmanned aerial vehicles (UAVs) often operate in demanding environments that require precise and reliable sensory feedback. Yet UAVs are also especially sensitive to small changes in weight and volume. As a result, autonomous platform operators may forgo valuable sensing capabilities or compromise overall platform performance.

**MicroStrain provides** high performance inertial sensing systems with minimal weight and size. MEMS technologies, GNSS tracking, and sophisticated estimation filtering offer accurate and reliable data quantities to provide precise control, stabilization, and pointing. Microstrain inertial solutions enable cost-effective integration of primary and secondary unmanned navigation or ISR (Intelligence, Surveillance, Reconnaissance).



**Ease of Integration:** MicroStrain provides tactical and high-end industrial grade miniature inertial sensors to the UAV market. Our user implementation procedure is streamlined to support rapid evaluation and integration with little development overhead, and low barriers to incorporate the latest sensor models and capabilities.

GNSS-Aided Inertial Navigation Systems (GNSS/INS), Attitude Heading Reference Systems (AHRS), and Inertial Measurement Units (IMU) are backed by comprehensive development kits. Combined with SensorConnect communication protocol, unmanned air vehicle operators have the flexibility of moving up or down the product line with little or no rewriting of code. Calibrating each sensor to the same strict standard ensures identical performance between same model devices. As a result, UAV developers can be confident that integrating MicroStrain sensors into their systems is a repeatable, cost-effective process.



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# MicroStrain Application note: UAV

## Benefits:

- Small, light, easy to integrate on new and existing platforms
- Best in class industrial and tactical grade inertial systems.
- Rugged, flight qualified systems
- Reduced development cost and rapid deployment
- Cost-effective, high-performance miniature inertial navigation systems.
- Forward compatible software communications across models.
- Configure your sensors
- Export data for real-time navigation
- Build custom dashboards
- analyze data for after-action reporting



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