Septentrio unveils a new GNSS/INS receiver for Unmanned Aerial Systems

Septentrio introduces a GNSS/INS receiver designed specifically for the UAVs. The on-board inertial sensor allows a compact design aimed at quick set-up and integration. Light weight and low power consumption optimize UAV battery life resulting in longer flight times.

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Leuven, Belgium - Septentrio, a leading global supplier of high-accuracy positioning technology for demanding applications has announced today a new addition to their GNSS/INS portfolio. AsteRx-i S UAS combines GNSS technology with industrial-grade inertial sensor to provide high-accuracy, reliable positioning and 3D orientation (heading, roll, pitch) to aerial drones and other compact robotic systems.

Septentrio's introduction of AsteRx-i S UAS builds on top of the success of their existing UAV products, AsteRx m2 and m2a UAS. Its optimized SWaP (Size, Weight and Power) increases UAV battery life resulting in longer flight times and improved productivity. This credit card sized receiver is designed for easy integration into any UAS (Unmanned Aerial System) and is compatible with popular autopilots such as Pixhawk and ArduPilot. It is a single-package GNSS/INS product, with an on-board IMU (Inertial Measurement Unit) and standard connectors allowing flexibility of sensor choice. "Quick receiver integration makes the lives of our customers easier. It also speeds up their system's time-to-market," said Danilo Sabbatini, Product Manager at Septentrio. "Our goal was to combine a high-performance product with a simple and flexible plug-and-play integration design, suitable for any aerial system."

Septentrio reliable centimeter-level positioning is based on multi-frequency, multi-constellation GNSS technology (GPS, GLONASS, Galileo, BeiDou, QZSS). AsteRx-i S UAS combines a GNSS receiver with a high-quality IMU to deliver reliable positioning together with 3D orientation. Septentrio's unique GNSS – IMU integration algorithm provides continuous positioning during short GNSS outages (coasting) which can happen in flight near high structures, under bridges or during banking turns.

AsteRx-i S UAS comes with built-in industry leading [Advanced Interference Mitigation](#) (AIM+) technology. In aerial drones, where lots of electronics are crammed into a small space, neighboring devices can emit electromagnetic radiation which interferes with GPS and GNSS signals. AIM+ offers protection against such interference resulting in faster set-up times and robust continuous operation. A built-in power spectrum plot allows users to analyze interference, helping locate its source and mitigating it.

For more info, visit the [AsteRx- i](#) [S UAS product page](#) - [High resolution images](#)
Come and visit us at: **[ION GNSS+](#)** 16-20 Sept. 2019 Miami, Florida, US
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About Septentrio

Septentrio provides high-precision, multi-frequency, multi-constellation GPS/GNSS positioning technology for use in demanding applications. Reliable centimeter-level positioning enables machine autonomy and ensures operational continuity, efficiency and safety. Septentrio provides positioning solutions for professional applications in such industries as autonomous vehicles, robotics, construction, mapping, marine, logistics and unmanned aerial vehicles (UAVs).

Septentrio is headquartered in Leuven, Belgium and has a global presence with offices in Los Angeles, Shanghai, Yokohama and many other distributors world-wide. To learn more about Septentrio and its products, visit septentrio.com.

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