

# Dual Antenna GNSS Inertial System



SBG Systems, France, adds a new inertial system to its Ekinox Series. With integrated Dual Antenna GPS + GLONASS receiver, the Ekinox-D is a ready-to-use Survey Grade inertial navigation system which provides consistent true heading (0.05°).

The Survey Grade [Ekinox-D](#) embeds a Dual Antenna L1/L2 GNSS receiver to deliver more robust heading and position, while increasing satellite reception availability. Ekinox-D is an integrated system. GNSS data and inertial information are fused by an Extended Kalman Filter (EKF) to improve data integrity. This computation allows the system to achieve 0.05° Roll, Pitch, and True Heading; 5 cm Heave; and 2 cm RTK GNSS position.

## All-in-one

Instead of mounting separately GNSS receiver and inertial systems, the Ekinox-D can be connected to a system (e.g. camera, sonar, Lidar, etc.). With its 8GB data logger and its high output rate (200Hz), Ekinox-D arranges robust heading for applications like surveying and hydrographic applications, unmanned system navigation, car testing, etc.

The IP68 Ekinox Series brings robust, maintenance free, and cost-effective MEMS to the next level thanks to a drastic selection of high end MEMS sensors, an advanced calibration procedure, and powerful algorithm design. Compromise is no longer required between high accuracy & cost.

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<https://www.hydro-international.com/content/news/dual-antenna-gnss-inertial-system-2>

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