

Improvements to Ellipse Series



SBG Systems has released a new version of the Ellipse Series, its product line of miniature inertial sensors. The Ellipse has been improved, showing increased performance in attitude and heave measurement while adding Galileo constellation to its GNSS receiver.

With low noise gyroscopes and new high performance accelerometers providing superior noise level, the accuracy of every Ellipse models has now improved from 0.2° to 0.1° in roll and pitch. In addition, the new accelerometers tolerate very high vibration environments (up to 8g).

The Ellipse-N model is an all-in-one inertial sensor that embeds a L1 GNSS receiver. Ellipse-N is already compatible with GPS, GLONASS and BEIDOU constellations. With the addition of GALILEO tracking, Ellipse-N benefits from more satellites, improving the signal robustness in harsh environments.

Heave Accuracy to 5cm

The new Ellipse (A2 option) delivers a 5-cm accurate heave which automatically adjusts to the wave period. This benefits to instrumented buoys, helideck, or boat motion monitoring applications where cost-effective and small-size devices are sought.

Ellipse embeds high quality sensors with a greatly improved long-term stability. Sensors are totally integrated in an IP68 enclosure, resistant to dust and water. Every Ellipse sensor is tested and calibrated in temperature and dynamics, to ensure constant behaviour in every condition. Ellipse are guaranteed for 2 years. This warranty can be extended up to 5 years.

The new Ellipse series can be used as a drop-in replacement of the previous Ellipse. No specific action is required in terms of mechanical, electrical or software integration.

