

Upgraded xNAV and xOEM Offer Enhanced Functionality and User Experience



OxTS, experts in inertial navigation has introduced a series of updates to the xNAV and xOEM range of products. The result is greater practicality and improved functionality from OxTS' survey-friendly GNSS-aided inertial navigation systems and lightweight GNSS/INS board sets.

The already compact xNAV550 dual-antenna GNSS/INS has been further reduced in size and weight. It is now even better suited to space- and weight-restricted UAV-based surveying applications that still require centimetre-level positioning and accurate roll, pitch and heading data. The xNAV550 now weighs just 395g and has been reduced in height to 43mm.

The xOEM550 dual-antenna GNSS/INS board set is also smaller and lighter than before, with a 4.9mm reduction in height (to only 30.1mm) and a reduction in weight (to 150g).

As well as reductions in size and weight, the xNAV500/xOEM500 and xNAV550/xOEM550 also benefit from reduced power consumption. This further increases their practicality in the field. An across-the-board saving of 0.5W brings the xNAV500/xOEM500 down to 6.5W and the xNAV550/xOEM550 to 9W. Furthermore, onboard storage capacity has been increased to 32GB for all products.

Additional functionality to xNAV and xOEM

- includes ethernet logging of UDP data streams from external sensors, like LiDAR (supporting up to four simultaneous stream logs);
- ethernet output of NMEA data (for external sensor synchronisation); and
- external PPS compatibility. The xOEM products have also been upgraded to feature three serial ports on the board set and offer RS485 support.

All units now have completely field-upgradable firmware and are future-ready thanks to a new ARM CPU that current only uses about 15% of its processing capability during standard use of the INS. This spare processing capacity allows for additional features to be added later, without the need for a hardware upgrade.

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