

Integrated GNSS/MEMS INS

OlinkStar has announced an integrated GNSS/MEMS Inertial Navigation System (INS) system, PNS100BGI. The system integrates GPS/Compass/GLONASS, MEMS IMU, magnetometer, and barometer to deliver a reliable 3D navigation solution. PNS100 tightly couples GNSS positioning and inertial navigation technologies to provide an accurate, continuous, smooth and reliable position, velocity and attitude solution in three dimensions.

A 32 channels GPS/Compass/GLONASS receiver, powered by the OlinkStar's OTrack32 chip technology, and a 6-DOF MEMS inertial measurement unit (IMU) including gyros and accelerometers, integrated within a single enclosure, comprises the system's accuracy and availability, even during periods of degraded, multipath, or no satellite signal available. A three-axis magnetometer and a barometer are also combined in to enhance the system's robust, faster cold start and multipath suppression.

The key features of PNS100 involves low-cost, lightweight, PPS synchronised sensor measurement, tightly coupled Kalman filtering, and No import/export issues. The instrument system weights 340g with a dimension of 83×65×40mm. The typical power consumption is 2W.

<https://www.gim-international.com/content/news/integrated-gnss-mems-ins>
