

Smartphone Solution with Survey-grade Mapping Accuracy



MetaSpatial Solutions' new platform-agnostic SmartSurveyor system turns any smartphone (iOS/Android), tablet or low-cost consumer-grade drone into a precise mapping system with 2cm mapping accuracy in XYZ. MetaSpatial Solutions is an Australian-based geospatial and mapping technology company.

The current surveying and mapping practices typically involve using total

stations, scanners and GNSS receivers for collecting ground features. Total stations must be established on a tripod for collecting ground features which is normally not adequate to represent the entire site condition and is very time and resource consuming.

Laser scanning instruments typically collect over a million points per each scan but require high-end and expensive GNSS and Inertial Measurement Units (IMU) and specialized processing software to produce georeferenced and co-registered precise points.

Alternative Affordable Solutions

Over the past decade, most of the surveying professionals adopted UAV-based mapping systems as a rapid and cost-effective alternative. However regulations, maintenance, multi-software and packages operation, support and uncertainties can all pose a challenge to typically smaller-size businesses.

The SmartSurveyor product concept is born as a result of 23 years of active geospatial and mapping product development. It uses a mixture of sciences and technologies for collecting and producing precise mapping data, and is aimed at doing this at a fraction of the cost and time compared with any other solutions. "We have packaged all the surveying, photogrammetry, mathematics, physics, sensor calibration, datum transformation and error adjustment complexities in a single software and hardware package so it can be simply operated by anyone," said Adam Chabok, director at MetaSpatial Solutions and inventor of the solution.



MetaSpatial's platform agnostic SmartSurveyor system.