

DT Research Introduces DT301T Rugged RTK Tablet



[DT Research](#), the leading designer and manufacturer of purpose-built computing solutions for vertical markets, has announced the DT301T Rugged RTK Tablet (DT301T-RTK), a lightweight military-grade tablet that is purpose-built for GIS mapping applications with Real Time Kinematic (RTK) satellite navigation used to enhance the precision of position data derived from satellite-based positioning systems. This unique tablet enables 3D Point Cloud creation with centimetre-level accuracy.

The DT301T-RTK has an IP65 rating and is lightweight offering the versatility to be used in the field, office and vehicles. A dual frequency GNSS module is built into the tablet, which uses real-time reference points within 1-2cm accuracy to position 3D point clouds created from aerial photogrammetry, using GPS, GLONASS and GALILEO receivers. Users can

measure with the RTK GNSS positioning directly using a foldable antenna or connect to an external antenna for more robust receiving and survey grade precision.

“In designing the DT301T with RTK satellite navigation, we took into consideration the other features and capabilities necessary within a rugged tablet to quickly and easily conduct Forensic Mapping, Land Surveying, e-Construction, Building Information Modelling and other mapping scenarios.” said Daw Tsai Sc.D., president of DT Research.

The DT301T-RTK is compatible with existing GIS software for mapping applications and brings together the advanced workflow for GIS data capture, accurate positioning and data transmitting. The tablet can be used in a variety of scenarios, including:

- **Forensic Mapping**– Public safety teams, investigators and crash re-constructionists can accurately collect measurements that are scientifically defensible by using the real-time centimetre reference points to position 3D point clouds created from aerial photogrammetry or take stand-alone measurements.
- **Land Surveying**– Surveyors can measure the altitudes, angles and distances on the land surface so that they can be accurately plotted on a map to determine property boundaries, construction layout and mapmaking.
- **e-Construction**– Construction workers can manage the collection, review, approval and distribution of highway construction contract documents in a paperless environment.
- **Building Information Modeling (BIM)**– Architecture, engineering, and construction (AEC) professionals can create 3D models to efficiently plan, design, construct, and manage buildings and infrastructure.

The DT301T-RTK has been purpose-built for precision mapping in a variety of environments and includes the following features and capabilities: Dual Frequency GNSS Module; High Performance CPU and Windows OS; Sunlight-readable Display; Wireless Connectivity; 1TB Storage; High Capacity Swappable Battery Pack; and accessories including external antennas, pole mount cradles, detachable keyboards, battery charging kits, and digital pens.