Penmap is a premium data collection software, specifically designed for cadastral surveying, mapping, and land registration tasks. Compatible with a suite of controllers running Windows® 8, 7, Vista®, XP, or Mobile operating systems, Penmap's revolutionary user interface provides the industry's largest map real-estate, is designed to be operated with your fingers, and provides the world's first right- or left-handed modes for better ergonomics.

**CADASTRAL DATA COLLECTION MADE EASY**
Penmap makes cadastral data collection easy and ensures complete data collection. With a map view of your job, all data is displayed in real time, including your current position. This highly improves the quality and completeness of your data and gives you peace of mind that you have collected everything completely and correctly before leaving the site.

Plus, WMS (Web Map Service) support within Penmap provides access to high-resolution satellite imagery and cadastral and other background maps worldwide for online and field office use. Functionality includes:
- Direct logging of total station and GNSS data
- Area computation
- Stakeout points with total station and GNSS data
- Multiple and verification measurements
- Configurable point numbering and code tables

**REVOLUTIONARY USER INTERFACE— TOUCH YOUR DATA**
The Penmap experience is a new and more enjoyable way of operating surveying and mapping software. Penmap is designed to be operated with your fingers. You don’t need a stylus that you could easily lose or forget. It’s fast and easy to control and navigate your data and map with just a touch of your finger. Now you can even touch your data.

For better ergonomics and user experience, Penmap provides two unique modes for right- and left-handed users.

**MORE SPACE FOR YOUR MAPS**
We don’t accept compromises between large buttons for easy operation and a gorgeous map display! The upper and lower button bars are translucent to show you the largest map real-estate possible. Penmap can handle very large data sets of raster or vector background maps. So you can have ALL your data with you whenever you need them.

Use with the land administration configuration of the the Trimble® ProXRT receiver and your choice of field controller, such as the Juno®, Trimble Nomad® G series handhelds, Trimble Yuma® or TSC3 handhelds, or a variety of field computers including laptops, Tablet PCs, and PDAs.

**TRIMBLE RTX SUPPORT**
Supporting the Trimble ProXRT receiver for land administration, Penmap enables you to receive centimeter accuracy worldwide—real time or post-processed. Trimble CenterPoint® RTX delivers GNSS enabled, repeatable 4 cm corrections to your Trimble ProXRT receiver anywhere in the world without requiring a base station or additional hardware.

**iFEATURE**
Do you need to collect multiple features simultaneously, such as such as a boundary line, boundary markers, and trees? Or even multiple line features: multiple boundary lines, a fence, and a building, without the need to finish one feature first? Penmap’s unique iFeature™ system manages multiple features. It reduces your walking distance and saves time.

**BRINGING THE OFFICE TO THE FIELD**
With Penmap, you can complete most of your project right in the field and share data between the field and office. Return to the office with a complete CAD drawing or high quality GIS data. Your office tasks get reduced to just a final touch or printing, enabling you to deliver—and invoice—your projects faster than ever.

Trimble Connected Community enables real-time data sharing between the field and office to streamline the work- and dataflow and enable office technicians to begin processing the data before you even leave the site.

**EASY TO USE**
Penmap is designed to be used immediately. You don’t need to be a surveying expert or go through a long learning curve. Because you always see what you are doing in real-time, using Penmap is like drawing a sketch or map on paper. And no worries about mistakes—Penmap’s UNDO / REDO function can remove errors instantly.
STANDARD FEATURES

Supported operating systems:
• Windows Mobile® 5.0, 6.0, 6.1, 6.5, and higher
• Windows XP, Vista, Windows 7, 8, and higher

Supported instruments and sensors:
• Total Stations/Robotic: Trimble, Spectra Precision, Nikon, Leica, Sokkia
• GNSS: Trimble, Leica, Javad, NMEA
• Laser: Trimble LaserAce 1000 Rangefinder, Leica Disto
• Echosounder
• Magnetometer
• Underground utility detectors
• Other interfaces on request

General
• Layer management: colors, linestyles
• Rastermap support
• WMS support on/offline use
• DigitalGlobe integrated
• Google maps, Bing maps

Data exchange (import/export)
• CSV Point data
• DXF, DWG
• Esri Shape
• GE Smallworld
• Penmap UNV
• Data synchronization between field and office using WebDav, FTP
• Reports: Measurements, Station setup, local adjustment, area, GIS,

Graphic elements
• Points
• Symbols (Blocks)
• Polylines
• Arcs
• Circles: center+radius, 2 nodes, 3 nodes
• Rectangles: 2 nodes+width, 3 nodes
• Bezier curves
• Text

Surveying methods
• GNSS
• Realtime: Base/Rover UHF, VRS, NTRIP, RTX
• Worldwide coordinate systems
• Local adjustment
• Raw data collection post-processing
• Visual quality indicators 1 - 2
• Collection modes: Single, average, continuous by time, by distance, Auto Tilt (Trimble R10 only)
• Total Station
• Known point multiple backsights
• Resection
• Traverse adjustment
• Snap
• Free node
• Bilateralization
• Chain & offset
• Enter data
• Extend
• Sketch
• Building
• Normal

Stakeout
• Points
• Verification observation
• Lines, parallels
• To DTMs

DTM
• Dynamic generation of DTM during data collection

CoGo
• Intersection lines, parallel, oblique, circles
• Split lines

Area computation

Transformation of site using control points

Point numbers and coding
• Various numbering systems
• Coding and comment support
• Unique iFeature system to collect multiple features simultaneously

Query
• Nodes and survey metadata
• Graphic elements
• Measurements between nodes and lines

Sensor interface
• Customizable: Echosounders, magnetometers

GNSS postprocessing
• Integrated postprocessing with Trimble Pathfinder software