

FieldGenius - Stonex



Thank you for your interest in FieldGenius – the most productive and easy-to-use data collection software solution ever!

If you are new to FieldGenius, you will be impressed by its graphic user interface, one-screen graphical stakeouts, easily deciphered raw file that you can edit, powerful COGO tools, DXF file support, streamlined connection to your instrument or computer, multi-point resections, roading, training movies, and the easiest, most powerful linework tools in the industry.

FieldGenius supports all common RTK GNSS and generic NMEA receivers, as well as all standard and robotic total stations. With direct support for LandXML, you can stake to DTM surfaces or cross sections from your designed alignment. Real time surface generation allows you to compute volumes instantly.

FIELDGENIUS HAS EVOLVED INTO THE MOST POWERFUL AND PRODUCTIVE DATA COLLECTION SOFTWARE

What sets FieldGenius apart from the competition?

- Code-free linework: Linework is created automatically without entering codes and is instantly displayed, eliminating the need for a separate sketch. No need to connect the dots back at the office.
- Advanced display with live graphics and intuitive interface. Logical icons, customizable toolbars, smart objects, and easy-to-use GPS and total station controls. Standard or high-definition devices!
- Easy stakeout: Choose between graphical compass, grid, and map staking modes to easily stake out points. Viewing direction can be adjusted based on your preferences.
- Productivity tasks: Customize your data collector by assigning commands to your keypad keys.
- Calculating tools: Access the built-in RPN calculator from any edit field and easily use surveying calculations.
- Plus advanced roading, surfacing, slope staking, smart points, DXF & LandXML import/export, and full robotic and GPS support. FieldGenius is the choice of organizations that value productivity.

LINEWORK THE FIELDGENIUS WAY!

MicroSurvey has developed the simplest linework connectivity in the industry. Absolutely NO CODING is required to generate your linework in the field in real time. Other data collection systems force you to predefine codes for generating linework. MicroSurvey has made real-time linework as simple as connecting the dots.

FIELDGENIUS LINEWORK IS EASIER THAN ANY OTHER

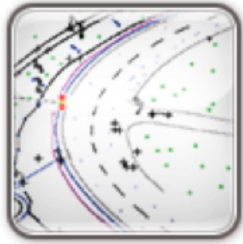
- You can connect points that have different descriptions.
- Linework can consist of straight segments, arcs, and splines.
- Linework is ALL in 3D, including arcs and splines.

- You can have more than one line with the same description; FieldGenius is smart enough to know which line to work on.
- Multiple lines can connect to the same point.
- Missing segments can be drawn using the pencil tool any time you need to add more info.
- A bad line can be removed instantly by tapping it and selecting “Delete Segment”.



TOTAL STATION AND GPS SUPPORT

FieldGenius supports all popular conventional and robotic total stations, as well as most RTK GPS receivers. Easy to use instrument toolbar ensures that your instrument options and settings are easily accessible.



POWERFUL ROAD MODULE

FieldGenius roading module is the most powerful and easy to use roading available. Manually input your alignment data including centerline, vertical and template data. Powerful alignment staking tools help you stake your points along your alignment with confidence. After you’ve staked your points, generate cut sheet reports using our cut sheet generator.



ALL THE STAKING TOOLS YOU WILL EVER NEED

FieldGenius includes staking commands for points, lines, arcs, alignments and 3D surfaces. A cut sheet generator helps you determine if the points you staked are where they should be.

Choose between compass, grid, and map staking modes.
Adjust viewing direction to north, prism, instrument, and user point.
Next point routine helps you quickly select next point to stake out.
Works with tablets and desktop PCs.



WORKS WITH TABLETS AND DESKTOP PCS

Not just for mobile devices & data collectors – it works great on Windows-based tablets as well!
The desktop version is great for learning how to use FieldGenius and it comes with all the same tools and functions that are available on the data collector version.
Use it to manually input your alignment data prior to heading out to the field, or use it to check projects that the field crew just downloaded.
Projects are interchangeable between the desktop version and your data collector.



IT'S EASY TO USE

The Tap'n Survey interface allows you to take shots, stake points, edit coords, stake a line, or any of the things you do all day long. A single graphics tap takes you immediately to the function you want.
Our logical icons and real toolbars are easy to use and understand. Larger buttons for common commands make it easy to pick on the screen.
You get more work done faster with our advanced interface that skips all the complicated menus.



CODE-FREE CONNECTIVITY

Line connectivity is not feature code dependent. A single line may be made up of points having different feature codes.

Preset codes are not required. Best linework available!
FieldGenius supports multiple lines using the same feature code.
Supports quick and easy line editing.
Arcs, Lines, and Splines are all fully 3D and can all be used in the same figure.



PAINLESS DATA TRANSFER

MicroSurvey's ActiveSync support automatically connects with FieldGenius to show you all the projects on your device. Upload and download with a mouse click. FieldGenius uses RW5 files for raw data. This allows you to transfer your raw files into any modern surveying software. Coordinate and connectivity files are standard dbase format files that can be opened in Excel for further processing. Our database is open to you.



ADVANCED AUTODESK LAND DESKTOP SUPPORT

Painless way to get your data directly from FieldGenius into LDD. NO other software is needed. Just export directly from FieldGenius to an FBK file, then import into the Survey module.

Our transfer sends both coordinates and linework into LDD.

Linework comes in as LDD Figures to make them easy to work with. Coordinates are true LDD coordinates that list & print as normal. A Huge time saver – no file conversions – just import directly from your data collector!



ADVANCED DISPLAY

Improves the ease and speed of your survey data collection

Details of each shot can be displayed in a small pop up window in your drawing (HA, VA, SD, Next Point ID and Target Height)
View coordinates, drawing info and computation results using the display
Added color control, view filtering and point symbols



CONTOURING, SURFACING, AND VOLUME CALCULATIONS

Create accurate contours in your hand.
One tap functionality. Modeling could not be easier.
Automatic support for breaklines.



SUPERIOR DATA IMPORT

More data imports than other software. Our RW5 support allows you to take an RAW file out of a TDS data collector and reprocess it into coordinates.
DXF direct import including lines, arcs, polylines, points, text and 3D faces.
LandXML direct import. Includes LandXML alignments, parcels, points and surfaces.



CUSTOM TOOLBARS

Custom instrument control toolbars for GPS and total stations on the main interface minimizes the need to dig into menus for common toggles and settings.
Everything is at your fingertips.



ONE-TAP MEASURE AND STORE SHOT FUNCTIONALITY

When in SideShot mode, the big measure button makes taking a shot easy. Just tap the screen with your finger and it takes a shot. No searching for the Enter key or a small button on the screen. Our “shot” button is about the size of your thumb!
Smart toolbars provide direct command access from data picked from the drawing.



LARGE ICONS, LOGICAL LAYOUT, HIGH DEF GRAPHICS

Informative icons in logical layouts help you breeze through menus at a spectacular pace.
High resolution graphics make use of the newer high-dpi screens. Crisp and clear text, symbols and other visual elements.

edition standard and premium editions

- FieldGenius Core Functionality
- Modern Windows interface with smart menus, smart objects, and incredible graphics
- The drawing is primary to the interface
- Real-time drawing generation with automatic linework
- Built in COGO – intersections, inversing, and traversing
- Enter, edit, and stake points
- One-button project manager
- DXF import for background project view
- DXF coordination of lines, arcs, polylines, points, etc.
- FBK export for easy Autodesk LDD import of raw data, points, and linework
- Custom ASCII import/export
- Automatic traversing (1 set, 2 set, nsets)
- Traverse closure calculations, angular adjustment, and compass balance
- Traverse re-coordination in the collector
- Raw data editing
- One-button file transfer to desktop systems
- 3D data view with dynamic zoom, pan, and scroll
- Support for built-in GPS on many controllers
- Graphical staking in grid, compass, and map views

- Full RTK GNSS support using either network RTK or base/rover pair
 - Profiles for multiple receivers makes setup easy
 - Automatic geodetic transformations from WGS84 to local coordinate systems
 - Dynamic GPS toolbar – HDOP, VDOP, PDOP and satellites
 - Heads-up display shows lat/long or grid coordinates
 - Local transformation
 - Horizontal/vertical adjustment
 - Supports RTCM transformation messages
 - Works with Leica Geosystems, Altus, Novatel, NEMA, STONEX, FOIF, NavCom, Champion, PENTAX, Hemesphere, GeoMax, Geo-Fennel, ComNav and more!
-
- Set instrument EDM measurement modes, min/max distance, prism offsets and target height, curvature and refraction, and more
 - Control distance mode, measurement parameters, and backsight reading on some models
-
- Advanced/Roading Features
 - Surface modeling in real-time
 - LandXML alignment, cross section, and zone staking
 - Fixed area calculations and volume calculations
 - Stake to DTM
 - Contouring in real-time
 - 3D alignment, cross section, and template view
 - Shaded, rendered view of surface data
-
- Video point scanning
 - Automatic “Turn to Point”
 - Navigate to stake point
 - Advanced robotic control tools
 - Wireless radio and Bluetooth support
 - Automatic prism tracking
 - Assign robotic functions to keypad keys
 - Real-time tracking icon in map view
 - Support for Leica, GeoMax, SOUTH, KOLIDA, PENTAX, STONEX, FOIF, and many more