



# **Features and Benefits**

FieldGenius for Android v1.6.2.4308

27 July 2020



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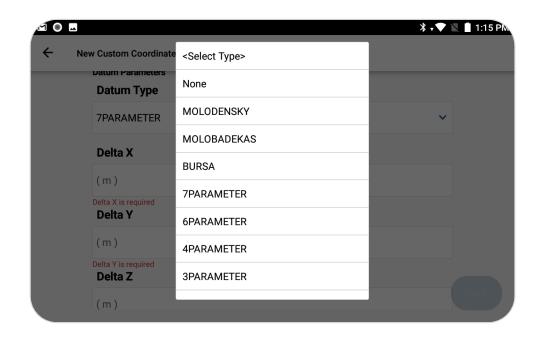


# MicroSurvey FieldGenius for Android v1.6.2.4308

Release Date: July 28, 2020

FieldGenius for Android v1.6 is a maintenance release that provides new features such as: defining custom coordinate systems, accessing web map services for background images, improved line staking, three point tilt support and project backup and restore. Major workflow program improvements have been made for selecting point and line options to improve navigation within the application. We have listened to our customers and made improvements in several areas to eliminate reported pain points like the ability to use spaces in code names and accepting a URL address for an NTRIP server, plus many more. Visit microsurvey.com/license to download and receive the latest features.

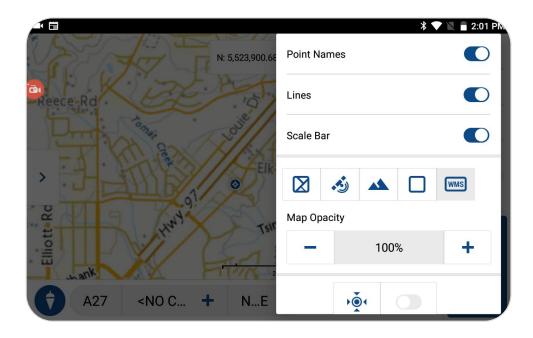
New: Custom Coordinate System



Feature	Benefit
Custom Coordinate System	Users can now define a custom coordinate system if the MicroSurvey coordinate system library does not meet their needs. The customer coordinate system will be stored with the project data once it has been defined. The customer coordinate system will be transformed to display on the map view screen with background maps. The custom coordinate system will be saved with the project information. Using the FGA back up feature customers can be archived with the project to be restored and used on another android device so that they do not have to define the customer coordinate system by hand on other devices.



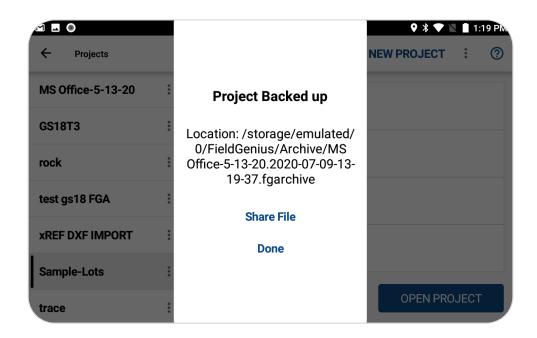
New: Web Map Services (WMS) Access



Feature	Benefit
WMS Maps	The ability to access WMS servers allows users to access and display a variety of map background images in the Map view screen with their field observations and line work. Customers can access government and private WMS information like cadastral map or topo maps and have them displayed as a background map image. It is easy to configure, just go to settings and the map tiles page and a new WMS tile is available that will allow you to add multiple WMS sources. Once the source is added you can select it to be available. Then on the map view just tap the map icon and select the WMS option.



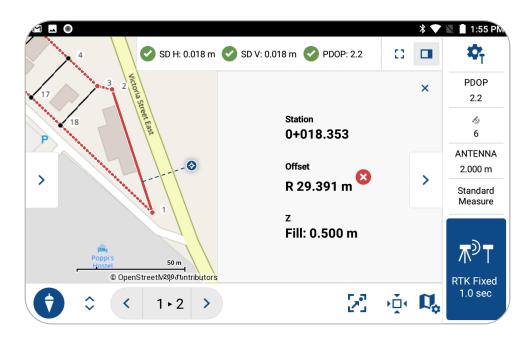
New: Project Archive and Restore



Feature	Benefit
Backup Project	Allows a user to back up and archive a project for data protection and to share. Customer can back up projects multiple times and differentiate the version by the time stamp in the file name.
Share Project File	Archive projects can be easily shared with the office. When saving the archive file just select the share button and then the file storage options like Google Drive to place the archive file where if can be accessed by other staff.
Restore Project	An archived project file has all the files necessary to restore the FGA project on another android device. If you need to transfer devices in the middle of a project you can easily use the restore option on the project screen to move the project to a new device and continue work or share the project with other staff to continue the work.



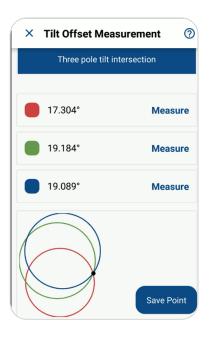
New: Line Staking



# Polyline Staking FGA now supports staking of polylines and the display of line stations and offset. Customers can now easily switch between line segment and polyline staking using the line data panel and not have to leave the staking map view screen. To stake the complete line select the polyline option. To stake individual line segments select the line segment option. For line segments on the map view screen it just takes a tap on the bottom toolbar to select the line segment you want to work with. The station and offset are visible in the observation toolbar, half screen or full screen mode making it easy to see the staking values and relationships on the map.



New: Three Point Tilt Solution



Feature	Benefit
Three Point Tilt Solution	FGA has expanded support or tilt measurements to include using a three point solution for GNSS devices with an inclinometer. This is in addition to the IMU tilt support released in version 1.5.  Note: FieldGenius for Android does not support many legacy devices that use a magnet compass and an inclinometer due to the inability of the OEM software to calibrate the tilt measurement sensors in the Android operating system.



#### **New: GNSS Drivers**

Feature	Benefit
Howay P78 CHC LT700H	FGA now support android tablets with RTK capability and GNSS external antennas to achieve a more precise location. The ability to receive RTK corrections directly on the tablet eliminating the need for a separate GNSS receiver to achieve RTK corrected locations.

Feature	Benefit
Hemisphere S631 GenEQ F100 GINTEC CY F100 Topcon HiPer II Topcon HiPer V e-Surveye300PRO eSurvey e800H	Added support for new GNSS devices. MicroSurvey continues to add support for GNSS devices to allow you to use it what the wide variety of GNSS receivers and not have to train staff on different OEM software.

# Enhanced: New Point and Line Options User Interface

Feature	Benefit
Workflow Enhancement	Redesign of the point and line option user interface makes it quicker and more intuitive for users to select the most used edit and navigation actions associated with a point or line without leaving the map view or data panel screen. The navigation pop up is the same when selecting a point or line from the data panel or map reducing training time.

# Enhanced: Spaces in Code Names

Feature	Benefit
Bug Fix	More intuitive code names can now be used as spaces are now allowed in the code names.

# Enhanced: X Marks Active End of Selected Line Segment

Feature	Benefit
Workflow Enhancement	It is easier to determine the active end of a selected line now as an X is displayed on the line in the map view.

# Enhanced: Point Filtering Coordinate File Export

Feature	Benefit
Workflow Enhancement	Filtering options makes it easier and faster to select the point information you want to include in a Coordinate file export.



#### **Enhanced: Improved Navigation Observation Details**

Feature	Benefit
Workflow Enhancement	Adding an observation detail page allows the user to see all the details related to an observation in one place for quick review in the field.

#### Enhanced: Detail option for Observation in Points List

Feature	
Workflow Enhancement	Adding an observation detail option to the three-dot menu makes it easier and faster to access the details without having to leave the points list page.

# Enhanced: Turn Splash Screen Sound OFF

Feature	Benefit
Pain Point Fix	Allows the user to turn off the sound when the splash screen loads without having to adjust the device sound volume.

# Enhanced: Use URL Address When Configuring NTRIP Source

Feature	Benefit
Workflow Enhancement	Saves the customer time in finding out the NTRIP IP address if they are only provided the web URL address for the NTRIP caster.

#### Enhanced: Optimize Various Page Load Times

Feature	Benefit
Workflow Enhancement	Optimization reduces wait time for loading some screens.

#### Enhanced: Disconnect Option Internal GNSS

Feature	Benefit
Bug fixes	User can easily disconnect from using the Android device internal GNSS and switch to connecting to a different GNSS receiver.

#### Enhanced: Dynamic Code Search Functionality

Feature	Benefit
Workflow Enhancement	Reduces the time needed to search for a point of line code from the project list and to add a new code if one does not exist.

#### Enhanced: Line Staking Mode Change Directions

Feature	Benefit
Workflow Enhancement	Reduces the time needed to reorder the line vertices to change the active end of a line segment.



# Enhanced: Required Geoid or Grid Shift File Workflow Improvement

Feature	Benefit
Workflow Enhancement	Reduces the time needed to obtain a required Geoid or Grid Shift file for a specific coordinate system.

# Enhanced: Save Display Theme

Feature	Benefit
Bug fixes	Fixed an issue that a a screen display theme like dark mode was not saved between application launch and had to be manually selected each time. Now the last theme selected will be used on the next application launch

#### Enhanced: Inverse Grid Values

Feature	Benefit
Workflow Enhancement	Quickly access the grid values when you perform an inverse calculation between two points. Select the drop down icon on the inverse solution pop up to display the associated Grid Values.

# Enhanced: Support Emlid ERB protocol

Feature	Benefit
Workflow Enhancement	Support of the Emlid ERB protocol allows additional GNSS information to be sent to FieldGenius for Android from Emlid devices over what is available in the NMEA standard. The customer will need to select the ERB output protocol when configuring the Emlis GNSS device.