FieldGenius 2011 – 5.0.0 Release Notes

Released on July 29, 2011

Release Notes

License – This new release requires a new license key. Please contact your local MicroSurvey sales representative to update your license key.

What's new in FieldGenius 2011?

Many Thanks to FieldGenius Beta Testers and Feedback Providers

Before we get into what's new, a very special thank you goes out to everyone who took the time to send us feedback on our products. Without your hard work and time, we would never have been able to make this product as great as it is. We at MicroSurvey can't express enough how much we appreciate your efforts to take the time and write us concerning what you would like to see improved. And as you know, WE LISTEN! Our goal is to make FieldGenius the best data collection software on the planet and we very much appreciate your efforts in helping us achieve that goal.

New Look and Feel

As soon as you fire up the program you will see a new splash screen and interface. All of the buttons have been modified (upgraded). We hope that you will really like the new look and feel of FieldGenius2011.

Desktop Version

With more tablet PCs entering the market that run the Windows 7 operating system (Algiz 7 for example), we have spent a lot of time modifying our desktop version of FieldGenius to perform just like our data collector devices version. Previously, the main purpose of our desktop version was meant to function as a field "simulator" to use in an office scenario as a training tool. We have made the desktop version a lot more "field" friendly so you can easily load it onto a Windows 7 tablet PC and go out into the field and now have a lot larger display, and the greater computing power that these tablet PCs come with.

Work Flow Improvements

We are continually improving the work flow of FieldGenius. You will notice that with every release that there will be changes to where items are on the screen and how to access them. We are always working towards making FieldGenius the easiest data collection software in the world.

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Better OnPOZ EZSurv Compatibility
The MicroSurvey FieldGenius team and OnPOZ Precision Positioning have been working closely at better integration of their two product's data formats. OnPOZ's EZSurv GNSS data processing software is an excellent additional GPS tool to have in the RTK tool box. In the field you continue to collect RTK measurements while at the same time logging GNSS data at the reference and rover. At the end of the day you download and process your GNSS data using EZSurv and see how it compares to your collected RTK data. Here is an immediate check of your RTK positions. Moreover, if you are working at the limit of your RTK radio's range, and lose your RTK fix, you still have the GNSS data that can be post-processed and you haven't lost those measurements and time.

Within FieldGenius, we have made data logging for OnPOZ very easy and automatic.

GPS Base Station IDs
We made adjustments to better accommodate the new RTCM 3.0 data format such as increasing the number of possible GPS base stations IDs from 32 to 4096.

Continuing with the GPS base station IDs, we moved the **Station ID** field from the **Tolerances** section to the **Link Configure** screen.

We also added a warning message so that if you are receiving corrections on your selected radio frequency but from the wrong station ID, you will be warned about the wrong ID. This is a safety feature to prevent you from using someone else's incorrectly set up base station.

Improvements and Bug Fixes

We continue to improve memory management.

We optimized FieldGenius graphics/interface for high-resolution displays.

We added more receiver status screens to help diagnose GPS RTK issues.

We added a command line console to the **Instrument Settings** screen. Power users will find this handy if they are trouble shooting a receiver and happen to know certain control commands that allow them to speak directly with the receiver. For example, we used this feature to set a Bluetooth ID on a Magellan ProMark500.

In the GNSS **Satellite** plot screen, we added Galileo and SBAS satellites to the plot and satellite list. We also indicate which satellites are GLONASS and which ones are GPS. We changed the line drawing default. Previously it was set to **line**. We changed it to **connect points**. When I was using the software, I always wanted to draw lines by connecting points on the map rather than using a direction and distance. This functionality is still there, it is just no longer the default setting.

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We renamed a couple of the link device names to make them more intuitive such as **Mobile (GSM)** has been renamed to **GSM module**, and **Local Internet** is now called **Data Collector Internet**. Use **Data collector Internet** when you want to use your data collector to provide the correction stream instead of your GPS receiver. Maybe your model of receiver doesn't have a SIM card slot but your data collector does. **GPRS** has been renamed to **Network**. Select **Network** when you wish to connect to a non-NTRIP supported internet-based reference station.

We fixed the work flow within some modules such as when you are exiting from the **Slope Stake** toolbar, you are now returned to the **Stake Alignment** screen.

We set the default setting for allowing **alpha-numeric characters** in the **Point ID** fields to set to on. MSCAD has been supporting alpha-numeric characters for years so there was no compelling reason to not support them as a default setting. You can still turn them off if you do not use alpha-characters in your point naming system.

FieldGenius no longer crashes when you reattach a LandXML file.

We fixed an issue with the staking tolerance when working in feet. This value was increasing by the metres to feet multiplier every time you restarted FieldGenius. This value now remains the same if working in either metres or feet.

We fixed the issue of FieldGenius sometimes crashing when you switched from using GPS to total station mode.

We made many more small fixes to the interface. Some buttons were squeezed together, some with no text, etc.

We fixed the Leica System 1200 internet connection driver.

We improved the Promark500 internet connection driver.

You can add a GPS pod to your Allegro MX and use it with FieldGenius.

We added GPRS (network) support to the Sokkia GRX-1 driver.

We made UTM Zone 11 North, NAD83, as the default coordinate system. And yes, you probably guessed it, that is our (MicroSurvey's) local coordinate system.

Sounds have been added back to our field software. Look for an entire new suite of "sounds" coming in a future release.

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We decided to turn the **Map Position Select** off by default. When this is turned on, to easily create a new point on the MapView, all you have to do is tap on the screen where you would like to create a point and the point is created. But this functionality has caused some confusion for new users so we decided to allow the user to decide if they want this on or not.

We added Data Collector Internet (cable only) support to our Topcon HiPer drivers.

We added RTCM 3 support to the Topcon HiPer driver.
Bluetooth support was added to the desktop (tablet) version of FieldGenius.

HUD (heads up display – in upper left-hand corner of the map) text in the Map screen now displays the current total station measurement mode.

Total Station measurement mode now displays an icon on the instrument toolbar. Actual text has been moved to the Map screen instead.

Getac PS535FC now generates a machine id so FieldGenius can be activated.

A valid position is now confirmed prior to selecting an NTRIP mount point requiring NMEA.

An error message is displayed if a position is not valid.

New and/or Improved Device Drivers

Champion nv3	FOIF A20
Champion TKO	South (S82-V)
Hi-Target v30	Stonex (S8)