

## Making precision agriculture available for all farmers (eFarmer)

#### Natalie Utkina

Sales and marketing manager at eFarmer Natalie@efarmer.mobi

It's becoming more and clearer that the future of farming is very technological. We will not be able to waste even a drop of water or a piece of arable land. That's what we keep in mind at eFarmer when we create innovative solutions to help farmers increase yield, save time and resources, and automate the workflow.

<u>eFarmer</u> B.V. was created in 2014 as a spin-off from one of the largest IT systems integration companies in Eastern Europe. So even though we are a young start-up, our IT developers and engineers have more than 10 years of experience in IT in the agricultural sector.

Our goal is to make precision agriculture available for every farmer. In the past, the market was dominated by multinational companies offering expensive, complex products that only the biggest farms could afford. We want to ensure that small and medium farms have the ability to take full advantage of the new technological solutions

In order to achieve this goal, we focus on creating products

that are

too.

- Affordable
- Easy-to-use
- Upgradable How is eFarmer different from the rest of the solutions on the market?

First, we apply new generation, cutting-edge microchip technology in our product. Second, customers do not



need to buy a special display, they can turn their smartphone or tablet into a navigation system by downloading the eFarmer app. Third, we sell the equipment directly, without intermediaries and use only moderate margins so that we could create new and innovative products for farmers.

Currently, the product portfolio consists of theeFarmer application, the FieldBee GPS-RTK system and the newest addition, the automatic steering system. All these standalone solutions can integrate into a single system.

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# Download the eFarmer app

Professional software on your smartphone/tablet and computer



# Attach FieldBee to your tractor

Submeter tractor navigation and other functionalities



# Connect to RTK Bee Station

0-4 cm accuracy with additional FieldBee base or local NTRIP provider



# Use with automatic steering

High accuracy, high quality autosteer system for many tractors



### eFarmer app - manage all field operation in one place

The easiest way for the owners of small farms to start moving towards precision agriculture is to start with a simple solution, for example using their smartphone and revise applications made for farmers. It is also important to start with a technology that is upgradable in the future.

The <u>eFarmer app</u>allow users to manage all field operations in one place. Users can

- Add their own fields to the system by defining its boundaries on the map
- Perform precise driving with tractor in 4 patterns
- Work during the night and in low visibility
- Avoid obstacles
- Keep field scouting notes and pictures with geo-location
- Save time on documentation by automatically saving data about materials used and creating reports

Our team is continuously working on releasing updates for the software and adding new functionalities.

## FieldBee - the new generation of tractor navigation systems

eFarmer has developed an easy-to-use, affordable RTK-GPS system, called <u>FieldBee</u> which is suitable for farms from the size of 10 hectares for all field operations. The system is installed on the roof of the tractor and wirelessly connects to the eFarmer application on the smart phone or tablet of the user.

## Accuracy

eFarmer offers solutions with different levels of accuracy. The FieldBee antenna in itself provides sub-meter accuracy. Together with the RTK Bee Station it has a very high accuracy of 0-4 centimeter.

## Installation

The FieldBee doesn't require any complex installation. Users can simply put it on the roof of their machines and connect via Bluetooth to their smart phones or tablets.

#### *Transferable*

The system works on batteries so it is very easy to switch between machines without removing a huge number of cables.

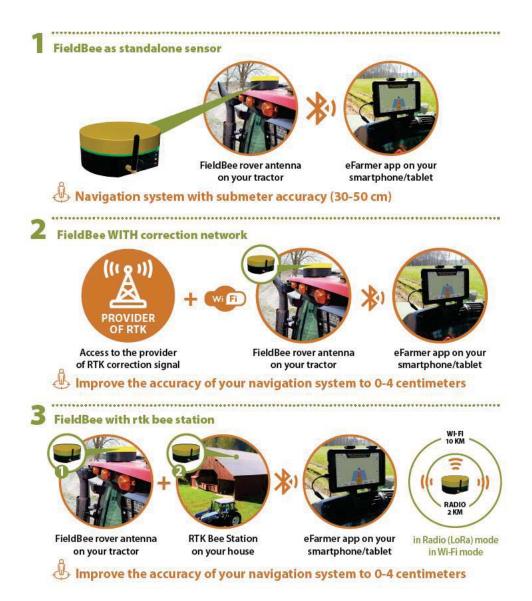
#### *Upgradable*

Some customers need a lower level of accuracy; others cannot invest in the full system at once. The FieldBee is upgradable, the components can be purchased one-by-one and integrate into one system based on the farmers' needs. Moreover, it has a built-in option for auto steering and implements.

In accordance with our goal to create a system that helps has the potential to help every farmer, there are more ways to use the sFieldBee The users can decide which of the three modes of FieldBee suits them best.



# **3 WAYS OF USING FIELDBEE**



#### **Automatic Steering System with RTK Accuracy**

We have received many inquiries about the options for using our FieldBee RTK system with an automatic steering system so we decided to create our own solution.

There are many automatic steering systems available on the market. The FieldBee system unique because:

It provides RTK accuracy: The FieldBee RTK system provides 0-4 cm accuracy. The FieldBee sensor can be connected to a local NTRIP provider and can easily be moved from one tractor to another. Thus, the price for such accuracy can be as low as €600.

It has built-in terrain compensation: The automatic steering controller comes with built-in tilt compensation so there is no extra cost involved This feature improves accuracy, especially when working on hilly fields.

It works on a high number of tractor models: The assembly kit can be used for 1000 tractor models and increases the quality and the accuracy of the system. There is a special adjustable kit for the rest of the models.

Different installation modes are available: The customers can choose the installation mode they need: steer-ready, hydraulic and mechanical installation.

It has a high quality: The same automatic steering components are used by Claas, Mueller-Electronics, Ag Leader, TeeJet and other precision farming technology providers.

*It's easily interchangeable:* Another positive feature of this system is that it is easily to move it from one tractor to another. Each tractor need a separate bracket but the rest of the system parts can be changed between tractors.

Our goal is to help farmers with the adoption of new technologies so that farming families can continue their much-needed work. We are truly committed to this goal. So far, the eFarmer tractor navigation app that has been downloaded by more than 100,000 farmers all around the world. Our FieldBee system is sold in 30 different countries. At the moment we are very excited to be able to finally collect pre-orders and schedule demonstration for our new automatic steering system. In the future, we plan to continue our mission to bring the newest technologies to the market and ensure that every farmer can benefit from these solutions.