**What is Network RTK?**

Network RTK is a way of providing RTK corrections across the largest distance possible. The main advantage with "NETWORK" RTK is that anywhere in the network area your signal will not be degraded due to distance. This is done by using a group of reference station’s which input their information into a central location. By doing this we get a more accurate signal that Traditional RTK networks. This signal is then re-broadcast out over the Cellular Network.

**What is Traditional RTK?**

RTK is currently the best signal that is available for public use that allows for the best accuracy and eliminates GPS drift. It stands for “Real Time Kinematics” which means that there is two way communication using radios that give this higher level of accuracy. Line of sight is required between the two radios. This signal is very robust but is limited to distance and line of sight.

As a ‘rover’ moves farther away from the base station the signal quality and accuracy is degraded.

**RTK Network Coverage**

Instead of providing you with a radio our Network RTK communicates with Modems.

These self contained units have a SIM card slot to allow you to use whichever Cell carrier you choose.

With the deployment of 3G networks across Canada and now the expansion of 4G towers, we have excellent coverage in our network area.

If you operate in suspect cell coverage area then a high gain antenna can be added to ensure continued service.

Another benefit with with our product is that you can have WIFI in the cab through the modem.
Seeding with RTK

As many producers have adopted guidance products into their operation in the last 10 years or so we have seen an increase in the desire and need for a better solution when seeding. GPS drift, implement draft caused by soil conditions, opener wear, incorrect tire pressures and other factors all contribute to the accuracy of a seeding operation.

With RTK you can eliminate GPS drift. Also with advanced field calibrations on your implement and tractor you can be assured that you are receiving the best signal for optimum accuracy.

Studies have shown that when inter-row seeding there can be a yield benefit of up to 12%*. Seeding into black dirt allows for the plant to have a better start. Germination, root development and plant stand seem to be improved and give the crop a better chance for disease resistance at the start of the growing season.

These benefits along with increased pass to pass accuracy allow you to optimize yield and save money.

iGrade with RTK

This product from John Deere allows for the automated control of your scraping applications. There is a controller installed on your John Deere tractor to manage the hydraulic functions. As well a John Deere RTK receiver is placed above the scraper blade so that it knows its exact height.

Surface Water Pro with RTK

To take your scraping applications to the next level John Deere offers a complete automated scraping program. In addition to iGrade, Surface Water Pro generates a “best fit” drain that calculates the most accurate way to cut a specific drain. As with iGrade a RTK receiver is placed above the cutting blade to ensure accurate cutting depth.

*2006 Agri-Food Canada Study, Guy LaFond