



# 2015 Trimble Agriculture

Farm Management Solutions You Can Rely On and Profit From



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## Transforming the Growing Process

Addressing challenges at each stage of the crop production cycle, Trimble Agriculture is transforming the growing process with farm management solutions on which you can rely and profit. Trimble solutions cover all seasons, crops, terrains, and farm sizes, and our brand-agnostic strategy allows you to easily deploy the solutions on your equipment—regardless of manufacturer. From land prep and soil analysis, through planting, vegetative health monitoring, nutrient and pest management, water application and harvest, Trimble solutions will help you maximize your efficiency and lower your costs of doing business.

### A PRESCRIPTION FOR YOUR SUCCESS

At Trimble, we know that your success depends on variables you can control and others that you can't. Our variable rate solutions help you control your inputs, irrigation, machine usage, and workforce costs while you minimize the impact of uncontrollable factors such as regulations, commodity prices, and weather.

For example, with the Irrigate-IQ™ precision irrigation solution, you can apply the right amount of water, fertigation, chemigation, or effluent in the right place—while minimizing nutrient and chemical runoff. Targeted water application modeled from a field's soil properties, topographical information and rainfall history can help ensure that the optimal amount of water is getting to the root zone for plant uptake. This results in more efficient use of water, while also increasing your yield and improving crop quality.

### DATA YOU CAN ACT UPON

We also know that the vast amount of data gathered and disseminated from variable rate and precision agriculture applications can be overwhelming without the right tools for you and your trusted advisor to analyze and act upon. So to help you more efficiently leverage all of that data, Trimble offers the Connected Farm™ solution—a total farm management platform that helps you organize and transform vital information into valuable insights and better decisions.

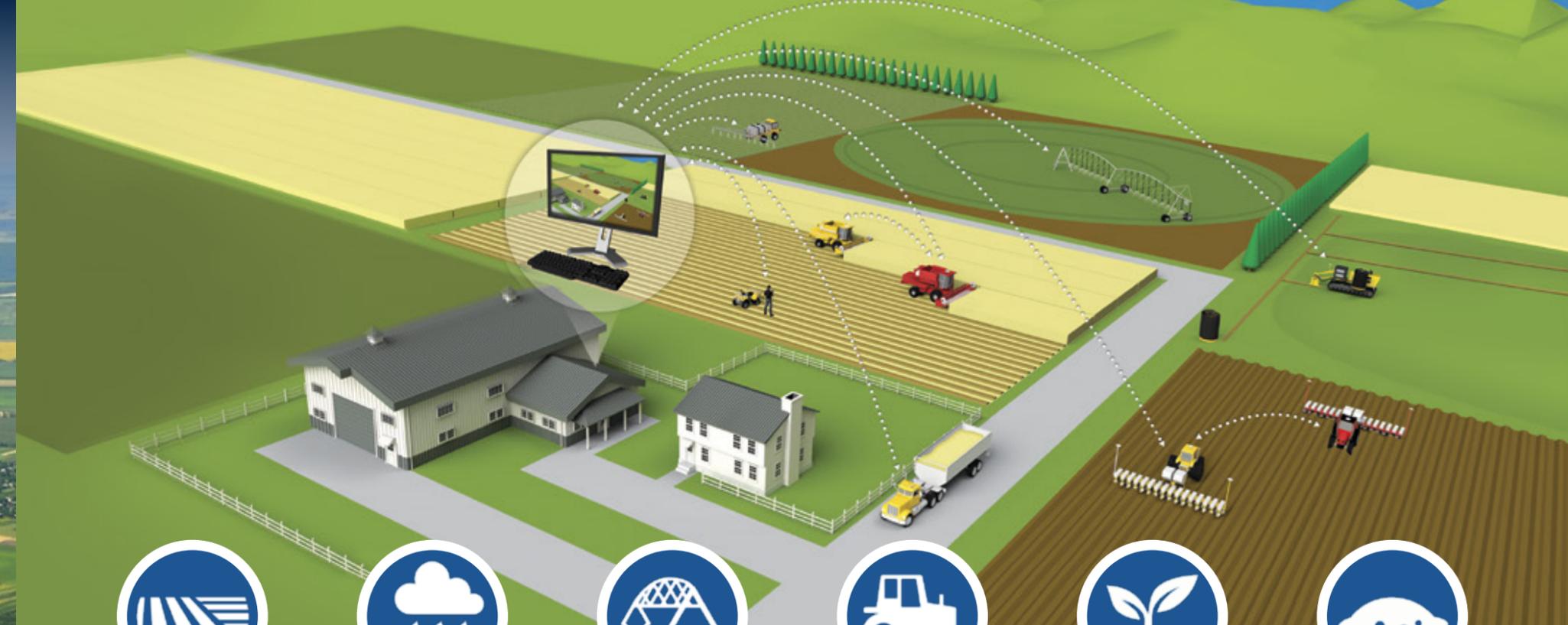
The new Connected Farm Advisor allows you to securely collaborate with your advisor and generate variable rate application (VRA) prescription maps specifically tailored for your soil, your crops and your growing practices. You choose when and with whom you want to share the information. At Trimble, our job is to help you make sense of your data and act upon it in ways that best benefit your operations. After all, it is your data, for your farm and your future.

*Joe Denniston*  
Vice President, Trimble Agriculture

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# Connected Farm

- Make better decisions with data that is collected, managed, and shared from anywhere
- Work on your own or with your advisor using farm management tools that optimize all types of equipment, farming practices, crop types, and farm sizes
- Connect the field and the office using in-cab displays, tablets, and smartphones
- Save time and trips to the field by wirelessly transferring data



Field



Rainfall



Irrigation



Fleet



Plant Health & Scouting



Soil

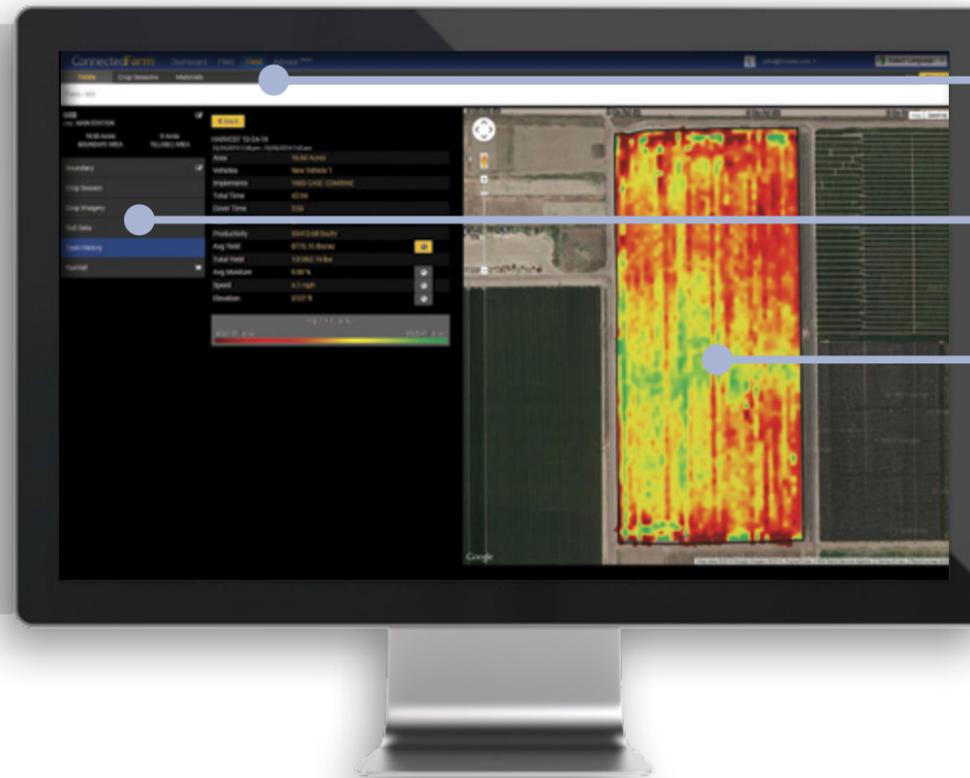
## Collect, Share, and Manage Information

Connected Farm™ integrates all of your precision farming technology and data into a single place—giving you a total farm management tool to transform real-time field information into better decisions. By sharing data with your trusted advisor, you can leverage Connected Farm for creating variable rate application and variable rate irrigation prescriptions that control the cost of your inputs while also improving crop quality and yield. With information on soil properties, crop health, rainfall and vehicle operations at your finger tips, just imagine the improvements you can make to your operations and bottom line.



Connected Farm™ Field simplifies data management for farmers by using a web-based solution to view critical information. Start by importing your completed precision farming activities such as yield data using wireless or USB technology. Also access critical field information about your crop health and rainfall variability.

Once your data is in your account, permission can be given to any number of trusted advisors to access it. This enables efficient collaboration between you and your advisor, resulting in higher farm productivity and profitability.



**FIELD NAMES AND BOUNDARIES**

- Enter your own field names and establish the boundaries by using drawing tools or importing them using Office Sync or File Sync

**SOIL TEST DATA**

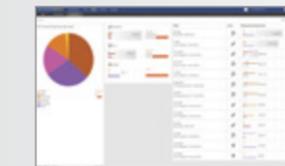
- Import soil test results for each field and easily share that information with your advisor

**FIELD TASKS**

- View important yield and application maps instantly as soon as jobs are completed in the field

**NEW! PROFIT AND LOSS**

- View the profit and loss for each field and crop season to determine what areas of the farm are most profitable and why



**Data Transfer Options**

**NEW! FILE SYNC**

Upload field operation maps to your Connected Farm account using a USB flash drive.



**OFFICE SYNC**

Exchange data files wirelessly between the field and office using your Connected Farm account or Farm Works™ desktop software.



**VEHICLE SYNC**

Exchange data files between multiple operators in the same field.

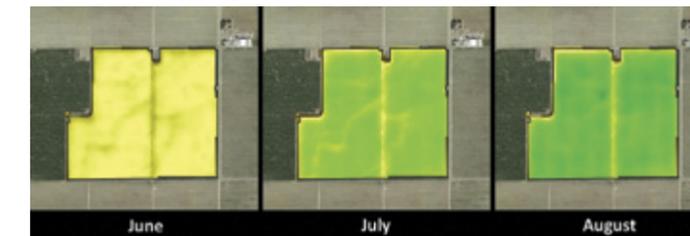


**COMPARISON CHART**

	FILE SYNC	OFFICE SYNC	VEHICLE SYNC
Data transfer method	USB	Wireless	Wireless
One-way file transfer	✓		
Two-way file transfer		✓	✓
Transfer variable rate prescription maps		✓	
Transfer planting, spraying, and coverage maps	✓	✓	✓
Transfer yield maps	✓	✓	✓
Transfer point, line, and area features		✓	✓
Transfer guidance lines		✓	✓
Transfer tank levels			✓

**PUREPIXEL™ VEGETATION HEALTH SOLUTION**

- Use a precise calibration process to easily compare crop health from one period to the next
- Filter "noise" from soil color, shadows, and moisture variability



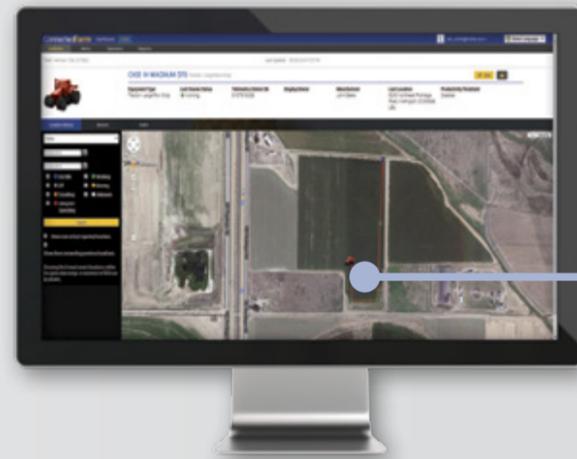
**RAINWAVE® CONTOUR MAP**

- View precise rainfall maps for each field
- Optimize water usage by not turning on irrigators in areas that have received adequate rainfall
- Make smart decisions on resource deployment based on field conditions



## Connected Farm™ FLEET

Connected Farm™ Fleet helps you accurately pinpoint the location, productivity and performance of your vehicles via the web. Coordinate vehicle logistics so you can efficiently manage maintenance, refueling, delivery of inputs, and other needs to keep your operators productive and your fleet running smoothly.

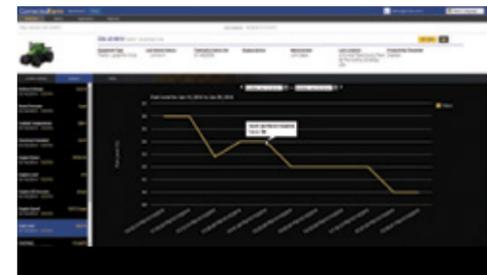
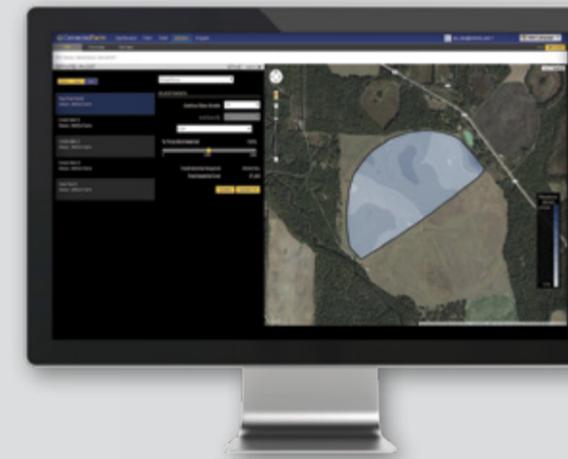


### REMOTE ASSISTANT

- Reduce technician travel time by resolving issues remotely from the office
- Eliminate operator downtime

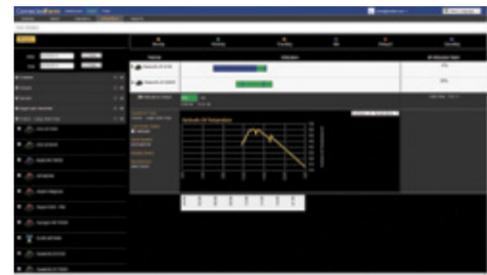
## Connected Farm™ ADVISOR

As an advisor, you can create and share variable rate prescriptions via Connected Farm Advisor with your individual growers or applicators.



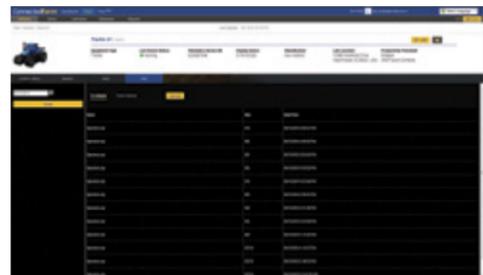
### FLEET HEALTH

- Monitor fuel usage, battery voltage, oil pressure, and other valuable diagnostics by connecting to the CAN Bus system
- View trends with vehicle health and performance graphed over time



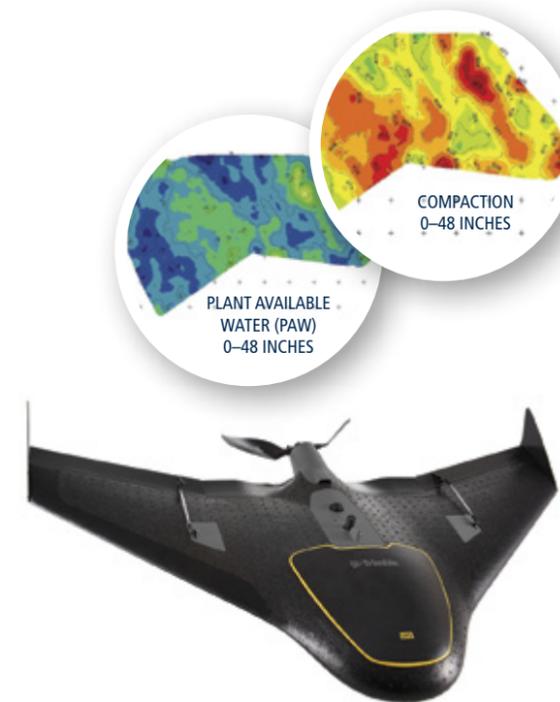
### FLEET PRODUCTIVITY AND UTILIZATION

- Compare the utilization of each vehicle during a 24-hour period to increase efficiency and productivity
- Capture time spent idling, moving, working, and traveling as well as delay reasons



### DATA FILE TRANSFER

- Send and receive data files for each vehicle such as guidance lines, prescriptions, as applied maps, boundaries, and more
- Share data files easily with a trusted advisor



### NUTRIENT MANAGEMENT VRA

- Build your own or select from a wide range of pre-built formulas to make your recommendations
- Create prescription maps for multiple fields while easily sharing them with growers using their Connected Farm account
- Review and adjust variable rate prescription maps before purchasing

### SOIL INFORMATION SYSTEM™ (SIS)

- Assess detailed soil properties for each field such as soil texture, compaction, root zone depth, moisture retention and availability, and soil fertility
- View soil analysis for the top 48 inches (122 cm) of the field's surface in 3D

### TRIMBLE UX5 AERIAL IMAGING SOLUTION

- Capture 180 acres (73 hectares) of imagery at one inch (2.5 cm) resolution in a single flight
- Apply imagery for crop scouting to detect pests, weeds, mineral deficiencies, and other potential problems in agriculture



**FARM WORKS™ MOBILE**

- Map field boundaries and other points of interest with GPS
- Utilize grids or management zones for soil sampling
- Compatible with the GreenSeeker® system for logging data and real-time variable rate application

**JUNO® 3  
HANDHELD**



- Microsoft® Windows® Embedded 6.5
- 3.5 inch (8.9 cm) screen

**JUNO T41™  
HANDHELD**



- Microsoft Windows Embedded 6.5
- 4.3 inch (10.9 cm) screen

**YUMA® 2  
RUGGED  
TABLET COMPUTER**



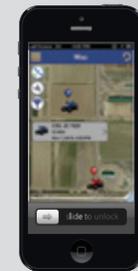
- Microsoft Windows 7 Professional
- 7 inch (17.8 cm) screen

**COMPARISON CHART**

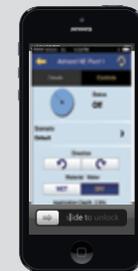
	CONNECTED FARM™				FARM WORKS
	SCOUT APP	FLEET APP	IRRIGATE APP	FIELD APP	MOBILE
Required operating system	iOS or Android	iOS or Android	iOS or Android	iOS or Android	Windows
Use GPS to map boundaries or other points of interest	✓				✓
Enter scouting information and capture images	✓				✓
Utilize grids or management zones for soil sampling					✓
Track the location and status of your fleet		✓			
Monitor and control your center pivot irrigation systems			✓		
Enter field records				✓	✓



CONNECTED FARM  
**SCOUT APP**



CONNECTED FARM  
**FLEET APP**



CONNECTED FARM  
**IRRIGATE APP**



CONNECTED FARM  
**FIELD APP**



**FREE! FARM WORKS VIEW**

- Compatible with a wide range of precision farming displays
- View and print basic maps with legends
- Build a list of clients, farms, fields, supplies, and other details

**FARM WORKS MAPPING**

- Includes all the features of View software
- Print a variety of maps and field record reports
- Create, edit, and manage guidance paths
- Analyze profit maps to verify which parts of the fields are more profitable

**FARM WORKS ACCOUNTING**

- Calculate cash and accrual general ledgers with single entry
- Allocate expenses and revenue for each field, livestock group, machine, and structure
- Track inventories for supplies, harvested crops, and livestock
- Print a variety of financial reports for taxes

**FARM WORKS SURFACE**

- Import field topography data
- Utilize the drawing tools to tie laterals to mains, create parallel lateral spacings, and clip drainage lines
- Create levee paths
- Eliminate guesswork by calculating pipe sizes automatically based on terrain, depth, drainage coefficient, and more

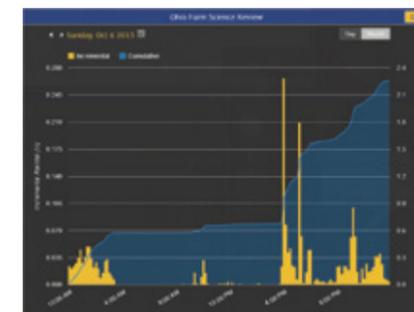
# Water Solutions

- Make every drop count by responsibly utilizing precious water resources
- Apply the right amount of water where your crop needs it to improve quality and yield
- Optimize sub-surface drainage design and installation for effective water table control and crop yield
- Create enhanced irrigation plans with Connected Farm solutions



## RainWave Precipitation Monitoring Solution

The RainWave® precipitation monitoring solution provides you with vital rainfall data, allowing you to make better management decisions for irrigation planning, fleet management, and timing of material application for nutrient and pest management.



### TRACK

Set up a virtual rain gauge by entering GPS coordinates, or pick the position from a map for the identified location to receive rainfall reports for that area.

View and monitor reports directly from the Connected Farm™ dashboard or from email alerts so you can save time traveling to dispersed gauges or manually tracking precipitation.

### MONITOR

View actual rainfall activity in 10-minute increments plus accumulated rainfall over a 24-hour period so you can have a better understanding of rainfall intensity.

Determine if water may have run off the field and is unavailable to the crop, or if it was absorbed into the soil and can be available to the crop.

### MANAGE

Make better-informed decisions for irrigation and other farming operations from this accurate rainfall data. Optimize irrigation plans and application timing, and compare yield against rainfall to plan for next season's crop.

## RainWave Contour Map

Going a step further, the RainWave Contour Map subscription allows you to access the color-coded rainfall contour maps and see rainfall variations within an entire farm or across fields.

Using the RainWave Contour Map functionality in Trimble's Connected Farm web-based management solution enables you or your trusted advisor to make better management decisions for irrigation planning, resource deployment, and timing of applications for nutrient and pest management. Rainfall amounts can be combined with additional key information on the Connected Farm website impacting daily operations including weather forecasts, commodity tracking, field operation maps, fleet management, crop health maps, and irrigation monitoring and control.

The rainfall data can also help guide your decisions regarding whether or not to deploy a vehicle for the day's planned activity, or whether to move forward or delay an input application.



## Irrigate-IQ Precision Irrigation Solution

Because every drop matters, every decision you make about irrigation is critical. With the Irrigate-IQ™ precision irrigation solution, you can apply the right amount of water, fertigation, chemigation, or effluent in the right place—while minimizing nutrient and chemical runoff.

The Irrigate-IQ solution is fully scalable to best suit your irrigation needs. Whether you use remote monitor and control or the full Variable Rate Irrigation (VRI) solution, you can be sure you're doing what's best for your crop and your farm.

### BENEFITS OF THE IRRIGATE-IQ SOLUTION

The Irrigate-IQ solution works with center pivots from all major manufacturers and can pay for itself within two growing seasons. It helps you:

- Improve crop quality and yield
- Optimize water resources and increase water use efficiency
- Minimize input costs of water, fertigation, chemigation, or effluent
- Reduce trips to the field to manually control the pivot
- Ensure even application to reduce run-off and leaching
- Choose to apply water only to the best producing areas within a field
- Ensure you meet environmental regulations by controlling and reporting on where and how much you irrigate



### MONITOR AND CONTROL

Monitor and control your irrigation system from any computer, smartphone, or tablet—so you don't have to waste time going out to the field.

- View and monitor pivot speed, status (on/off), current voltage, pressure, and more
- Remotely control pivot status (on/off), material applied, and direction
- Check system status so you can change your irrigation plan or control irrigators and pumps when they have stopped or encountered errors



### VARIABLE RATE IRRIGATION (VRI)

Implement VRI plans to perform highly-targeted application of water, fertigation, or effluent.

#### Create Irrigation Plans

- Generate your own prescription maps by drawing polygons on top of a satellite map or use an EC soil map to create your irrigation plan
- Work with your trusted advisor to create VRI plans that compensate for variations in soil properties, vegetative health, topography, and precipitation history within each field
- Manage exclusion zones to ensure water is not being wasted in areas that don't need it, such as roadways or other fixed landmarks
- Update and send your irrigation plans instantly and wirelessly to the irrigator

#### Water with Precision

- Control individual nozzles to apply the right depth in the right spot
- Disperse effluent through your irrigation system without blocking or corroding valves
- Optimize application beyond the pivot circle using corner arm control and VRI plans
- Control end guns to ensure they apply beyond the pivot circle only where required

## WM-Form Land Forming Solution

Whether you're a grower or an earthworks contractor, the Trimble® WM-Form™ land forming solution can help you fix underproducing areas—while also minimizing the amount of earthworks and controlling the cost.

With easy-to-use surface design tools and flexible parameters, the WM-Form solution can help you create and implement leveling, surface drainage, and furrow irrigation designs that optimize the field surface for effective water management and produce a more consistent yield.

### FIX UNDERPERFORMING AREAS

You'll get problem areas producing in no time, while you:

- Open up more acres to be farmed
- Enable optimal water distribution and drainage
- Minimize disturbance of valuable topsoil
- Reduce erosion and minimize flooding by effectively channeling water in the right direction
- Create more uniform production and increase yield
- Minimize the amount of earthworks and reduce land forming time and costs

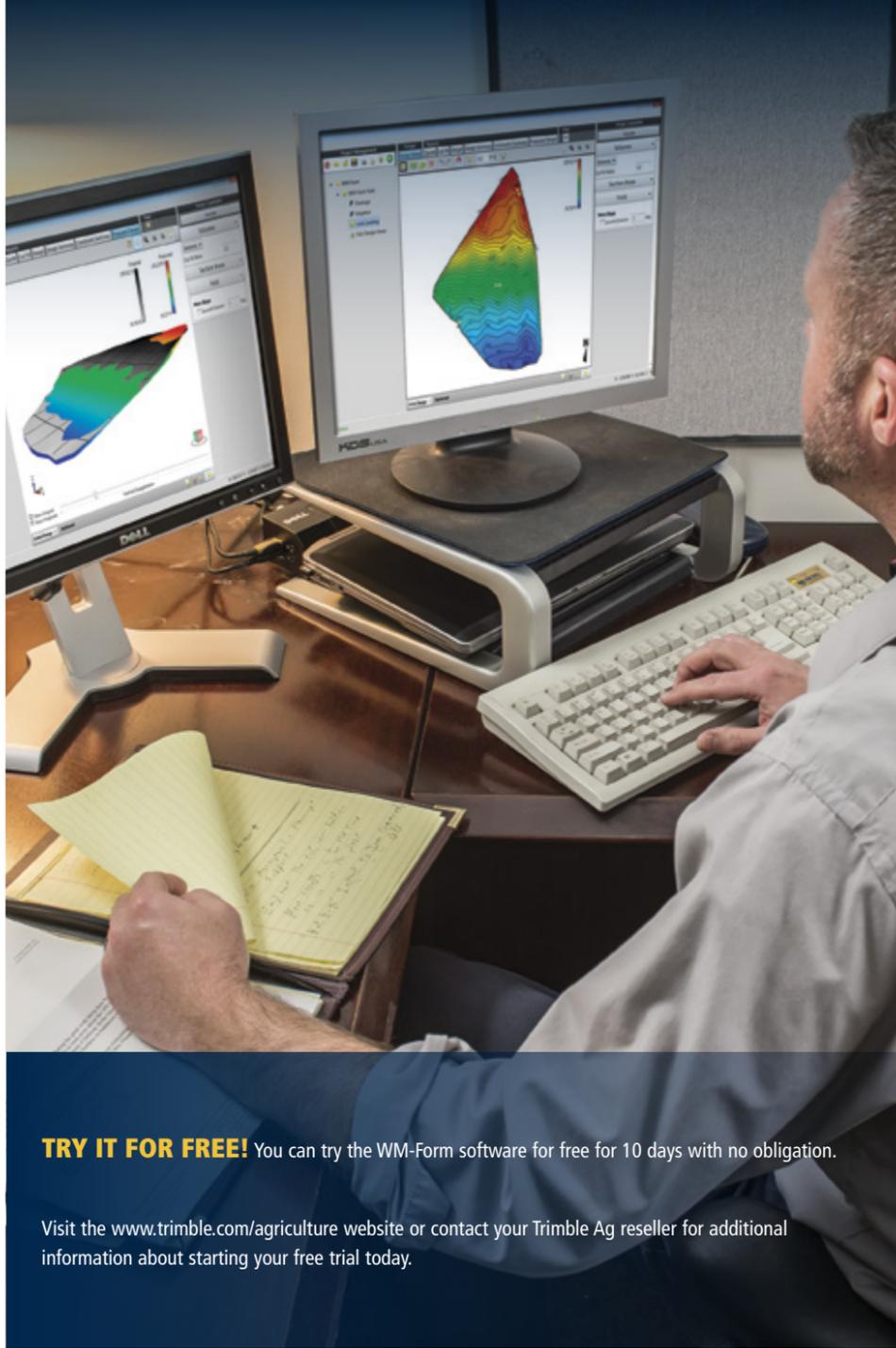
### ONE INTEGRATED SOLUTION

As a complete end-to-end workflow, the WM-Form solution allows you to perform field survey, analyze topography, create an optimized design, export earthworks reports and control files, and conduct land forming operations on the machine.

Because the WM-Form solution builds upon field-proven Trimble solutions, you never need to worry about compatibility issues or the accuracy of your field design.

- Start by surveying your field with your Trimble display or WM-Topo™ solution
- Create the land forming design using the WM-Form software
- Form the land utilizing the FieldLevel™ II system
- Verify the design was accurately completed using the WM-Topo survey system

Your investment in these Trimble technologies can be leveraged over other agriculture solutions. This cross-functional utility means you get more from your investment.



**TRY IT FOR FREE!** You can try the WM-Form software for free for 10 days with no obligation.

Visit the [www.trimble.com/agriculture](http://www.trimble.com/agriculture) website or contact your Trimble Ag reseller for additional information about starting your free trial today.

## FieldLevel II System

The FieldLevel™ II system utilizes lessons learned from more than 30+ years of industry leadership in high-precision GNSS applications and land leveling.

The FieldLevel II system streamlines the survey, design, and grading steps required for land leveling and land forming.

### LAND LEVELING

#### Survey

- Map your fields with RTK measurements
- Create boundaries, interior points, and sections
- Calculate and report the true acreage of your field

#### Design

- Use WM-Form software to optimize land leveling designs
- Define primary and cross slopes for prescribed orientation and grades
- Create a best-fit surface using Autoplane technology

#### Level

- Drive the scraper hydraulic valves automatically
- Level your fields using any type of tractor and scraper
- Operate both tandem and dual scraper systems

### LEEVE DESIGN & INSTALLATION

#### Survey

- Capture 3D topographic data using the FieldLevel II Survey Design and Install module on the TMX-2050™ or FmX® displays, or with the WM-Topo system

#### Design

- Use Farm Works™ Surface software to analyze the shape of the field
- Determine the optimal levee locations in the field

#### Install

- Utilize a Trimble® Autopilot™, EZ-Pilot®, or EZ-Steer® steering system to guide the tractor as the levees are being installed



## WM-Topo Survey System

The WM-Topo survey system is a portable topographic data collector that can be taken into areas inaccessible to tractor- or truck-mounted survey equipment. Collect survey data by hand when poor field conditions exist, or crops are too mature to allow vehicle access.

Survey data can then be transferred to Farm Works Surface software or directly to the Trimble TMX-2050 display or FmX integrated display, and used to create surface models as a basis for better-informed water management decisions.

### FOR USE DURING DRAINAGE PROJECTS

Gather topographic field data using the WM-Topo system, then transfer that data via USB stick or Connected Farm™ to Farm Works Surface software or the TMX-2050 or FmX displays to create a 3D model of the field.

Take the WM-Topo system back out to the field to flag locations where drainage tile should be installed, then utilize the Trimble WM-Drain farm drainage solution to complete the drainage job.

### FOR USE DURING LAND FORMING AND LEVELING PROJECTS

Follow along behind a scraper performing grade checks with the WM-Topo system. This portable system allows you to check your land forming leveling project's accuracy as you go.

Topographic data gathered with the WM-Topo system can also be used on the TMX-2050 or FmX displays to create land forming leveling designs for use with the FieldLevel II system for water management.



## WM-Drain Solution

Trimble's WM-Drain® farm drainage solution connects the survey, analysis, design, installation, and mapping steps in your surface and subsurface drainage projects.

When combined with the TMX-2050™ display or the FmX® integrated display and RTK-level corrections, the WM-Drain solution ensures optimal 3D tile placement, which improves crop yields by controlling surface ponding, optimizing root depth, maximizing the planting season, and minimizing nutrient loss.

### SURVEY

Collect 3D field data with ease by using the TMX-2050 or FmX displays or WM-Topo™ survey system.

### ANALYZE

Analyze the 3D field data using Farm Works™ Surface software to make better-informed drainage decisions.

### DESIGN

Design and verify a complete 3D drainage system using Farm Works Surface software in the office, or design drainage lines on-the-go without having to leave your vehicle.

### INSTALL

Take your designs back to the field and utilize the WM-Drain module on the FmX display or TMX-2050 display and Trimble's 3D machine control technology for precise installation of your pipe or surface ditches.

### MAPPING

Map the true location of your installed drainage pipes or ditches and utilize the records for future maintenance or drainage expansion projects.



## Laser Transmitters

Trimble offers an entire line of Spectra Precision® laser transmitters that can be used to manually perform a variety of water management tasks and ensure that the water on your field is distributed evenly. Laser transmitter options for various needs and budgets are available.

### SPECTRA PRECISION LASER GL700 SERIES



The Spectra Precision GL700 is Trimble's most advanced laser transmitter, offering unmatched accuracy and beam stability. Use the GL700 for automatic machine control applications when a high level of accuracy—up to 1500 feet (450 meters)—and the capability to set single or dual slopes on your field are required.

### SPECTRA PRECISION LASER GL600 SERIES



The Spectra Precision GL600 is a highly reliable laser transmitter series for growers requiring the ability to set single or dual slopes in their field. Packed with features, GL600 series lasers are ideal for field leveling applications using automatic machine control. Both the GL612 and GL622 can be used up to 1300 feet (400 meters).

### SPECTRA PRECISION LASER AG401



The Spectra Precision AG401 is Trimble's entry-level laser transmitter. It is ideal for growers with zero-grade fields who do not need to adjust the grade. It is a self-leveling laser that can be used for automatic machine control at long ranges up to 1500 feet (450 meters).

## Grade Control Systems

By adding automated grade control systems to your leveling or drainage equipment, you can improve your productivity and accuracy by up to 50%. Trimble provides a wide range of agricultural machine control systems to fit your application and budget.

### AG GCS300/400 GRADE CONTROL SYSTEM



The AG GCS300 and the AG GCS400 systems are Trimble's most advanced grade control systems, offering multiple capabilities to growers and water management contractors. The systems connect directly to almost all machine types and also work with external control valves. They can be used for any application offering control, survey, and indicate modes.

### AG GCS200 GRADE CONTROL SYSTEM



The AG GCS200 system is ideal for vehicles with PT valves requiring dual rigid mast control or single electric mast control. The key components of the system are the CB60 control box and the LR410 laser receiver. The system includes a digital elevation display and can be used in both survey and control modes.

### AG GCS100 GRADE CONTROL SYSTEM



The AG GCS100 system is Trimble's most economical grade control system. The system is designed specifically for vehicles pulling scrapers, or drainage machines requiring connection with a PT valve. The key components of the AG GCS100 system are the CB40 control box and the LR40 laser receiver. The system delivers excellent performance in long-range applications with adverse environmental conditions and operates with a single receiver on a rigid mast.

# Guidance & Steering Solutions

- Complete field operations quickly and efficiently using industry-leading displays and steering systems from Trimble
- Keep your vehicle on line and focus on other farming tasks
- Reduce operator fatigue while also minimizing skips and overlaps between passes
- Reduce crop damage and compaction to improve yield
- Monitor and improve the performance of your vehicle operations—regardless of manufacturer, make or model—with Connected Farm™ Fleet



Trimble guidance displays help you accurately monitor and map field information in real time. Benefit from industry-leading performance and reliability to complete field applications quickly and efficiently. With an array of functionalities and price points, you can select a display option that best fits your farming needs.

FEATURES	TMX-2050™ DISPLAY	FmX® DISPLAY	CFX-750™ DISPLAY	EZ-GUIDE® 250 SYSTEM
Size of color screen	12.3" (31.2 cm)	12.1" (30.7 cm)	8.0" (20.3 cm)	4.3" (10.9 cm)
Touchscreen	√	√	√	
Video camera inputs	2	4	2	
Built-in GPS receiver	1	2	1	1
GLONASS compatibility	√	√	√	
Assisted steering compatibility	√	√	√	√
Automated steering compatibility	√	√	√	
Implement control	√	√		
Row guidance	√	√		
Flow and application control	Select capabilities	Select capabilities	Select capabilities	
On-the-go VRA with GreenSeeker® sensors	√	√		
Water management	√	√		
Yield monitoring	√	√	Select capabilities	
Wireless vehicle to vehicle data exchange	√	√		
Wireless office to field data exchange	√	√	√	
Support for Connected Farm apps	√			
Internet browsing capability	√			
NextSwath™ end-of-row turn technology	√			

## TMX-2050 Display

Built on the Android™ operating system, the TMX-2050™ display integrates into your operation seamlessly, and the intuitive interface makes it easy for both beginning and advanced users to implement precision agriculture solutions.

In the middle of a busy season, the last thing you need is a complicated interface. The easy-to-use TMX-2050 display features a large 12.3" (31.2 cm) high-definition touch screen with sharp visuals and a choice of FmX® Plus or Precision-IQ™ display software to suit your specific farm practices.

### TECHNICAL OVERVIEW

- Customizable tablet-like interface similar to your other mobile devices
- Choice of FmX Plus or Precision-IQ display software
- Rugged construction for everyday field use
- Easily transferred between vehicles

### PRECISION AGRICULTURE CAPABILITIES

- Manual guidance and mapping
- Trimble® steering system compatibility
- NextSwath™ end-of-row turn technology to optimize the implement turn for the next pass
- Boom height and automatic section control for sprayers
- Single product variable rate application control for sprayers
- Wireless field to office data exchange

### GPS/GNSS CORRECTION ACCURACY

Trimble's CenterPoint® RTX and RangePoint™ RTX correction services provide substantial performance benefits for your guidance display—increasing your field operation accuracy, yield, and profits.

CenterPoint RTK < 1 inch accuracy	CenterPoint VRS™ < 1 inch accuracy	CenterPoint RTX 1.5 inch accuracy	OmniSTAR® HP 2–4 inch accuracy	OmniSTAR G2 3–4 inch accuracy	OmniSTAR XP 3–4 inch accuracy	RangePoint RTX < 6 inch accuracy	SBAS (WAAS) 6–8 inch accuracy
√	√	√	√	√	√	√	√



### BEYOND PRECISION TO DECISION

The TMX-2050 display moves beyond traditional precision agriculture functionality to provide real farm management decision-making tools in the cab.

### CHOICE OF DISPLAY SOFTWARE

The TMX-2050 display allows you to choose the application you want to use based on the work you need to do today.

- The FmX Plus app leverages the same familiar workflows and menus of the Trimble FmX integrated display so there's no need to retrain or learn new software
- The Trimble Precision-IQ app provides a graphics-rich and streamlined workflow designed specially for today's leading grower

### TMX-2050 DISPLAY AND CONNECTED FARM APPS

The TMX-2050 display provides instant access to the Connected Farm™ dashboard—a central location to view key information that impacts your farm operation.

- View local weather forecasts and recent rainfall totals for your fields so that you know whether to irrigate or apply other inputs
- Monitor fuel levels, oil pressure, battery life, and other diagnostics for your fleet vehicles
- Track machine locations, work status, health, and productivity delays across the entire fleet
- Wirelessly control irrigation systems and monitor pivot status from inside the cab
- Locate other vehicle operators and see if they are idling, working, or traveling between jobs
- View field operation maps as they are completed in the field

## FmX Integrated Display

The FmX® integrated display is an advanced, full-featured guidance display for all your precision farming operations. This versatile display allows you to adapt as your farming business grows. It provides leading-edge capabilities that help you enhance your productivity in any stage of the crop cycle—season to season, year after year.

### ADVANCED PRECISION AGRICULTURE CAPABILITIES

- Manual guidance and mapping
- Trimble® steering system compatibility
- Implement control
- Row guidance
- Spinner speed control for spreaders
- Advanced seed monitoring
- Six-product variable rate application control
- Automatic section control
- Nitrogen sensing in real time
- Land leveling and levee installation
- Drainage operations
- Yield monitoring
- Wireless vehicle to vehicle data exchange
- Wireless office to field data exchange
- Remote Assistant compatibility

### PRECISE FARMING—NO MATTER WHERE YOU OPERATE

The FmX integrated display is compatible with a wide variety of correction services—ideal for any location, crop type, field shape, or soil type.



CenterPoint RTK < 1 inch accuracy	CenterPoint VRS™ < 1 inch accuracy	CenterPoint RTX 1.5 inch accuracy	OmniSTAR HP 2–4 inch accuracy	OmniSTAR G2 3–4 inch accuracy	OmniSTAR XP 3–4 inch accuracy	RangePoint™ RTX < 6 inch accuracy	OmniSTAR VBS < 1 meter accuracy	SBAS (WAAS) 6–8 inch accuracy
✓	✓	✓	✓	✓	✓	✓	✓	✓

## CFX-750 Display

The CFX-750™ display is an affordable, multi-function guidance display offering key precision agriculture functionality. This intuitive display allows you to easily perform day-to-day farming tasks, extend your operating hours, and enhance productivity on your farm.

### KEY PRECISION AGRICULTURE CAPABILITIES

- Manual guidance and mapping
- Trimble steering system compatibility
- Boom height control for sprayers
- Seed monitoring
- Two-product variable rate application control
- Automatic section control
- Basic yield monitoring
- Wireless office to field data exchange

### PROVIDING THE ACCURACY YOU NEED

No matter your location, crop type, field shape, or soil type, Trimble delivers a variety of correction service options to your CFX-750 display.



CenterPoint RTK < 1 inch accuracy	CenterPoint VRS < 1 inch accuracy	CenterPoint RTX 1.5 inch accuracy	OmniSTAR HP 2–4 inch accuracy	OmniSTAR G2 3–4 inch accuracy	OmniSTAR XP 3–4 inch accuracy	RangePoint™ RTX < 6 inch accuracy	OmniSTAR VBS < 1 meter accuracy	SBAS (WAAS) 6–8 inch accuracy
✓	✓	✓	✓	✓	✓	✓	✓	✓

## EZ-Guide 250 System

The EZ-Guide® 250 system provides high-quality, entry-level guidance capabilities at an entry-level price. It is well-suited for broadacre crop applications that can be accomplished with submeter accuracy. Use it for basic guidance to make your farming operations easier in any farming season.

### KEY PRECISION AGRICULTURE CAPABILITIES

- Manual guidance and mapping
- Trimble EZ-Steer® steering system compatibility
- USB data transfer for in-office analysis

### SIMPLE INSTALLATION AND EASE OF USE

With its color display, one-touch function buttons, and intuitive interface, the EZ-Guide 250 system allows you to quickly access guidance lines and coverage maps and easily perform your day-to-day farming tasks.

### BASIC SATELLITE COVERAGE AND ACCURACY LEVELS

The EZ-Guide 250 system is compatible with the GPS satellite constellation. Get submeter pass-to-pass accuracy with SBAS for farming applications that can be accomplished with lower-accuracy corrections.



SBAS (WAAS) 6–8 inch accuracy
✓



## Autopilot Automated Steering System

The Autopilot™ automated steering system provides integrated, high-accuracy steering in any field type—hands free. When your vehicle is off line, the Autopilot system signals it to adjust its position to follow the correct path. The Autopilot system automatically steers your vehicle on line for maximum precision and increased productivity when performing the most demanding row crop farming applications.



## EZ-Pilot Assisted Steering System

The EZ-Pilot® assisted steering system provides high-accuracy steering at an affordable price. When you are driving your vehicle, the EZ-Pilot system turns the wheel for you with a compact electric motor drive using guidance from Trimble® displays to help keep you on line and improve your efficiency. This versatile steering system is ideal for both low-accuracy broadacre farming applications as well as high-accuracy row crop applications.



## EZ-Steer Assisted Steering System

The EZ-Steer® assisted steering system provides simple, portable, hands-free farming for more than 1200 vehicle models—old and new. The EZ-Steer system turns the steering wheel for you by combining a friction wheel and a motor with guidance from any Trimble display. It helps keep your vehicle on line for efficient, low-stress steering capabilities for your farming applications.



To increase your planting accuracy, add one of Trimble's implement control solutions when using the TMX-2050™ display or FmX® integrated display. Implement control helps you guide your implement on line, so you can operate with ease.

Benefit by using an implement control system to accurately guide your implement on hillsides, rolling terrain, contours, or terraces in variable soil conditions; minimize the effects of draft; increase precision with seed and fertilizer placement; and maintain consistent guess rows.

## TrueTracker Implement Steering System

The TrueTracker™ system is an active implement guidance system that keeps your tractor and implement on the same guidance line.

- Enables both the implement and tractor to stay on a repeatable path
- Reduces crop damage and compaction
- Provides high-accuracy control on difficult terrain with terrain compensation technology on the implement
- Best-suited for row crop and multiple-pass farming applications



## TrueGuide Implement Guidance System

The TrueGuide™ system is a passive implement guidance system that monitors and corrects the position of your implement by moving the tractor.

- Low-cost solution best suited for broadacre farming applications
- Ideal for controlling implements where multi-pass repeatability is not required

## Correction Services

Trimble has been the leader in the GPS industry for over 30 years. Our correction services are second-to-none, and are the backbone of every precision agriculture solution we offer. Substantial increases in yield can be achieved by using any level of correction, from sub-meter to sub-inch. No matter where you are located or the size of your operation, Trimble has a correction service solution for your farm.

- Range of correction services to meet all your precision agriculture needs based on crop, terrain and location
- Save time, fuel and money and increase output
- Receive accurate, high-performance positioning no matter where you are located

## RTK-Based Technology

### CENTERPOINT RTX

**Accuracy**  
< 1" (2.5 cm)

**Initialization/Convergence**  
< 1 min



Receive the highest accuracy correction service within 8 miles (12.87 km) of an established RTK base station or base station network. Contact your local Trimble Reseller to determine if your area has RTK base station coverage.

Add a Trimble® RTK base station as part of a network or as a single mobile base station for on-farm use.

### CENTERPOINT VRS

**Accuracy**  
< 1" (2.5 cm)

**Initialization/Convergence**  
< 1 min



- Instant access to real time kinematic (RTK) corrections
- Centimeter-level RTK accuracy
- Built-in redundancy
- No single base station required



### TRIMBLE xFILL TECHNOLOGY

- Increase your uptime by receiving supplemental xFill™ signals when an RTK signal is lost
- Maximize your productivity by continuing your farming operations until your RTK signal is restored
- Benefit from uninterrupted workflow with the seamless transition between RTK and xFill signals



### TRY IT FOR FREE!

Visit [www.trimble.com/positioning-services](http://www.trimble.com/positioning-services) for a free 3 day demo of the CenterPoint® RTX correction service

## Trimble RTX-Based Correction Services

Trimble delivers GNSS enabled, RTX-based corrections to your receiver worldwide. Trimble CenterPoint RTX and RangePoint™ RTX correction services provide:

- Unmatched reliability and uptime
- Free GLONASS unlock with active subscription
- No base station needed
- Service over a large geographic area
- GNSS compatibility using the TMX-2050™ display, FmX® integrated display, CFX-750™ display, and AG-372 GNSS receiver

### CENTERPOINT RTX



**Repeatable Accuracy**  
< 1.5" (3.8 cm)

#### Initialization

Standard (30 min)\*

Standard (30 min)\*

(< 5 min)\*\*



\* Receiver convergence time varies based on GNSS constellation health, level of multipath, and proximity to obstructions such as large trees and buildings. In ideal conditions, receivers can converge to a 30 cm position in approximately 10 minutes, 20 cm in 15 minutes, and full accuracy in less than 30 minutes.

All horizontal accuracy specifications are based on repeatable in-field performance 95% of the time.

\*\* < 5 min initialization in Europe only available on the CFX-750 display.

### RANGEPOINT RTX



**Pass-to-Pass Accuracy**  
< 6" (15 cm)

**Repeatable Accuracy**  
< 20" (50 cm)

**Initialization**  
1–5 min

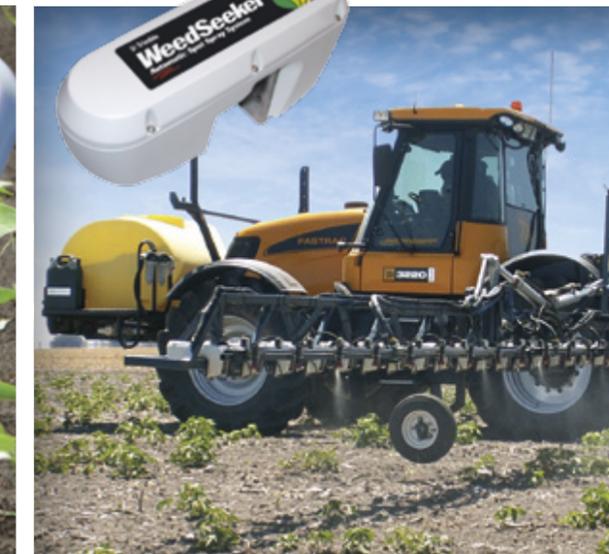


Free! One-year trial of RangePoint RTX service available with the purchase of any new compatible product.\*\*\*

\*\*\* Offer valid on any new RTX-compatible device, shipped from Trimble between 1 October 2014 to 31 December 2015. Subscriptions must be activated by March 31, 2016. Other restrictions may apply.

# Flow & Application Control

- Increase profits by creating uniform yield across the field
- Control input costs by applying the right amount of fertilizer, chemicals, and other inputs in the right place
- Lessen environmental impact by decreasing over-application
- Reduce operator fatigue by automating applications
- Manage your crop inputs and make better decisions on flow and application throughout the crop cycle using Connected Farm™ Field



## GreenSeeker Crop Sensing System

The GreenSeeker® crop sensing system is a variable rate application and crop vigor mapping system that offers a more efficient and precise way to manage crop inputs such as nitrogen.

- The GreenSeeker system can be used to verify the amount of nitrogen the soil has made available, then determines a nitrogen prescription on-the-go for instant application
- The correct amount of fertilizer is delivered in real time, averaging an increase in profits of \$15 per acre

## GreenSeeker Handheld Crop Sensor

The GreenSeeker handheld crop sensor is an affordable, easy-to-use measurement device that can be used to assess the health—or vigor—of a crop.

- Readings taken by the GreenSeeker handheld can be used to make non-subjective decisions regarding the amount of fertilizer to be applied to a crop, resulting in a more efficient use of fertilizer—a benefit to both a farmer's bottom line and the environment
- Use the Connected Farm scout app on a smartphone or tablet to calculate fertilizer application rates from crop readings taken with the GreenSeeker handheld

## WeedSeeker Automatic Spot Spray System

The WeedSeeker® system helps you cut overall weed control costs by up to 80% by saving on chemical costs, cutting down on time and labor, and reducing the environmental impact of your field activities.

- Uses advanced optics and computer circuitry to sense if a weed is present
- When a weed enters the sensor's field of view, it signals a spray nozzle to deliver a precise amount of herbicide
- The WeedSeeker system will spray only weeds, not bare ground, and is effective wherever weeds occur intermittently



#### VARIABLE RATE APPLICATION CONTROL

- Simultaneously control the application rate of up to six different materials when using the TMX-2050™ display or FmX® integrated display, including seed, granular seed, granular fertilizer, liquid, and anhydrous ammonia in different combinations
- Two material rate control capability when using the CFX-750™ display, and single material rate control when using the TMX-2050 display for spraying
- Variable rate control of materials can be achieved with a prescription VRA map or in real time with a GreenSeeker® system for more efficient fertilizer utilization
- As-applied mapping records where you've applied inputs and automates record keeping
- Adjust your seed population, fertilizer rates, or spray application manually or automatically a prescription created with Farm Works Software® solutions
- Apply a high population to fertile or well-irrigated soils to maximize yield potential while reducing the rate on less fertile or poorly irrigated soils
- Automatically control spinner speed of spreader application systems to evenly distribute nutrients

#### NUTRIENT MANAGEMENT

- Transform nutrient management recommendations into actionable variable rate fertilizer prescriptions using Connected Farm™ Advisor

#### BOOM HEIGHT CONTROL FOR SPRAYERS

- Automatically adjust spray boom height with ultrasonic sensors that measure the distance between ground or crop canopy, resulting in an even application of material
- Minimize environmental impact and ensure the health of neighboring crops by eliminating off-target applications of products
- Automatic height sensing reduces operator fatigue by eliminating the need for manual boom switching
- Compatible with the TMX-2050 display and CFX-750 display

Trimble's Field-IQ™ crop input control system is a section control and variable rate application control system that prevents seed and fertilizer overlap, controls the rate of material applications, monitors seed delivery or fertilizer blockage, and controls the height of spray booms.

The Field-IQ system runs on the TMX-2050 display, FmX integrated display, and CFX-750 display. Each of these displays supports a different combination of Field-IQ functionality—giving you the ability to choose the interface option that fits your needs.

#### AUTOMATIC SECTION CONTROL

- Manage seed, liquid, and anhydrous using section control on up to 48 individual sections
- Overlap detection shows where you've been and what you've done

#### SEED MONITORING

- Advanced seed monitoring increases the quality of seed placement by delivering singulation details from the seeding system to the operator, allowing for on-the-go planter tuning
- Prevent costly planter problems by catching them early before they cause yield reduction
- See results of singulation analysis including information on population, singulation, skips/multiples, spacing, and quality of spacing

#### RAWSON® DRIVE

- Drives piston pumps for more efficient operation during planting
- Single drive can run up to 24 row units
- Mounts to a number of planting, drilling, air seeding, piston pumps, and strip till applicators
- Compatible with the TMX-2050 display, FmX integrated display, and CFX-750 display, and works with many third party controllers



#### TRU COUNT AIR CLUTCH®

- Use for automatic section control to eliminate seed overlap in your headlands and point rows
- Compatible with the TMX-2050 display, FmX integrated display, CFX-750 display, and a variety of other guidance displays



#### TRU COUNT LIQUIBLOCK™ VALVE

- Use for automatic section control to eliminate liquid fertilizer overlap
- Compatible with the TMX-2050 display, FmX integrated display, CFX-750 display, and a variety of other guidance displays



# Harvest

- View yield and moisture data in real time to quickly determine if grain should be stored or dried
- Generate yield maps to analyze and correct high- and low-performing areas
- Combine year on year data to understand how seed and other field activities affect yield
- Save time by wirelessly transferring harvest data to Connected Farm™ for analysis and follow up



## RG-100 Row Guidance System

The RG-100 row guidance system allows you to automatically adjust the combine in response to changes in the rows by using existing sensors built into the combine head. The RG-100 system uses the Autopilot™ automated steering system and TMX-2050™ display or FmX® integrated display to center the combine on rows—even when they are not straight.

- Reduce fatigue in difficult conditions such as down corn, curved rows, long passes, and other poor visibility conditions
- Operate effectively in fields planted using other steering systems or in areas where the planter drifted
- Stay on line to efficiently gather ears of corn—and ultimately increase your yield
- RG-100 row guidance works with advanced T3™ terrain compensation technology in the Autopilot system for high-accuracy steering on rolling hills and slopes

## Yield Monitoring

With Yield Monitoring, you can accurately collect yield and moisture data for a variety of grain crops. This information is critical for precision agriculture operations—allowing you to perform valuable analyses to enhance your decision making on your farm, season to season.

- Map and compare the performance of different seed varieties throughout your field
- Record the amount of grain harvested and loaded onto your trucks
- Determine if grain needs to be stored or dried based on the in-field moisture content
- Adjust the cut width automatically when traveling over odd-shaped fields, point rows, or other previously harvested areas to avoid inaccurate yield calculations
- Transfer yield data to your office using a USB stick or wirelessly with Connected Farm to analyze how seed varieties compared to yield
- Utilize your yield data to create variable rate prescription maps and send them wirelessly from the office to the field using Connected Farm